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2007 Health Care Survey of DoD Beneficiaries:

Adult Technical Manual

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Chapter 1

Introduction

The 2007 Adult Health Care Survey of Department of Defense Beneficiaries (HCSDB) is the primary tool with which the TRICARE Management Activity (TMA) of the Assistant Secretary of Defense (Health Affairs) monitors the opinions and experiences of military health system (MHS) beneficiaries. The HCSDB was conducted annually from 1995 to 2000, at which time the survey was fielded quarterly. Specifically, the HCSDB is designed to answer the following questions:

- How *satisfied* are DoD beneficiaries with their health care and their health plan?
- How does overall satisfaction with military treatment facilities (MTFs) compare with satisfaction with civilian treatment facilities (CTFs)?
- Does *access* to military and civilian facilities meet TRICARE standards?
- Is beneficiaries' use of preventive health care services in line with national goals, such as those outlined in *Healthy People 2010*?
- Has beneficiaries' use of MHS services changed over time?
- What aspects of MHS care contribute most to beneficiary satisfaction with their health care experiences? With which aspects are beneficiaries least satisfied?
- What are the demographic characteristics of MHS beneficiaries?

The HCSDB is a quarterly mail survey of a representative sample of MHS beneficiaries. It is sponsored by the TRICARE Management Activity in the Office of the Assistant Secretary of Defense (Health Affairs) [OASD(HA)] under authority of the National Defense Authorization Act for Fiscal Year 1993 (P.L. 102-484). Altarum Institute prepares the sampling frame, which consists of selected variables for each MHS beneficiary in the Defense Enrollment Eligibility Reporting System (DEERS) database on a specified reference date. DEERS includes everyone who is eligible for a MHS benefit (i.e., everyone in the Uniformed Services—Army, Air Force, Navy, Marine Corps, Coast Guard, the Commissioned Corps of the Public Health Service, National Oceanic and Atmospheric Administration, Guard/Reserve personnel who are activated for more than 30 days – and other special categories of people who qualify for benefits). DEERS includes those on active duty, those retired from military careers, immediate family members of people in the previous two categories, and surviving family members of people in these categories.

Each quarter, Mathematica Policy Research, Inc. (MPR, Washington, D.C.) prepares a sample of 50,000 adult beneficiaries. Synovate fields the survey each quarter. MPR analyzes the survey data, reports on the results and prepares a public use file and a Codebook and Users' Guide. Each year, MPR prepares an annual public use dataset, this document, the "2007 Health Survey of DoD Beneficiaries: Adult Technical Manual", and the Health Care Survey of DoD Beneficiaries: Annual Report.

This manual is designed to be used as a reference by analysts in OASD (HA) as they interpret the survey findings and prepare briefings. The manual provides detailed documentation on the following: naming conventions for variables, editing procedures, selection of records, computation of response rates, recoding of variables, computation of weights, variance estimation, and construction of tables and charts for the reports. The manual enables an analyst to link each cell in

each table (or chart) in the reports to the associated question in the adult questionnaire and/or to the variable in the survey database. The manual also enables an analyst to follow, and replicate if desired, the processing of the raw survey data through each step in the production of the final database.

A. OVERVIEW OF THE HCSDB

1. Sample Design

The 2007 adult sample design is a stratified random sample based on three stratification variables: analytical group, geographic area, and enrollment/beneficiary type. The *analytical group* stratification is determined in cooperation with TRICARE Management Activity (TMA) staff, and is important to data users and policymakers: (1) beneficiaries younger than 65, enrolled with a military primary care manager (PCM), or active duty beneficiaries; (2) beneficiaries younger than 65, who use Managed Care Support Contractors; (3) beneficiaries younger than 65, who use TRICARE Standard/Extra; (4) beneficiaries enrolled in TRICARE Reserve Select; (5) beneficiaries age 65 or older enrolled in TRICARE Plus; and (6) beneficiaries age 65 or older not enrolled in TRICARE Plus.

The *geographic area* stratification includes military treatment facilities (MTFs) which TMA is interested in, TNEX regions for those enrolled in other MTFs, and TNEX regions for all other beneficiaries.

The *enrollment/beneficiary* type includes (1) active duty; (2) active duty family members enrolled in Prime with a civilian PCM; (3) active duty family members enrolled in Prime with a military PCM; (4) active duty family members not enrolled in Prime; (5) retirees and their family members younger than 65 enrolled in Prime with a civilian PCM; (6) retirees and their family members younger than 65 enrolled in Prime with a military PCM; (7) retirees and their family members younger than 65 not enrolled in Prime; (8) retirees and their family members age 65; and (9) beneficiaries enrolled in TRICARE Reserve Select.

2. 2007 Adult HCSDB

The HCSDB questionnaire was converted from an annual to a quarterly survey in 2000, and is fielded each quarter to a representative sample of MHS beneficiaries. Beginning with 2006, reporting and documentation of the HCSDB is performed on a fiscal year basis. In previous years, reporting and documentation were based on calendar years. Thus this document, the "2007 Health Survey of DoD Beneficiaries: Adult Technical Manual", describes Quarters I-IV of fiscal year 2007. Throughout this document, Quarter I, 2007 refers to Quarter I of fiscal year 2007. The adult questionnaires for Quarters I-IV are reproduced in Appendix A. The 2007 survey consists of an unchanging core questionnaire with different quarterly supplements.

The core adult questionnaire includes the following topics:

- Use of health care
- Use of preventive health care
- Type of health plan covering the beneficiary
- Satisfaction with health plan
- Satisfaction with health care
- Access to health care
- Demographic characteristics

Beginning in 2002, the survey naming convention was changed. Prior to 2000, the year in the survey's name reflected the year that respondents were asked to think about when answering the questions. For example, although the 2000 HCSDB was fielded in 2001, it asked beneficiaries to think about the prior 12 months (mostly 2000) as the reference period for their answer. Under the new naming convention, the survey title refers to the year the questionnaires are fielded, so last year's survey was the 2006 HCSDB and this year's survey is the 2007 HSCDB. Because of the name change, there is no "2001" survey, even though the questionnaire was administered continuously in each quarter of 2001.

3. Survey Response – Quarters I-IV

Each quarter in 2007, Synovate sent surveys to a random sample of 50,000 adult MHS beneficiaries. By the end of the fielding period in Quarter I, Synovate received completed surveys from 26 percent of the sample. In Quarter II, 26 percent of the sample members returned completed surveys while in Quarter III, 23 percent of the sample members returned completed surveys. In Quarter IV, Synovate received complete surveys from 22 percent of the beneficiaries sampled. Information pertaining to how MPR developed these response rates is presented in Chapter 3.

It should be noted that the above cited response rates do not reflect late arriving responses from the surveys fielded in the first three quarters. The response rates are based on the number of completed surveys returned to the survey vendor at the end of the fielding period. The annual combined dataset, however, includes the surveys returned after the end of the fielding period. Therefore, the revised annual response rates were 27 percent for Quarter I, 28 percent for Quarter II, 24 percent for Quarter III, and 25 percent for the combined annual dataset.

4. Database Development

MPR edits the data, selects records for inclusion in the final database, and constructs variables to be used in reports. To ensure that the survey data is representative of the DEERS population, MPR develops weights to take account of the initial sampling, the sampled individuals who chose not to respond to the survey, and post-stratification if the beneficiary's key information is updated.

5. Reports

MPR analyzes the data and produces several reports explaining the findings on topics such as satisfaction, access to care, health care use, and use of preventive services. These reports will be available on the TRICARE website at http://www.TRICARE.USD.mil:

- 2007 TRICARE Beneficiary Reports
- 2007 TRICARE Consumer Watch
- Health Care Survey of DoD Beneficiaries: Annual Report

B. ORGANIZATION OF THIS MANUAL

Chapter 2 explains how the database was developed. It covers naming conventions, editing procedures, record selection criteria, descriptions of all variable types, definitions of each constructed variable, the development of satisfaction and health status scales, and weighting procedures. Chapter 3 describes how the database was analyzed. This includes rules for developing response rates, the development of table and chart specifications for the Health Care Survey of DoD Beneficiaries: The HCSDB Annual Report, TRICARE Beneficiary Reports and TRICARE Consumer Watch, an explanation of the dependent variables and independent

variables, and the methodology for estimating the variance of estimates. The manual concludes with a series of technical appendices:

- Appendix A: Annotated questionnaire – Quarters I-IV survey questionnaire annotated with database variable names
- Appendix B: Plan for Data Quality – Coding Scheme – Quarters I-IV
- Appendix C: A table mapping MTFs to the catchment area and DMIS ID
- Appendix D: Response rate tables for selected domains – Quarters I-IV and Combined Annual
- Appendix E: Technical Description of the 2007 TRICARE Beneficiary Reports
- Appendix F: SAS Code for File Development – Quarters I-IV
- Appendix G: SAS Code for Statistical and Web Specifications for the 2007 TRICARE Beneficiary Reports - Quarters I-IV
- Appendix H: SAS Code for 2007 TRICARE Consumer Watch - Quarters I-IV and Combined Annual
- Appendix I: SAS Code for Statistical and Web Specifications for the 2007 TRICARE Purchased Care Beneficiary Reports - Quarters I-IV
- Appendix J: SAS Code for 2007 TRICARE Purchased Care Consumer Watch - Quarters I-IV and Combined Annual
- Appendix K: Sample SUDAAN Code for Calculating Variance Estimates

Chapter 2

Database

This chapter explains the process of developing the raw survey data into a final database free of inconsistencies and ready for analysis. We discuss the design of the database; cleaning, editing, and implementing the Coding Scheme; record selection; and constructing variables.

A. DATABASE DESIGN

The 2007 Adult HCSDB consists of variables from various sources. When Synovate delivers the file to MPR after fielding the sample, the following types of variables are present:

- DEERS information on beneficiary group, social security number (SSN), sex, age, etc.
- Sampling variables used to place beneficiaries in appropriate strata
- Core and supplemental questionnaire responses
- Synovate information from fielding the sample, such as scan date and flags developed during the fielding to assist us in determining eligibility

MPR removes all identifying information such as SSN to protect the confidentiality of the respondents. MPR then adds the following types of variables to the database:

- Updated DEERS variables from the time of data collection to be used for post-stratification
- Coding Scheme flags
- Constructed variables for analysis
- Weights

In addition, MPR updates and cleans the questionnaire responses using the Coding Scheme tables found in Appendix B. Each quarter, the final public-use database will contain only the recoded responses; this will help users to avoid using an uncleaned response for analysis. We structured the final database so that all variables from a particular source are grouped by position. Table 2.1 lists all variables in the Quarters I-IV, 2007 database by source. For specific information on variable location within the database, refer to the "2007 Adult Health Care Survey of DoD Beneficiaries: Adult Codebook and User's Guide."

1. Data Sources

a. DEERS

Altarum provided the sampling frame to MPR prior to the selection of the sample. DEERS information such as sex, date of birth, and service are retained in the database; this data is current as of the time of sample selection.

b. Sampling Variables

MPR developed variables during the sample selection procedure that were instrumental in placing beneficiaries in appropriate strata. Many of the variables are retained on the database.

c. Questionnaire Responses

These variables represent the cleaned values for all responses to the questionnaire. The original values scanned in by Synovate are cleaned and recoded as necessary to ensure that responses are consistent throughout the questionnaire. The Coding Scheme tables found in Appendix B are the basis for insuring data quality.

d. Survey Fielding Variables

In the process of fielding the survey, Synovate created a number of variables that we retain in the database. Certain of these variables, information that came in by phone, for example, assist us in determining eligibility.

e. Coding Scheme Flags

Each table of the Coding Scheme (see Appendix B) has a flag associated with it that indicates the pattern of original responses and any recodes that were done. For example, the table for Note 5 has a flag N5.

f. Constructed Variables

MPR constructed additional variables that were used in the TRICARE Beneficiary Reports, TRICARE Consumer Watch, and the Health Care Survey of DoD Beneficiaries: Annual Report. Often these variables were regroupings of questionnaire responses or the creation of a binary variable to indicate whether or not a TRICARE standard was met. Complete information on each constructed variable is found in section 2.D.

g. Weights

MPR developed weights for each record in the final database. Weights are required for the following reasons:

- To compensate for variable probabilities of selection
- To adjust for differential response rates
- To improve the precision of survey-based estimates through post-stratification

Weighting procedures are discussed in section 2.E.

TABLE 2.1

VARIABLES IN THE 2007 ADULT HCSDB DATA FILE – QUARTERS I-IV

SAMPLING VARIABLES	
MPRID	- Unique MPR identifier
SVCSMPL	- Branch of service sampling variable
SEXSMPL	- Sex sampling variable
STRATUM	- Sampling stratum
CACSMPL	- Catchment area
ENBGSMPL	- Enrollment by beneficiary category
MPCSMPL	- Military personnel category
NHFF	- Stratum sample size
SERVAREA	- Service area
DCATCH	- Catchment Area
MSM	- Multiple service market areas
D_FAC	- Facility type code
D_HEALTH	- Health service region
TNEXREG	- TRICARE next generation of contracts region grouping
DEERS VARIABLES	
SERVAFF	- Service affiliation
MRTLSTAT	- Marital status
RACEETHN	- Race/Ethnic code
PNSEXCD	- Person gender
DAGEQY	- Age at time of data collection
FIELDAGE	- Age at start of fielding period
PCM	- Primary manager code (civilian or military)
ACV	- Alternate care value
DBENCAT	- Beneficiary category
DMEDELG	- Medical privilege code
DSPONSVC	- Derived sponsor branch of service
MBRRELCD	- Member relationship code
MEDTYPE	- Medicare type
PATCAT	- Aggregated beneficiary category
PNTYPCD	- Person type code
PNLCATCD	- Personnel category code (duty status)
QUESTIONNAIRE RESPONSES	
H07001	- Are you the person listed on envelope
H07002A	- Health plan(s) covered: TRICARE Prime
H07002C	- Health plan(s) covered: TRICARE Ext/Stnd
H07002F	- Health plan(s) covered: MEDICARE
H07002G	- Health plan(s) covered: FEHBP
H07002H	- Health plan(s) covered: Medicaid
H07002I	- Health plan(s) covered: Civilian HMO
H07002J	- Health plan(s) covered: Other civilian
H07002K	- Health plan(s) covered: USFHP
H07002L	- Health plan(s) covered: Not sure
H07002M	- Health plan(s) covered: Veterans
H07002N	- Health plan(s) covered: TRICARE Plus
H07002O	- Health plan(s) covered: TRICARE for Life
H07002P	- Health plan(s) covered: TRICARE Supplemental Insurance
H07002Q	- Health plan(s) covered: TRICARE Reserve Select
H07002R	- Health plan(s) covered: Other government health insurance
H07003	- Currently covered Medicare part A
H07004	- Currently covered Medicare part B
H07005	- Currently covered Medicare supplemental

H07006	- Which health plan did you use most in the past 12 months?
H07007	- Months or years in a row with health plan
H07008	- Have one person you think of as personal doctor
H07009	- Rating of your personal doctor or nurse
H07010	- Had same personal Dr/nurse before joining health plan
H07011	- Health plan: problem to get a personal doctor or nurse you are happy with
H07012	- In last year: you or a doctor or nurse think you needed to see a specialist
H07013	- In last year: how much of a problem to see a specialist you needed to see
H07014	- In last year: did you see a specialist
H07015	- Rating of specialist seen most often in last year
H07016	- In last year: called a doctor's office or clinic during regular office hours to get help or advice for yourself
H07017	- In last year: when you called during regular office hours how often got help or advice you needed
H07018	- In last year: have illness/injury/condition that needed care right away
H07019	- In last year: when needed care right away for an illness or injury got care as soon as wanted
H07020	- In last year: wait between trying to get care and actually seeing a provider for an illness or injury
H07021	- In last year: made any appointment for regular or routine health care
H07022	- In last year: how often made appointments for regular or routine health care as soon as you wanted
H07023	- In last year: days between making an appointment for regular or routine care and actually seeing a provider
H07024	- In last year: times went to an emergency room for own care
H07025	- In last year: times went to a doctors office or clinic for yourself (not counting times went to an emergency room)
H07026	- In last year: did you/Dr believe you needed any care, tests, or treatment
H07027	- In last year: problem to get necessary care
H07028	- In last year: need approval from health plan for any care, tests, or treatment
H07029	- In last year: problem with delays in healthcare while waiting for approval from health plan
H07030	- In last year: how often taken to exam room within 15 minutes of appointment
H07031	- In last year: how often office staff at a doctor's office or clinic treat you with courtesy and respect
H07032	- In last year: how often office staff at a doctor's office or clinic as helpful as expected
H07033	- In last year: how often doctors or other health providers listen carefully to you
H07034	- In last year: how often doctors or other health providers explain things in way you could understand
H07035	- In last year: how often doctors or other health providers show respect for what you had to say
H07036	- In last year: how often doctors or other health providers spend enough time with you
H07037	- Rating of all healthcare in last year
H07038	- In last year: facility used most for health care
H07039	- In last year: sent in any claims to your health plan
H07040	- In last year: health plan handled claims in a reasonable time
H07041	- In last year: how often health plan handled claims correctly
H07042	- In last year: look for any information in written materials/internet on how health plan works
H07043	- In last year: problem to find or understand information in the written materials/internet
H07044	- In last year: called health plan's customer service to get information or help
H07045	- In last year: problem to get the help you needed when called health plan's customer service
H07046	- In last year: have to fill out paperwork for your health plan
H07047	- In last year: how much problem with paperwork for your health plan
H07048	- Rating of all experience with health plan
H07049	- Blood pressure: when last reading

H07050	- Blood pressure: know if blood pressure is too high or not
H07051	- When did you last have a flu shot
H07052	- Smoked at least 100 cigarettes in life
H07053	- Smoke everyday, some days, or not at all
H07054	- How long since you quit smoking
H07055	- Last year: number of visits advised to quit smoking
H07056	- Last year: number of visits medication was recommended or discussed to assist with quitting smoking
H07057	- Last year: number of visits recommended or discussed methods and strategies to assist quitting smoking
H07058	- Are you male or female
H07059	- Female: Last have a Pap smear test
H07060	- Female: Are you under age 40
H07061	- Female: Last time breasts checked mammography
H07063	- Female: Been pregnant in last year or pregnant now
H07064	- Female: In what trimester is your pregnancy
H07065	- Female: Trimester first received prenatal care
H07066	- In general how would you rate your overall health
H07067	- Limited in any way in any activities because of any impairment or health problem
H07068F	- Feet portion of height without shoes
H07068I	- Inches portion of height without shoes
H07069	- Weight without shoes
H07070	- Are you Spanish, Hispanic, or Latino
H07070A	- No, not Spanish, Hispanic, or Latino
H07070B	- Yes, Mexican, Mexican American, Chicano
H07070C	- Yes, Puerto Rican
H07070D	- Yes, Cuban
H07070E	- Yes, other Spanish, Hispanic, or Latino
SREDA	- Highest grade completed
SRRACEA	- Race: White
SRRACEB	- Race: Black or African American
SRRACEC	- Race: American Indian or Alaska native
SRRACED	- Race: Asian
SRRACEE	- Race: Native Hawaiian/other Pacific Islanders
SRAGE	- What is your age now?
S07G18	- Self/Spouse/Parent reservist on active duty for more than 30 consecutive days in support of contingency operations in past year
S07G19	- Reservist activated for contingency operations for more than 30 consecutive days in past year
S07G20	- Operation you were most recently activated in support of contingency operations
S07G21	- When activated for contingency operation
S07G22	- Length of time initial activation orders stated that this activation would last
S07G23	- Spouse/parent reservist activated for contingency operations for more than 30 consecutive days in past year
S07G24	- Contingency operation for which reservist spouse/parent was most recently activated
S07G25	- When was reservist spouse/parent first activated for this operation
S07G26	- Length of time initial activation orders stated that this contingency activation would last
S07G27	- Covered by civilian health insurance before becoming eligible for TRICARE
S07G28	- Current health care coverage
S07G29A	- Don't use TRICARE: Greater choice of doctors with my civilian plan
S07G29B	- Don't use TRICARE: Better customer service with civilian plan
S07G29C	- Don't use TRICARE: Personal doctor is not available through TRICARE
S07G29D	- Don't use TRICARE: TRICARE benefits are poor compared to civilian plan
S07G29E	- Don't use TRICARE: It is easier to get care through civilian plan
S07G29F	- Don't use TRICARE: Pay less for civilian care than would for TRICARE
S07G29G	- Don't use TRICARE: No military facilities near me
S07G29H	- Don't use TRICARE: Prefer civilian doctors

S07G29I	- Don't use TRICARE: Prefer civilian hospitals
S07G29J	- Don't use TRICARE: Happy with civilian plan and have no reason to change
S07G29K	- Don't use TRICARE: Another reason
S07G30	- Self/policy holder now pay all/part of the premium for your civilian health insurance
S07G31	- Problem getting information about TRICARE benefits once became eligible for TRICARE
S07G32	- Is personal doctor a civilian
S07G33	- Personal doctor accepts TRICARE
S07G34	- Difficult to see personal doctor once became eligible for TRICARE
S07G35	- Difficult to see specialist once became eligible for TRICARE
S07G36	- Self or a reservist in immediate family deactivated after 11/6/03
S07G37	- As reservist/family member of reservist, eligible for TRICARE for any period of time immediately before the reservist reported to active duty
S07G38	- Length of time in days eligible for this coverage
S07G39	- Eligible for TRICARE coverage for any period of time after self/reservist in immediate family deactivated
S07001	- In past year: Eligible to purchase coverage under TRICARE Reserve Select(TRS)
S07002	- In past year: Covered by TRICARE Reserve Select
S07003	- Tier of most recent TRICARE Reserve Select coverage
S07004	- In past year: Number months covered by TRICARE Reserve Select
S07005	- TRS coverage: family or member-only
S07006	- Most important reason for purchase of TRICARE Reserve Select coverage
S07007	- In past year: Elected not to purchase or dropped TRICARE Reserve Select coverage
S07008A	- Reason no TRS coverage: Civilian health insurance is more affordable
S07008B	- Reason no TRS coverage: Civilian health insurance has better benefits
S07008C	- Reason no TRS coverage: Other TRICARE health insurance available
S07008D	- Reason no TRS coverage: Period of eligibility ended
S07008E	- Reason no TRS coverage: TRS not affordable
S07008F	- Reason no TRS coverage: Not pleased with TRICARE
S07008G	- Reason no TRS coverage: Preferred doctor doesn't accept TRICARE
S07008H	- Reason no TRS coverage: Change in employment status that affected health insurance availability
S07008I	- Reason no TRS coverage: Don't know
S07Q01	- Had blood stool test using a home kit
S07Q02	- Time since last blood stool test using a home kit
S07Q03	- Had sigmoidoscopy or colonoscopy exam
S07Q04	- Time since last sigmoidoscopy
S07Q05	- Time since last colonoscopy
S07Q06	- Personal doctor or nurse talk about colon cancer or colon cancer screening tests
S07Q07	- Last prostate disease exam or blood test
S07B01	- Self rating of overall mental/emotional health
S07B02	- Last year: Needed treatment/counseling for personal/family problem
S07B03	- Last year: Problem getting needed treatment/counseling
S07B04	- Last year: Rating of treatment/counseling received
S07V01	- In last year: Amount of healthcare from TRICARE civilian network(TCN)
S07V02	- In last year: Problem getting wanted healthcare from TCN
S07V05	- In last year: Learn physician whom you wanted to see left TCN
S07V06	- In last year: Problem finding convenient doctor from TCN
S07V07	- In last year: Problem finding specialist in civilian network
S07V08	- In last year: Tried to make an appointment with civilian Dr not in TCN
S07V09	- In last year: Wanted Dr not seeing old/new TRICARE patients
S07V10	- In last year: Problem finding Dr who will accept TRICARE
S07V11A	- Prblm fndng civ ntwrk prsnl Dr: Travel distance too long
S07V11B	- Prblm fndng civ ntwrk prsnl Dr: Communicating with doctor(s)
S07V11C	- Prblm fndng civ ntwrk prsnl Dr: Doctor(s) not taking new patients
S07V11D	- Prblm fndng civ ntwrk prsnl Dr: Could not find desired specialist
S07V11E	- Prblm fndng civ ntwrk prsnl Dr: Didn't like doctor(s)

S07V11F	- Prblm fndng civ ntwrk prsnl Dr: Wait for an appointment was too long
S07V11G	- Prblm fndng civ ntwrk prsnl Dr: Could not find information about doctors
S07V11H	- Prblm fndng civ ntwrk prsnl Dr: Other
S07V12A	- Prblm fndng civ ntwrk spclst: Travel distance too long
S07V12B	- Prblm fndng civ ntwrk spclst: Communicating with doctor(s)
S07V12C	- Prblm fndng civ ntwrk spclst: Doctor(s) not taking new patients
S07V12D	- Prblm fndng civ ntwrk spclst: Didn't like doctor(s)
S07V12E	- Prblm fndng civ ntwrk spclst: Wait for an appointment was too long
S07V12F	- Prblm fndng civ ntwrk spclst: Could not find information about doctors
S07V12G	- Prblm fndng civ ntwrk spclst: Other
S07V13	- In last year: Problem finding civilian Dr/nurse who will accept TRICARE
S07V14A	- Prblm fndng prsnl dr accepts TRICARE: Travel distance too long
S07V14B	- Prblm fndng prsnl dr accepts TRICARE: Communicating with doctor(s)
S07V14C	- Prblm fndng prsnl dr accepts TRICARE: Doctor(s) not accepting TRICARE fee schedule
S07V14D	- Prblm fndng prsnl dr accepts TRICARE: Could not find desired speciality
S07V14E	- Prblm fndng prsnl dr accepts TRICARE: Didn't like doctor(s)
S07V14F	- Prblm fndng prsnl dr accepts TRICARE: Wait for an appointment was too long
S07V14G	- Prblm fndng prsnl dr accepts TRICARE: Could not find information about doctors
S07V14H	- Prblm fndng prsnl dr accepts TRICARE: Other
S07V15	- Tried to make an appointment with non-TRICARE civilian specialist
S07V16	- Speciality of the last non-network civilian specialist
S07V17	- In last year: Problem getting appointment with non-network(nn) civilian specialist
S07V18A	- Prblm fndng nn civ spclst: Travel distance too long
S07V18B	- Prblm fndng nn civ spclst: Communicating with doctor(s)
S07V18C	- Prblm fndng nn civ spclst: Doctor(s) not accepting TRICARE fee schedule
S07V18D	- Prblm fndng nn civ spclst: Didn't like doctor(s)
S07V18E	- Prblm fndng nn civ spclst: Wait for an appointment was too long
S07V18F	- Prblm fndng nn civ spclst: Could not find information about doctors
S07V18G	- Prblm fndng nn civ spclst: Other
S07Y01	- In last 90 days, filled any prescriptions using TRICARE benefit
S07Y22	- How often got prescription drugs from TRICARE mail order pharmacy(TMOP) within 14 days of the day you placed your order
S07Y23	- In last 90 days: Tried to use the Express Scripts website to order refills
S07Y24	- In last 90 days: Problem to order refills on the Express Scripts website
S07Y35	- In Last 90 days: Used TRICARE mail order pharmacy (TMOP)
S07Y36A	- TMOP info from:TRICARE website
S07Y36B	- TMOP info from:Internet not TRICARE website
S07Y36C	- TMOP info from:Mailings
S07Y36D	- TMOP info from:MTF pharmacy
S07Y36E	- TMOP info from:Military publications/periodicals
S07Y36F	- TMOP info from:Friend/Friends
S07Y36G	- TMOP info from:Another source
S07Y36H	- TMOP info from:None in last 12 months
S07Y36I	- TMOP info from:Nothing known about TMOP
S07Y37A	- Did not use TMOP:Didn't know I could
S07Y37B	- Did not use TMOP:Didn't know how
S07Y37C	- Did not use TMOP:Costs too much
S07Y37D	- Did not use TMOP:Uncomfortable getting drugs by mail
S07Y37E	- Did not use TMOP:Medication unavailable from mail order pharmacy
S07Y37F	- Did not use TMOP:Difficult to use
S07Y37G	- Did not use TMOP:Civilian pharmacy is more convenient
S07Y37H	- Did not use TMOP:Trust civilian pharmacy to fill prescriptions correctly
S07Y37I	- Did not use TMOP:Civilian pharmacy has better instructions and information
S07Y37J	- Did not use TMOP:MTF pharmacy is more convenient
S07Y37K	- Did not use TMOP:Trust MTF pharmacy to fill prescriptions correctly
S07Y37L	- Did not use TMOP:MTF pharmacy has better instructions and information
S07Y37M	- Did not use TMOP:Need my prescription filled immediately

S07Y37N	- Did not use TMOP:Other reasons
SURVEY FIELDING VARIABLES	
ONTIME	- Responded within 8 weeks of mail-out
FLAG_FIN	- Final disposition
DUPFLAG	- Multiple response indicator
FNSTATUS	- Final status
KEYCOUNT	- Number of key questions answered
QUARTER	- Survey quarter
WEB	- Web survey indicator
CODING SCHEME FLAGS AND COUNTS	
N1	- Coding scheme note 1
N1A1	- Coding Scheme Note 1A1
N1A2	- Coding Scheme Note 1A2
N1A3	- Coding Scheme Note 1A3
N2	- Coding scheme note 2
N3	- Coding scheme note 3
N4	- Coding scheme note 4
N5	- Coding scheme note 5
N6	- Coding scheme note 6
N7	- Coding scheme note 7
N8	- Coding scheme note 8
N9	- Coding scheme note 9
N10	- Coding scheme note 10
N10A1	- Coding scheme note 10A1
N10B1	- Coding scheme note 10B1
N10B2	- Coding scheme note 10B2
N10B3	- Coding scheme note 10B3
N10B4	- Coding scheme note 10B4
N10B5	- Coding scheme note 10B5
N10B6	- Coding scheme note 10B6
N10B7	- Coding scheme note 10B7
N10C1	- Coding scheme note 10C1
N10C2	- Coding scheme note 10C2
N10C3	- Coding scheme note 10C3
N11	- Coding scheme note 11
N12	- Coding scheme note 12
N13	- Coding scheme note 13
N14	- Coding scheme note 14
N15A1	- Coding scheme note 15A1
N15A2	- Coding scheme note 15A2
N15A3	- Coding scheme note 15A3
N15A4	- Coding scheme note 15A4
N15A5	- Coding scheme note 15A5
N15A6	- Coding scheme note 15A6
N15B1	- Coding scheme note 15B1
N15B2	- Coding scheme note 15B2
N16	- Coding scheme note 16
N16A1	- Coding scheme note 16A1
N17A	- Coding scheme note 17A
N17A1	- Coding scheme note 17A1
N17B	- Coding scheme note 17B
N18	- Coding scheme note 18
N19	- Coding scheme note 19
MISS_1	- Count of: violates skip pattern
MISS_4	- Count of: incomplete grid error
MISS_5	- Count of: scalable response of don't know
MISS_6	- Count of: not applicable - valid skip

MISS_7	- Count of: out-of-range error
MISS_8	- Count of: multiple response error
MISS_9	- Count of: no response- invalid skip
MISS_TOT	- Total number of missing responses
CONSTRUCTED VARIABLES	
XSERVAFF	- Service affiliation
XTNEXREG	- TRICARE next generation of contracts region grouping
XBMI	- Body mass index
XBMICAT	- Body mass index category
XENRLLMT	- Enrollment in TRICARE prime
XENR_PCM	- Enrollment by PCM type
XINS_COV	- Insurance coverage
XBENCAT	- Beneficiary category
XENR_RSV	- Enrollment by PCM type - reservist
XINS_RSV	- Insurance coverage - reservist
XREGION	- Region
XCATCH	- XCATCH - Catchment area (reporting)
CONUS	- CONUS/OCONUS indicator
XOCONUS	- Overseas Europe/Pacific/Latin indicator
OUTCATCH	- Out of catchment area indicator
XSEXA	- Male or female (recode)
XBNFGRP	- Constructed beneficiary group
KMILOFFC	- Office wait of 15 min or more at military facility
KCIVOFFC	- Office wait of 15 min or more at civilian facility
KBGPRB1	- Big problem getting referrals to specialist
KBGPRB2	- Big problem getting necessary care
KMILOPQY	- Outpatient visits to military facility
KCIVOPQY	- Outpatient visits to civilian facility
KCIVINS	- Beneficiary covered by civilian insurance
HP_PRNTL	- Pregnant in last year received care in 1st trimester
HP_MAMOG	- Women age 40 and over mammography in past 2 years
HP_MAM50	- Women age 50 and over mammography in past 2 years
HP_PAP	- All women pap smear in last 3 years
HP_BP	- Blood pressure check in last 2 years know results
HP_FLU	- Age 65 and older flu shot in last 12 months
HP_SMOKE	- Advised to quit smoking in last 12 months
HP_SMOKH	- Smoker under HEDIS definition
HP_CESH	- Had smoking cessation counseling - HEDIS
HP_OBESE	- Obese or morbidly obese
POSTCELL	- Poststratification cell for new weights
WEIGHTS	
BWT	- Basic sampling weight
FWRWT	- Final quarterly weight
CFWT	- Combined Annual Final Weight

2. Variable Naming Conventions

To preserve continuity with survey data from previous years, MPR followed the same variable naming conventions for the core questions used for the 1996, 1997, 1998, 1999, 2000, 2002, 2003, 2004, 2005, 2006 and 2007 survey data. Variable naming conventions for the 2007 Adult HCSDB core and supplemental questions, shown in Table 2.2 correspond to those of previous years. The suffix "_0" will be used to distinguish the original version of the variable from the recoded version. The public use files for the adult survey will contain only recoded variables.

Variables created from most survey questions begin with the character "H". The next two characters are the third and fourth digits of the survey year. A small number of self-reported demographic variables begin with the characters "SR".

Each quarter, the questionnaire includes a battery of questions on specific health care topics concerning services offered to MHS beneficiaries. Supplemental questions contain the same number of alphanumeric characters as the core questions; each variable begins with an "S" to distinguish it as a supplemental question.

TABLE 2.2

NAMING CONVENTIONS FOR 2007 HCSDB VARIABLES – QUARTERS I-IV
(VARIABLES REPRESENTING SURVEY QUESTIONS)

1st Character: Survey Type	2nd – 3rd Characters: Survey Year	4th – 6th Characters: Question #	Additional Characters: Additional Information
H= Health Beneficiaries (18 and older, Adult Questionnaire) S = Supplemental Question	07	001 to 070 Quarter I G18-G39 – Supplemental questions about reservist coverage. Quarter II 001-008 – Supplemental questions about TRICARE Reserve Select. G18-G39 – Supplemental questions about reservist coverage. Quarter III 001-008 – Supplemental questions about TRICARE Reserve Select. B01-B04 – Supplemental questions about overall mental or emotional health. Q01-Q07 – Supplemental questions about colon cancer and prostate cancer screening tests. Quarter IV V01-V02, V05-V18 – Supplemental questions about TRICARE's civilian network. Y01, Y22-Y24, Y35-Y37 – Supplemental questions about prescription medicine.	A to R are used to label responses associated with a multiple response question _O denotes an original version of a recoded variable A to N are used to label responses associated with a multiple response question

1st Characters: Variable Group	Additional Characters: Additional Information
SR=Self-reported demographic data	Descriptive text, e.g., SREDA
N=Coding scheme notes	Number referring to Note, e.g., N2
X=Constructed independent variable	Descriptive text, e.g., XREGION
HP=Constructed *Healthy People 2010* variable	Descriptive text, e.g., HP_BP (had blood pressure screening in past two years and know the results)
K=Constructed dependent variables	Descriptive text, e.g., KMILOPQY (total number of outpatient visits to military facility)
FW= Weighting variables	Descriptive text, e.g., FWRWT for the final weight and number referring to replicate weights, e.g., FWRWT10
CFW= Annual weighting variables	Descriptive text, e.g., CFWT for the final weight and number referring to replicate weights, e.g., CFWT10

3. Missing Value Conventions

The 2007 conventions for missing variables are the same as the 2006 conventions. All missing value conventions used in the 2007 HCSDB are shown in Table 2.3

TABLE 2.3

CODING OF MISSING DATA AND "NOT APPLICABLE" RESPONSES

ASCII or Raw Source Data	Edited and Cleaned SAS Data	Description
Numeric	Numeric	
-9	.	No response
-7	.O	Out of range error
-6	.N	Not applicable or valid skip
-5	.D	Scalable response of "Don't know" or "Not sure"
-4	.I	Incomplete grid error
-1	.C	Question should have been skipped, not answered
	.B	No survey received

B. CLEANING AND EDITING

Data cleaning and editing procedures ensure that the data are free of inconsistencies and errors. Standard edit checks include the following:

- Checks for multiple surveys returned for any one person
- Range checks for appropriate values within a single question
- Logic checks for consistent responses throughout the questionnaire

We computed frequencies and cross tabulations of values at various stages in the process to verify the accuracy of the data. Data editing and cleaning proceeded in the following way:

1. Scan Review

Synovate spot checked the scanned results from the original survey to verify the accuracy of the scanning process and made any necessary corrections by viewing the returned survey.

2. Additional Synovate Editing and Coding

In preparing the database for MPR, Synovate used variable names and response values provided by MPR in the annotated questionnaires (see Appendix A). Synovate delivered to MPR a database in SAS format. In this database, any questions with no response were encoded with a SAS missing value code of '.'.

3. Duplicate or Multiple Surveys

At this stage, Synovate delivered to MPR a file containing one record for every beneficiary in the sample, plus additional records for every duplicate survey or multiple surveys received from any beneficiary. These duplicates and multiples were eliminated during record selection, and only the most complete questionnaire in the group was retained in the final database. Record selection is discussed in Section 2.C.

4. Removal of Sensitive or Confidential Information

The file that MPR received from Synovate contained sensitive information such as Social Security Number (SSN). Any confidential information was immediately removed from the file. Each beneficiary had already been given a generic ID (MPRID) substitute during sample selection, and the MPRID was retained as a means to uniquely identify each individual.

5. Initial Frequencies

MPR computed frequencies for all fields in the original data file. These tabulations served as a reference for the file in its original form and allowed comparison to final frequencies from previous years, helping to pinpoint problem areas that needed cleaning and editing. MPR examined these frequencies and cross-tabulations, using the results to adapt and modify the cleaning and editing specifications as necessary.

6. Data Cleaning and Recoding of Variables

MPR's plan for data quality is found in the 2007 Adult Coding Scheme for Quarters I-IV. It contains detailed instructions for all editing procedures used to correct data inconsistencies and errors. The

Coding Scheme tables for Quarters I-IV are found in Appendix B. These tables outline in detail the approach for recoding self-reported fields, doing range checks, logic checks, and skip pattern checks to insure that responses are consistent throughout the questionnaire. The Coding Scheme tables specify all possible original responses and any recoding, also indicating if backward coding or forward coding was used. Every skip pattern is assigned a note number shown in the annotated questionnaire (Appendix A). This note number defines the flag (for example, the Note 5 flag is N5) that is set to indicate the pattern of the original responses and any recoding. Thus, if the value of N5 is 2, the reader can look at line 2 in the Note 5 table for the original and recoded response values.

The SAS programs implementing the Coding Scheme for each quarter are found in Appendix F.

a. Check Self-Reported Fields

Several survey questions seek information that can be verified with DEERS data and/or sampling variables. Nevertheless, in recoding these self-reported fields (such as sex, active duty status, and TRICARE enrollment) we used the questionnaire responses unless they were missing; in which case, we used the DEERS data. For example, if the question on the sex of the beneficiary was not answered, the recoded variable for self-reported sex was not considered missing but was given the DEERS value for gender. If there was any disagreement between questionnaire responses and DEERS data, the questionnaire response generally took precedence.

In many tables and charts in the reports, the DEERS information was used rather than the recoded self-reported information for active duty status and TRICARE enrollment.

b. Skip Pattern Checks

At several points in the survey, the respondent should skip certain questions. If the response pattern is inconsistent with the skip pattern, each response in the series was checked to determine which are most accurate, given the answers to other questions. Questions that are appropriately skipped were set to the SAS missing value of '.N'. Inconsistent responses, such as answering questions that should be skipped or not answering questions that should be answered, were examined for patterns that could be resolved. Frequently, responses to subsequent questions provide the information needed to infer the response to a question that was left blank. The 2007 Adult Coding Scheme for Quarters I-IV (see Appendix B) specifically addresses every skip pattern and shows the recoded values for variables within each pattern; we back coded and/or forward coded to ensure that all responses are consistent within a sequence.

c. Missing Values

Synovate initially encoded any question with a missing response to a SAS missing value code of '.'. After verifying skip patterns, MPR recoded some of these responses to reflect valid skips (SAS missing value code of '.N'). The complete list of codes for types of missing values such as incomplete grids, and questions that should not have been answered is shown in Table 2.3.

Occasionally, missing questionnaire responses can be inferred by examining other responses. For example, if a respondent fails to answer H07016 about getting advice or help over the phone from his/her doctor's office or clinic, but goes on to answer how often he/she received help or advice, then we assume that the answer to H07016 should have been "yes". Using this technique, we recoded some missing questionnaire responses to legitimate responses.

d. Logic Checks

Most logic problems are due to inconsistent skip patterns, for example, when a male answers a question intended for women only. Other internal inconsistencies were resolved in the same manner as skip pattern inconsistencies — by looking at the answers to all related questions. For instance, several questions related to smoking were examined as a group to determine the most

appropriate response pattern so that any inconsistent response could be reconciled to the other responses in the group.

7. Quality Assurance

MPR created an edit flag for each Coding Scheme table that indicates what, if any, edits were made in the cleaning and editing process. This logic was also used in previous years; variables such as N5 (see Appendix B) indicate exactly what pattern of the Coding Scheme was followed for a particular set of responses. These edit flags have a unique value for each set of original and recoded values, allowing us to match original values and recoded values for any particular sequence.

In order to validate the editing and cleaning process, MPR prepared cross-tabulations between the original variables and the recoded variables with the corresponding edit flag. This revealed any discrepancies that needed to be addressed. In addition, we compared unweighted frequencies of each variable with the frequencies from the original file to verify that each variable was accurately recoded. MPR reviewed these tabulations for each variable in the survey. If necessary, the earlier edit procedures were modified and the Coding Scheme program rerun. The resulting file was clean and ready for analysis.

C. RECORD SELECTION

To select final records, we first defined a code that classifies each sampled beneficiary as to his/her final response status. To determine this response status, we used postal delivery information provided by Synovate for each sampled beneficiary. This information is contained in the FLAG_FIN variable which is described in Table 2.4

TABLE 2.4

FLAG_FIN VARIABLE FOR 2007 HCSDB

Value	Questionnaire Return Disposition	Reason/Explanation Given	Eligibility
1	Returned survey	Completed and returned	Eligible
2	Returned ineligible	Returned with at least one question marked and information that the beneficiary was ineligible	Ineligible
3	Returned blank	Information sent that beneficiary is temporarily ill or incapacitated	Eligible
4	Returned blank	Information sent that beneficiary is deceased	Ineligible
5	Returned blank	Information sent that beneficiary is incarcerated or permanently incapacitated	Ineligible
6	Returned blank	Information sent that beneficiary left military, or divorced after reference date, or retired	Eligible
7	Returned blank	Information sent that beneficiary was not eligible on reference date	Ineligible
8	Returned blank	Blank form accompanied by reason for not participating	Eligible
9	Returned blank	No reason given	----
10	No return	Temporarily ill or incapacitated. Information came in by phone	Eligible
11	No return	Active refuser. Information came in by phone	Eligible
12	No return	Deceased. Information came in by phone	Ineligible
13	No return	Incarcerated or permanently incapacitated. Information came in by phone	Ineligible

Value	Questionnaire Return Disposition	Reason/Explanation Given	Eligibility
14	No return	Left military or divorced after reference date, or retired. Information came in by phone	Eligible
15	No return	Not eligible on reference date. Information came in by phone	Ineligible
16	No return	Other eligible. Information came in by phone	Eligible
17	No return	No reason	---
18	Postal Non-Deliverables (PND)	No address remaining	---
19	PND	Address remaining at the close of field	---
20	Original Non-Locatable	No address at start of mailing	---
21	No return or returned blank	Written documentation declining participation, no reason given	Eligible
22	No return or returned blank	Hospitalized but no indication if temporary or permanent	---
23	Returned blank	Deployed	Eligible
24	No return	Deployed	Eligible
25	Deceased	Updating process identified beneficiary as deceased	Ineligible
26	Ineligible	Updating process identified beneficiary as not eligible for Military Health System plan	Ineligible

Using the above variables in Table 2.4, we classified all sampled beneficiaries into four groups:

- **Group 1**: Eligible, Questionnaire Returned. Beneficiaries who were eligible for the survey and returned a questionnaire with at least one question answered (FLAG_FIN = 1)
- **Group 2**: Eligible, Questionnaire Not Returned (or returned blank). Beneficiaries who did not complete a questionnaire but who were determined to be eligible for military health care by the reference date, that is, not deceased, not incarcerated, not permanently hospitalized (FLAG_FIN = 3, 6, 8, 10, 11, 14, 16, 21, 23, 24)
- **Group 3:** Ineligible Beneficiaries who were ineligible because of death, institutionalization, or no longer being in the MHS as of the reference date (FLAG_FIN = 2, 4, 5, 7, 12, 13, 15, 25, 26)
- **Group 4:** Eligibility Unknown. Beneficiaries who did not complete a questionnaire and for whom survey eligibility could not be determined (FLAG_FIN = 9, 17, 18, 19, 20, 22)

Group 1 was then divided into two subgroups according to the number of survey items completed (including legitimate skip responses):

- G1-1. Complete questionnaire returned
- G1-2. Incomplete questionnaire returned

G1-1 consists of eligible respondents who answered “enough” questions to be classified as having completed the questionnaire. G1-2 consists of eligible respondents who answered only a few questions. To determine if a questionnaire is complete, 27 key questions were chosen. The key survey variables are: H07006, H07008, H07009, H07010, H07011, H07012, H07014, H07015, H07016, H07017, H07018, H07019, H07021, H07024, H07025, H07027, H07030, H07037, H07038, H07042, H07044, H07046, H07048, H07066, SREDA, H07070, and the race indicator (any response to SRRACEA-SRRACEE). If thirteen or more of these key items are completed, then the questionnaire can be counted as complete.

Group 3 was then divided into two subgroups according to how ineligible beneficiaries were identified:

- G3-1. Returned ineligible (FLAG_FIN = 2, 4, 5, 7, 12, 13, 15)
- G3-2. Ineligible at time of Altarum address update (FLAG_FIN = 25, 26)

G3-1 consists of ineligible beneficiaries who responded to the survey request, but told us they were ineligible. G3-2 consists of beneficiaries identified as ineligible during the updating process.

Furthermore, we also subdivided Group 4 into the following:

- G4-1 for locatable-blank return/no reason or no return/no reason (FLAG_FIN = 9, 17, 22)
- G4-2 for nonlocatable-postal nondeliverable/no address, postal nondeliverable/had address, or original nonlocatable (FLAG_FIN = 18, 19, 20).

With this information, we can calculate the location rate (see Section 4.A).

With a code (FNSTATUS) for the final response/eligible status, we classified all sampled beneficiaries using the following values of FNSTATUS:

- 11 for G1-1
- 12 for G1-2
- 20 for Group 2
- 31 for G3-1
- 32 for G3-2
- 41 for G4-1
- 42 for G4-2

There were altogether 963 duplicate questionnaires in the four quarterly data sets Synovate delivered. All duplicates were classified into one of the above six groups. We then retained the one questionnaire for each beneficiary that had the most "valid" information for the usual record selection process. For example, if two returned questionnaires from the same beneficiary have FNSTATUS code values of 11, 12, 20, 41, or 42, we retained the questionnaire with the smaller value. However, if one of a pair of questionnaires belongs to Group 3 (FNSTATUS = 31 or 32, i.e., ineligible), then we regarded the questionnaire as being ineligible.

Only beneficiaries with FNSTATUS = 11 were retained. All other records were dropped. In Quarters I-IV, we retained 49,609 respondents.

D. CONSTRUCTED VARIABLES

One of the most important aspects of database development is the formation of constructed variables and scale variables to support analysis. Constructed variables are formed when no single question in the survey defines the construct of interest. In Table 2.1 there is a list of all constructed variables for 2007. Each constructed variable is discussed in this section and the relevant piece of SAS code is shown. All SAS programs can be found in Appendix F.

1. Demographic Variables

a. Region (XREGION)

Catchment area codes (CACSMPL) are used to classify beneficiaries into lead agent's regions. These regions corresponded to the administrative organization of TRICARE before reorganization in 2004. The XREGION variable partitions all catchment areas into non-overlapped regions so that we can report catchment-level estimates in the catchment reports. The regions are defined as follows:

1 = Northeast

2 = Mid-Atlantic

3 = Southeast

4 = Gulfsouth

5 = Heartland

6 = Southwest

7,8 = Central

9 = Southern California

10 = Golden Gate

11 = Northwest

12 = Hawaii

13 = Europe

14 = Western Pacific Command (Asia)

15 = TRICARE Latin America

16 = Alaska

.= Unassigned (CACSMPL = 9999)

For the purposes of our analysis, Region 7 and Region 8 were combined.

```
/* XREGION –HEALTH CARE REGIONS */
IF      CACSMPL IN (0035, 0036, 0037, 0066, 0067,
                    0068, 0069, 0081, 0086, 0100,
                    0123, 0306, 0310, 0321, 0326,
                    0330, 0385, 0413, 6201, 6223) THEN XREGION= 1;
ELSE IF CACSMPL IN (0089, 0090, 0091, 0092, 0120,
                    0121, 0122, 0124, 0335, 0378, 0387, 0432,
                    0433, 0508, 7143, 7286, 7294) THEN XREGION= 2;
ELSE IF CACSMPL IN (0039, 0041, 0045, 0046, 0047,
                    0048, 0049, 0050, 0051, 0101,
                    0103, 0104, 0105, 0337, 0356,
                    0405, 0422, 0511            ) THEN XREGION= 3;
ELSE IF CACSMPL IN (0001, 0002, 0003, 0004, 0038,
                    0042, 0043, 0073, 0074, 0107,
                    0297, 7139            ) THEN XREGION= 4;
ELSE IF CACSMPL IN (0055, 0056, 0060, 0061, 0095,
                    9905                      ) THEN XREGION= 5;
ELSE IF CACSMPL IN (0013, 0062, 0064, 0096, 0097,
                    0098, 0109, 0110, 0112, 0113,
                    0114, 0117, 0118, 0338, 0363,
```

```
                0364, 0365, 0366, 1587, 1592, 7236, 9906       ) THEN XREGION= 6;
ELSE IF CACSMPL IN (0008, 0009, 0010, 0079, 0083,
                0084, 0085, 0108, 9907       ) THEN XREGION= 7;
ELSE IF CACSMPL IN (0031, 0032, 0033, 0053, 0057,
                0058, 0059, 0075, 0076, 0077,
                0078, 0093, 0094, 0106, 0119,
                0129, 0252, 7200, 7293, 9908            ) THEN XREGION= 8;
ELSE IF CACSMPL IN (0018, 0019, 0024, 0026, 0029, 0030,
                0131, 0213, 0231, 0248, 0407, 5205,
                6215, 9909  ) THEN XREGION= 9;
ELSE IF CACSMPL IN (0014, 0015, 0028, 0235, 0250,
                9910                        ) THEN XREGION=10;
ELSE IF CACSMPL IN (0125, 0126, 0127, 0128, 0395, 1646,
                9911                        ) THEN XREGION=11;
ELSE IF CACSMPL IN (0052, 0280, 0287, 0534, 7043, 9912 ) THEN XREGION=12;
ELSE IF CACSMPL IN (0606, 0607, 0609, 0617, 0618,
                0623, 0624, 0629, 0633, 0635,
                0653, 0805, 0806, 0808, 0814,
                8931, 8982, 9913            ) THEN XREGION=13;
ELSE IF CACSMPL IN (0610, 0612, 0620, 0621, 0622,
                0637, 0638, 0639, 0640, 0802,
                0804, 0853, 0862, 9914       ) THEN XREGION=14;
ELSE IF CACSMPL IN (0449, 0613, 0615, 0616, 9915 ) THEN XREGION=15;
ELSE IF CACSMPL IN (0005, 0006, 0203, 9916       ) THEN XREGION=16;
ELSE IF CACSMPL = 9999                          THEN XREGION= .;

IF CACSMPL IN (9901,9902,9903,9904) THEN DO;
  IF D_HEALTH NOT IN ('00','17','18','19') THEN DO;
    XREGION=INPUT(D_HEALTH,8.)+0;
  END;
  ELSE DO;
    IF  DCATCH IN ('0037', '0067', '0123', '0781', '0907',
                '0908', '0920', '0921', '0922', '0930',
                '0931', '0933', '0939', '0940', '0946',
                '0995')
    THEN XREGION=1;
    ELSE IF DCATCH IN ('0124', '0934', '0996')
        THEN XREGION=2;
    ELSE IF DCATCH IN ('0039', '0048', '0105', '0911', '0941',
                    '0987')
        THEN XREGION=3;
    ELSE IF DCATCH IN ('0003', '0787', '0901', '0925', '0943',
                    '0988', '0989')
        THEN XREGION=4;
    ELSE IF DCATCH IN ('0055', '0056', '0061', '0782', '0783',
                    '0789', '0914', '0915', '0918', '0923',
                    '0936', '0950')
        THEN XREGION=5;
    ELSE IF DCATCH IN ('0113', '0904', '0937', '0990', '0993')
        THEN XREGION=6;
    ELSE IF DCATCH IN ('0785', '0929', '0932')
        THEN XREGION=7;
    ELSE IF DCATCH IN ('0078', '0784', '0788', '0906', '0917',
                    '0924', '0927', '0928', '0935', '0942',
                    '0945', '0951', '0974')
```

```
        THEN XREGION=8;
    ELSE IF DCATCH IN ('0029', '0786', '0986')
        THEN XREGION=9;
    ELSE IF DCATCH IN ('0014', '0985')
        THEN XREGION=10;
    ELSE IF DCATCH IN ('0125', '0938', '0948', '0973')
        THEN XREGION=11;
    ELSE IF DCATCH IN ('0912')
        THEN XREGION=12;
    ELSE IF DCATCH IN ('0957', '0958', '0960', '0964', '0966',
                '0967', '0976', '0977', '0979',
                '0982')
        THEN XREGION=13;
    ELSE IF DCATCH IN ('0006', '0052', '0640', '0961', '0963',
                '0965', '0978', '0983')
        THEN XREGION=14;
    ELSE IF DCATCH IN ('0075', '0120', '0615', '0622','0953',
                '0970', '0971', '0972', '0975')
        THEN XREGION=15;
    ELSE IF DCATCH IN ('0902')
        THEN XREGION=16;
  END;
END;


IF D_PAR = '0902' THEN XREGION=16;
IF XREGION = 0 THEN XREGION = .;
```

b. Continental United States (CONUS)

XREGION is used to classify beneficiaries either in the continental United States (CONUS) or overseas (OCONUS).

CONUS stands for Continental United States but it includes both Alaska and Hawaii.

```
IF      XREGION IN (1,2,3,4,5,6,7,8,9,10,11,12,16) THEN CONUS=1;
ELSE IF XREGION IN (13,14,15)                      THEN CONUS=0;
ELSE IF XREGION = .                                THEN CONUS=.;
```

c. Overseas (XOCONUS)

XREGION is used to classify beneficiaries who are overseas as follows:

1=Europe
2=Western Pacific
3=Latin America
.=In Conus/Missing Region

```
IF      XREGION=13 THEN XOCONUS=1;
ELSE IF XREGION=14 THEN XOCONUS=2;
ELSE IF XREGION=15 THEN XOCONUS=3;
```

d. TRICARE Next Generation of Contracts Region (XTNEXREG)

XREGION is used to create XTNEXREG. XTNEXREG is the TRICARE Next Generation of Contracts Region grouping.

```
IF XREGION IN (1,2,5) THEN XTNEXREG=1;                    /* North */
ELSE IF XREGION IN (3,4,6) THEN XTNEXREG=2;               /* South */
ELSE IF XREGION IN (7,8,9,10,11,12,16) THEN XTNEXREG=3; /* West */
ELSE IF XREGION IN (13,14,15) THEN XTNEXREG=4;            /* Overseas */
```

e. Out of Catchment Area (OUTCATCH)

CACSMPL is used to classify beneficiaries either in a catchment area or outside a catchment area.

```
/* OUTCATCH – OUT OF CATCHMENT AREA */
IF 9900 < CACSMPL < 9999 THEN OUTCATCH=1;     /* Out of catchment area */
  ELSE IF CACSMPL = 9999 THEN OUTCATCH=.;
  ELSE OUTCATCH=0;                        /* Catchment area        */
```

f. Catchment (XCATCH)

XCATCH is an

MTF catchment area for annual beneficiary reports. The catchment is defined as follows:

```
  LENGTH XCATCH 8;
  com_geo = geocell;
  if pcm = 'MTF' then do;
%INCLUDE "..\..\..\Q4_2005\Programs\Sampling\AssignCOM_GEO.inc"; (refer to Appendix F.18)
    else if ('1976' <= enrid <= '1980' ) or ( '6301' <= enrid <= '6323' ) or
      ('6991' <= enrid <= '6994')   or ('6501' <=enrid <='6512') or
      ('7166' <= enrid <= '7195') or ( '6700' <= enrid <= '6881' ) or enrid = '0000' or
      ('8001' <= enrid <= '8036') or ('6901' <= enrid <= '6919') or
      ('3031' <= enrid <= '3057') or
      enrid in ('0002', '0041', '0044', '0082', '0111', '0213', '0235', '0585', '5208', '0250',
                '0449', '0626', '0012') or
      ('0190' <= enrid <='0199') then com_geo = geocell;
    else com_geo = d_par;
  end;
  else if patcat='ACTDTY' then com_geo=d_par;

  if d_fac='NONCAT' or d_fac='TGRO' or d_fac="TPR" then do;
    if d_health in ('01','02','05','17') then com_geo = '9901';
    else if d_health in ('03','04','06','18') then com_geo = '9902';
    else if d_health in ('07','08','09','10','11','12','19') then com_geo = '9903';
    else if d_health in ('00','13','14','15') then com_geo = '9904';
  end;
  ******************************************************************************************;
  ***d_fac="TPR" and d_health = '17', '18', '19' were added above for Q4, 2004,  ***;
  ***since we got the new regions 17(North T_NEX),18(South T_NEX),19(West T_NEX).***;
  ******************************************************************************************;

  *** If the facility is unknown then set com_geo indicates unknown facility ***;
  *** '0999' added 03/15 to account for id 6992;
  if com_geo in ('9900', '0999', '0998',' ') then com_geo = '9904';

  ********************************************************************************;
  ***Made the following 9 Navy sites stand alone in q1,2005:      ***;
  ***'0026','0068','0231','0378','0387','0405','0407','0508','6215'***;
  ********************************************************************************;
  if geocell in ('0026','0068','0231','0378','0387','0405','0407','0508','6215') then com_geo=geocell;
```

```
xcatch = INPUT(com_geo,8.);
label xcatch = "XCATCH – Catchment Area (Reporting)";
```

g. Gender of Beneficiary (XSEXA)

XSEXA is constructed using self reported sex, gender identified on the DEERS database, and answers to gender specific questions.

```
/** Note 17 - gender H07058, SEX, H07059--H07065,
          XSEXA */

/* 1/21/98 use SRSEX & responses to gender specific questions
  if there is discrepancy between SRSEX and SEX */
/* set imputed FMALE based on gender specific questions */


ARRAY fmaleval H07059 H07060 H07061 H07063 H07064 H07065
          ;

cntfmale=0;
DO OVER fmaleval;        /* mammogram/pap smear/PREGNANT*/
  IF fmaleval>0 THEN cntfmale=cntfmale+1;
END;

IF cntfmale>0 THEN FMALE=1;
ELSE FMALE = 0;


IF H07058=. THEN DO;
  IF (SEX='F' AND FMALE) THEN DO;
    N17a=1;
    XSEXA=2;
  END;
  ELSE IF (SEX='F' AND FMALE=0) THEN DO;
    N17a=2;
    XSEXA=2;
  END;
  ELSE IF (SEX='M' AND FMALE) THEN DO;
    N17a=3;
    XSEXA=1;
  END;
  ELSE IF (SEX='M' AND FMALE=0) THEN DO;
    N17a=4;
    XSEXA=1;
  END;
  ELSE IF ((SEX IN ('Z',' ') AND FMALE)) THEN DO;
    N17a=5;
    XSEXA=2;
  END;
  ELSE IF (SEX='Z' AND FMALE=0) THEN DO;
    N17a=6;
    XSEXA=.;
  END;
  ELSE IF (SEX=' ' AND FMALE=0) THEN DO;
    N17a=7;
```

```
      XSEXA=.;
    END;
  END;
  ELSE IF (H07058=1) THEN DO;
    IF FMALE=0 THEN DO;
      N17a=8;
      XSEXA=1;
    END;
    ELSE IF FMALE THEN DO;
      IF SEX='F' THEN DO;
        N17a=9;
        XSEXA=2;
      END;
      ELSE DO;
        N17a=10;
        XSEXA=1;
      END;
    END;
  END;
  ELSE IF (H07058=2) THEN DO;
    IF FMALE THEN DO;
     N17a=11;
     XSEXA=2;
    END;
    ELSE IF FMALE=0 THEN DO;
      IF SEX='M' THEN DO;
       N17a=12;
       XSEXA=1;
      END;
      ELSE DO;
        N17a=13;
        XSEXA=2;
      END;
    END;
  END;
```

h. Beneficiary Group (XBNFGRP)

We redefined beneficiary groups to exclude any active duty personnel and any active duty family members who are age 65 or older. The variable XBNFGRP reconstructs beneficiary groups into the following values:

1 = Active Duty, under 65
2 = Family members of active duty, under 65
3 = Retirees, survivors, and family members, under 65
4 = Retirees, survivors, and family members, 65 or over
.= Unknown/other

```
/* XBNFGRP-Beneficiary Group that excludes those 65 and over-Active Duty and Family Members
of Active Duty */
IF FIELDAGE  >= 65 AND ENBGSMPL IN (1, 2, 3, 4) THEN XBNFGRP = .;
  ELSE IF ENBGSMPL = 1 THEN XBNFGRP = 1;
  ELSE IF ENBGSMPL IN (2, 3, 4) THEN XBNFGRP = 2;
  ELSE IF ENBGSMPL IN (5, 6, 7) THEN XBNFGRP = 3;
  ELSE IF ENBGSMPL IN (8, 9, 10) THEN XBNFGRP = 4;
  ELSE IF ENBGSMPL IN (11)       THEN XBNFGRP = .;
END;
```

i. Service Affiliation (XSERVAFF)

We redefined service affiliation to collapse coast guard, administrative, support contractor, USTF, noncatchment, other, not available, Missing/unknown service affiliations. The variable XSERVAFF reconstructs service affiliation into the following values:
1 = Army
2 = Air Force
3 = Navy
4 = Other

```
IF SERVAFF='A' THEN XSERVAFF=1; *Army;
IF SERVAFF='F' THEN XSERVAFF=2; *Air Force;
IF SERVAFF='N' THEN XSERVAFF=3; *Navy;

 /***Coast Guard, Administrative, Support Contractor, USTF, Noncatchment,
      Other, Not available, Missing/unknown
  *** will collapse to other per Eric Shone ***/

 IF SERVAFF IN ('C' 'J' 'M' 'T' 'S' 'O' 'X' ' ') THEN XSERVAFF=4; *Other;
```

2. TRICARE Prime Enrollment and Insurance Coverage

a. TRICARE Prime Enrollment Status (XENRLLMT)

For reporting purposes, a person is considered enrolled in TRICARE Prime if they are under 65 and the poststratification enrollment type (ENBGSMPL), based on DEERS data, indicates that they were enrolled at the time of data collection. Because it is important to view the experiences of active duty personnel separately from other enrollees, there is a separate category for active duty (under 65) — they are automatically enrolled in Prime. The five categories for TRICARE Prime enrollment are as follows:

1 = Active duty, under 65
2 = Other enrollees, under 65
3 = Not enrolled in TRICARE Prime, under 65
4 = Not enrolled in TRICARE Prime, 65 or over
5 = Enrolled in TRICARE Prime, 65 or over
. = Unknown

```
 /* XENRLLMT—ENROLLMENT STATUS */
 IF 18 <= INPUT(FIELDAGE,8.) < 65 THEN DO;
   IF INPUT(ENBGSMPL,8.) = 1 THEN XENRLLMT = 1;                /*  Active duty (<65) */
   ELSE IF INPUT(ENBGSMPL,8.) IN (2, 3, 5, 6) THEN XENRLLMT = 2;   /*   Non-active duty
 enrolled (<65)*/
   ELSE IF INPUT(ENBGSMPL,8.) IN (4, 7,11) THEN XENRLLMT = 3;     /*  Not Enrolled (<65)*/
 END;
 ELSE IF INPUT(FIELDAGE,8.)  > = 65 THEN DO;
   IF INPUT(ENBGSMPL,8.) = 10 THEN XENRLLMT = 4;               /*  Not Enrolled (65+)*/
   IF INPUT(ENBGSMPL,8.) IN (8,9) THEN XENRLLMT = 5;           /*  Enrolled (65+)   */
 END;
```

b. TRICARE Prime Enrollment Status by Primary Care Manager (XENR_PCM)

This variable, similar to the previous variable XENRLLMT, separates the ‘other enrollees’ category into those with a military primary care manager (PCM) and those with a civilian PCM. Active duty

personnel are automatically enrolled and always have a military PCM. XENR_PCM has seven possible values:

1 = Active duty, under 65, military PCM
2 = Other enrollees, under 65, military PCM
3 = Other enrollees, under 65, civilian PCM
4 = Not enrolled in TRICARE Prime, under 65
5 = Not enrolled in TRICARE Prime, 65 or over
6 = Enrolled in TRICARE Prime, 65 or over, military PCM
7 = Enrolled in TRICARE Prime, 65 or over, civilian PCM
. = Unknown

```
/* XENR_PCM—ENROLLMENT BY PCM TYPE */
IF 18 <= FIELDAGE < 65 THEN DO;
  IF ENBGSMPL = 1 THEN XENR_PCM = 1;              /*  Active duty (<65)       */
  ELSE IF ENBGSMPL IN (3, 6) THEN XENR_PCM = 2;     /*  Enrolled (<65) - mil PCM */
  ELSE IF ENBGSMPL IN (2, 5) THEN XENR_PCM = 3;     /*  Enrolled (<65) - civ PCM */
  ELSE IF ENBGSMPL IN (4, 7,11) THEN XENR_PCM = 4;  /*  Not Enrolled (<65)      */
END;
 ELSE IF FIELDAGE > = 65 THEN DO;
   IF ENBGSMPL = 10 THEN XENR_PCM = 5;          /*  Not Enrolled (65+)      */
   IF ENBGSMPL = 9 THEN XENR_PCM = 6;           /*  Enrolled (65+)-mil PCM   */
   IF ENBGSMPL = 8 THEN XENR_PCM = 7;           /*  Enrolled (65+)-civ PCM   */  /*NJ_Q2*/
 END;
END;
```

c. Most–Used Health Plan (XINS_COV)

The respondent's most–used health plan comes directly from Question 6 (unless the respondent is active duty) and the respondent's age. All active duty personnel are automatically enrolled in Prime. The eight categories for this variable are as follows:
1 = Active duty, under 65
2 = Other TRICARE Prime enrollees, under 65
3 = TRICARE Standard/Extra (CHAMPUS)
4 = Medicare Part A and/or Part B
5 = Other civilian health insurance or civilian HMO
6 = Prime, 65 or over
7 = TRICARE Plus and Medicare
8 = Veterans Administration (VA)
. = Unknown

```
IF XENRLLMT = 1 THEN XINS_COV =1;                          /* Prime <65-Active Duty */
  ELSE IF 18 <= FIELDAGE  < 65 AND H07006 IN (1) THEN XINS_COV = 2; /* Prime <65-Non-
active Duty */
  ELSE IF H07006 = 3 THEN XINS_COV = 3;                    /* Standard/Extra */
  ELSE IF H07006 = 11 THEN XINS_COV = 7;                     /* Plus and Medicare */
  ELSE IF H07006 = 4 THEN XINS_COV = 4;                     /* Medicare*/
  ELSE IF H07006 IN (5,6, 7, 8, 9, 13) THEN XINS_COV = 5;            /* Other civilian health
insurance*/
  ELSE IF H07006 = 10 THEN XINS_COV = 8;                     /* Veterans Administration (VA) */
  ELSE IF H07006 = 12 THEN XINS_COV = 9;                     /* TRICARE Reserve Select */
  ELSE IF (FIELDAGE >= 65 AND XENRLLMT = 5 and H07006 = 1) THEN XINS_COV = 6;   /*
Prime, >= 65 */
  ELSE IF H07003=1 AND H07004=1 AND H07006 NE .N THEN XINS_COV = 4;
```

d. Types of Coverage (KCIVINS)

A binary variable was created to indicate the type of insurance that respondents use:

- Is the respondent covered by civilian insurance (KCIVINS)

This variables has the following values:
1 = Yes
2 = No
.= Unknown

```
IF H07002G=1 OR H07002I=1 OR H07002J=1 THEN KCIVINS=1;        /* YES  */
  ELSE KCIVINS=2;                                             /* NO   */
```

3. Access to Care (KMILOFFC, KCIVOFFC, KBGPRB1, KBGPRB2)

Some of the survey questions on access relate to a TRICARE performance standard. For these questions, we constructed binary variables, separately for beneficiaries using military and civilian facilities, to approximate the TRICARE standard. Table 2.5 presents those standards that were analyzed in the reports. The new variables have the following values:

1 = Standard was met
2 = Standard was not met
. = Missing response

TABLE 2.5

TRICARE STANDARDS FOR ACCESS

Access Measure	TRICARE Standard	Variable Name	Relevant Question
Waiting Room Wait	Within 15 minutes	KMILOFFC, KCIVOFFC	H07030

```
/* KMILOFFC—OFFICE WAIT OF MORE THAN 15 MINUTES AT MILITARY FACILITES
  KCIVOFFC—OFFICE WAIT OF MORE THAN 15 MINUTES AT CIVILIAN FACILITES */
IF H07038  = 1 THEN DO;                          /* Military */
  IF H07030  IN (1,2) THEN KMILOFFC = 1;            /* Yes */
  ELSE IF H07030  IN (3,4) THEN KMILOFFC = 2;         /* No  */
END;
  ELSE IF H07038 IN (2, 3, 4) THEN DO;              /* Civilian */
    IF H07030 IN (1,2) THEN KCIVOFFC = 1;           /* Yes */
    ELSE IF H07030  IN (3,4) THEN KCIVOFFC = 2;       /* No */
  END;
```

H07013 asks how much of a problem, if any, it was to get a referral to a specialist. The responses to this question are regrouped by a binary variable KBGPRB1. KBGPRB1 looks at these two categories:
1 = Those who reported a “big problem”
2 = Those who reported not a “big problem”
. = Missing response

```
/* KBGPRB1—BIG PROBLEM GETTING REFERRALS TO SPECIALISTS */
 IF H07013 = 1 THEN KBGPRB1 = 1;                    /* YES */
  ELSE IF H07013 IN (2,3) THEN KBGPRB1 = 2;            /* NO  */
```

Similarly, variable KBGPRB2 was constructed. H07027 asks about how much of a problem, if any, it was to get the care you or a doctor believed necessary. The responses to this question are regrouped by a binary variable KBGPRB2. KBGPRB2 looks at these two categories:

1 = Those who reported a “big problem”
2 = Those who reported not a “big problem”
. = Missing response

```
/* KBGPRB2—BIG PROBLEM GETTING NECESSARY CARE */
IF H07027 = 1 THEN KBGPRB2 = 1;                    /* YES */
   ELSE IF H07027 IN (2,3) THEN KBGPRB2 = 2;          /* NO  */
```

4. Preventive Care (HP_PRNTL, HP_MAMOG, HP_MAM50, HP_PAP, HP_BP, HP_FLU, HP_SMOKE, HP_SMOKH, HP_CESH, HP_OBESE, XBMI, XBMICAT)

As in some of the access analyses, preventive care analyses incorporated either a TRICARE standard or a federal Healthy People 2010 objective. We constructed new binary variables from the responses to indicate whether the respondent received the preventive care service within the recommended time period. See Table 2.6 for the list of the variables developed for analysis of preventive care; these variables will be compared to the TRICARE standard or Healthy People 2010 Goal. The new variables have the following values:

1 = Received service within the recommended time period
2 = Did not receive service within the recommended time period
.= Missing information

TABLE 2.6

PREVENTIVE CARE STANDARDS

Preventive Care Delivered	Relevant Question	Variable Name	Received Service In Recommended Time Period (Numerator)	Population Involved (Denominator)	Standard
Blood Pressure Check	H07049 & H07050	HP_BP	Number with care in the past 24 months and know the results	Adults	95% within past 2 years
Flu Shot	H07051	HP_FLU	Number with care in the past 12 months	Adults age 65 and older	90% in past year, age 65 and over
Pap Smear	H07059	HP_PAP	Number with care in the past 36 months	Adult females	90% in the past 36 months
Mammography	H07061	HP_MAMOG	Number with care in the past 24 months	Females age 40 and over	70% in the past 24 months
Mammography	H07061	HP_MAM50	Number with care in the past 24 months	Females age 50 and over	70% in the past 24 months
Smoker	H07052, H07053 & H07054	HP_SMOKH	Number that smoked in the past 12 months	Adults	12% in the last 12 months
Smoking Cessation	H07052, H07053, H07054, & H07055	HP_CESH	Number that smoked in the past 12 months	All current adult smokers and those who quit smoking within the past year	None
Prenatal Care	H07065	HP_PRNTL	Number with care in the first trimester	Currently pregnant adult females and all adult females who were pregnant in the past 12 months, excluding those less than 3 months pregnant who haven't received care	90% had care in first trimester
Non-Obese Weight	H07068F, H07068I & H07069	HP_OBESE	Number of people who are not obese	Adults	85% are not obese

```
/* HP_PRNTL--IF PREGNANT LAST YEAR, RECEIVED PRENATAL CARE IN 1ST TRIMESTER
*/
IF H07063 IN (1,2) THEN DO;                          /*   Pregnant in last 12 months   */
  IF H07065 = 4 THEN HP_PRNTL = 1;                        /*   Yes   */
    ELSE IF (H07064 = 1 AND H07065 = 1) THEN HP_PRNTL = .;    /* <3 months pregnant now */
    ELSE IF H07065 IN (1,2,3) THEN HP_PRNTL = 2;             /*   No */
END;

/* HP_MAMOG--FOR WOMEN AGE 40 AND OVER, HAD MAMMOGRAM W/IN PAST 2 YEARS
*/
IF XSEXA = 2 AND INPUT(FIELDAGE,8.)  >= 40 THEN DO;
  IF H07061 IN (5, 4) THEN HP_MAMOG = 1;           /* Yes */
  ELSE IF H07061 IN (1, 2, 3) THEN HP_MAMOG = 2;    /* No */
END;

/* HP_MAM50--FOR WOMEN AGE 50 AND OVER, HAD MAMMOGRAM W/IN PAST 2 YEARS
*/
IF XSEXA = 2 AND INPUT(FIELDAGE,8.)  >= 50 THEN DO;
  IF H07061 IN (5, 4) THEN HP_MAM50 = 1;           /* Yes */
  ELSE IF H07061 IN (1, 2, 3) THEN HP_MAM50 = 2;    /* No */
END;
```

```
/* HP_PAP--FOR ALL WOMEN, HAD PAP SMEAR IN LAST 3 YEARS */
IF XSEXA = 2 THEN DO;
  IF H07059 IN (4, 5) THEN HP_PAP = 1;            /* Yes */
  ELSE IF H07059 IN (1, 2, 3) THEN HP_PAP = 2;      /* No  */
END;

/* HP_BP--HAD BLOOD PRESSURE SCREENING IN LAST 2 YEARS AND KNOW RESULT */
IF H07049 IN (2,3) AND H07050 IN (1,2) THEN HP_BP = 1;   /* Yes     */
  ELSE IF H07049 = 1 THEN HP_BP = 2;                  /* No      */
  ELSE IF H07049 < 0 OR H07050 < 0 THEN HP_BP = .;     /* Unknown */
  ELSE HP_BP = 2;                                 /* No      */

/* HP_FLU--FOR PERSON AGE 65 OR OVER, HAD FLU SHOT IN LAST 12 MONTHS */
IF INPUT(FIELDAGE,8.) >= 65 THEN DO;
  IF H07051 = 4 THEN HP_FLU = 1;                  /*   Yes */
  ELSE IF H07051 IN (1, 2, 3) THEN HP_FLU = 2;      /*   No  */
END;

/* HP_SMOKE--ADVISED TO QUIT SMOKING IN PAST 12 MONTHS */
IF H07055 IN (2, 3, 4, 5) THEN HP_SMOKE = 1;        /*   Yes   */
  ELSE IF H07055 = 1 THEN HP_SMOKE = 2;           /*   No    */

/* Add code for smoking and smoking cessation counseling according to the HEDIS */
/* definition.  Smoking variable is HP_SMOKH and smoking cessation counseling   */
/* is HP_CESH.                                                                   */
IF H07052 IN (1,2) THEN DO;
  IF H07052=1 AND (H07053=3 OR H07053=4 OR (H07053=2 AND H07054=3)) THEN
HP_SMOKH=1;      /* Yes */
  ELSE IF H07052=2 OR H07053 > 0 THEN HP_SMOKH=2;                          /* No  */
END;
IF HP_SMOKH=1 & H07055>0 THEN DO;
  IF H07055>1 THEN HP_CESH=1;  /* Yes */
  ELSE HP_CESH=2;            /* No */
END;

* Calculate XBMI- Body Mass Index and XBMICAT- Body Mass Index Category
* BMI=Weight(in pounds)*703 divide by Height(in inch)*Height(in inch)
*****************************************************************************************;

IF H07068F IN (.A,.O,.I,.B) THEN TSRHGTF=.; ELSE TSRHGTF=H07068F;
 IF H07068I IN (.A,.O,.I,.B) THEN TSRHGTI=.; ELSE TSRHGTI=H07068I;
 IF H07069  IN (.A,.O,.I,.B) THEN TSRWGT =.; ELSE TSRWGT =H07069;

 IF TSRHGTF IN (.) OR
   TSRWGT  IN (.) THEN XBMI=.;
 ELSE DO;
   XBMI = ROUND((TSRWGT*703)/
            (SUM(TSRHGTF*12,TSRHGTI)*SUM(TSRHGTF*12,TSRHGTI)), .1);
 END;

IF XBMI >= 100 THEN XBMI=.;


* FORMAT XBMI 5.1;

 DROP TSRHGTF TSRHGTI TSRWGT;
```

```
  IF XBMI = .        THEN XBMICAT=.;
  ELSE IF XBMI < 18.5 THEN XBMICAT=1;  *Underweight;
  ELSE IF XBMI < 25   THEN XBMICAT=2;  *Normal Weight;
  ELSE IF XBMI < 30   THEN XBMICAT=3;  *Overweight;
  ELSE IF XBMI < 40   THEN XBMICAT=4;  *Obese;
  ELSE                XBMICAT=5;  *Morbidly Obese;


/*ADD HP_OBESE VARIABLE. JMA 11/3/2005*/

IF XBMICAT=. THEN HP_OBESE=.;
ELSE IF XBMICAT IN (4,5) THEN HP_OBESE=1;    *OBESE ;
ELSE HP_OBESE=2;                             *NOT OBESE;
```

5. Utilization

a. Outpatient Utilization (KMILOPQY, KCIVOPQY)

H06025 contains the total outpatient visits. This is called KMILOPQY for those receiving care at military facilities; we adjust KMILOPQY to reflect zero visits for those with no care or those who get their care from civilian facilities. KCIVOPQY is the comparable variable for those who receive care at civilian facilities.

```
/* KMILOPQY—OUTPATIENT VISITS TO MILITARY FACILITY
  KCIVOPQY—OUTPATIENT VISITS TO CIVILIAN FACILITY */
IF H07038 = 1 THEN DO;
  KMILOPQY=H07025;
  KCIVOPQY=1;
END;
ELSE IF H07038 IN  (2, 3, 4) THEN DO;
  KCIVOPQY=H07025;
  KMILOPQY=1;
END;
ELSE IF H07038 = 5 THEN DO;
  KMILOPQY=1;
  KCIVOPQY=1;
END;
```

E. WEIGHTING PROCEDURES

Quarterly and annual estimates based on the 2007 HCSDB must account for the survey's complex sample design and adjust for possible bias due to nonresponse. As part of sample selection, MPR constructed sampling weights (BWT) that reflect the differential selection probabilities used to sample beneficiaries across strata. With the level of nonresponse experienced in the HCSDB and the likelihood that respondents and nonrespondents will differ in terms of their responses to survey questions, the issue of nonresponse bias is potentially a serious one. In previous surveys prior to 2005 we compensated for potential nonresponse bias by adjusting for nonresponse independently within weighting classes defined by the stratification variables—enrollment status, beneficiary group, and geographic area. In other words, it was assumed that both response propensity and characteristics related to survey outcome variables were homogeneous within these weighting classes.

However, because the HCSDB sample is selected from the DEERS, a great deal is known about both respondents and nonrespondents. Consequently, a wide choice of variables is available for use as auxiliary variables in the nonresponse weighting adjustments. As described above, in previous surveys, the only auxiliary variables used in developing the nonresponse weighting adjustments were the stratification variables, a small subset of the available variables.

Therefore, for the 2005 HCSDB we developed a new weighting adjustment procedure to incorporate more information about respondents and nonrespondents. The first stage in this process identified variables from the frame that were most related to whether or not a beneficiary responded to the survey. After initial screening of variables, the Chi-squared Automatic Interaction Detection (CHAID) (Biggs et al. 1991) technique was used for this purpose. Second, we incorporated the chosen auxiliary variables into a weighting class adjustment procedure using a response propensity model.

1. Constructing the Sampling Weight

The sampling weight was constructed on the basis of the sample design. In the 2007 HCSDB, stratified sampling was used to select the samples that would receive the questionnaire. Sampling was independently executed within strata defined by combinations of three domains: enrollment status groups; beneficiary groups; and geographic areas.

The sample was selected with differential probabilities of selection across strata. Sample sizes were driven by predetermined precision requirements. For further details of the 2007 adult sample design, see Health Care Survey of DoD Beneficiaries: 2007 Adult Sampling Report (2006). Our first step in constructing sampling weights was to ensure that they reflected these unequal sampling rates. These sampling weights can be viewed as the number of population elements each sampled beneficiary represents. The sampling weight was defined as the inverse of the beneficiary's selection probability:

$$W_s(h,i) = \frac{N_h}{n_h}$$

where:

$W_s(h,i)$ is the sampling weight for the ith sampled beneficiary in stratum h,

N_h is the total number of beneficiaries in stratum h, and

n_h is the number of sampled beneficiaries in stratum h.

The sum of the sampling weights over selections i, from the stratum h stratum equals the total population size of stratum h or N_h.

2. Adjustment for Total Nonresponse

Survey estimates obtained from respondent data only can be biased with respect to describing characteristics of the total population (Lessler and Kalsbeek 1992). The choice of an appropriate method for adjusting for potential nonresponse bias depends on the response mechanism that underlies the study population. We adjusted for nonresponse independently within classes, with the assumptions that both response and characteristics directly or indirectly related to survey variables are homogeneous within these classes. Two types of nonresponse were associated with the 2007 HCSDB:

- Unit or total nonresponse occured when a sampled beneficiary did not respond to the survey questionnaire (e.g., refusals, no questionnaire returned, blank questionnaire returned, bad address).
- Item nonresponse occured when a question that should have been answered was not answered (e.g., refusal to answer, no response).

Because item response rates in previous surveys were high, statistical imputation, a technique used to compensate for item nonresponse, was not used in the 2007 HCSDB. To account for unit or total nonresponse, we implemented a weighting class adjustment procedure where the weighting classes are formed from a response propensity model.

3. Weighting Class Adjustments

Weighting class adjustments were made by partitioning the sample into groups, called weighting classes, and then adjusting the weights of respondents within each class so that they sum to the weight total for nonrespondents and respondents from that class. Implicit in the weighting class adjustment is the assumption that—had the nonrespondents responded—their responses would have been distributed in the same way as the responses of the other respondents in their weighting class.

The 2007 HCSDB weighting was implemented by using a method that was instituted in 2005. This new method forms the weighting classes using the propensity scores from the propensity model.

Nonresponse adjustment factors for the 2007 HCSDB were calculated in two steps. First, we adjusted the sampling weights to account for sampled beneficiaries for whom eligibility status could not be determined. Sampled beneficiaries were then grouped as follows according to their response status *d*:

d = 1 Eligible — complete questionnaire returned (FNSTATUS = 11)

d = 2 Eligible — incomplete or no questionnaire returned (FNSTATUS = 12 or 20)

d = 3 Ineligible — deceased, incarcerated or permanently incapacitated beneficiary (FNSTATUS = 31)

d = 4 Eligibility unknown — no questionnaire or eligibility data (FNSTATUS = 41 or 42)

d = 5 Ineligible — ineligible at time of Altarum address update (FNSTATUS = 32)

Within weighting class *c*, the weights of the *d* = 4 nonrespondents with unknown eligibility were redistributed to the cases for which eligibility was known (*d* = 1, 2, 3), using an adjustment factor $A_{wc1}(c,d)$ that was defined to be zero for *d* = 4, one for *d* = 5, and defined as:

$$A_{wc1}(c,d) = \frac{\sum_{i \in S(c)} W_s(c,i)}{\sum_{i \in S(c)} I_1(i) W_s(c,i) + \sum_{i \in S(c)} I_2(i) W_s(c,i) + \sum_{i \in S(c)} I_3(i) W_s(c,i)} \quad \text{for d = 1, 2, 3}$$

where:

$A_{wc1}(c,d)$ is the eligibility-status adjustment factor for weighting class *c* and response status code *d*,

$I_d(i)$ is the indicator function that has a value of 1 if sampled unit *i* has a response status code of *d* and value of 0 otherwise,

$S(c)$ is the set of sample members belonging to weighting class *c*, and

$W_s(c,i)$ is the sampling weight (BWT) for the ith sample beneficiary from weighting class c before adjustment.

The adjustment $A_{wc1}(c,d)$ was then applied to the sampling weights to obtain the eligibility-status adjusted weight. Beneficiaries in weighting class c with response status code of d were assigned the eligibility-status adjusted weight:

$$W_{wc1}(c,d,i) = A_{wc1}(c,d)\, W_s(c,i) \text{ for } d = 1, 2, 3, 4, 5$$

Note that since d = 5 cases have an adjustment factor of one, they have an adjusted weight equal to the sampling weight. Moreover, note that since d = 4 cases have adjustment factors of zero; they also have adjusted weights of zero.

The next step in weighting was to adjust for incomplete or missing questionnaires from beneficiaries known to be eligible. For this adjustment, the weighting class method is again used. Within weighting class c the sample was again partitioned into groups according to the beneficiary's response status code d. Within weighting class c, the weights of the d = 2 nonresponding eligibles were redistributed to the responding eligibles d = 1, using an adjustment factor $A_{wc2}(c,d)$ that was defined to be zero for d = 2, 4. For Group 1 (d = 1), the questionnaire-completion adjustment or $A_{wc2}(c, 1)$ factor for class c was computed as:

$$A_{wc2}(c,1) = \frac{\sum_{i \in S(c)} I_1(i) W_{wc1}(c,i) + \sum_{i \in S(c)} I_2(i) W_{wc1}(c,i)}{\sum_{i \in S(c)} I_1(i) W_{wc1}(c,i)}$$

By definition, all d = 3 and d = 5 ineligible beneficiaries "respond," so the d = 3 and d = 5 adjustment factor is 1, or $A_{wc2}(c,3) = A_{wc2}(c,5) = 1$. The questionnaire-completion adjusted weight was calculated as the product of the questionnaire-completion adjustment $A_{wc2}(c,d)$ and the previous eligibility-status adjusted weight $W_{wc1}(c,d,i)$, or:

$$W_{wc2}(c,d,i) = A_2(c,d) W_{wc1}(c,d,i)$$

As a result of this step, all nonrespondents (d = 2, 4) had questionnaire-completion adjusted weights of zero, while the weight for ineligible cases (d = 3, 5) remained unchanged, or $W_{wc2}(c,3,i) = W_{wc1}(c,3,i)$ and $W_{wc2}(c,5,i) = W_{wc1}(c,5,i)$.

4. Response Propensity Model

It is common practice to use weighting adjustments to compensate for unit nonresponse in sample surveys. There are numerous methods developed to make these adjustments (Kalton and Maligalig 1991; Holt and Smith 1979; Oh and Scheuren 1983; Little and Vartivarian 2003; Vartivarian and Little 2003). Moreover, a number of studies have evaluated multiple weighting methods to adjust for nonresponse. Carlson and Williams (2001) found nearly identical results with respect to the design effects and the weighted estimates for two weighting approaches: 1) weighting classes using the design features (strata and sampling units), and 2) propensity models containing numerous variables identified as predictors of response. They conjectured that the propensity model approach might perform better for estimates in key geographic subdomains because there would be many fewer weighting cells than for the national estimates. Rizzo et al. (1994) investigated several alternative methods for panel nonresponse in the Survey of Income and Program Participation (SIPP), including nonresponse adjustment cells, logistic regression, CHAID methods, and generalized raking methods. They found a number of variables related to panel nonresponse that are not employed in the standard SIPP nonresponse adjustment cells

methodology. These variables were used in the alternative weighting methods and were found to result in similar weights regardless of method. Therefore, Rizzo et al conclude that the choice of model variables is more important than the weighting methodology.

a. Predictors of Response Propensity

The first step in developing nonresponse adjustments is deciding which of the large number of variables available from the HCSDB sample frame would be best to use in the adjustment procedures. We do this by evaluating each variable and its relationship to response. Segmentation analysis using the CHAID software was used to allow for a model-building process that focuses on segments showing different response propensities.[1] This analysis avoids the problem of examining "all possible interactions" that is typical of regression modeling. The unweighted segmentation algorithm split the sample into subgroups based on response rates. The splitting process continued until either no other predictors were found or the segment size fell below a minimum size of 50. For ease of interpretation, we also limited the splitting process to three levels. We ran the CHAID analysis twice, once to predict eligibility determination and again to predict survey completion among eligible beneficiaries

b. Response Propensity Weighting Classes

The nonresponse adjustments involved developing weighting classes using sample design characteristics and the response propensity model developed in the modeling stage. The usual HCSDB approach computes the response weight adjustment cells based on fully observed variables from the sample frame. However, in order to avoid empty or sparsely populated cells, we limited our classification to the stratification variables, catchment area, enrollment, and beneficiary group, and collapsed these cells as necessary.

The alternative approach we used to reduce the number of cells was to stratify based on response propensity. The method used a model of the relationship between a set of beneficiary characteristics and a response outcome. We used logistic regression to model this relationship because response outcome is dichotomous: beneficiaries either respond or they do not. If the characteristics in the model predict response well and if the characteristics are correlated with the substantive variables of the survey, then the model-based adjustment factors applied to the sampling weights greatly reduce the potential for nonresponse bias. Like the previous weighting class adjustment method, we make two separate weighting adjustments to attempt to compensate for nonresponse: an eligibility determination adjustment and a completion adjustment.

The overall probability of having a known eligibility status is estimated with a logistic regression model. The probability that sample beneficiary *i* has a known eligibility status is:

$$\begin{aligned}\hat{\lambda}_i &= P\left[E_i = 1 \mid X_i\hat{\beta}\right] \\ &= \left[1 + \exp\left(-X_i\hat{\beta}\right)\right]^{-1}\end{aligned}$$

where

[1] Using as a criterion the significance of a chi-squared test, CHAID evaluates all of the values of a potential predictor variable. It merges values that are judged to be statistically homogeneous (similar) with respect to response and maintains all other values that are heterogeneous (dissimilar). It then selects the best predictor variable to form the first branch in the decision tree, such that each node is made of a group of homogeneous values of response. This process continues recursively until the tree is fully grown.

$$E_i = \begin{cases} 1 \text{ if sample beneficiary } i \text{ has eligibility status determined} \\ 0 \text{ otherwise} \end{cases}$$

and X_i is a vector of HCSDB response predictors (main effects and interaction terms) and $\hat{\beta}$ are the estimated regression coefficients.

To determine the best set of response predictors we fit models using unweighted stepwise, backward, and forward logistic regression procedures in SAS. We developed a model for Continental U.S. (CONUS) and Outside of Continental U.S. (OCONUS) separately and included as response predictors an indicator variable for each TNEX region. Besides TNEX region, an indicator of whether a beneficiary is in a catchment area or not was added in the model. In the full model, we included all nine variables (TNEX region, age, beneficiary group, PCM, personnel category, rank, sex, service, and an indicator for being in a catchment area) and interactions identified by the CHAID analysis as response predictors. We re-ran the three resulting unweighted models using weights and the sample design characteristics in SUDAAN. We estimated the coefficients using a weighted logistic regression procedure in SUDAAN, which incorporates the stratified design in estimating standard errors for the coefficients. We selected the model with the best Hosmer and Lemeshow (H-L) goodness-of-fit test from both SAS and SUDAAN since all models have similar concordance-discordance rates.

For each eligibility determination model, we ordered the list of response propensity scores and then divided them into groups of equal size. Ten weighting classes were formed from the deciles of the propensity score for CONUS. For OCONUS we formed five classes using the quintiles of the propensity scores.

For the completion adjustment stage, we formed the weighting classes using the results from the CHAID trees; the number of weighting classes was determined by the number of the terminal nodes in the CHAID trees. Because we observed little variation in the questionnaire-completion adjustment stage, the modeling was not necessary, and instead the weighting classes were formed directly from the CHAID trees.

Lastly, we poststratified the nonresponse-adjusted weights to the frame totals to obtain specific domain weighted totals equal to population totals. The poststrata were defined by stratification variables—TNEX region, catchment area, and enrollment status, and were collapsed to form poststrata of sufficient size. Due to the possibly insufficient sample size constraint within each TNEX region, we stratified by catchment area only for those enrolled with military primary care manager. The poststratification adjustment factor for the hth poststratum is defined as:

$$A_h^{PS} = \frac{N_h}{\sum_{i \in h} W_i^C}$$

where W_i^C is the nonresponse-adjusted weights, and N_h is the total number of beneficiaries in the DEERS frame associated with the hth poststratum. We calculated the poststratified adjusted weight for the ith sample record from the hth poststratum by the following:

$$W_{hi}^{PS} = A_h^{PS} \times W_i^C$$

Therefore, when summed over all respondents in poststratum h, the poststratified weights now total N_h.

5. Calculation of Combined Annual Weights

Lastly, we constructed a dataset combining the four consecutive quarterly data files. Because there were a total of 1,937 late respondents who were not included in the Quarters I–III 2007 files, the first three quarters were re-weighted before they were merged into the combined annual dataset. The new Quarters I–III datasets contain the responses of respondents who "trickled" in past the deadline for the survey. After reweighting the Quarters I–III datasets, the Quarters I–III datasets and the Quarter IV dataset were merged to form a combined annual dataset with data for all four quarters.

Because the combined annual dataset sample sizes are sufficiently large to provide statistically reliable estimates, users will be able to calculate survey estimates for subdomains, such as catchment areas. Construction of an appropriate annual weight will allow users to consider the combined data as the data from a single survey. Quarterly weights are still included so that users may continue to calculate quarterly estimates and retain the ability to combine any sequential four quarters into a combined data set.

The method used for combining the four quarters of data and calculating combined estimates assumes that the variance in estimates from one quarter to the next is merely due to sampling variation. That is, combined estimates can be calculated from the four independent samples by averaging the estimates for the four quarters. These combined estimates will, in fact, be more precise than the quarterly estimates because they average out the variation across quarters (For a further discussion, see Friedman, et al. 2002).

We calculated the final survey weight for each quarter within the combined dataset. Without the loss of generality, let us denote the current quarter by Q4. Then, the combined dataset would include the four quarterly datasets: Q1, Q2, Q3, and Q4. Let us denote quarterly final survey weights by WQ1, WQ2, WQ3, and WQ4. To retain the sum of the weights from the combined data as the population count, we average the population over the four quarters, by rescaling each quarterly survey weight as follows in order to develop a combined annual weight:

(1) $$WCOM = q_i \times WQi$$

where q_i is between 0 and 1 with the constraint $q_1 + q_2 + q_3 + q_4 = 1$. We can make the choice of the appropriate value for each of the q_i's based on various assumptions. We have decided that each quarterly contribution to the annual weight should be equal and therefore the value of each q_i is as follows:

$$q_1 = 0.25;\ q_2 = 0.25;\ q_3 = 0.25;\ q_4 = 0.25$$

Then, the weight for the combined annual data will be *WCOM* in (1).

The final data file retains the quarterly sampling stratum variables and quarterly weight as calculated using the response propensity (FWRWT) and the combined weights (CFWT). The file also contains an indicator variable for the quarters. From this combined dataset, one can calculate both combined data and revised quarterly estimates.

6. Calculation of Jackknife Replicates

Calculation of variance estimates in the HCSDB requires a design-based variance estimation technique that is available in most statistical software packages for analysis from a complex survey data, such as WesVarPC® (Brick et al. 1996), SUDAAN®, SAS/STAT® version 8 or higher, and STATA®. This technique requires sample design information, including the sampling weight and stratification information. As an alternative, a replication technique such as the Jackknife method

can be used to calculate variance estimates. In the HCSDB, a series of jackknife replicate weights are calculated and attached to each beneficiary record in the database. In jackknife replication, deleting selected cases from the full sample generates the prescribed number of replicates. The HCSDB replicate weights were constructed as follows.

First, the entire file of sampled beneficiaries is sorted in sample selection order in which the stratification variables are used in the sorting process. Next, 60 mutually exclusive and exhaustive systematic subsamples of the full sample are identified in the sorted file. A jackknife replicate is then obtained by dropping one subsample from the full sample. As each subsample is dropped in turn, the same number of different jackknife replicates as subsamples is defined. The entire weighting process as applied to the full sample is then applied separately to each of the jackknife replicates to produce a set of replicate weights for each record. Then, a series of jackknife replicate weights (FWRWT1-FWRWT60) is attached to the final data in order to construct jackknife replication variance estimates. These replicate weights should be used to estimate variances of quarterly estimates.

Chapter 3

Analysis

This chapter explains how the HCSDB variables were processed during the analysis phase of the project. It covers the procedure for calculating response rates, developing dependent and independent variables for the analysis and estimating the variance of the statistics. The Health Care Survey of DoD Beneficiaries: Annual Report is described briefly along with an outline of the steps involved in creating charts for the reports.

A. RESPONSE RATES

In this section, we present the procedures for response rate calculations along with a brief analysis of response rates for domains of interest. Response rates for the 2007 HCSDB were calculated in the same way as they were calculated in 2006. The procedure is based on the guidelines established by the Council of American Survey Research Organizations (CASRO 1982) for defining a response rate.

1. Definition of Response Rates

In calculating response rates and related measures, we considered two different rates: *unweighted* and *weighted*. The unweighted version of the response rate represents the counted proportion of respondents among all sampled units, and the weighted version indicates the estimated proportion of respondents among all population units. When sampling rates across all strata are equal, these two approaches give the same result. However, the 2007 HCSDB used different sampling rates across strata. So, it is useful to show both "unweighted" and "weighted" response rates. We calculated these two response rates in the same way. As presented in Chapter 2, all sampled beneficiaries were completely classified into these four main (seven detailed) groups:

- Group 1 (G1-1): eligible and complete questionnaire returned;
- Group 1 (G1-2): eligible and incomplete questionnaire returned;
- Group 2: eligible and questionnaire not returned;
- Group 3 (G3-1): returned ineligible
- Group 3 (G3-2): ineligible at time of Altarum address update
- Group 4 (G4-1): eligibility unknown and locatable; and
- Group 4 (G4-2): eligibility unknown and unlocatable.

The unweighted counts reflect the number of sampled cases (n_i for Group i, where i =1,2,3,4), and the weighted counts reflect the estimated population size[2] ($\hat{N}_i$ for Group i, where i =1,2,3,4) for the four main response categories.

These weighted and unweighted counts were also calculated for the subgroups G1-1, G1-2, G3-1, G4-1, and G4-2, where we denote the unweighted counts by $n_{1,1}$, $n_{1,2}$, $n_{3,1}$, $n_{4,1}$, and $n_{4,2}$, and the

[2] The weighted sum of sampled units can be regarded as an estimated population size. The base weight (BWT) was used in calculating weighted counts, where BWT is the inverse of selection probability.

weighted counts by $\hat{N}_{1,1}, \hat{N}_{1,2}, \hat{N}_{3,1}, \hat{N}_{4,1}$, and $\hat{N}_{4,2}$. With these values, we calculated response rates as follows.

Response rates can be partitioned into two measures: the location rate and the completion rate. To calculate the location rate, we first estimated the number of Group 4 "located" beneficiaries who were expected to be eligible for the survey:

(1)

$$l = \left(\frac{n_1 + n_2}{n_1 + n_2 + n_{3,1}} \right) n_{4,1} \qquad \text{and} \qquad l_w = \left(\frac{\hat{N}_1 + \hat{N}_2}{\hat{N}_1 + \hat{N}_2 + \hat{N}_{3,1}} \right) \hat{N}_{4,1}$$

where l and l_w are unweighted and weighted estimates of the number of "located" beneficiaries among Group 4. Then, the unweighted and weighted "location rates" are defined by:

(2)

$$LR = \frac{n_1 + n_2 + l}{n_1 + n_2 + n_4 \left(\frac{n_1 + n_2}{n_1 + n_2 + n_{3,1}} \right)} \qquad \text{and} \qquad LR_w = \frac{\hat{N}_1 + \hat{N}_2 + l_w}{\hat{N}_1 + \hat{N}_2 + \hat{N}_4 \left(\frac{\hat{N}_1 + \hat{N}_2}{\hat{N}_1 + \hat{N}_2 + \hat{N}_{3,1}} \right)}.$$

And the corresponding unweighted and weighted "completion rates" are defined by:

(3)

$$CR = \frac{n_{1,1}}{n_1 + n_2 + l} \qquad \text{and} \qquad CR_w = \frac{\hat{N}_{1,1}}{\hat{N}_1 + \hat{N}_2 + l_w}.$$

The final response rates in Equation (4) can be obtained by multiplying the location rate in Equation (2) by the completion rate in Equation (3).

(4)

$$FRR = LR \times CR \text{ and } FRR_w = LR_w \times CR_w$$

In the definitions in Equations (1) through (4), the subscript "w" indicates that all calculations involve weighted counts. The method used to calculate response rates is consistent with the CASRO guidelines.

2. Reporting

We examined response rates to identify patterns across different domains or characteristics. While analysts prefer weighted rates that reflect the estimated proportion of respondents among all population beneficiaries, operational staff often is interested in getting unweighted measures. All tables include unweighted and weighted values under columns headed "RR" and "RR_w", respectively. In the following, we focus on discussing unweighted response rates for domains of interest.

Table 3.1 includes overall response rates for the 2007 HCSDB for Quarters I-IV, individual and combined. It also contains response rates by beneficiary groups, and by enrollment status:

- Overall: The overall unweighted response rate for the combined 2007 Adult HCSDB was 25.1 percent (which is found in Table 3.1 in the row of "Overall"). This rate is smaller than 29.3 percent rate achieved in the combined 2006 Adult HCSDB.
- Beneficiary group and enrollment status: All response rates calculated by beneficiary group and enrollment status show similar patterns to the 2006 survey, i.e., active duty beneficiaries had the lowest response rates and beneficiaries 65 years and older had the highest rate.[3]
- The response rates for the first three quarters include late respondents (respondents whose survey "trickled-in" after the deadline).

TABLE 3.1

RESPONSE RATES OVERALL AND BY ENROLLEE BENEFICIARY GROUP: QUARTERS I-IV, 2007

	Q1 2007		Q2 2007		Q3 2007		Q4 2007		COMBINED	
	RR (%)	RR_W (%)	RR (%)	RR_W (%)	RR (%)	RR_W (%)	RR (%)	RR_W (%)	RR (%)	RR_W (%)
Overall	26.9	44.9	27.5	44.4	23.7	40.7	22.1	39.3	25.1	42.3
Active duty	16.9	15.9	18.1	16.8	14.6	13.4	13.0	11.9	15.6	14.5
Active duty fam,Prime,civ PCM	26.3	27.7	25.9	27.6	23.1	24.2	20.6	21.2	24.0	25.1
Active duty fam,Prime,mil PCM	26.4	26.4	27.3	26.6	22.3	22.1	21.4	21.0	24.4	24.0
Active duty fam,non-enrollee	18.1	20.4	18.5	20.1	14.9	15.9	14.6	15.3	16.5	18.0
Retired,<65,civ PCM	56.1	58.0	54.5	54.5	50.5	50.4	45.7	46.5	51.7	52.2
Retired,<65,mil PCM	51.8	52.4	52.4	52.2	46.4	46.9	43.6	44.6	48.5	49.0
Retired,<65,non-enrollee	44.0	46.8	45.2	48.0	40.1	42.4	38.5	41.1	42.0	44.6
Retired,65+,enrollee	81.8	81.6	80.2	79.4	74.2	72.6	71.8	73.3	77.0	76.7
Retired,65+,non-enrollee	74.8	74.8	72.0	72.0	69.4	69.6	68.9	69.1	71.3	71.4
TRICARE Reserve Select	35.6	35.6	31.6	31.6	29.4	29.4	28.6	28.6	31.2	31.1

RR = Unweighted
RR_w = Weighted

For domains of special interest, Appendix D contains tables showing unweighted and weighted response rates for Quarters I-IV, 2007. We summarize unweighted results about response rates for selected domains as follows:

- Regions: Combined response rates across regions range from 17.6 percent for Overseas to 26.3 percent for North (Table D.8).
- Sex: Combined response rate for men is 21.4 percent as compared to 30.1 percent for women. (Table D.2).
- Conus: Combined response rate for CONUS is 25.6 percent as compared to 17.6 percent for OCONUS. (Table D.3).
- Catchment areas: Combined response rates across catchment areas range from 11.1 percent for Ft. Drum to 40.0 percent for Tricare Outpat-Chula Vista. (Table D.5).

[3] However, response patterns vary considerably across beneficiary and enrollment groups. The relatively low level of response for active duty persons and their family members could be due to frequent relocations and our inability to receive new addresses in a timely manner.

- Beneficiary groups by sex: Women respond at a higher rate than men for both active duty and active duty family members, 18.8 percent versus 15.5 percent and 23.3 percent versus 12.1 percent, respectively. The opposite pattern emerges for retirees, survivors and family members 65 and older. The response rates for retirees less than 65 are 47.6 for men vs 46.7 for women. (Table D.10).
- Beneficiary group by service affiliation (Army, Navy, Air Force, Marine Corps, Coast Guard): Among service affiliations, the smallest combined response rate comes from active duty in the Marine Corps with 10.2 percent and the largest from beneficiaries over 65 from the Air Force with 75.1 percent (Table D.11).

B. VARIANCE ESTIMATION

Due to the complex sample design, variance estimation for the 2007 HCSDB is not simple, and may be most easily achieved using one of two methods. The first, the Taylor series linearization via SUDAAN (Shah et al. 1996) or SAS/STAT version 8 or higher, is a direct variance estimation method, which may be used to calculate the standard errors (the square root of the variance) of estimates. For the 2007 HCSDB analyses, we used the Taylor series linearization method. For analysts who prefer a replication method of variance estimation, replicate weights for jackknife replication are provided in the public use file. This section details the two approaches to calculating variance estimates of the characteristics of interest associated with the 2007 HCSDB.

1. Taylor Series Linearization

MPR uses Taylor series linearization to produce standard errors for the estimates from the 2007 HCSDB. For most sample designs, including the 2007 HCSDB, design-based variance estimates for linear estimators of totals and means can be obtained with explicit formulas. Estimators for nonlinear parameters, such as ratios, do not have exact expressions for the variance. The Taylor series linearization method approximates the variance of a nonlinear estimator with the variances of the linear terms from the Taylor series expansion for the estimator (Woodruff 1971). To calculate variance estimates based on the Taylor series linearization method, given HCSDB's stratified sampling design, we need to identify stratum as well as the final analysis weight for each data record. We included these variables on the final database. For variance estimation, we use the general-purpose statistical software package SUDAAN to produce Taylor series variance estimates. SUDAAN is the most widely used of the publicly available software packages based on the Taylor series linearization method. In SUDAAN, the user specifies the sample design and includes the stratum variables and the analysis weight for each record. Unlike WesVarPC, SUDAAN allows for unlimited strata, so stratification effects can be incorporated in calculating standard errors.

2. Jackknife Replication

Resampling methods are often used in estimating the variance for surveys with complex designs. In resampling, the sample is treated as if it was a population, and many smaller samples are drawn from the original sample (Lohr 1999, pages 298-308). The subsamples are then used to compute the variance. Replication methods have been recommended for surveys in which the sample design is complex, nonresponse adjustments are needed, and statistics of interest are complicated. In such surveys, the usual design-based estimation formula is extremely difficult or impossible to develop (see, for example, Wolter 1985, pages 317-318). Jackknife replicate weights can be used to calculate the standard errors of estimates. An estimate of a characteristic of interest is calculated (with the same formula as the full sample estimate) using each set of replicate weights; these replicate estimates are used to derive the variance of the full sample statistic.

The jackknife variance of the full sample statistic of interest is estimated from the variability among the replicated estimates. When the replicate weights are produced according to the above procedure, jackknife replicate standard errors can be produced using custom written software or publicly available statistical software. For instance, WesVarPC® (Brick et al. 1996) is a popular software package that calculates standard errors based on replication methods. It produces standard errors for functions of survey estimates such as differences and ratios as well as simple estimates such as means, proportions, and totals. Additional details about the jackknife replication approach are given in Wolter (1985). Like other replication methods, the jackknife variance estimation can be easily implemented for any form of estimate without further algebraic work.

C. SIGNIFICANCE TESTS

In certain charts in the adult report cards and the Health Care Survey of DoD Beneficiaries: Annual Report, statistical testing is done to show which columns of the chart (values of the independent variable) are statistically different from all CONUS regions as a whole. Positional arrows show if a region is statistically better than the CONUS regions (an arrow pointing up) or statistically worse than the CONUS regions (an arrow pointing down); if there is no arrow, there is no statistical difference.

The null hypothesis for this significance test is that the mean for the column is essentially equal with the CONUS mean, and the alternative is that the mean for the column is different from the CONUS mean. That is, we are testing:

$$H_0: \mu_1 = \mu_2 \quad \text{vs.} \quad H_a: \mu_1 \neq \mu_2$$

For instance, μ_1 might represent the characteristic of interest for the active duty group while μ_2 might represent the same characteristic for all CONUS regions.

With large sample sizes, the estimator $\overline{y_1} - \overline{y_2}$ is approximately distributed as a normal distribution with mean zero and variance $\sigma^2_{\overline{y_1}-\overline{y_2}}$ under the null hypothesis. In testing the hypothesis, a test statistic T is thus calculated as:

$$T = \frac{\overline{y_1} - \overline{y_2}}{\hat{\sigma}_{\overline{y_1}-\overline{y_2}}}.$$

With α = 0.05, the null hypothesis should be rejected if |T| > 1.96. The denominator of T, the standard error of $\overline{y_1} - \overline{y_2}$, can be calculated as the square root of the variance estimator $\hat{\sigma}^2_{\overline{y_1}-\overline{y_2}}$:

$$\hat{\sigma}^2_{\overline{y_1}-\overline{y_2}} = \mathrm{var}(\overline{y_1}) + \mathrm{var}(\overline{y_2}) - 2\,\mathrm{cov}(\overline{y_1}, \overline{y_2}).$$

If $\overline{y_1}$ and $\overline{y_2}$ are independent, then the covariance term equals zero and thus the variance estimator can be easily obtained as the sum of two individual variance estimators. However, there are some cases in which the condition of independence does not hold. For example, active duty MTF group is not independent with the CONUS regions because these two domains share active duty group within the CONUS regions. So the covariance term should be incorporated in calculating the variance estimator of the estimator of the difference. With suitable algebra and program modification, these covariance terms were calculated for all such cases. All detailed programs are included in Appendix G.

D. DEMOGRAPHIC ADJUSTMENTS

All scores in the TRICARE Beneficiary Reports are adjusted for patient characteristics affecting their scores. Scores can be adjusted for a wide range of socioeconomic and demographic variables.

The purpose of risk adjustment is to make comparisons of outcomes, either internally or to external benchmarks, that control for characteristics beyond the health care provider's control. Based on previous work with satisfaction scales derived from Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey, it appears that satisfaction increases with age and decreases with poor health across social classes and insurance types. Besides, controlling for these factors, the methodology used does the following:

- Permits risk-adjusted comparisons among regions and catchment areas within and across beneficiary and enrollment groups
- Permits testing the hypothesis that the difference in risk-adjusted scores between a region or catchment area and a benchmark is due to chance
- Is appropriate for CAHPS composites and global satisfaction ratings.

The methodology used is an adaptation of that found in CAHPS 2.0 Survey and Reporting Kit (DHHS, 1999).

The model used for this adjustment is:

$$Y_{ijkl} = \beta_{1l} A_{1l} + \beta_{2l} A_{2l} + \ldots + \beta_{5l} A_{5l} + \beta_{6l} P_l + \varepsilon_{ijkl},$$

where Y_{ijkl} is a dependent variable, β_{ql}'s are parameters to be estimated, A_{ql}'s are age dummy variables (A_{ql} = 1 if the beneficiary is in age group q, and 0 otherwise; A_l = age 18-24, A_2 = age 25-34, A_3 = age 35-44, A_4 = age 45-54, A_5 = age 55-64), P_l is health status. The subscripts *i*, *j*, *k and l* refer to the service/region, MTF, beneficiary, and beneficiary's enrollment group, respectively.

Given 24 region and service combinations and *J*+1 catchment areas, the specifications that we use are:

$$\varepsilon_{ijkl} = \delta_{0l} + \delta_{1l} R_{1l} + \delta_{2l} R_{2l} + \ldots + \delta_{24l} R_{24l} + w_{ijkl},$$

where R_i 's are service/region dummy variables (R_{il} = 1 if the beneficiary is in service/region *i* and beneficiary group *l*, and 0 otherwise), and

$$\varepsilon_{ijkl} = \gamma_{0l} + \gamma_{1l} H_{1l} + \gamma_{2l} H_{2l} + \ldots + \gamma_{Jl} H_{Jl} + w_{ijkl},$$

where H_{ij} 's are catchment area dummy variables (H_{jl} = 1 if the beneficiary is in catchment area *j* and beneficiary group *l*, and 0 otherwise). The first specification is used when catchment area values are not reported, and the second when catchment areas are reported.

The methods for calculating demographically adjusted values and testing hypotheses of differences in demographically adjusted scores among geographic areas vary with the way ε_{ijkl} is defined. For specification 1, the adjusted mean of the dependent variable *Y* for region *i* can be obtained as:

$$\overline{y_i} = \hat{\delta}_0 + \hat{\delta}_i + \hat{\beta}_1 \hat{A}_1 + \hat{\beta}_2 \hat{A}_2 + \ldots + \hat{\beta}_5 \hat{A}_5 + \hat{\beta}_6 \hat{P},$$

where $\hat{\beta}_i$'s are estimated model parameters, $\hat{A}_i$'s are weighted proportions of age group *i* among the total U.S. population, and $\hat{P}$ is the weighted MHS mean of the variable *P.* For beneficiary group *l*, the adjusted regional value is:

$$\overline{y_{il}} = \hat{\delta}_{0l} + \hat{\delta}_{il} + \hat{\beta}_{1l}\hat{A} + \hat{\beta}_{2l}\hat{A}_{2l} + \ldots + \hat{\beta}_{5l}\hat{A}_{5l} + \hat{\beta}_{6l}\hat{P}_l ,$$

where $\hat{A}_{ql}$'s are weighted proportions of age group *q* in the MHS.

For specification 2, an adjusted catchment area value can be calculated as:

$$\overline{y_{ijl}} = \hat{\gamma}_{0l} + \hat{\gamma}_{ijl} + \hat{\beta}_{1l}\hat{A}_{1l} + \hat{\beta}_{2l}\hat{A}_{2l} + \ldots + \hat{\beta}_{5l}\hat{A}_{5l} + \hat{\beta}_{6l}\hat{P}_l ,$$

while the regional value is calculated using specification 1.

Standard errors then can be estimated as the standard error of residuals for catchment areas or regions using SUDAAN. These standard errors can be used in hypothesis tests comparing adjusted values to other adjusted values or to external benchmarks. Composite values are calculated as averages of regional or catchment area adjusted values for questions making up the composites, in which each question is equally weighted.

Benchmarks can also be adjusted for age and health status as are scores taken from survey responses. If the benchmark data set contains age and health status information, we fit a model of the form

$$y = \alpha + \beta_1 A_1 + \beta_2 A_2 + \ldots + \beta_5 A_5 + \beta_6 P$$

where the A's are age groups and P is health status. Then the adjusted benchmark is

$$\hat{y}_l = \hat{\alpha} + \hat{\beta}_1 \overline{A}_{1l} + \hat{\beta}_2 \overline{A}_{2l} + \ldots + \hat{\beta}_5 \overline{A}_{5l} + \hat{\beta}_6 \overline{P}_l$$

using the mean values of A and P for beneficiary group l.

The adjusted values for that beneficiary group can then be compared to a benchmark appropriate for their age distribution and health status.

In some cases, it may be desirable for a single benchmark to be presented in comparison to many beneficiary groups. We accomplish this by recentering scores for beneficiary groups. In the Beneficiary Reports, described below, the benchmark presented is the all-users beneficiary group, but scores for many other beneficiary groups are also presented. Each score and benchmark is calculated for the appropriate beneficiary group. Then a recentering factor for each beneficiary group is calculated as the difference in adjusted benchmarks between a beneficiary group and the all-users group. For the all-users group, that recentering factor is zero. The recentering factor is added to the score for each region or catchment area for that beneficiary group. Thus beneficiary groups can also be compared controlling for age and health status and can be compared to the same benchmark.

E. CALCULATING SCORES

Beneficiary Reports (see below) include four types of scores: CAHPS composites, ratings, a preventive care composite, and a healthy behaviors composite.

1. Composites and Ratings

The preventive care composite is calculated as $P_i = \Sigma w_i r_i$, where w is the proportion of the eligible population for whom the preventive care measure is relevant and r is the proportion of that eligible group receiving preventive care.

CAHPS composites are calculated as

$$S_i = (1/n_i)\ \Sigma(q_j/k_j),$$

where n_i is the number of questions in the composite *i*, q_j is the number giving a favorable response to question *j* in the composite *i*, and k_j is the number responding to that question *j*. CAHPS ratings are calculated as

$$S_i = q_i/k_i,$$

where q_i is the number giving a favorable response and k_i is the (weighted) number responding to rating *i*. All scores are adjusted for age and health status (see above).

F. TESTS FOR TREND

In the Beneficiary Reports (see below), we use linear regression to estimate a quarterly rate of change and test it for statistical significance. Our estimate for the rate of change, *T*, is

$$T = \sum_{t=1}^{4} w_t (S_t - \overline{S})(t - \overline{t}) / \sum_{t=1}^{4} w_t (t - \overline{t})^2 ,$$

where t is the quarter, S_i is the score and w_i is the total weight of quarter i's observations. In order to test the hypothesis that trend is zero, we use the standard error for the trend coefficient

$$\sigma = \frac{\sqrt{\sum_{t=1}^{4} w_t^2 \sigma_t^2}}{\sum_{t=1}^{4} w_t}, \text{ and}$$

$$S = \sigma / \sqrt{\sum_{t=1}^{4} w_t (t - \overline{t})^2 / \sum_{t=1}^{4} w_t}$$

where σ_t is the standard error for quarter t. The hypothesis test is based on a t-test of the hypothesis that T=0, where n is the total number of observations for all 4 quarters p=Prob(abs(T/S)>0,n).

G. DEPENDENT AND INDEPENDENT VARIABLES

Dependent, or outcome, variables represent the research questions the survey is designed to answer. For example, beneficiary satisfaction and access are dependent variables in this analysis. The research questions are listed in Chapter 1. Generally, dependent variables form the rows of the tables and the vertical axis of the charts.

Independent, or explanatory, variables do not directly represent research questions, but they may help to explain the differences in one or more of the outcome variables. They may also be

correlated with one or more dependent variables. For example, a beneficiary's satisfaction with health care may be correlated with their age and/or TRICARE Prime enrollment status. Each table is designed to help determine whether a particular dependent variable is correlated with a particular independent variable. Independent variables form the columns of the tables and the horizontal axis of the charts.

In analyzing the relationship between dependent and independent variables, MPR produced charts and tables that are found in the reports described below. Beginning with the HCSDB in a SAS format, MPR programmers developed SAS procedures such as PROC FREQ and PROC MEANS and SAS-callable SUDAAN procedures such as PROC DESCRIPT and PROC CROSSTAB to generate the relevant statistics (e.g., per cents, means, and standard errors). These statistical values were moved directly from SAS programs to Excel tables using a dynamic data exchange to populate the cells of the tables. Graphical displays were generated from table values wherever feasible.

H. REPORTS

This section lists the three types of reports produced and states the main purpose of each report: 2007 TRICARE Beneficiary Reports, the TRICARE Consumer Watch, and the Health Care Survey of DoD Beneficiaries: Annual Report. The 2007 TRICARE Beneficiary Reports and the TRICARE Consumer Watch are presented on a quarterly basis and display results from the most recent quarter. The Health Care Survey of DoD Beneficiaries: Annual Report is produced annually and describes findings from all four quarters of survey data.

1. 2007 TRICARE Beneficiary Reports

a. Purpose

The purpose of the Beneficiary Reports is to provide TRICARE Regional offices, services and MTF commanders with a comprehensive description of TRICARE beneficiaries' satisfaction with care, access to care, and use of preventive care, in comparison with other regions and catchment areas, and with relevant national benchmarks. MHS scores are adjusted using demographic characteristics. Both quarterly and annual Beneficiary Reports are produced. The quarterly reports present results from the most recent quarter for each region, service and for CONUS MHS by beneficiary status and enrollment group, making it easy for the reader to compare findings across groups and quarters. The annual report is a cumulative report that combines results from four quarters and previous years and presents results by catchment area, region, and service.

b. Beneficiary Report Production

1. Content

The quarterly Beneficiary Report presents 12 scores for all beneficiary groups and all enrollment by region and CONUS MHS overall. Scores are presented in the following areas: getting needed care; getting care quickly; courteous and helpful office staff; how well doctors communicate; customer service; claims processing; rating of the health plan, health care, personal doctor, and specialist; healthy behavior and preventive care standards. The first 6 scores are CAHPS composites, which group together responses to several related survey questions. The CAHPS composite questions are shown in Appendix E. The scores are presented in relation to national benchmarks.

The four ratings of health care and health care providers are health plan, health care, personal doctor, and specialist. Rating is based on a scale of 0 to 10, where 0 is the worst and 10 is the best. The scores are adjusted for patient age and health status and are presented relative to national benchmarks.

The TMA Standard Composite for preventive care is based on how beneficiaries compare preventive care services offered through the MHS with the Healthy People 2010 goals. Preventive care indicators include prenatal care, hypertension, mammography, and Pap smears.

Healthy behavior combines the non-smoking rate, the rate at which smokers are counseled to quit, and the percent non-obese.

2. Format

a. Programming Specifications

Data for the Beneficiary Reports is arranged in a SAS data set, consisting of records indexed by region, service, catchment area, enrollment group, beneficiary category, and table column. A benchmark corresponding to the MHS population is also included in the SAS data set. Records contain scores and categorical variables showing the existence and directions of significant differences. The benchmark record contains national mean values, where available, for a comparable non-MHS population.

Data files serve as the basis for the electronic reports and quality assurance. The file for the quarterly Beneficiary Reports is updated each quarter and referenced by the report card application. In each quarter, a separate quarterly file is created. The quarterly and annual Beneficiary Reports are coded in HTML and a program generates the information in the form of a data set corresponding to the cells in the tables of the reports described below. Appendix G contains the programs to generate the Beneficiary Reports.

b. Web Specifications

Quarterly Beneficiary Reports are published in a tabular, interactive, HTML format on TRICARE's website, allowing users to "drill down" in the reports to follow the performance of the MHS over time by enrollment status and beneficiary group. Each report consists of several pages of tables. The first set of tables presents the findings for a single quarter for all enrollment and beneficiary groups by region and CONUS MHS. A second set of tables presents the findings for the current quarter and for the past quarters for each enrollment and beneficiary group, by regions and CONUS MHS. Significant differences between the scores and the benchmark are indicated by color, bolding and italics. Scores significantly above the benchmark are green and bold. Scores significantly below the benchmark are red and italicized.

Like the quarterly report, the annual report is presented in HTML tabular format. One set of tables shows cumulative scores for the 2007 HCSDB by region for all beneficiary groups and enrollment groups. Another set shows scores for the questions that make up the composite, and a third set shows composites or ratings from prior years. The fourth set of tables shows scores for the catchment areas that make up the MHS regions.

2. TRICARE Consumer Watch

a. Purpose

Like the TRICARE Beneficiary Reports, the TRICARE Consumer Watch is targeted to TRICARE Regional offices, services and MTF commanders. TRICARE Consumer Watch presents key results from the quarterly HCSDB in a graphical format. The exhibits present TRICARE beneficiaries' experiences with their health care and health plan and utilization rates for preventive services. The TRICARE Consumer Watch is produced on a quarterly basis for all regions and three service affiliations. In the fourth quarter, the TRICARE Consumer Watch is produced for all catchment areas.

b. 2007 TRICARE Consumer Watch Production

1. Content

The Consumer Watch contains graphs presenting four ratings and six composite scores. These graphs are based on data from the Beneficiary Reports. Beneficiaries are asked to rate their experiences with their health care and health plan, and their personal provider on a scale of 0 to 10 where 0 is the worst and 10 is the best. Composite scores evaluate beneficiaries' experiences with the following: getting needed care, getting care quickly, courteous and helpful office staff, how well doctors communicate, customer service, and claims processing. Using data from the National CAHPS Benchmarking Database, ratings and composites are compared to experiences of individuals in civilian health plans. Ratings and composites are also compared to results from previous surveys.

Utilization of preventive care services are measured against the goals established by Healthy People 2010 as well as results from the prior years. Preventive care indicators include preventive cancer screenings, such as mammography and Pap smears, hypertension screening, and prenatal care. Preventative care also includes a non-smoking rate and the percentage of smokers counseled to quit.

2. Format

a. Programming Specifications

Data for the Consumer Watch is arranged in a SAS data set, and consists of records indexed by region, catchment area, enrollment group, and beneficiary category. Scores for the rating and composite graphs utilize the same programs as the TRICARE Beneficiary Reports. The data file for the Consumer Watch is updated each quarter. The programs to generate the Consumer Watch are in Appendix I.

b. Report Production Specifications

Though the Consumer Watch files reside on TRICARE's website, it is designed to be used primarily in print form. The reports are created in portable document format (PDF). The Consumer Watch is arranged on two pages; the key findings are presented as bar graphs. Preventive care scores are presented in table format.

3. Health Care Survey of DoD Beneficiaries: Annual Report

a. Purpose

The purpose of the Health Care Survey of DoD Beneficiaries: Annual Report is to provide OASD(HA), in general, and TMA, in particular, with a comprehensive national summary of the HCSDB findings. The Health Care Survey of DoD Beneficiaries: Annual Report bar charts reflect survey data from all respondents in the domestic MHS and incorporates data from the adult and child HCSDB for 2007[4] and previous years.

b. Procedures for Report Production

1. Content

The report contains ten chapters and an executive summary:

[4] For further detail on the 2007 child HCSDB, refer to "the 2007 Health Care Survey of DoD Beneficiaries: Child Codebook and User's Guide" and "The 2007 Health Care Survey of DoD Beneficiaries: Child Technical Manual."

- Introduction
- Beneficiaries' Choices of Health Plan
- Experience with Health Plan
- Experience with Health Care Providers
- Preventive Care of Retirees
- Communicating with Children's Providers
- Active Duty Experiences
- Children's Behavioral Health Care
- Behavioral Health Care
- Issue Briefs

2. Programming Specification

Programs for calculation of the statistics appearing in the report are written in SAS-callable SUDAAN. Means and proportions and their standard errors are calculated using PROC DESCRIPT. Tests for linear trends are performed using PROC REGRESS or PROC RLOGIST. Values are compared with benchmarks from the National CAHPS Benchmarking Database (NCBD). The benchmarks are readjusted for age and health status using the methods described in Chapter 3, Section D above.

3. Report Production

Numbers and text are presented using publishing software following models developed by importing SUDAAN results into Excel as a text file. Results in the finished report are compared with their Excel models for accuracy. Methods used in the Annual Report are also described in the Health Care Survey of DoD Beneficiary: Annual Report.

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APPENDIX A

ANNOTATED QUESTIONNAIRE – QUARTER I

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RCS: DD-HA(A) 1942

Health Care Survey of DoD Beneficiaries

We need your help!

The Department of Defense is conducting a world-wide survey of DoD health care beneficiaries aimed at understanding and improving your health care. You have been randomly selected to participate in this important study. ***Even if you do not receive health care from a military facility, please complete this survey since your views are important to us and your opinions count***. Your participation will help improve the health care offered to DoD Beneficiaries throughout the world.

Please fill this out and mail it in the enclosed postage-paid envelope. Or, you can complete the survey online by visiting **www.synovate.net/dodq1sat** and using your unique 6-digit password which can be found on the top of this page.

The results of this survey will be posted at **http://www.tricare.osd.mil/survey/hcsurvey/.**

YOUR PRIVACY

Your participation in this survey effort is very important. Your responses are confidential and your participation is voluntary. The number in the upper left hand corner is ONLY used to let us know if you returned your survey so we don't have to send you reminders.

This is your opportunity to tell officials of your opinions and experiences with the current military health care system. It is also an opportunity to provide feedback and identify areas where improvements are needed.

The survey processing center removes all identifying information before sending the results to the Department of Defense.

Your information is grouped with others and no individual information is shared. Only group statistics will be compiled and reported. No information about you as an individual will be disclosed.

According to the Privacy Act of 1974 (Public Law 93-579), the Department of Defense is required to inform you of the purposes and use of this survey. Please read it carefully.

Authority: 10 U.S.C., Chapter 55; Section 706, Public Law 102-484; E.O. 9397.

Purpose: This survey helps health policy makers gauge beneficiary satisfaction with the current military health care system and provides valuable input from beneficiaries that will be used to improve the Military Health System.

Routine Uses: None

Disclosure: Voluntary. Failure to respond will not result in any penalty to the respondent. However, maximum participation is encouraged so that data will be as complete and representative as possible.

Questions about the survey?

Any questions about the survey, or if you want to remove yourself from the survey mailing list, please contact us:

Email: **dod-survey@synovate.net**
Toll-free phone (in the US, Puerto Rico and Canada):
1-877-236-2390, available 24 hours a day
Toll-free fax (in the US, Puerto Rico and Canada): **1-800-409-7681**

International Toll-Free numbers:
Germany: 0 800 182 1532
Great Britain: 008 234 7139
Japan: 0053 11 30 814
South Korea: 003 0813 1286
Mexico: 001 877 238 5171
Philippines: 1 800 1116 2366

When calling or writing, please provide your name, address, and the 8-digit number above your address in the envelope.

Questions about your TRICARE coverage?

For additional information on TRICARE, or if you are not sure about your benefits, or if you don't have a primary care manager; contact the TRICARE Service Center in your region:

North: 1-877-874-2273
South: 1-800-444-5445
West: 1-888-874-9378
Outside the US: 1-888-777-8343

The website is:
www.tricare.osd.mil/tricareservicecenters

Veterans: Contact the US Department of Veterans Affairs at **1-877-222-VETS**; or go to **www.va.gov**

SURVEY INSTRUCTIONS

Answer all the questions by checking the box to the left of your answer. You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

☑ Yes ➔ ***Go to Question 42***

☐ No

Please return the completed questionnaire in the enclosed postage-paid envelope within ***seven days***. If you have misplaced the envelope, our address is:

Office of the Assistant Secretary of Defense (HA)
TMA/HPAE
c/o Synovate
PO Box 5030
Chicago, IL 60680-4138

SURVEY STARTS HERE

As an eligible TRICARE beneficiary, please complete this survey even if you did not receive your health care from a military facility.

Please recognize that some specific questions about TRICARE benefits may not apply to you, depending on your entitlement and particular TRICARE program.

This survey is about the health care of the person whose name appears on the envelope. The questionnaire should be completed by that person. If you are not the addressee, please give this survey to that person.

1. Are you the person whose name appears on the mailing label of this envelope?

H07001

*Percent of Responses**

99.8% 1 ☐ Yes ➔ **Go to Question 2**

0.2% 2 ☐ No ➔ Please give this questionnaire to the person addressed on the envelope.

2. By which of the following health plans are you currently covered? MARK ALL THAT APPLY.

H07002A- H07002R

Military Health Plans

50.4% A ☐ TRICARE Prime

15.4% C ☐ TRICARE Extra or Standard (CHAMPUS)

0.9% N ☐ TRICARE Plus

24.4% O ☐ TRICARE for Life

1.4% P ☐ TRICARE Supplemental Insurance

1.1% Q ☐ TRICARE Reserve Select

Other Health Plans

26.1% F ☐ Medicare

3.4% G ☐ Federal Employees Health Benefit Program (FEHBP)

1.3% H ☐ Medicaid

3.5% I ☐ A civilian HMO (such as Kaiser)

13.1% J ☐ Other civilian health insurance (such as Blue Cross)

1.0% K ☐ Uniformed Services Family Health Plan (USFHP)

7.4% M ☐ The Veterans Administration (VA)

0.3% R ☐ Government health insurance from a country other than the US

8.6% L ☐ Not sure

3. Currently, are you covered by Medicare Part A? Medicare is the federal health insurance program for people aged 65 or older and for certain persons with disabilities. Medicare Part A helps pay for inpatient hospital care.

H07003

*Percent of Responses**

27.8% 1 ☐ Yes, I am now covered by Medicare Part A

72.2% 2 ☐ No, I am not covered by Medicare Part A

4. Currently, are you covered by Medicare Part B? Medicare is the federal health insurance program for people aged 65 or older and for certain persons with disabilities. Medicare Part B helps pay for doctor's services, outpatient hospital services, and certain other services.

H07004

26.9% 1 ☐ Yes, I am now covered by Medicare Part B

73.1% 2 ☐ No, I am not covered by Medicare Part B

5. Currently, are you covered by Medicare supplemental insurance? Medicare supplemental insurance, also called Medigap or MediSup, is usually obtained from private insurance companies and covers some of the costs not paid for by Medicare.

H07005

2.2% 1 ☐ Yes, I am now covered by Medicare supplemental insurance

97.8% 2 ☐ No, I am not covered by Medicare supplemental insurance

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

6. Which health plan did you use for all or most of your health care in the last 12 months? MARK ONLY ONE.

Percent of Responses*		
47.0%	1 ☐	TRICARE Prime
8.8%	3 ☐	TRICARE Extra or Standard (CHAMPUS)
0.5%	11 ☐	TRICARE Plus
0.4%	12 ☐	TRICARE Reserve Select
20.9%	4 ☐	Medicare (may include TRICARE for Life)
2.2%	5 ☐	Federal Employees Health Benefit Program (FEHBP)
0.4%	6 ☐	Medicaid
3.1%	7 ☐	A civilian HMO (such as Kaiser)
9.8%	8 ☐	Other civilian health insurance (such as Blue Cross)
0.7%	9 ☐	Uniformed Services Family Health Plan (USFHP)
3.8%	10 ☐	The Veterans Administration (VA)
0.2%	13 ☐	Government health insurance from a country other than the US
2.1%	-5 ☐	Not sure
	-6 ☐	Did not use any health plan in the last 12 months ➔ **Go to Question 8**

H07006 | See Note 1

For the remainder of this questionnaire, the term health plan refers to the plan you indicated in Question 6.

7. How many months or years in a row have you been in this health plan?

H07007 | See Note 1

1.9%	1 ☐	Less than 6 months
6.8%	2 ☐	6 up to 12 months
9.5%	3 ☐	12 up to 24 months
24.3%	4 ☐	2 up to 5 years
24.7%	5 ☐	5 up to 10 years
32.9%	6 ☐	10 or more years

YOUR PERSONAL DOCTOR OR NURSE

The next questions ask about your own health care. Do not include care you got when you stayed overnight in a hospital. Do not include the times you went for dental care visits.

8. A personal doctor or nurse is the health provider who knows you best. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant. Do you have one person you think of as your personal doctor or nurse?

H07008 | See Note 2

Percent of Responses*		
67.2%	1 ☐	Yes
32.8%	2 ☐	No ➔ **Go to Question 11**

9. Using any number from 0 to 10, where 0 is the worst personal doctor or nurse possible and 10 is the best personal doctor or nurse possible, what number would you use to rate your personal doctor or nurse?

H07009 | See Note 2

0.5%	0 ☐	0 Worst personal doctor or nurse possible
0.3%	1 ☐	1
0.5%	2 ☐	2
1.0%	3 ☐	3
1.0%	4 ☐	4
5.7%	5 ☐	5
5.5%	6 ☐	6
10.8%	7 ☐	7
21.1%	8 ☐	8
18.7%	9 ☐	9
35.0%	10 ☐	10 Best personal doctor or nurse possible
	-6 ☐	I don't have a personal doctor or nurse.

10. Did you have the same personal doctor or nurse before you joined this health plan?

27.7%	1 ☐	Yes ➔ **Go to Question 12**
72.3%	2 ☐	No

H07010 | See Note 2

*Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.

11. Since you joined your health plan, how much of a problem, if any, was it to get a personal doctor or nurse you are happy with?

Percent of Responses*		
14.6%	1 ☐	A big problem
24.2%	2 ☐	A small problem
61.2%	3 ☐	Not a problem

H07011
See Note 2

GETTING HEALTH CARE FROM A SPECIALIST

When you answer the next questions, do not include dental visits.

12. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care.

In the last 12 months, did you or a doctor think you needed to see a specialist?

57.6%	1 ☐	Yes
42.4%	2 ☐	No ➔ **Go to Question 14**

H07012
See Note 3

13. In the last 12 months, how much of a problem, if any, was it to see a specialist that you needed to see?

10.2%	1 ☐	A big problem
18.5%	2 ☐	A small problem
71.2%	3 ☐	Not a problem
	-6 ☐	I didn't need a specialist in the last 12 months.

H07013
See Note 3

14. In the last 12 months, did you see a specialist?

56.7%	1 ☐	Yes
43.3%	2 ☐	No ➔ **Go to Question 16**

H07014
See Note 4

15. We want to know your rating of the specialist you saw most often in the last 12 months. Using any number from 0 to 10, where 0 is the worst specialist possible and 10 is the best specialist possible, what number would you use to rate the specialist?

Percent of Responses*		
0.6%	0 ☐	0 Worst specialist possible
0.2%	1 ☐	1
0.5%	2 ☐	2
1.0%	3 ☐	3
1.4%	4 ☐	4
5.4%	5 ☐	5
4.6%	6 ☐	6
8.5%	7 ☐	7
19.1%	8 ☐	8
22.0%	9 ☐	9
36.7%	10 ☐	10 Best specialist possible
	-6 ☐	I didn't see a specialist in the last 12 months

H07015
See Note 4

CALLING DOCTORS' OFFICES

16. In the last 12 months, did you call a doctor's office or clinic during regular office hours to get help or advice for yourself?

60.2%	1 ☐	Yes
39.8%	2 ☐	No ➔ **Go to Question 18**

H07016
See Note 5

17. In the last 12 months, when you called during regular office hours, how often did you get the help or advice you needed?

3.5%	1 ☐	Never
15.7%	2 ☐	Sometimes
27.0%	3 ☐	Usually
53.8%	4 ☐	Always
	-6 ☐	I didn't call for help or advice during regular office hours in the last 12 months.

H07017
See Note 5

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

YOUR HEALTH CARE IN THE LAST 12 MONTHS

18. In the last 12 months, did you have an illness, injury, or condition that needed care right away in a clinic, emergency room, or doctor's office?

H07018 | See Note 6

Percent of Responses*		
44.5%	1 ☐	Yes
55.5%	2 ☐	No ➔ **Go to Question 21**

19. In the last 12 months, when you <u>needed care right away</u> for an illness, injury, or condition, how often did you get care as soon as you wanted?

H07019 | See Note 6

5.6%	1 ☐	Never
13.3%	2 ☐	Sometimes
22.8%	3 ☐	Usually
58.4%	4 ☐	Always
	-6 ☐	I didn't need care right away for an illness, injury or condition in the last 12 months.

20. In the last 12 months, when you <u>needed care right away</u> for an illness, injury, or condition, how long did you usually have to wait between trying to get care and actually seeing a provider?

H07020 | See Note 6

60.0%	1 ☐	Same day
15.7%	2 ☐	1 day
7.4%	3 ☐	2 days
4.2%	4 ☐	3 days
6.4%	5 ☐	4-7 days
3.2%	6 ☐	8-14 days
3.3%	7 ☐	15 days or longer
	-6 ☐	I didn't need care right away for an illness, injury or condition in the last 12 months.

21. A <u>health provider</u> could be a general doctor, a specialist doctor, a nurse practitioner, a physician assistant, a nurse, or anyone else you would see for health care.

In the last 12 months, not counting the times you needed health care right away, did you make any <u>appointments</u> with a doctor or other health provider for health care?

H07021 | See Note 7

Percent of Responses*		
80.1%	1 ☐	Yes
19.9%	2 ☐	No ➔ **Go to Question 24**

22. In the last 12 months, not counting times you needed health care right away, how often did you get an appointment for health care as soon as you wanted?

H07022 | See Note 7

5.2%	1 ☐	Never
16.4%	2 ☐	Sometimes
36.2%	3 ☐	Usually
42.3%	4 ☐	Always
	-6 ☐	I had no appointments in the last 12 months.

23. In the last 12 months, not counting the times you needed health care right away, how many <u>days</u> did you usually have to wait between making an <u>appointment</u> and actually <u>seeing a provider</u>?

H07023 | See Note 7

10.4%	1 ☐	Same day
10.9%	2 ☐	1 day
23.2%	3 ☐	2-3 days
22.4%	4 ☐	4-7 days
16.4%	5 ☐	8-14 days
12.1%	6 ☐	15-30 days
4.6%	7 ☐	31 days or longer
	-6 ☐	I had no appointments in the last 12 months.

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

24. In the last 12 months, how many times did you go to an emergency room to get care for yourself?

H07024

Percent of Responses*		
72.5%	1 ☐	None
18.0%	2 ☐	1
5.9%	3 ☐	2
2.2%	4 ☐	3
0.8%	5 ☐	4
0.5%	6 ☐	5 to 9
0.1%	7 ☐	10 or more

25. In the last 12 months (not counting times you went to an emergency room), how many times did you go to a doctor's office or clinic to get care for yourself?

H07025
See Note 8

16.3%	1 ☐	None ➔ **Go to Question 38**
10.6%	2 ☐	1
17.4%	3 ☐	2
15.3%	4 ☐	3
13.7%	5 ☐	4
17.4%	6 ☐	5 to 9
9.3%	7 ☐	10 or more

26. In the last 12 months, did you or a doctor believe you needed any care, tests, or treatment?

H07026
See Notes 8 and 9

86.8%	1 ☐	Yes
13.2%	2 ☐	No ➔ **Go to Question 28**

27. In the last 12 months, how much of a problem, if any, was it to get the care, tests or treatment you or a doctor believed necessary?

H07027
See Notes 8 and 9

4.6%	1 ☐	A big problem
16.1%	2 ☐	A small problem
79.3%	3 ☐	Not a problem
	-6 ☐	I had no visits in the last 12 months.

28. In the last 12 months, did you need approval from your health plan for any care, tests, or treatment?

H07028
See Notes 8 and 10

Percent of Responses*		
40.1%	1 ☐	Yes
59.9%	2 ☐	No ➔ **Go to Question 30**

29. In the last 12 months, how much of a problem, if any, were delays in health care while you waited for approval from your health plan?

H07029
See Notes 8 and 10

9.4%	1 ☐	A big problem
23.1%	2 ☐	A small problem
67.5%	3 ☐	Not a problem
	-6 ☐	I had no visits in the last 12 months.

30. In the last 12 months, how often were you taken to the exam room within 15 minutes of your appointment?

H07030
See Note 8

18.7%	1 ☐	Never
25.7%	2 ☐	Sometimes
38.2%	3 ☐	Usually
17.4%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months.

31. In the last 12 months, how often did office staff at a doctor's office or clinic treat you with courtesy and respect?

H07031
See Note 8

0.6%	1 ☐	Never
6.2%	2 ☐	Sometimes
22.0%	3 ☐	Usually
71.2%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months.

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

32. In the last 12 months, how often were office staff at a doctor's office or clinic as helpful as you thought they should be?

H07032
See Note 8

Percent of Responses*		
1.4%	1 ☐	Never
10.8%	2 ☐	Sometimes
36.4%	3 ☐	Usually
51.4%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months.

33. In the last 12 months, how often did doctors or other health providers listen carefully to you?

H07033
See Note 8

1.2%	1 ☐	Never
11.0%	2 ☐	Sometimes
33.6%	3 ☐	Usually
54.2%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months.

34. In the last 12 months, how often did doctors or other health providers explain things in a way you could understand?

H07034
See Note 8

0.8%	1 ☐	Never
7.3%	2 ☐	Sometimes
31.8%	3 ☐	Usually
60.1%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months.

35. In the last 12 months, how often did doctors or other health providers show respect for what you had to say?

H07035
See Note 8

1.1%	1 ☐	Never
9.5%	2 ☐	Sometimes
31.0%	3 ☐	Usually
58.4%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months.

36. In the last 12 months, how often did doctors or other health providers spend enough time with you?

H07036
See Note 8

Percent of Responses*		
2.9%	1 ☐	Never
12.6%	2 ☐	Sometimes
38.1%	3 ☐	Usually
46.4%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months.

37. Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last 12 months?

H07037
See Note 8

0.5%	0 ☐	0 Worst health care possible
0.4%	1 ☐	1
1.1%	2 ☐	2
1.9%	3 ☐	3
2.4%	4 ☐	4
5.8%	5 ☐	5
5.7%	6 ☐	6
11.9%	7 ☐	7
22.6%	8 ☐	8
21.3%	9 ☐	9
26.3%	10 ☐	10 Best health care possible
	-6 ☐	I had no visits in the last 12 months.

38. In the last 12 months, where did you go most often for your health care? MARK ONLY ONE ANSWER.

H07038

36.0%	1 ☐	A military facility – This includes: Military clinic, Military hospital, PRIMUS clinic, NAVCARE clinic
53.1%	2 ☐	A civilian facility – This includes: Doctor's office, Clinic, Hospital, Civilian TRICARE contractor
0.7%	3 ☐	Uniformed Services Family Health Plan facility (USFHP)
4.3%	4 ☐	Veterans Affairs (VA) clinic or hospital
6.0%	5 ☐	I went to none of the listed types of facilities in the last 12 months.

*Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.

YOUR HEALTH PLAN

The next questions ask about your experience with your health plan. By your health plan, we mean the health plan you marked in Question 6.

39. Claims are sent to a health plan for payment. You may send in the claims yourself, or doctors, hospitals, or others may do this for you. In the last 12 months, did you or anyone else send in any claims to your health plan?

H07039 — See Note 11

*Percent of Responses**

- *56.4%* 1 ☐ Yes
- *33.0%* 2 ☐ No ➔ **Go to Question 42**
- *10.6%* -5 ☐ Don't know ➔ **Go to Question 42**

40. In the last 12 months, how often did your health plan handle your claims in a reasonable time?

H07040 — See Note 11

- *1.8%* 1 ☐ Never
- *7.0%* 2 ☐ Sometimes
- *32.3%* 3 ☐ Usually
- *48.1%* 4 ☐ Always
- *10.9%* -5 ☐ Don't know
- -6 ☐ No claims were sent for me in the last 12 months.

41. In the last 12 months, how often did your health plan handle your claims correctly?

H07041 — See Note 11

- *1.3%* 1 ☐ Never
- *5.9%* 2 ☐ Sometimes
- *28.4%* 3 ☐ Usually
- *53.1%* 4 ☐ Always
- *11.3%* -5 ☐ Don't know
- -6 ☐ No claims were sent for me in the last 12 months.

42. In the last 12 months, did you look for any information about how your health plan works in written material or on the Internet?

H07042 — See Note 12

*Percent of Responses**

- *33.9%* 1 ☐ Yes
- *66.1%* 2 ☐ No ➔ **Go to Question 44**

43. In the last 12 months, how much of a problem, if any, was it to find or understand this information?

H07043 — See Note 12

- *11.5%* 1 ☐ A big problem
- *33.5%* 2 ☐ A small problem
- *55.1%* 3 ☐ Not a problem
- -6 ☐ I didn't look for information from my health plan in the last 12 months.

44. In the last 12 months, did you call your health plan's customer service to get information or help?

H07044 — See Note 13

- *33.6%* 1 ☐ Yes
- *66.4%* 2 ☐ No ➔ **Go to Question 46**

45. In the last 12 months, how much of a problem, if any, was it to get the help you needed when you called your health plan's customer service?

H07045 — See Note 13

- *12.6%* 1 ☐ A big problem
- *28.0%* 2 ☐ A small problem
- *59.4%* 3 ☐ Not a problem
- -6 ☐ I didn't call my health plan's customer service in the last 12 months.

46. In the last 12 months, did you have to fill out any paperwork for your health plan?

H07046 — See Note 14

- *35.1%* 1 ☐ Yes
- *64.9%* 2 ☐ No ➔ **Go to Question 48**

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

47. In the last 12 months, how much of a problem, if any, did you have with paperwork for your health plan?

*Percent of Responses**

H07047 | See Note 14

- *6.4%* 1 ☐ A big problem
- *18.5%* 2 ☐ A small problem
- *75.1%* 3 ☐ Not a problem
- -6 ☐ I didn't have any experiences with paperwork for my health plan in the last 12 months.

48. Using <u>any number from 0 to 10</u>, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your health plan?

H07048

- *0.9%* 0 ☐ 0 Worst health plan possible
- *0.7%* 1 ☐ 1
- *0.9%* 2 ☐ 2
- *1.8%* 3 ☐ 3
- *2.1%* 4 ☐ 4
- *7.7%* 5 ☐ 5
- *5.8%* 6 ☐ 6
- *12.4%* 7 ☐ 7
- *20.7%* 8 ☐ 8
- *19.2%* 9 ☐ 9
- *27.6%* 10 ☐ 10 Best health plan possible

RESERVISTS

The following questions concern health care coverage provided to reservists (National Guard and Reserves) and members of their immediate families. An immediate family member is a reservist's TRICARE eligible spouse or child.

49. Are you or your spouse or parent a reservist who was on active duty for more than 30 consecutive days in support of contingency operations during the past 12 months (e.g. Operation Iraqi Freedom, Noble Eagle/Enduring Freedom, Kosovo, Bosnia)?

S07G18 | See Note 15A1

- *6.9%* 1 ☐ Yes
- *93.1%* 2 ☐ No ➔ **Go to Question 71**

50. Are you a reservist activated for contingency operations for more than 30 consecutive days during the past 12 months?

*Percent of Responses**

- *26.9%* 1 ☐ Yes, I am a reservist who is currently on active duty for a contingency operation ➔ **Go to Question 51**
- *40.8%* 2 ☐ Yes, I am a reservist who has been on active duty for a contingency operation but was deactivated in the past 12 months ➔ **Go to Question 51**
- *0.8%* 3 ☐ No, I am a reservist but I have not been on active duty for a contingency operation in the past 12 months ➔ **Go to Question 54**
- *31.5%* 4 ☐ No, I am not a reservist ➔ **Go to Question 54**

S07G19 | See Notes 15A1 and15A2

51. For which operation were you most recently activated in support of contingency operations?

- *91.3%* 1 ☐ Operation Noble Eagle, Operation Enduring Freedom, or Operation Iraqi Freedom
- *0.2%* 2 ☐ Bosnia
- *2.1%* 3 ☐ Kosovo
- *6.3%* 4 ☐ Another contingency Operation

S07G20 | See Notes 15A1 and15A2

52. When were you activated for this contingency operation?

- *15.7%* 1 ☐ Less than 6 months ago
- *19.8%* 2 ☐ At least 6 months ago but less than 12 months ago
- *64.5%* 3 ☐ Twelve months ago or more

S07G21 | See Notes 15A1 and15A2

53. How long did the initial activation orders state that this activation would last?

- *11.7%* 1 ☐ Less than 6 months
- *14.4%* 2 ☐ At least 6 months but less than 12 months
- *73.9%* 3 ☐ Twelve months or more

S07G22 | See Notes 15A1 and15A2

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

54. Is your spouse or parent a reservist who was activated for contingency operations for more than 30 consecutive days during the past 12 months?

*Percent of Responses**

25.5% 1 ☐ Yes, my spouse or parent is a reservist currently on active duty for a contingency operation ➔ **Go to Question 55**

14.9% 2 ☐ Yes, my reservist spouse or parent had been on active duty for a contingency operation but was deactivated within the past 12 months ➔ **Go to Question 55**

1.8% 3 ☐ No, my spouse or parent is a reservist but has not been on active duty for a contingency operation within the past 12 months ➔ **Go to Question 58**

57.9% 4 ☐ No, my spouse or parent is not a reservist ➔ **Go to Question 58**

S07G23 | See Notes 15A1 and15A3

55. For which contingency operation was your reservist spouse or parent activated most recently?

86.3% 1 ☐ Operation Noble Eagle, Operation Enduring Freedom, or Operation Iraqi Freedom

0.2% 2 ☐ Bosnia

2.5% 3 ☐ Kosovo

11.0% 4 ☐ Another contingency Operation

S07G24 | See Notes 15A1 and15A3

56. When was your reservist spouse or parent first activated for this operation?

15.4% 1 ☐ Less than 6 months ago

25.9% 2 ☐ At least 6 months ago but less than 12 months ago

54.7% 3 ☐ Twelve months ago or more

4.0% -5 ☐ Don't know

S07G25 | See Notes 15A1 and15A3

57. How long did the initial activation orders state that this contingency activation would last?

5.7% 1 ☐ Less than 6 months

14.2% 2 ☐ At least 6 months but less than 12 months

68.4% 3 ☐ Twelve months or more

11.8% -5 ☐ Don't know

S07G26 | See Notes 15A1 and15A3

58. Before becoming eligible for TRICARE, were you covered by civilian health insurance?

*Percent of Responses**

S07G27 | See Note 15A1

48.9% 1 ☐ Yes, through my own policy

13.3% 2 ☐ Yes, through the policy of a reservist spouse or parent

9.1% 3 ☐ Yes, through the policy of a non-reservist in my family

28.7% 4 ☐ No, I had no civilian coverage

59. Which of the following describes your current health care coverage?

43.6% 1 ☐ I use only TRICARE ➔ **Go to Question 62**

14.1% 2 ☐ I use both TRICARE and civilian coverage ➔ **Go to Question 61**

25.5% 3 ☐ I use only civilian coverage ➔ **Go to Question 60**

16.8% -5 ☐ Don't know ➔ **Go to Question 61**

S07G28 | See Notes 15A1 and15A4

60. Why don't you use TRICARE? MARK ALL THAT APPLY.

40.1% A ☐ I have a greater choice of doctors with my civilian plan

20.0% B ☐ I get better customer service with civilian plans

29.0% C ☐ My personal doctor is not available to me through TRICARE

24.0% D ☐ TRICARE benefits are poor compared to my civilian plan

48.9% E ☐ It is easier for me to get care through my civilian plan

22.2% F ☐ I pay less for civilian care than I would for TRICARE

31.9% G ☐ There are no military facilities near me

24.5% H ☐ I prefer civilian doctors

19.2% I ☐ I prefer civilian hospitals

50.6% J ☐ I am happy with my civilian plan and have no reason to change

30.1% K ☐ Another reason

S07G29A-S07G29K | See Notes 15A1 and15A4

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

61. Do you or the policy-holder now pay all or part of the premium for your civilian health insurance?

S07G30

See Notes 15A1 and15A4

Percent of Responses*		
19.2%	1 ☐	Yes, we pay all
20.3%	2 ☐	Yes, we pay part
45.2%	3 ☐	No, we pay nothing
15.3%	-5 ☐	Don't know

62. When you became eligible for TRICARE, how much of a problem was it to get information about your TRICARE benefits?

S07G31

See Note 15A1

13.5%	1 ☐	A big problem
24.5%	2 ☐	A small problem
62.0%	3 ☐	Not a problem
	-6 ☐	I did not try to get information about TRICARE

63. Is the doctor you consider your personal doctor a civilian?

S07G32

See Notes 15A1 and15A5

86.9%	1 ☐	Yes
13.1%	2 ☐	No ➔ **Go to Question 65**
	-6 ☐	I do not have a personal doctor ➔ **Go to Question 66**

64. Does your personal doctor accept TRICARE?

S07G33

See Notes 15A1 and15A5

65.0%	1 ☐	Yes
10.1%	2 ☐	No
24.9%	-5 ☐	Don't know
	-6 ☐	I do not have a personal doctor

65. Since you became eligible for TRICARE, how difficult is it to see the personal doctor you want to see?

Percent of Responses*		
16.6%	1 ☐	It is now more difficult
12.5%	2 ☐	It is now less difficult
70.9%	3 ☐	It is about the same
	-6 ☐	I do not have a personal doctor

S07G34

See Notes 15A1 and15A5

66. Since you became eligible for TRICARE, how difficult is it to see the specialists you want to see?

S07G35

See Note 15A1

20.0%	1 ☐	It is now more difficult
13.8%	2 ☐	It is now less difficult
66.2%	3 ☐	It is about the same
	-6 ☐	I have not needed to see any specialists

67. Were you or a reservist in your immediate family deactivated after November 6, 2003?

S07G36

See Notes 15A1 and15A6

38.0%	1 ☐	Yes
52.2%	2 ☐	No ➔ **Go to Question 70**
9.8%	-5 ☐	Don't know ➔ **Go to Question 70**

68. Either as a reservist or a family member of a reservist, were you eligible for TRICARE coverage for any period of time immediately before the reservist reported to active duty?

S07G37

See Notes 15A1 and15A6

24.6%	1 ☐	Yes
53.5%	2 ☐	No ➔ **Go to Question 70**
21.9%	3 ☐	Don't know ➔ **Go to Question 70**

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

69. How long were you eligible for this coverage?

Directions: Write the number of days in the shaded blank boxes. Check the box next to the matching number.

*Percent of Responses**

22.6%

Example:

Eligibility Days			Eligibility Days		
	9	5			
	☐0	☐0		☐0	☐0
	☐1	☐1		☐1	☐1
	☐2	☐2		☐2	☐2
	☐3	☐3		☐3	☐3
	☐4	☐4		☐4	☐4
	☐5	☑5		☐5	☐5
	☐6	☐6		☐6	☐6
	☐7	☐7		☐7	☐7
	☐8	☐8		☐8	☐8
	☑9	☐9		☐9	☐9

77.4% -5 ☐ Don't know

S07G38 | See Notes 15A1 and15A6

70. Were you eligible for TRICARE coverage for any period of time after you or a reservist in your immediate family deactivated?

*Percent of Responses**

S07G39 | See Note 15A1

52.8% 1 ☐ Yes

16.7% 2 ☐ No

30.6% 3 ☐ Don't know

PREVENTIVE CARE

Preventive care is medical care you receive that is intended to maintain your good health or prevent a future medical problem. A physical or blood pressure screening are examples of preventive care.

71. When did you last have a blood pressure reading?

*Percent of Responses**

H07049

91.3% 3 ☐ Less than 12 months ago

6.1% 2 ☐ 1 to 2 years ago

2.7% 1 ☐ More than 2 years ago

72. Do you know if your blood pressure is too high?

H07050

18.0% 1 ☐ Yes, it is too high

75.0% 2 ☐ No, it is not too high

6.9% 3 ☐ Don't know

73. When did you last have a flu shot?

H07051

47.4% 4 ☐ Less than 12 months ago

21.4% 3 ☐ 1-2 years ago

16.3% 2 ☐ More than 2 years ago

14.9% 1 ☐ Never had a flu shot

74. Have you ever smoked at least 100 cigarettes in your entire life?

H07052 | See Note 16

45.2% 1 ☐ Yes

53.6% 2 ☐ No ➔ **Go to Question 80**

1.2% -5 ☐ Don't know ➔ **Go to Question 80**

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

75. Do you now smoke every day, some days or not at all?

H07053 | See Note 16

Percent of Responses*		
26.3%	4 ☐	Every day ➔ **Go to Question 77**
9.7%	3 ☐	Some days ➔ **Go to Question 77**
63.7%	2 ☐	Not at all ➔ **Go to Question 76**
0.4%	-5 ☐	Don't know ➔ **Go to Question 80**

76. How long has it been since you quit smoking cigarettes?

H07054 | See Note 16

8.0%	3 ☐	Less than 12 months ➔ **Go to Question 77**
89.0%	2 ☐	12 months or more ➔ **Go to Question 80**
2.9%	-5 ☐	Don't know ➔ **Go to Question 80**

77. In the last 12 months, on how many visits were you advised to quit smoking by a doctor or other health provider in your plan?

H07055 | See Note 16

34.5%	1 ☐	None
19.5%	2 ☐	1 visit
30.8%	3 ☐	2 to 4 visits
8.9%	4 ☐	5 to 9 visits
6.2%	5 ☐	10 or more visits
	-6 ☐	I had no visits in the last 12 months.

78. On how many visits was medication recommended or discussed to assist you with quitting smoking (for example: nicotine gum, patch, nasal spray, inhaler, prescription medication)?

H07056 | See Note 16

62.7%	1 ☐	None
17.1%	2 ☐	1 visit
14.2%	3 ☐	2 to 4 visits
3.8%	4 ☐	5 to 9 visits
2.1%	5 ☐	10 or more visits
	-6 ☐	I had no visits in the last 12 months

79. On how many visits did your doctor or health provider recommend or discuss methods and strategies (other than medication) to assist you with quitting smoking?

H07057 | See Note 16

Percent of Responses*		
60.9%	1 ☐	None
16.8%	2 ☐	1 visit
15.6%	3 ☐	2 to 4 visits
4.4%	4 ☐	5 to 9 visits
2.3%	5 ☐	10 or more visits
	-6 ☐	I had no visits in the last 12 months

80. Are you male or female?

51.7%	1 ☐	Male ➔ **Go to Question 87**
48.3%	2 ☐	Female ➔ **Go to Question 81**

H07058 | See Note 17A

81. When did you last have a Pap smear test?

55.9%	5 ☐	Within the last 12 months
27.6%	4 ☐	1 to 3 years ago
5.5%	3 ☐	More than 3 but less than 5 years ago
8.6%	2 ☐	5 or more years ago
2.4%	1 ☐	Never had a Pap smear test

H07059 | See Notes 17A and 17B

82. Are you under age 40?

36.6%	1 ☐	Yes ➔ **Go to Question 84**
63.4%	2 ☐	No

H07060 | See Notes 17A, 17B, and 18

83. When was the last time your breasts were checked by mammography?

62.1%	5 ☐	Within the last 12 months
19.9%	4 ☐	1 to 2 years ago
7.6%	3 ☐	More than 2 years ago but less than 5 years ago
5.2%	2 ☐	5 or more years ago
5.2%	1 ☐	Never had a mammogram

H07061 | See Notes 17A, 17B, and 18

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

84. Have you been pregnant in the last 12 months or are you pregnant now?

H07063 | See Notes 17A, 17B, and 19

Percent of Responses*		
2.7%	1 ☐	Yes, I am currently pregnant ➔ **Go to Question 85**
7.0%	2 ☐	No, I am not currently pregnant, but have been pregnant in the past 12 months ➔ **Go to Question 86**
90.4%	3 ☐	No, I am not currently pregnant, and have not been pregnant in the past 12 months ➔ **Go to Question 87**

85. In what trimester is your pregnancy?

22.1%	1 ☐	First trimester (up to 12 weeks after 1st day of last period) ➔ **Go to Question 87**
37.2%	2 ☐	Second trimester (13th through 27th week)
40.7%	3 ☐	Third trimester (28th week until delivery)

H07064 | See Notes 17A, 17B, and 19

86. In which trimester did you first receive prenatal care?

83.1%	4 ☐	First trimester (up to 12 weeks after 1st day of last period)
12.3%	3 ☐	Second trimester (13th through 27th week)
0.3%	2 ☐	Third trimester (28th week until delivery)
4.3%	1 ☐	Did not receive prenatal care

H07065 | See Notes 17A, 17B, and 19

ABOUT YOU

87. In general, how would you rate <u>your overall health</u> now?

H07066

14.7%	5 ☐	Excellent
35.2%	4 ☐	Very good
34.7%	3 ☐	Good
12.5%	2 ☐	Fair
2.8%	1 ☐	Poor

88. Are you limited in any way in any activities because of any impairment or health problem?

H07067

33.0%	1 ☐	Yes
67.0%	2 ☐	No

89. How tall are you without your shoes on? Please give your answer in feet and inches.

H07068F
H07068I

Example:

Height	
Feet	Inches
5	6
☐1	☐0
☐2	☐1
☐3	☐2
☐4	☐3
☑5	☐4
☐6	☐5
☐7	☑6
	☐7
	☐8
	☐9
	☐10
	☐11

Height	
Feet	Inches
____	____
☐1	☐0
☐2	☐1
☐3	☐2
☐4	☐3
☐5	☐4
☐6	☐5
☐7	☐6
	☐7
	☐8
	☐9
	☐10
	☐11

Percent of Responses* 96.8%

90. How much do you weigh without your shoes on? Please give your answer in pounds.

H07069

Example:

Weight		
Pounds		
1	6	0
☐0	☐0	☑0
☑1	☐1	☐1
☐2	☐2	☐2
☐3	☐3	☐3
	☐4	☐4
	☐5	☐5
	☑6	☐6
	☐7	☐7
	☐8	☐8
	☐9	☐9

Weight		
Pounds		
___	___	___
☐0	☐0	☐0
☐1	☐1	☐1
☐2	☐2	☐2
☐3	☐3	☐3
	☐4	☐4
	☐5	☐5
	☐6	☐6
	☐7	☐7
	☐8	☐8
	☐9	☐9

Percent of Responses* 96.2%

*Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.

91. What is the highest grade or level of school that you have completed?

SREDA

Percent of Responses*		
1.1%	1 ☐	8th grade or less
3.0%	2 ☐	Some high school, but did not graduate
24.9%	3 ☐	High school graduate or GED
43.6%	4 ☐	Some college or 2-year degree
12.7%	5 ☐	4-year college graduate
14.6%	6 ☐	More than 4-year college degree

92. Are you of Hispanic or Latino origin or descent? (Mark "NO" if not Spanish/Hispanic/Latino.)

88.9%	A ☐	No, not Spanish, Hispanic, or Latino
3.5%	B ☐	Yes, Mexican, Mexican American, Chicano
2.1%	C ☐	Yes, Puerto Rican
0.3%	D ☐	Yes, Cuban
2.3%	E ☐	Yes, other Spanish, Hispanic, or Latino

H07070, H07070A- H07070E

93. What is your race? (Mark ONE OR MORE races to indicate what you consider yourself to be.)

SRACEA-SRACEE

80.4%	A ☐	White
9.8%	B ☐	Black or African American
2.0%	C ☐	American Indian or Alaska Native
5.5%	D ☐	Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
0.7%	E ☐	Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian, or Chamorro)

94. What is your age now?

SRAGE

15.1%	1 ☐	18 to 24
15.1%	2 ☐	25 to 34
14.2%	3 ☐	35 to 44
12.8%	4 ☐	45 to 54
17.3%	5 ☐	55 to 64
15.2%	6 ☐	65 to 74
10.5%	7 ☐	75 or older

THANK YOU FOR TAKING THE TIME TO COMPLETE THE SURVEY! Your generous contribution will greatly aid efforts to improve the health of our military community.

Return your survey in the postage-paid envelope. If the envelope is missing, please send to:

Office of the Assistant Secretary of Defense (HA)
TMA/HPAE
c/o Synovate
PO Box 5030
Chicago, IL 60680-4138

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

APPENDIX A

ANNOTATED QUESTIONNAIRE – QUARTER II

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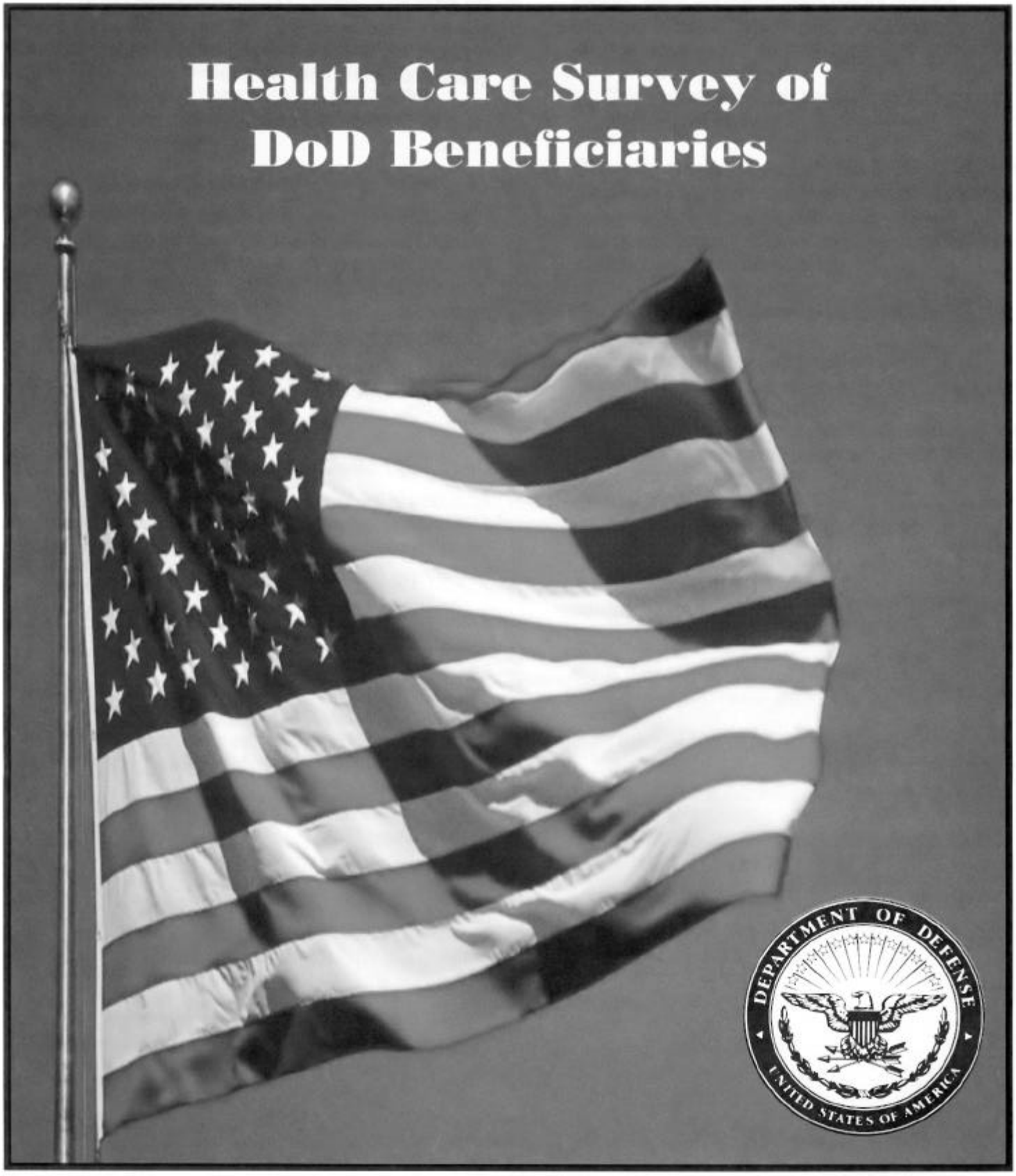
RCS: DD-HA(A) 1942

Health Care Survey of DoD Beneficiaries



9H95-02

JANUARY, 2007

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YOUR PRIVACY

Your participation in this survey effort is very important. Your responses are confidential and your participation is voluntary. The number in the upper left hand corner of the cover is ONLY used to let us know if you returned your survey so we don't have to send you reminders.

This is your opportunity to tell officials of your opinions and experiences with the current military health care system. It is also an opportunity to provide feedback and identify areas where improvements are needed.

The survey processing center removes all identifying information before sending the results to the Department of Defense.

Your information is grouped with others and no individual information is shared. Only group statistics will be compiled and reported. No information about you as an individual will be disclosed.

According to the Privacy Act of 1974 (Public Law 93-579), the Department of Defense is required to inform you of the purposes and use of this survey. Please read it carefully.

Authority: 10 U.S.C., Chapter 55; Section 706, Public Law 102-484; E.O. 9397.

Purpose: This survey helps health policy makers gauge beneficiary satisfaction with the current military health care system and provides valuable input from beneficiaries that will be used to improve the Military Health System.

Routine Uses: None

Disclosure: Voluntary. Failure to respond will not result in any penalty to the respondent. However, maximum participation is encouraged so that data will be as complete and representative as possible.

SURVEY INSTRUCTIONS

Answer all the questions by checking the box to the left of your answer. You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

☑ Yes ➔ ***Go to Question 42***

☐ No

Please return the completed questionnaire in the enclosed postage-paid envelope within ***seven days***. If you have misplaced the envelope, our address is:

Office of the Assistant Secretary of Defense (HA)
TMA/HPAE
c/o Synovate
PO Box 5030
Chicago, IL 60680-4138

SURVEY STARTS HERE

As an eligible TRICARE beneficiary, please complete this survey even if you did not receive your health care from a military facility.

Please recognize that some specific questions about TRICARE benefits may not apply to you, depending on your entitlement and particular TRICARE program. This survey is about the health care of the person whose name appears on the envelope. The questionnaire should be completed by that person. If you are not the addressee, please give this survey to that person.

1. Are you the person whose name appears on the mailing label of this envelope?

H07001

Percent of Responses*		
99.8%	1 ☐	Yes ➔ ***Go to Question 2***
0.2%	2 ☐	No ➔ Please give this questionnaire to the person addressed on the envelope.

2. By which of the following health plans are you currently covered? MARK ALL THAT APPLY.

H07002A - H07002R

Military Health Plans

49.2%	A ☐	TRICARE Prime (including TRICARE Prime Remote and TRICARE Overseas)
15.3%	C ☐	TRICARE Extra or Standard (CHAMPUS)
1.3%	N ☐	TRICARE Plus
25.0%	O ☐	TRICARE for Life
2.2%	P ☐	TRICARE Supplemental Insurance
1.0%	Q ☐	TRICARE Reserve Select

Other Health Plans

26.0%	F ☐	Medicare
2.9%	G ☐	Federal Employees Health Benefit Program (FEHBP)
1.2%	H ☐	Medicaid
3.8%	I ☐	A civilian HMO (such as Kaiser)
12.3%	J ☐	Other civilian health insurance (such as Blue Cross)
0.9%	K ☐	Uniformed Services Family Health Plan (USFHP)
7.5%	M ☐	The Veterans Administration (VA)
0.2%	R ☐	Government health insurance from a country other than the US
7.9%	L ☐	Not sure

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

3. Currently, are you covered by Medicare Part A? Medicare is the federal health insurance program for people aged 65 or older and for certain persons with disabilities. Medicare Part A helps pay for inpatient hospital care.

H07003

Percent of Responses*		
27.5%	1 ☐	Yes, I am now covered by Medicare Part A
72.5%	2 ☐	No, I am not covered by Medicare Part A

4. Currently, are you covered by Medicare Part B? Medicare is the federal health insurance program for people aged 65 or older and for certain persons with disabilities. Medicare Part B helps pay for doctor's services, outpatient hospital services, and certain other services.

H07004

26.8%	1 ☐	Yes, I am now covered by Medicare Part B
73.2%	2 ☐	No, I am not covered by Medicare Part B

5. Currently, are you covered by Medicare supplemental insurance? Medicare supplemental insurance, also called Medigap or MediSup, is usually obtained from private insurance companies and covers some of the costs not paid for by Medicare.

H07005

2.6%	1 ☐	Yes, I am now covered by Medicare supplemental insurance
97.4%	2 ☐	No, I am not covered by Medicare supplemental insurance

6. Which health plan did you use for all or most of your health care in the last 12 months? MARK ONLY ONE.

Percent of Responses*		
47.1%	1 ☐	TRICARE Prime
9.6%	3 ☐	TRICARE Extra or Standard (CHAMPUS)
0.7%	11 ☐	TRICARE Plus
0.4%	12 ☐	TRICARE Reserve Select
21.3%	4 ☐	Medicare (may include TRICARE for Life)
1.8%	5 ☐	Federal Employees Health Benefit Program (FEHBP)
0.4%	6 ☐	Medicaid
3.2%	7 ☐	A civilian HMO (such as Kaiser)
8.7%	8 ☐	Other civilian health insurance (such as Blue Cross)
0.7%	9 ☐	Uniformed Services Family Health Plan (USFHP)
3.2%	10 ☐	The Veterans Administration (VA)
0.2%	13 ☐	Government health insurance from a country other than the US
2.7%	-5 ☐	Not sure
	-6 ☐	Did not use any health plan in the last 12 months ➔ ***Go to Question 8***

H07006 | See Note 1

For the remainder of this questionnaire, the term <u>health plan</u> refers to the plan you indicated in Question 6.

7. How many months or years in a row have you been in this health plan?

H07007 | See Note 1

Percent of Responses*		
1.6%	1 ☐	Less than 6 months
6.1%	2 ☐	6 up to 12 months
10.7%	3 ☐	12 up to 24 months
24.9%	4 ☐	2 up to 5 years
24.5%	5 ☐	5 up to 10 years
32.2%	6 ☐	10 or more years

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

TRICARE RESERVE SELECT

8. TRICARE Reserve Select (TRS) is a premium-based TRICARE health plan available for purchase by qualified members of the Selected Reserve. In the past 12 months, have you (or your sponsor) been eligible to purchase coverage under TRICARE Reserve Select?

*Percent of Responses**

S07001 | See Note 1A1

- *2.1%* 1 ☐ Yes
- *86.7%* 2 ☐ No ➔ ***Go to Question 16***
- *11.1%* -5 ☐ Don't know

9. In the past 12 months, have *you* been covered by TRICARE Reserve Select?

S07002 | See Notes 1A1 and 1A2

- *10.1%* 1 ☐ Yes
- *89.9%* 2 ☐ No ➔ ***Go to Question 16***

10. Reservists who join the Selected Reserve are offered TRICARE Reserve Select in different tiers with different premium costs. In what tier was your most recent coverage?

S07003 | See Notes 1A1 and 1A2

- *9.7%* 1 ☐ Tier 1
- *1.1%* 2 ☐ Tier 2
- *0.5%* 3 ☐ Tier 3
- *88.7%* -5 ☐ Don't know

11. In the past 12 months, how many months have you been covered by TRICARE Reserve Select?

87.9% _____ Insert number of months

S07004 | See Notes 1A1 and 1A2

12. Was your TRICARE Reserve Select coverage family coverage or member-only?

- *58.8%* 1 ☐ Family
- *41.2%* 2 ☐ Member-only

S07005 | See Notes 1A1 and 1A2

13. What was the *most* important reason you (or your sponsor) purchased coverage under TRICARE Reserve Select? MARK ONLY ONE.

*Percent of Responses**

- *19.8%* 1 ☐ I didn't have other alternatives for health insurance
- *12.9%* 2 ☐ TRS was more affordable than my alternatives
- *2.7%* 3 ☐ TRS had more generous benefits than my alternatives
- *1.2%* 4 ☐ My preferred doctors take TRICARE
- *5.9%* 5 ☐ TRICARE provides better coverage for my medical needs
- *11.6%* 6 ☐ I am pleased with the care I have received from TRICARE in the past
- *14.8%* 7 ☐ None of the above
- *31.0%* -5 ☐ Don't know

S07006 | See Notes 1A1 and 1A2

14. In the past 12 months, did you (or your sponsor) elect *not* to purchase TRICARE Reserve Select or *drop* TRICARE Reserve Select?

S07007 | See Notes 1A1, 1A2, and 1A3

- *15.3%* 1 ☐ Yes
- *84.7%* 2 ☐ No ➔ ***Go to Question 16***

15. What were the reasons you (or your sponsor) did *not* purchase coverage or *dropped* coverage under TRICARE Reserve Select? CHECK ALL THAT APPLY.

- *33.8%* A ☐ Civilian health insurance was available that is more affordable than TRS
- *16.3%* B ☐ Civilian health insurance was available with more generous benefits than TRS
- *11.4%* C ☐ Other TRICARE health insurance was available
- *14.9%* D ☐ My period of eligibility ended
- *2.9%* E ☐ No other health insurance was available but I could not afford TRS
- *2.3%* F ☐ I am not pleased with TRICARE
- *3.0%* G ☐ My preferred doctors do not accept TRICARE
- *8.7%* H ☐ A change in employment status that affected health insurance availability
- *27.2%* I ☐ Don't know

S07008A - S07008I | See Notes 1A1, 1A2, and 1A3

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

YOUR PERSONAL DOCTOR OR NURSE

The next questions ask about your own health care. Do not include care you got when you stayed overnight in a hospital. Do not include the times you went for dental care visits.

16. A personal doctor or nurse is the health provider who knows you best. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant. Do you have one person you think of as your personal doctor or nurse?

H07008 | See Note 2

Percent of Responses*		
67.1%	1 ☐	Yes
32.9%	2 ☐	No ➔ *Go to Question 19*

17. Using any number from 0 to 10, where 0 is the worst personal doctor or nurse possible and 10 is the best personal doctor or nurse possible, what number would you use to rate your personal doctor or nurse?

H07009 | See Note 2

0.2%	0 ☐	0 Worst personal doctor or nurse possible
0.2%	1 ☐	1
0.6%	2 ☐	2
1.0%	3 ☐	3
1.3%	4 ☐	4
5.6%	5 ☐	5
4.5%	6 ☐	6
10.4%	7 ☐	7
21.5%	8 ☐	8
19.3%	9 ☐	9
35.5%	10 ☐	10 Best personal doctor or nurse possible
	-6 ☐	I don't have a personal doctor or nurse.

18. Did you have the same personal doctor or nurse before you joined this health plan?

30.6%	1 ☐	Yes ➔ *Go to Question 20*
69.4%	2 ☐	No

H07010 | See Note 2

19. Since you joined your health plan, how much of a problem, if any, was it to get a personal doctor or nurse you are happy with?

H07011 | See Note 2

Percent of Responses*		
14.1%	1 ☐	A big problem
23.7%	2 ☐	A small problem
62.1%	3 ☐	Not a problem

GETTING HEALTH CARE FROM A SPECIALIST

When you answer the next questions, do not include dental visits.

20. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care.

In the last 12 months, did you or a doctor think you needed to see a specialist?

H07012 | See Note 3

Percent of Responses*		
58.0%	1 ☐	Yes
42.0%	2 ☐	No ➔ *Go to Question 22*

21. In the last 12 months, how much of a problem, if any, was it to see a specialist that you needed to see?

H07013 | See Note 3

10.8%	1 ☐	A big problem
17.5%	2 ☐	A small problem
71.8%	3 ☐	Not a problem
	-6 ☐	I didn't need a specialist in the last 12 months.

22. In the last 12 months, did you see a specialist?

H07014 | See Note 4

56.6%	1 ☐	Yes
43.4%	2 ☐	No ➔ *Go to Question 24*

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

23. We want to know your rating of the specialist you saw most often in the last 12 months. Using any number from 0 to 10, where 0 is the worst specialist possible and 10 is the best specialist possible, what number would you use to rate the specialist?

Percent of Responses*		
0.8%	0 ☐	0 Worst specialist possible
0.4%	1 ☐	1
0.8%	2 ☐	2
1.2%	3 ☐	3
1.2%	4 ☐	4
5.3%	5 ☐	5
4.1%	6 ☐	6
8.3%	7 ☐	7
19.3%	8 ☐	8
22.2%	9 ☐	9
36.4%	10 ☐	10 Best specialist possible
	-6 ☐	I didn't see a specialist in the last 12 months

H07015
See Note 4

CALLING DOCTORS' OFFICES

24. In the last 12 months, did you call a doctor's office or clinic during regular office hours to get help or advice for yourself?

H07016 | See Note 5

Percent of Responses*		
61.2%	1 ☐	Yes
38.8%	2 ☐	No ➔ *Go to Question 26*

25. In the last 12 months, when you called during regular office hours, how often did you get the help or advice you needed?

H07017
See Note 5

3.2%	1 ☐	Never
16.4%	2 ☐	Sometimes
27.3%	3 ☐	Usually
53.1%	4 ☐	Always
	-6 ☐	I didn't call for help or advice during regular office hours in the last 12 months.

YOUR HEALTH CARE IN THE LAST 12 MONTHS

26. In the last 12 months, did you have an illness, injury, or condition that needed care right away in a clinic, emergency room, or doctor's office?

H07018 | See Note 6

Percent of Responses*		
47.3%	1 ☐	Yes
52.7%	2 ☐	No ➔ *Go to Question 29*

27. In the last 12 months, when you needed care right away for an illness, injury, or condition, how often did you get care as soon as you wanted?

H07019
See Note 6

5.7%	1 ☐	Never
13.3%	2 ☐	Sometimes
25.1%	3 ☐	Usually
55.9%	4 ☐	Always
	-6 ☐	I didn't need care right away for an illness, injury or condition in the last 12 months.

28. In the last 12 months, when you needed care right away for an illness, injury, or condition, how long did you usually have to wait between trying to get care and actually seeing a provider?

H07020
See Note 6

59.1%	1 ☐	Same day
15.7%	2 ☐	1 day
7.6%	3 ☐	2 days
4.7%	4 ☐	3 days
7.1%	5 ☐	4-7 days
3.0%	6 ☐	8-14 days
2.9%	7 ☐	15 days or longer
	-6 ☐	I didn't need care right away for an illness, injury or condition in the last 12 months.

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

29. A health provider could be a general doctor, a specialist doctor, a nurse practitioner, a physician assistant, a nurse, or anyone else you would see for health care.

In the last 12 months, not counting the times you needed health care right away, did you make any appointments with a doctor or other health provider for health care?

H07021 | See Note 7

*Percent of Responses**

81.9% 1 ☐ Yes

18.1% 2 ☐ No ➔ ***Go to Question 32***

30. In the last 12 months, not counting times you needed health care right away, how often did you get an appointment for health care as soon as you wanted?

H07022 | See Note 7

4.8% 1 ☐ Never

16.5% 2 ☐ Sometimes

37.9% 3 ☐ Usually

40.8% 4 ☐ Always

-6 ☐ I had no appointments in the last 12 months.

31. In the last 12 months, not counting the times you needed health care right away, how many days did you usually have to wait between making an appointment and actually seeing a provider?

H07023 | See Note 7

11.8% 1 ☐ Same day

12.1% 2 ☐ 1 day

23.2% 3 ☐ 2-3 days

20.8% 4 ☐ 4-7 days

16.3% 5 ☐ 8-14 days

11.1% 6 ☐ 15-30 days

4.6% 7 ☐ 31 days or longer

-6 ☐ I had no appointments in the last 12 months.

32. In the last 12 months, how many times did you go to an emergency room to get care for yourself?

H07024

72.7% 1 ☐ None

17.8% 2 ☐ 1

5.7% 3 ☐ 2

2.1% 4 ☐ 3

0.8% 5 ☐ 4

0.7% 6 ☐ 5 to 9

0.3% 7 ☐ 10 or more

33. In the last 12 months (not counting times you went to an emergency room), how many times did you go to a doctor's office or clinic to get care for yourself?

*Percent of Responses**

H07025 | See Note 8

14.6% 1 ☐ None ➔ ***Go to Question 46***

10.5% 2 ☐ 1

17.3% 3 ☐ 2

14.8% 4 ☐ 3

13.6% 5 ☐ 4

19.4% 6 ☐ 5 to 9

9.7% 7 ☐ 10 or more

34. In the last 12 months, did you or a doctor believe you needed any care, tests, or treatment?

H07026 | See Notes 8 and 9

86.8% 1 ☐ Yes

13.2% 2 ☐ No ➔ ***Go to Question 36***

35. In the last 12 months, how much of a problem, if any, was it to get the care, tests or treatment you or a doctor believed necessary?

H07027 | See Notes 8 and 9

5.0% 1 ☐ A big problem

15.9% 2 ☐ A small problem

79.1% 3 ☐ Not a problem

-6 ☐ I had no visits in the last 12 months.

36. In the last 12 months, did you need approval from your health plan for any care, tests, or treatment?

38.7% 1 ☐ Yes

61.3% 2 ☐ No ➔ ***Go to Question 38***

H07028 | See Notes 8 and 10

37. In the last 12 months, how much of a problem, if any, were delays in health care while you waited for approval from your health plan?

9.0% 1 ☐ A big problem

22.8% 2 ☐ A small problem

68.2% 3 ☐ Not a problem

-6 ☐ I had no visits in the last 12 months.

H07029 | See Notes 8 and 10

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

38. In the last 12 months, how often were you taken to the exam room within 15 minutes of your appointment?

H07030
See Note 8

Percent of Responses*		
18.0%	1	☐ Never
27.3%	2	☐ Sometimes
38.0%	3	☐ Usually
16.7%	4	☐ Always
	-6	☐ I had no visits in the last 12 months.

39. In the last 12 months, how often did office staff at a doctor's office or clinic treat you with courtesy and respect?

H07031
See Note 8

0.6%	1	☐ Never
6.3%	2	☐ Sometimes
20.0%	3	☐ Usually
73.2%	4	☐ Always
	-6	☐ I had no visits in the last 12 months.

40. In the last 12 months, how often were office staff at a doctor's office or clinic as helpful as you thought they should be?

H07032
See Note 8

1.6%	1	☐ Never
10.4%	2	☐ Sometimes
34.2%	3	☐ Usually
53.7%	4	☐ Always
	-6	☐ I had no visits in the last 12 months.

41. In the last 12 months, how often did doctors or other health providers listen carefully to you?

H07033
See Note 8

1.5%	1	☐ Never
9.6%	2	☐ Sometimes
33.0%	3	☐ Usually
55.9%	4	☐ Always
	-6	☐ I had no visits in the last 12 months.

42. In the last 12 months, how often did doctors or other health providers explain things in a way you could understand?

H07034
See Note 8

Percent of Responses*		
0.9%	1	☐ Never
6.9%	2	☐ Sometimes
32.1%	3	☐ Usually
60.1%	4	☐ Always
	-6	☐ I had no visits in the last 12 months.

43. In the last 12 months, how often did doctors or other health providers show respect for what you had to say?

H07035
See Note 8

1.3%	1	☐ Never
8.1%	2	☐ Sometimes
30.2%	3	☐ Usually
60.3%	4	☐ Always
	-6	☐ I had no visits in the last 12 months.

44. In the last 12 months, how often did doctors or other health providers spend enough time with you?

H07036
See Note 8

3.1%	1	☐ Never
12.3%	2	☐ Sometimes
37.0%	3	☐ Usually
47.6%	4	☐ Always
	-6	☐ I had no visits in the last 12 months.

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

45. Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last 12 months?

Percent of Responses*		
0.4%	0 ☐	0 Worst health care possible
0.5%	1 ☐	1
1.0%	2 ☐	2
1.7%	3 ☐	3
2.9%	4 ☐	4
5.6%	5 ☐	5
6.0%	6 ☐	6
11.8%	7 ☐	7
21.6%	8 ☐	8
21.9%	9 ☐	9
26.6%	10 ☐	10 Best health care possible
	-6 ☐	I had no visits in the last 12 months.

H07037
See Note 8

46. In the last 12 months, where did you go most often for your health care? MARK ONLY ONE ANSWER.

36.0%	1 ☐	A military facility – This includes: Military clinic, Military hospital, PRIMUS clinic, NAVCARE clinic
53.8%	2 ☐	A civilian facility – This includes: Doctor's office, Clinic, Hospital, Civilian TRICARE contractor
0.6%	3 ☐	Uniformed Services Family Health Plan facility (USFHP)
4.1%	4 ☐	Veterans Affairs (VA) clinic or hospital
5.5%	5 ☐	I went to none of the listed types of facilities in the last 12 months.

H07038

YOUR HEALTH PLAN

The next questions ask about your experience with your health plan. By your health plan, we mean the health plan you marked in Question 6.

47. Claims are sent to a health plan for payment. You may send in the claims yourself, or doctors, hospitals, or others may do this for you. In the last 12 months, did you or anyone else send in any claims to your health plan?

H07039
See Note 11

Percent of Responses*		
57.6%	1 ☐	Yes
31.8%	2 ☐	No ➔ *Go to Question 50*
10.6%	-5 ☐	Don't know ➔ *Go to Question 50*

48. In the last 12 months, how often did your health plan handle your claims in a reasonable time?

H07040
See Note 11

1.6%	1 ☐	Never
6.5%	2 ☐	Sometimes
30.5%	3 ☐	Usually
50.5%	4 ☐	Always
10.9%	-5 ☐	Don't know
	-6 ☐	No claims were sent for me in the last 12 months.

49. In the last 12 months, how often did your health plan handle your claims correctly?

H07041
See Note 11

1.2%	1 ☐	Never
5.9%	2 ☐	Sometimes
27.8%	3 ☐	Usually
53.5%	4 ☐	Always
11.6%	-5 ☐	Don't know
	-6 ☐	No claims were sent for me in the last 12 months.

50. In the last 12 months, did you look for any information about how your health plan works in written material or on the Internet?

H07042
See Note 12

34.1%	1 ☐	Yes
65.9%	2 ☐	No ➔ *Go to Question 52*

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

51. In the last 12 months, how much of a problem, if any, was it to find or understand this information?

*Percent of Responses**

H07043 | See Note 12

- *9.1%* 1 ☐ A big problem
- *32.7%* 2 ☐ A small problem
- *58.1%* 3 ☐ Not a problem
- -6 ☐ I didn't look for information from my health plan in the last 12 months.

52. In the last 12 months, did you call your health plan's <u>customer service</u> to get information or help?

H07044 | See Note 13

- *34.0%* 1 ☐ Yes
- *66.0%* 2 ☐ No ➔ ***Go to Question 54***

53. In the last 12 months, how much of a problem, if any, was it to get the help you needed when you called your health plan's customer service?

H07045 | See Note 13

- *11.1%* 1 ☐ A big problem
- *28.3%* 2 ☐ A small problem
- *60.6%* 3 ☐ Not a problem
- -6 ☐ I didn't call my health plan's customer service in the last 12 months.

54. In the last 12 months, did you have to fill out any paperwork for your health plan?

H07046 | See Note 14

- *29.8%* 1 ☐ Yes
- *70.2%* 2 ☐ No ➔ ***Go to Question 56***

55. In the last 12 months, how much of a problem, if any, did you have with paperwork for your health plan?

H07047 | See Note 14

- *5.3%* 1 ☐ A big problem
- *19.9%* 2 ☐ A small problem
- *74.7%* 3 ☐ Not a problem
- -6 ☐ I didn't have any experiences with paperwork for my health plan in the last 12 months.

56. Using <u>any number from 0 to 10</u>, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your health plan?

*Percent of Responses**

H07048

- *0.9%* 0 ☐ 0 Worst health plan possible
- *0.5%* 1 ☐ 1
- *0.9%* 2 ☐ 2
- *1.6%* 3 ☐ 3
- *1.9%* 4 ☐ 4
- *8.0%* 5 ☐ 5
- *6.5%* 6 ☐ 6
- *12.3%* 7 ☐ 7
- *20.1%* 8 ☐ 8
- *18.9%* 9 ☐ 9
- *28.3%* 10 ☐ 10 Best health plan possible

RESERVISTS

The following questions concern health care coverage provided to reservists (National Guard and Reserves) and members of their immediate families. An immediate family member is a reservist's TRICARE eligible spouse or child.

57. Are you or your spouse or parent a reservist who was on active duty for more than 30 consecutive days in support of contingency operations during the past 12 months (e.g. Operation Iraqi Freedom, Noble Eagle/Enduring Freedom, Kosovo, Bosnia)?

*Percent of Responses**

S07G18 | See Note 15A1

- *10.5%* 1 ☐ Yes
- *89.5%* 2 ☐ No ➔ ***Go to Question 79***

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

58. Are you a reservist activated for contingency operations for more than 30 consecutive days during the past 12 months?

*Percent of Responses**

25.5% 1 ☐ Yes, I am a reservist who is currently on active duty for a contingency operation ➔ ***Go to Question 59***

34.6% 2 ☐ Yes, I am a reservist who has been on active duty for a contingency operation but was deactivated in the past 12 months ➔ ***Go to Question 59***

2.4% 3 ☐ No, I am a reservist but I have not been on active duty for a contingency operation in the past 12 months ➔ ***Go to Question 62***

37.4% 4 ☐ No, I am not a reservist ➔ ***Go to Question 62***

S07G19 | See Notes 15A1 and 15A2

59. For which operation were you most recently activated in support of contingency operations?

91.9% 1 ☐ Operation Noble Eagle, Operation Enduring Freedom, or Operation Iraqi Freedom

0.0% 2 ☐ Bosnia

1.0% 3 ☐ Kosovo

7.1% 4 ☐ Another contingency Operation

S07G20 | See Notes 15A1 and 15A2

60. When were you activated for this contingency operation?

13.2% 1 ☐ Less than 6 months ago

17.2% 2 ☐ At least 6 months ago but less than 12 months ago

69.6% 3 ☐ Twelve months ago or more

S07G21 | See Notes 15A1 and 15A2

61. How long did the initial activation orders state that this activation would last?

10.5% 1 ☐ Less than 6 months

9.5% 2 ☐ At least 6 months but less than 12 months

80.0% 3 ☐ Twelve months or more

S07G22 | See Notes 15A1 and 15A2

62. Is your spouse or parent a reservist who was activated for contingency operations for more than 30 consecutive days during the past 12 months?

*Percent of Responses**

28.6% 1 ☐ Yes, my spouse or parent is a reservist currently on active duty for a contingency operation ➔ ***Go to Question 63***

19.6% 2 ☐ Yes, my reservist spouse or parent had been on active duty for a contingency operation but was deactivated within the past 12 months ➔ ***Go to Question 63***

2.3% 3 ☐ No, my spouse or parent is a reservist but has not been on active duty for a contingency operation within the past 12 months ➔ ***Go to Question 66***

49.5% 4 ☐ No, my spouse or parent is not a reservist ➔ ***Go to Question 66***

S07G23 | See Notes 15A1 and 15A3

63. For which contingency operation was your reservist spouse or parent activated most recently?

90.7% 1 ☐ Operation Noble Eagle, Operation Enduring Freedom, or Operation Iraqi Freedom

0.0% 2 ☐ Bosnia

1.5% 3 ☐ Kosovo

7.8% 4 ☐ Another contingency Operation

S07G24 | See Notes 15A1 and 15A3

64. When was your reservist spouse or parent first activated for this operation?

9.4% 1 ☐ Less than 6 months ago

30.2% 2 ☐ At least 6 months ago but less than 12 months ago

58.3% 3 ☐ Twelve months ago or more

2.1% -5 ☐ Don't know

S07G25 | See Notes 15A1 and 15A3

65. How long did the initial activation orders state that this contingency activation would last?

7.8% 1 ☐ Less than 6 months

13.3% 2 ☐ At least 6 months but less than 12 months

70.3% 3 ☐ Twelve months or more

8.6% -5 ☐ Don't know

S07G26 | See Notes 15A1 and 15A3

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

66. Before becoming eligible for TRICARE, were you covered by civilian health insurance?

*Percent of Responses**

- *53.5%* 1 ☐ Yes, through my own policy
- *15.3%* 2 ☐ Yes, through the policy of a reservist spouse or parent
- *7.8%* 3 ☐ Yes, through the policy of a non-reservist in my family
- *23.3%* 4 ☐ No, I had no civilian coverage

S07G27 | See Note 15A1

67. Which of the following describes your current health care coverage?

- *49.6%* 1 ☐ I use only TRICARE ➔ ***Go to Question 70***
- *15.0%* 2 ☐ I use both TRICARE and civilian coverage ➔ ***Go to Question 69***
- *27.1%* 3 ☐ I use only civilian coverage ➔ ***Go to Question 68***
- *8.4%* -5 ☐ Don't know ➔ ***Go to Question 69***

S07G28 | See Notes 15A1 and 15A4

68. Why don't you use TRICARE? MARK ALL THAT APPLY.

- *25.6%* A ☐ I have a greater choice of doctors with my civilian plan
- *13.0%* B ☐ I get better customer service with civilian plans
- *11.2%* C ☐ My personal doctor is not available to me through TRICARE
- *10.9%* D ☐ TRICARE benefits are poor compared to my civilian plan
- *42.1%* E ☐ It is easier for me to get care through my civilian plan
- *22.7%* F ☐ I pay less for civilian care than I would for TRICARE
- *31.1%* G ☐ There are no military facilities near me
- *11.7%* H ☐ I prefer civilian doctors
- *10.4%* I ☐ I prefer civilian hospitals
- *38.3%* J ☐ I am happy with my civilian plan and have no reason to change
- *28.8%* K ☐ Another reason

S07G29A – S07G29K | See Notes 15A1 and 15A4

69. Do you or the policy-holder now pay all or part of the premium for your civilian health insurance?

*Percent of Responses**

- *16.1%* 1 ☐ Yes, we pay all
- *44.9%* 3 ☐ Yes, we pay part
- *20.4%* 2 ☐ No, we pay nothing
- *18.5%* -5 ☐ Don't know

S07G30 | See Notes 15A1 and 15A4

70. When you became eligible for TRICARE, how much of a problem was it to get information about your TRICARE benefits?

S07G31 | See Note 15A1

- *11.5%* 1 ☐ A big problem
- *22.5%* 2 ☐ A small problem
- *66.0%* 3 ☐ Not a problem
- -6 ☐ I did not try to get information about TRICARE

71. Is the doctor you consider your personal doctor a civilian?

S07G32 | See Notes 15A1 and 15A5

- *84.8%* 1 ☐ Yes
- *15.2%* 2 ☐ No ➔ ***Go to Question 73***
- -6 ☐ I do not have a personal doctor ➔ ***Go to Question 74***

72. Does your personal doctor accept TRICARE?

S07G33 | See Notes 15A1 and 15A5

- *68.8%* 1 ☐ Yes
- *10.3%* 2 ☐ No
- *21.0%* -5 ☐ Don't know
- -6 ☐ I do not have a personal doctor

73. Since you became eligible for TRICARE, how difficult is it to see the personal doctor you want to see?

- *16.4%* 1 ☐ It is now more difficult
- *8.9%* 2 ☐ It is now less difficult
- *74.7%* 3 ☐ It is about the same
- -6 ☐ I do not have a personal doctor

S07G34 | See Notes 15A1 and 15A5

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

74. Since you became eligible for TRICARE, how difficult is it to see the specialists you want to see?

*Percent of Responses**

S07G35
See Note 15A1

24.5% 1 ☐ It is now more difficult

12.4% 2 ☐ It is now less difficult

63.1% 3 ☐ It is about the same

-6 ☐ I have not needed to see any specialists

75. Were you or a reservist in your immediate family deactivated after November 6, 2003?

44.4% 1 ☐ Yes

46.7% 2 ☐ No ➔ ***Go to Question 78***

9.0% -5 ☐ Don't know ➔ ***Go to Question 78***

S07G36	See Notes 15A1 and15A6

76. Either as a reservist or a family member of a reservist, were you eligible for TRICARE coverage for any period of time immediately before the reservist reported to active duty?

24.7% 1 ☐ Yes

54.4% 2 ☐ No ➔ ***Go to Question 78***

21.0% 3 ☐ Don't know ➔ ***Go to Question 78***

S07G37	See Notes 15A1 and15A6

77. How long were you eligible for this coverage?

Directions: Write the number of days in the shaded blank boxes. Check the box next to the matching number.

*Percent of Responses**

23.9%

Example:

	Eligibility Days			Eligibility Days	
	9	**5**		____	____
	☐0	☐0		☐0	☐0
	☐1	☐1		☐1	☐1
	☐2	☐2		☐2	☐2
	☐3	☐3		☐3	☐3
	☐4	☐4		☐4	☐4
	☐5	☑5		☐5	☐5
	☐6	☐6		☐6	☐6
	☐7	☐7		☐7	☐7
	☐8	☐8		☐8	☐8
	☑9	☐9		☐9	☐9

76.1% -5 ☐ Don't know

S07G38	See Notes 15A1 and15A6

78. Were you eligible for TRICARE coverage for any period of time after you or a reservist in your immediate family deactivated?

*Percent of Responses**

S07G39
See Note 15A1

51.0% 1 ☐ Yes

14.9% 2 ☐ No

34.1% 3 ☐ Don't know

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

PREVENTIVE CARE

Preventive care is medical care you receive that is intended to maintain your good health or prevent a future medical problem. A physical or blood pressure screening are examples of preventive care.

Percent of Responses*

79. When did you last have a blood pressure reading? H07049

91.9% 3 ☐ Less than 12 months ago
5.8% 2 ☐ 1 to 2 years ago
2.4% 1 ☐ More than 2 years ago

80. Do you know if your blood pressure is too high? H07050

19.8% 1 ☐ Yes, it is too high
73.7% 2 ☐ No, it is not too high
6.5% 3 ☐ Don't know

81. When did you last have a flu shot? H07051

58.2% 4 ☐ Less than 12 months ago
11.1% 3 ☐ 1-2 years ago
15.3% 2 ☐ More than 2 years ago
15.4% 1 ☐ Never had a flu shot

82. Have you ever smoked at least 100 cigarettes in your entire life? H07052 See Note 16

46.9% 1 ☐ Yes
52.0% 2 ☐ No ➔ *Go to Question 88*
1.1% -5 ☐ Don't know ➔ *Go to Question 88*

83. Do you now smoke every day, some days or not at all?

26.8% 4 ☐ Every day ➔ *Go to Question 85*
10.1% 3 ☐ Some days ➔ *Go to Question 85*
63.0% 2 ☐ Not at all ➔ *Go to Question 84*
0.2% -5 ☐ Don't know ➔ *Go to Question 88*

H07053 See Note 16

84. How long has it been since you quit smoking cigarettes? H07054 See Note 16

8.6% 3 ☐ Less than 12 months ➔ *Go to Question 85*
87.9% 2 ☐ 12 months or more ➔ *Go to Question 88*
3.5% -5 ☐ Don't know ➔ *Go to Question 88*

Percent of Responses*

85. In the last 12 months, on how many visits were you advised to quit smoking by a doctor or other health provider in your plan? H07055 See Note 16

32.5% 1 ☐ None
18.8% 2 ☐ 1 visit
32.3% 3 ☐ 2 to 4 visits
9.8% 4 ☐ 5 to 9 visits
6.5% 5 ☐ 10 or more visits
-6 ☐ I had no visits in the last 12 months.

86. On how many visits was medication recommended or discussed to assist you with quitting smoking (for example: nicotine gum, patch, nasal spray, inhaler, prescription medication)? H07056 See Note 16

64.4% 1 ☐ None
15.3% 2 ☐ 1 visit
14.7% 3 ☐ 2 to 4 visits
3.1% 4 ☐ 5 to 9 visits
2.5% 5 ☐ 10 or more visits
-6 ☐ I had no visits in the last 12 months

87. On how many visits did your doctor or health provider recommend or discuss methods and strategies (other than medication) to assist you with quitting smoking? H07057 See Note 16

64.5% 1 ☐ None
15.7% 2 ☐ 1 visit
14.1% 3 ☐ 2 to 4 visits
3.6% 4 ☐ 5 to 9 visits
2.2% 5 ☐ 10 or more visits
-6 ☐ I had no visits in the last 12 months

88. Are you male or female?

51.9% 1 ☐ Male ➔ *Go to Question 95*
48.1% 2 ☐ Female ➔ *Go to Question 89*

H07058 See Note 17A

*Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.

89. When did you last have a Pap smear test?

*Percent of Responses**

- *56.2%* 5 ☐ Within the last 12 months
- *26.7%* 4 ☐ 1 to 3 years ago
- *5.4%* 3 ☐ More than 3 but less than 5 years ago
- *8.7%* 2 ☐ 5 or more years ago
- *3.0%* 1 ☐ Never had a Pap smear test

H07059 | See Notes 17A and 17B

90. Are you under age 40?

- *36.1%* 1 ☐ Yes ➔ ***Go to Question 92***
- *63.9%* 2 ☐ No

H07060 | See Notes 17A, 17B, and 18

91. When was the last time your breasts were checked by mammography?

- *62.3%* 5 ☐ Within the last 12 months
- *19.8%* 4 ☐ 1 to 2 years ago
- *6.8%* 3 ☐ More than 2 years ago but less than 5 years ago
- *5.3%* 2 ☐ 5 or more years ago
- *5.7%* 1 ☐ Never had a mammogram

H07061 | See Notes 17A, 17B, and 18

92. Have you been pregnant in the last 12 months or are you pregnant now?

- *2.6%* 1 ☐ Yes, I am currently pregnant ➔ ***Go to Question 93***
- *6.9%* 2 ☐ No, I am not currently pregnant, but have been pregnant in the past 12 months ➔ ***Go to Question 94***
- *90.5%* 3 ☐ No, I am not currently pregnant, and have not been pregnant in the past 12 months ➔ ***Go to Question 95***

H07063 | See Notes 17A, 17B, and 19

93. In what trimester is your pregnancy?

- *20.1%* 1 ☐ First trimester (up to 12 weeks after 1st day of last period) ➔ ***Go to Question 95***
- *38.8%* 2 ☐ Second trimester (13th through 27th week)
- *41.0%* 3 ☐ Third trimester (28th week until delivery)

H07064 | See Notes 17A, 17B, and 19

94. In which trimester did you first receive prenatal care?

*Percent of Responses**

- *85.7%* 4 ☐ First trimester (up to 12 weeks after 1st day of last period)
- *8.8%* 3 ☐ Second trimester (13th through 27th week)
- *0.5%* 2 ☐ Third trimester (28th week until delivery)
- *4.9%* 1 ☐ Did not receive prenatal care

H07065 | See Notes 17A, 17B, and 19

ABOUT YOU

95. In general, how would you rate <u>your overall health</u> now?

H07066

*Percent of Responses**

- *14.5%* 5 ☐ Excellent
- *36.1%* 4 ☐ Very good
- *34.6%* 3 ☐ Good
- *12.4%* 2 ☐ Fair
- *2.4%* 1 ☐ Poor

96. Are you limited in any way in any activities because of any impairment or health problem?

H07067

- *33.0%* 1 ☐ Yes
- *67.0%* 2 ☐ No

97. How tall are you without your shoes on? Please give your answer in feet and inches.

H07068F
H07068I

Example:

Height	
Feet	Inches
5	**6**
☐1	☐0
☐2	☐1
☐3	☐2
☐4	☐3
☑5	☐4
☐6	☐5
☐7	☑6
	☐7
	☐8
	☐9
	☐10
	☐11

Height	
Feet	Inches
_____	_____
☐1	☐0
☐2	☐1
☐3	☐2
☐4	☐3
☐5	☐4
☐6	☐5
☐7	☐6
	☐7
	☐8
	☐9
	☐10
	☐11

*Percent of Responses** *97.6%*

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

98. How much do you weigh without your shoes on? Please give your answer in pounds.

H07069

Example:

Weight			Weight		
Pounds			Pounds		
1	6	0	___	___	___
☐0	☐0	☑0	☐0	☐0	☐0
☑1	☐1	☐1	☐1	☐1	☐1
☐2	☐2	☐2	☐2	☐2	☐2
☐3	☐3	☐3	☐3	☐3	☐3
	☐4	☐4		☐4	☐4
	☐5	☐5		☐5	☐5
	☑6	☐6		☐6	☐6
	☐7	☐7		☐7	☐7
	☐8	☐8		☐8	☐8
	☐9	☐9		☐9	☐9

*Percent of Responses** *96.8%*

99. What is the highest grade or level of school that you have completed?

SREDA

Percent of Responses*		
1.2%	1 ☐	8th grade or less
2.9%	2 ☐	Some high school, but did not graduate
26.0%	3 ☐	High school graduate or GED
42.3%	4 ☐	Some college or 2-year degree
12.3%	5 ☐	4-year college graduate
15.3%	6 ☐	More than 4-year college degree

100. Are you of Hispanic or Latino origin or descent? (Mark "NO" if not Spanish/Hispanic/Latino.)

88.7%	A ☐	No, not Spanish, Hispanic, or Latino
3.3%	B ☐	Yes, Mexican, Mexican American, Chicano
2.4%	C ☐	Yes, Puerto Rican
0.2%	D ☐	Yes, Cuban
2.8%	E ☐	Yes, other Spanish, Hispanic, or Latino

H07070, H07070A – H07070E

101. What is your race? (Mark ONE OR MORE races to indicate what you consider yourself to be.)

SRRACEA - SRRACEE

Percent of Responses*		
80.1%	A ☐	White
9.9%	B ☐	Black or African American
2.3%	C ☐	American Indian or Alaska Native
5.9%	D ☐	Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
0.8%	E ☐	Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian, or Chamorro)

102. What is your age now?

SRAGE

16.1%	1 ☐	18 to 24
14.6%	2 ☐	25 to 34
13.7%	3 ☐	35 to 44
12.2%	4 ☐	45 to 54
17.4%	5 ☐	55 to 64
15.2%	6 ☐	65 to 74
10.8%	7 ☐	75 or older

THANK YOU FOR TAKING THE TIME TO COMPLETE THE SURVEY! Your generous contribution will greatly aid efforts to improve the health of our military community.

Return your survey in the postage-paid envelope. If the envelope is missing, please send to:

Office of the Assistant Secretary of Defense (HA)
TMA/HPAE
c/o Synovate
PO Box 5030
Chicago, IL 60680-4138

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

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APPENDIX A

ANNOTATED QUESTIONNAIRE – QUARTER III

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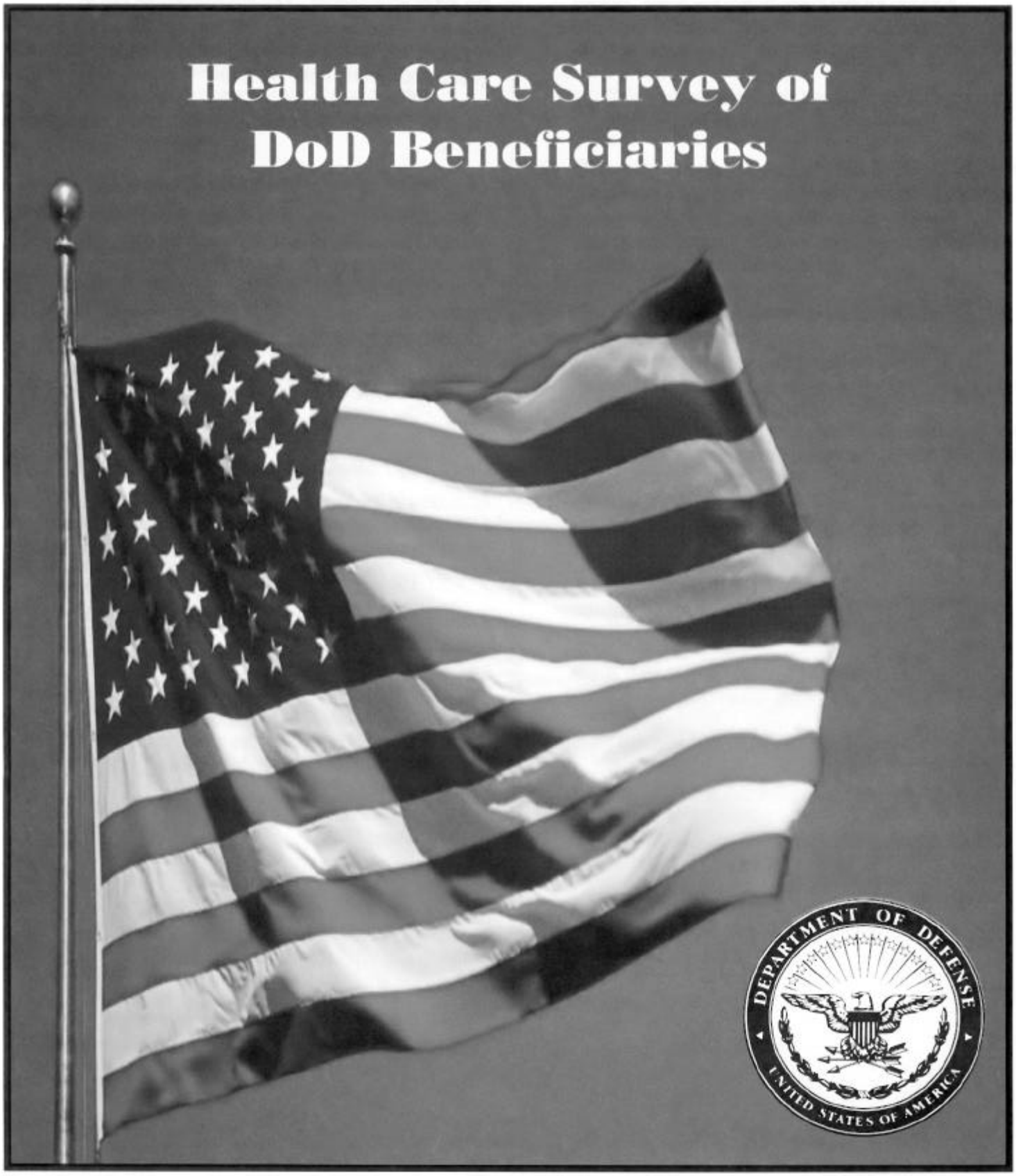
Health Care Survey of DoD Beneficiaries



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APRIL, 2007

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According to the Privacy Act of 1974 (Public Law 93-579), the Department of Defense is required to inform you of the purposes and use of this survey. Please read it carefully.

Authority: 10 U.S.C., Chapter 55; Section 706, Public Law 102-484; E.O. 9397.

Purpose: This survey helps health policy makers gauge beneficiary satisfaction with the current military health care system and provides valuable input from beneficiaries that will be used to improve the Military Health System.

Routine Uses: None

Disclosure: Voluntary. Failure to respond will not result in any penalty to the respondent. However, maximum participation is encouraged so that data will be as complete and representative as possible.

YOUR PRIVACY

Your participation in this survey effort is very important. Your responses are confidential and your participation is voluntary. The number in the upper left hand corner is ONLY used to let us know if you returned your survey so we don't have to send you reminders.

This is your opportunity to tell officials of your opinions and experiences with the current military health care system. It is also an opportunity to provide feedback and identify areas where improvements are needed.

The survey processing center removes all identifying information before sending the results to the Department of Defense.

Your information is grouped with others and no individual information is shared. Only group statistics will be compiled and reported. No information about you as an individual will be disclosed.

SURVEY INSTRUCTIONS

Answer all the questions by checking the box to the left of your answer. You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

☑ Yes ➔ ***Go to Question 42***
☐ No

Please return the completed questionnaire in the enclosed postage-paid envelope within ***seven days***. If the envelope is missing, please send to:

Office of the Assistant Secretary of Defense (Health Affairs)
TMA/HPAE
c/o Synovate Survey Processing Center
PO Box 5030
Chicago, IL 60680-4138

SURVEY STARTS HERE

As an eligible TRICARE beneficiary, please complete this survey even if you did not receive your health care from a military facility.

Please recognize that some specific questions about TRICARE benefits may not apply to you, depending on your entitlement and particular TRICARE program.

This survey is about the health care of the person whose name appears on the envelope. The questionnaire should be completed by that person. If you are not the addressee, please give this survey to that person.

1. Are you the person whose name appears on the mailing label of this envelope? H07001

Percent of Responses*		
99.7%	1 ☐	Yes ➔ ***Go to Question 2***
0.3%	2 ☐	No ➔ Please give this questionnaire to the person addressed on the envelope.

2. By which of the following health plans are you currently covered? MARK ALL THAT APPLY. H07002A - H07002R

Military Health Plans

48.7%	A ☐	TRICARE Prime (including TRICARE Prime Remote and TRICARE Overseas)
16.8%	C ☐	TRICARE Extra or Standard (CHAMPUS)
1.0%	N ☐	TRICARE Plus
25.8%	O ☐	TRICARE for Life
2.1%	P ☐	TRICARE Supplemental Insurance
1.0%	Q ☐	TRICARE Reserve Select

Other Health Plans

27.1%	F ☐	Medicare
3.1%	G ☐	Federal Employees Health Benefit Program (FEHBP)
1.2%	H ☐	Medicaid
2.9%	I ☐	A civilian HMO (such as Kaiser)
11.6%	J ☐	Other civilian health insurance (such as Blue Cross)
0.8%	K ☐	Uniformed Services Family Health Plan (USFHP)
6.7%	M ☐	The Veterans Administration (VA)
0.5%	R ☐	Government health insurance from a country other than the US
10.2%	L ☐	Not sure

3. Currently, are you covered by Medicare Part A? Medicare is the federal health insurance program for people aged 65 or older and for certain persons with disabilities. Medicare Part A helps pay for inpatient hospital care. H07003

29.0%	1 ☐	Yes, I am now covered by Medicare Part A
71.0%	2 ☐	No, I am not covered by Medicare Part A

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

4. Currently, are you covered by Medicare Part B? Medicare is the federal health insurance program for people aged 65 or older and for certain persons with disabilities. Medicare Part B helps pay for doctor's services, outpatient hospital services, and certain other services.

H07004

Percent of Responses*		
28.2%	1 ☐	Yes, I am now covered by Medicare Part B
71.8%	2 ☐	No, I am not covered by Medicare Part B

5. Currently, are you covered by Medicare supplemental insurance? Medicare supplemental insurance, also called Medigap or MediSup, is usually obtained from private insurance companies and covers some of the costs not paid for by Medicare.

H07005

2.5%	1 ☐	Yes, I am now covered by Medicare supplemental insurance
97.5%	2 ☐	No, I am not covered by Medicare supplemental insurance

6. Which health plan did you use for all or most of your health care in the last 12 months? MARK ONLY ONE.

46.3%	1 ☐	TRICARE Prime
10.0%	3 ☐	TRICARE Extra or Standard (CHAMPUS)
0.6%	11 ☐	TRICARE Plus
0.3%	12 ☐	TRICARE Reserve Select
22.5%	4 ☐	Medicare (may include TRICARE for Life)
2.5%	5 ☐	Federal Employees Health Benefit Program (FEHBP)
0.3%	6 ☐	Medicaid
2.4%	7 ☐	A civilian HMO (such as Kaiser)
8.6%	8 ☐	Other civilian health insurance (such as Blue Cross)
0.5%	9 ☐	Uniformed Services Family Health Plan (USFHP)
3.1%	10 ☐	The Veterans Administration (VA)
0.3%	13 ☐	Government health insurance from a country other than the US
2.5%	-5 ☐	Not sure
	-6 ☐	Did not use any health plan in the last 12 months ➔ *Go to Question 8*

H07006 | See Note 1

For the remainder of this questionnaire, the term health plan refers to the plan you indicated in Question 6.

7. How many months or years in a row have you been in this health plan?

2.3%	1 ☐	Less than 6 months
5.8%	2 ☐	6 up to 12 months
10.8%	3 ☐	12 up to 24 months
23.8%	4 ☐	2 up to 5 years
23.2%	5 ☐	5 up to 10 years
34.1%	6 ☐	10 or more years

H07007 | See Note 1

TRICARE RESERVE SELECT

8. TRICARE Reserve Select (TRS) is a premium-based TRICARE health plan available for purchase by qualified members of the Selected Reserve. In the past 12 months, have you (or your sponsor) been eligible to purchase coverage under TRICARE Reserve Select?

S07001 | See Note 1A1

Percent of Responses*		
3.3%	1 ☐	Yes
72.6%	2 ☐	No ➔ *Go to Question 16*
24.1%	-5 ☐	Don't know

9. In the past 12 months, have *you* been covered by TRICARE Reserve Select?

7.8%	1 ☐	Yes
92.2%	2 ☐	No ➔ *Go to Question 16*

S07002 | See Notes 1A1 and 1A2

10. Reservists who join the Selected Reserve are offered TRICARE Reserve Select in different tiers with different premium costs. In what tier was your most recent coverage?

6.8%	1 ☐	Tier 1
0.9%	2 ☐	Tier 2
1.1%	3 ☐	Tier 3
91.1%	-5 ☐	Don't know

S07003 | See Notes 1A1 and 1A2

11. In the past 12 months, how many months have you been covered by TRICARE Reserve Select?

55.5% _____ Insert number of months

S07004 | See Notes 1A1 and 1A2

12. Was your TRICARE Reserve Select coverage family coverage or member-only?

51.3%	1 ☐	Family
48.7%	2 ☐	Member-only

S07005 | See Notes 1A1 and 1A2

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

13. What was the *most* important reason you (or your sponsor) purchased coverage under TRICARE Reserve Select? MARK ONLY ONE.

*Percent of Responses**

15.7%	1 ☐	I didn't have other alternatives for health insurance
7.6%	2 ☐	TRS was more affordable than my alternatives
1.7%	3 ☐	TRS had more generous benefits than my alternatives
4.9%	4 ☐	My preferred doctors take TRICARE
8.6%	5 ☐	TRICARE provides better coverage for my medical needs
14.2%	6 ☐	I am pleased with the care I have received from TRICARE in the past
12.6%	7 ☐	None of the above
34.7%	-5 ☐	Don't know

S07006

See Notes 1A1 and 1A2

14. In the past 12 months, did you (or your sponsor) elect *not* to purchase TRICARE Reserve Select or *drop* TRICARE Reserve Select?

10.3%	1 ☐	Yes
89.7%	2 ☐	No ➔ *Go to Question 16*

S07007 | See Notes 1A1, 1A2, and 1A3

15. What were the reasons you (or your sponsor) did *not* purchase coverage or *dropped* coverage under TRICARE Reserve Select? CHECK ALL THAT APPLY.

26.6%	A ☐	Civilian health insurance was available that is more affordable than TRS
10.2%	B ☐	Civilian health insurance was available with more generous benefits than TRS
11.4%	C ☐	Other TRICARE health insurance was available
14.1%	D ☐	My period of eligibility ended
0.7%	E ☐	No other health insurance was available but I could not afford TRS
6.0%	F ☐	I am not pleased with TRICARE
5.2%	G ☐	My preferred doctors do not accept TRICARE
12.8%	H ☐	A change in employment status that affected health insurance availability
29.5%	I ☐	Don't know

S07008A - S07008I

See Notes 1A1, 1A2, and 1A3

YOUR PERSONAL DOCTOR OR NURSE

The next questions ask about your own health care. Do not include care you got when you stayed overnight in a hospital. Do not include the times you went for dental care visits.

16. A personal doctor or nurse is the health provider who knows you best. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant. Do you have one person you think of as your personal doctor or nurse?

*Percent of Responses**

69.9%	1 ☐	Yes
30.1%	2 ☐	No ➔ *Go to Question 19*

H07008 | See Note 2

17. Using any number from 0 to 10, where 0 is the worst personal doctor or nurse possible and 10 is the best personal doctor or nurse possible, what number would you use to rate your personal doctor or nurse?

*Percent of Responses**

0.3%	0 ☐	0 Worst personal doctor or nurse possible
0.3%	1 ☐	1
0.8%	2 ☐	2
0.9%	3 ☐	3
1.5%	4 ☐	4
5.7%	5 ☐	5
4.4%	6 ☐	6
11.0%	7 ☐	7
21.5%	8 ☐	8
19.3%	9 ☐	9
34.2%	10 ☐	10 Best personal doctor or nurse possible
	-6 ☐	I don't have a personal doctor or nurse

H07009

See Note 2

18. Did you have the same personal doctor or nurse before you joined this health plan?

31.1%	1 ☐	Yes ➔ *Go to Question 20*
68.9%	2 ☐	No

H07010

See Note 2

19. Since you joined your health plan, how much of a problem, if any, was it to get a personal doctor or nurse you are happy with?

15.5%	1 ☐	A big problem
23.9%	2 ☐	A small problem
60.7%	3 ☐	Not a problem

H07011

See Note 2

GETTING HEALTH CARE FROM A SPECIALIST

When you answer the next questions, do not include dental visits.

20. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care.

*Percent of Responses**

In the last 12 months, did you or your doctor think you needed to see a specialist?

57.3%	1 ☐	Yes
42.7%	2 ☐	No ➔ *Go to Question 22*

H07012

See Note 3

21. In the last 12 months, how much of a problem, if any, was it to see a specialist that you needed to see?

11.3%	1 ☐	A big problem
18.6%	2 ☐	A small problem
70.1%	3 ☐	Not a problem
	-6 ☐	I didn't need a specialist in the last 12 months

H07013

See Note 3

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

22. In the last 12 months, did you see a specialist?

H07014 | See Note 4

Percent of Responses*			
56.5%	1 ☐	Yes	
43.5%	2 ☐	No	➔ *Go to Question 24*

23. We want to know your rating of the specialist you saw most often in the last 12 months. Using any number from 0 to 10, where 0 is the worst specialist possible and 10 is the best specialist possible, what number would you use to rate the specialist?

H07015 | See Note 4

0.8%	0 ☐	0	Worst specialist possible
0.6%	1 ☐	1	
0.9%	2 ☐	2	
1.5%	3 ☐	3	
1.4%	4 ☐	4	
5.1%	5 ☐	5	
4.5%	6 ☐	6	
9.4%	7 ☐	7	
20.2%	8 ☐	8	
20.1%	9 ☐	9	
35.6%	10 ☐	10	Best specialist possible
	-6 ☐	I didn't see a specialist in the last 12 months	

CALLING DOCTORS' OFFICES

24. In the last 12 months, did you call a doctor's office or clinic during regular office hours to get help or advice for yourself?

H07016 | See Note 5

Percent of Responses*			
60.0%	1 ☐	Yes	
40.0%	2 ☐	No	➔ *Go to Question 26*

25. In the last 12 months, when you called during regular office hours, how often did you get the help or advice you needed?

H07017 | See Note 5

4.0%	1 ☐	Never
15.3%	2 ☐	Sometimes
28.9%	3 ☐	Usually
51.9%	4 ☐	Always
	-6 ☐	I didn't call for help or advice during regular office hours in the last 12 months

YOUR HEALTH CARE IN THE LAST 12 MONTHS

26. In the last 12 months, did you have an illness, injury, or condition that needed care right away in a clinic, emergency room, or doctor's office?

Percent of Responses*			
46.6%	1 ☐	Yes	
53.4%	2 ☐	No	➔ *Go to Question 29*

H07018 | See Note 6

27. In the last 12 months, when you needed care right away for an illness, injury, or condition, how often did you get care as soon as you wanted?

H07019 | See Note 6

Percent of Responses*		
6.2%	1 ☐	Never
12.7%	2 ☐	Sometimes
24.9%	3 ☐	Usually
56.2%	4 ☐	Always
	-6 ☐	I didn't need care right away for an illness, injury or condition in the last 12 months

28. In the last 12 months, when you needed care right away for an illness, injury, or condition, how long did you usually have to wait between trying to get care and actually seeing a provider?

H07020 | See Note 6

59.3%	1 ☐	Same day
15.8%	2 ☐	1 day
6.8%	3 ☐	2 days
4.0%	4 ☐	3 days
7.0%	5 ☐	4-7 days
3.1%	6 ☐	8-14 days
4.0%	7 ☐	15 days or longer
	-6 ☐	I didn't need care right away for an illness, injury or condition in the last 12 months

29. A health provider could be a general doctor, a specialist doctor, a nurse practitioner, a physician assistant, a nurse, or anyone else you would see for health care.

In the last 12 months, not counting the times you needed health care right away, did you make any appointments with a doctor or other health provider for health care?

H07021 | See Note 7

82.0%	1 ☐	Yes	
18.0%	2 ☐	No	➔ *Go to Question 32*

30. In the last 12 months, not counting times you needed health care right away, how often did you get an appointment for health care as soon as you wanted?

H07022 | See Note 7

5.1%	1 ☐	Never
18.0%	2 ☐	Sometimes
35.3%	3 ☐	Usually
41.6%	4 ☐	Always
	-6 ☐	I had no appointments in the last 12 months

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

31. In the last 12 months, not counting the times you needed health care right away, how many days did you usually have to wait between making an appointment and actually seeing a provider?

H07023 | See Note 7

Percent of Responses*		
10.2%	1 ☐	Same day
11.5%	2 ☐	1 day
22.4%	3 ☐	2-3 days
21.6%	4 ☐	4-7 days
16.4%	5 ☐	8-14 days
12.4%	6 ☐	15-30 days
5.5%	7 ☐	31 days or longer
	-6 ☐	I had no appointments in the last 12 months

32. In the last 12 months, how many times did you go to an emergency room to get care for yourself?

H07024

73.3%	1 ☐	None
17.2%	2 ☐	1
5.9%	3 ☐	2
1.9%	4 ☐	3
0.8%	5 ☐	4
0.6%	6 ☐	5 to 9
0.2%	7 ☐	10 or more

33. In the last 12 months (not counting times you went to an emergency room), how many times did you go to a doctor's office or clinic to get care for yourself?

H07025 | See Note 8

14.6%	1 ☐	None ➔ *Go to Question 46*
11.5%	2 ☐	1
16.7%	3 ☐	2
15.4%	4 ☐	3
14.0%	5 ☐	4
18.8%	6 ☐	5 to 9
9.1%	7 ☐	10 or more

34. In the last 12 months, did you or a doctor believe you needed any care, tests, or treatment?

86.3%	1 ☐	Yes
13.7%	2 ☐	No ➔ *Go to Question 36*

H07026 | See Notes 8 and 9

35. In the last 12 months, how much of a problem, if any, was it to get the care, tests or treatment you or a doctor believed necessary?

5.1%	1 ☐	A big problem
15.5%	2 ☐	A small problem
79.4%	3 ☐	Not a problem
	-6 ☐	I had no visits in the last 12 months

H07027 | See Notes 8 and 9

36. In the last 12 months, did you need approval from your health plan for any care, tests, or treatment?

Percent of Responses*		
37.7%	1 ☐	Yes
62.3%	2 ☐	No ➔ *Go to Question 38*

H07028 | See Notes 8 and 10

37. In the last 12 months, how much of a problem, if any, were delays in health care while you waited for approval from your health plan?

H07029 | See Notes 8 and 10

10.6%	1 ☐	A big problem
23.6%	2 ☐	A small problem
65.8%	3 ☐	Not a problem
	-6 ☐	I had no visits in the last 12 months

38. In the last 12 months, how often were you taken to the exam room within 15 minutes of your appointment?

H07030 | See Note 8

18.7%	1 ☐	Never
26.1%	2 ☐	Sometimes
38.9%	3 ☐	Usually
16.3%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months

39. In the last 12 months, how often did office staff at a doctor's office or clinic treat you with courtesy and respect?

H07031 | See Note 8

0.7%	1 ☐	Never
5.7%	2 ☐	Sometimes
20.4%	3 ☐	Usually
73.2%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months

40. In the last 12 months, how often were office staff at a doctor's office or clinic as helpful as you thought they should be?

H07032 | See Note 8

1.4%	1 ☐	Never
10.4%	2 ☐	Sometimes
35.1%	3 ☐	Usually
53.1%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months

41. In the last 12 months, how often did doctors or other health providers listen carefully to you?

H07033 | See Note 8

1.1%	1 ☐	Never
11.5%	2 ☐	Sometimes
32.1%	3 ☐	Usually
55.3%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

42. In the last 12 months, how often did doctors or other health providers explain things in a way you could understand?

Percent of Responses*		
0.7%	1 ☐	Never
7.2%	2 ☐	Sometimes
32.6%	3 ☐	Usually
59.5%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months

H07034
See Note 8

43. In the last 12 months, how often did doctors or other health providers show respect for what you had to say?

1.0%	1 ☐	Never
9.3%	2 ☐	Sometimes
30.7%	3 ☐	Usually
58.9%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months

H07035
See Note 8

44. In the last 12 months, how often did doctors or other health providers spend enough time with you?

2.7%	1 ☐	Never
13.5%	2 ☐	Sometimes
37.7%	3 ☐	Usually
46.1%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months

H07036
See Note 8

45. Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last 12 months?

0.7%	0 ☐	0	Worst health care possible
0.6%	1 ☐	1	
1.2%	2 ☐	2	
1.9%	3 ☐	3	
2.0%	4 ☐	4	
6.2%	5 ☐	5	
5.5%	6 ☐	6	
12.7%	7 ☐	7	
21.9%	8 ☐	8	
21.9%	9 ☐	9	
25.5%	10 ☐	10	Best health care possible
	-6 ☐		I had no visits in the last 12 months

H07037
See Note 8

46. In the last 12 months, where did you go most often for your health care? MARK ONLY ONE ANSWER.

H07038

Percent of Responses*			
35.7%	1 ☐	A military facility –	This includes: Military clinic Military hospital PRIMUS clinic NAVCARE clinic
53.8%	2 ☐	A civilian facility –	This includes: Doctor's office Clinic Hospital Civilian TRICARE contractor
0.6%	3 ☐	Uniformed Services Family Health Plan facility (USFHP)	
4.2%	4 ☐	Veterans Affairs (VA) clinic or hospital	
5.7%	5 ☐	I went to none of the listed types of facilities in the last 12 months	

47. In general, how would you rate your overall mental or emotional health now?

S07B01

39.6%	1 ☐	Excellent
31.6%	2 ☐	Very good
20.1%	3 ☐	Good
7.0%	4 ☐	Fair
1.7%	5 ☐	Poor

48. In the last 12 months, did you need any treatment or counseling for a personal or family problem?

19.2%	1 ☐	Yes
80.8%	2 ☐	No ➔ *Go to Question 51*

S07B02 | See Note 10A1

49. In the last 12 months, how much of a problem, if any, was it to get the treatment or counseling you needed through your health plan?

S07B03
See Note 10A1

10.9%	1 ☐	A big problem
14.1%	2 ☐	A small problem
75.0%	3 ☐	Not a problem

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

50. Using any number from 0 to 10, where 0 is the worst treatment or counseling possible and 10 is the best treatment or counseling possible, what number would you use to rate all your treatment or counseling in the last 12 months?

S07B04 | See Note 10A1

Percent of Responses*			
2.2%	0 ☐	0	Worst treatment or counseling possible
1.6%	1 ☐	1	
2.6%	2 ☐	2	
3.4%	3 ☐	3	
1.8%	4 ☐	4	
7.2%	5 ☐	5	
5.6%	6 ☐	6	
12.2%	7 ☐	7	
17.4%	8 ☐	8	
18.3%	9 ☐	9	
27.6%	10 ☐	10	Best treatment or counseling possible

YOUR HEALTH PLAN

The next questions ask about your experience with your health plan. By your health plan, we mean the health plan you marked in Question 6.

51. Claims are sent to a health plan for payment. You may send in the claims yourself, or doctors, hospitals, or others may do this for you. In the last 12 months, did you or anyone else send in any claims to your health plan?

H07039 | See Note 11

Percent of Responses*			
56.7%	1 ☐	Yes	
31.7%	2 ☐	No	➔ *Go to Question 54*
11.6%	-5 ☐	Don't know	➔ *Go to Question 54*

52. In the last 12 months, how often did you health plan handle your claims in a reasonable time?

H07040 | See Note 11

2.2%	1 ☐	Never
6.1%	2 ☐	Sometimes
33.7%	3 ☐	Usually
47.0%	4 ☐	Always
11.0%	-5 ☐	Don't know
	-6 ☐	No claims were sent for me in the last 12 months

53. In the last 12 months, how often did your health plan handle your claims correctly?

H07041 | See Note 11

1.2%	1 ☐	Never
5.9%	2 ☐	Sometimes
28.6%	3 ☐	Usually
53.9%	4 ☐	Always
10.4%	-5 ☐	Don't know
	-6 ☐	No claims were sent for me in the last 12 months

54. In the last 12 months, did you look for any information about how your health plan works in written material or on the Internet?

H07042 | See Note 12

Percent of Responses*			
30.8%	1 ☐	Yes	
69.2%	2 ☐	No	➔ *Go to Question 56*

55. In the last 12 months, how much of a problem, if any, was it to find or understand this information?

H07043 | See Note 12

10.5%	1 ☐	A big problem
34.7%	2 ☐	A small problem
54.9%	3 ☐	Not a problem
	-6 ☐	I didn't look for information from my health plan in the last 12 months

56. In the last 12 months, did you call your health plan's customer service to get information or help?

H07044 | See Note 13

31.4%	1 ☐	Yes	
68.6%	2 ☐	No	➔ *Go to Question 58*

57. In the last 12 months, how much of a problem, if any, was it to get the help you needed when you called your health plan's customer service?

H07045 | See Note 13

12.2%	1 ☐	A big problem
27.4%	2 ☐	A small problem
60.4%	3 ☐	Not a problem
	-6 ☐	I didn't call my health plan's customer service in the last 12 months

58. In the last 12 months, did you have to fill out any paperwork for your health plan?

H07046 | See Note 14

26.7%	1 ☐	Yes	
73.3%	2 ☐	No	➔ *Go to Question 60*

59. In the last 12 months, how much of a problem, if any, did you have with paperwork for your health plan?

H07047 | See Note 14

6.6%	1 ☐	A big problem
21.6%	2 ☐	A small problem
71.9%	3 ☐	Not a problem
	-6 ☐	I didn't have any experiences with paperwork for my health plan in the last 12 months

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

60. Using any number from 0 to 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your health plan?

H07048

Percent of Responses*			
0.9%	0 ☐	0	Worst health plan possible
0.6%	1 ☐	1	
0.7%	2 ☐	2	
1.6%	3 ☐	3	
1.9%	4 ☐	4	
7.9%	5 ☐	5	
6.1%	6 ☐	6	
12.9%	7 ☐	7	
20.1%	8 ☐	8	
20.3%	9 ☐	9	
27.0%	10 ☐	10	Best health plan possible

PREVENTIVE CARE

Preventive care is medical care you receive that is intended to maintain your good health or prevent a future medical problem. A physical or blood pressure screening are examples of preventive care.

61. When did you last have a blood pressure reading?

H07049

Percent of Responses*		
91.9%	3 ☐	Less than 12 months ago
5.8%	2 ☐	1 to 2 years ago
2.3%	1 ☐	More than 2 years ago

62. Do you know if your blood pressure is too high?

H07050

19.6%	1 ☐	Yes, it is too high
74.4%	2 ☐	No, it is not too high
6.1%	3 ☐	Don't know

63. For a blood stool test, a person uses a home kit and puts some stool on a card. The card is sent to the doctor's office or lab. Have you ever had this test using a home kit?

S07Q01 | See Note 15B1

34.1%	1 ☐	Yes	
64.7%	2 ☐	No	➔ *Go to Question 65*
1.2%	-5 ☐	Don't know	➔ *Go to Question 65*

64. How long has it been since you had your last blood stool test using a home kit?

S07Q02 | See Note 15B1

28.2%	1 ☐	Less than 12 months ago
23.7%	2 ☐	At least one year but less than 2 years ago
26.1%	3 ☐	At least 2 years but less than 5 years ago
20.1%	4 ☐	5 or more years ago
	-6 ☐	Never had a blood stool test
1.9%	-5 ☐	Don't know

65. Sigmoidoscopy and colonoscopy are exams in which a lighted tube is inserted in the rectum to view the colon for signs of cancer or other health problems. Have you ever had either of these exams?

S07Q03 | See Note 15B2

42.4%	1 ☐	Yes	
56.8%	2 ☐	No	➔ *Go to Question 68*
0.8%	-5 ☐	Don't know	➔ *Go to Question 68*

66. A sigmoidoscopy is limited to the lower part of the colon and is usually done without anesthesia. How long has it been since you had your last sigmoidoscopy?

S07Q04 | See Note 15B2

11.2%	1 ☐	Less than 12 months ago
13.0%	2 ☐	At least one year but less than 2 years ago
29.0%	3 ☐	At least 2 years but less than 5 years ago
37.4%	4 ☐	5 or more years ago
	-6 ☐	Never had a sigmoidoscopy
9.4%	-5 ☐	Don't know

67. For a colonoscopy, the entire colon is examined and patients usually receive medication in their veins to relax them and make them feel sleepy. How long has it been since you had your last colonoscopy?

S07Q05 | See Note 15B2

23.5%	1 ☐	Less than 12 months ago
20.4%	2 ☐	At least one year but less than 2 years ago
35.8%	3 ☐	At least 2 years but less than 5 years ago
14.6%	4 ☐	At least 5 years but less than 10 years ago
3.0%	5 ☐	10 or more years ago
	-6 ☐	Never had a colonoscopy
2.7%	-5 ☐	Don't know

68. A personal doctor or nurse is the health provider who knows you best. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant.

In the last 12 months, did your personal doctor or nurse talk to you about colon cancer, or colon cancer screening tests, which may include blood stool testing, sigmoidoscopy or colonoscopy?

S07Q06

34.7%	1 ☐	Yes
65.3%	2 ☐	No
	-6 ☐	I do not have a personal doctor or nurse

69. When did you last have a flu shot?

H07051

59.0%	4 ☐	Less than 12 months ago
11.0%	3 ☐	1-2 years ago
15.3%	2 ☐	More than 2 years ago
14.7%	1 ☐	Never had a flu shot

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

70. Have you ever smoked at least 100 cigarettes in your entire life?

H07052 | See Note 16

Percent of Responses*			
47.0%	1 ☐	Yes	
52.2%	2 ☐	No	➔ *Go to Question 76*
0.8%	-5 ☐	Don't know	➔ *Go to Question 76*

71. Do you now smoke every day, some days or not at all?

26.4%	4 ☐	Every day	➔ *Go to Question 73*
10.6%	3 ☐	Some days	➔ *Go to Question 73*
62.7%	2 ☐	Not at all	➔ *Go to Question 72*
0.4%	-5 ☐	Don't know	➔ *Go to Question 76*

H07053 | See Note 16

72. How long has it been since you quit smoking cigarettes?

8.2%	3 ☐	Less than 12 months	➔ *Go to Question 73*
88.5%	2 ☐	12 months or more	➔ *Go to Question 76*
3.3%	-5 ☐	Don't know	➔ *Go to Question 76*

H07054 | See Note 16

73. In the last 12 months, on how many visits were you advised to quit smoking by a doctor or other health provider in your plan?

H07055 | See Notes 16 and 16A1

30.1%	1 ☐	None
21.1%	2 ☐	1 visit
33.4%	3 ☐	2 to 4 visits
9.9%	4 ☐	5 to 9 visits
5.4%	5 ☐	10 or more visits
	-6 ☐	I had no visits in the last 12 months

74. On how many visits was medication recommended or discussed to assist you with quitting smoking (for example: nicotine gum, patch, nasal spray, inhaler, prescription medication)?

H07056 | See Notes 16 and 16A1

62.9%	1 ☐	None
15.0%	2 ☐	1 visit
16.8%	3 ☐	2 to 4 visits
3.2%	4 ☐	5 to 9 visits
2.0%	5 ☐	10 or more visits
	-6 ☐	I had no visits in the last 12 months

75. On how many visits did your doctor or health provider recommend or discuss methods and strategies (other than medication) to assist you with quitting smoking?

H07057 | See Notes 16 and 16A1

64.6%	1 ☐	None
14.3%	2 ☐	1 visit
15.6%	3 ☐	2 to 4 visits
3.6%	4 ☐	5 to 9 visits
1.9%	5 ☐	10 or more visits
	-6 ☐	I had no visits in the last 12 months

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

76. Are you male or female?

Percent of Responses*			
51.9%	1 ☐	Male	➔ *Go to Question 77*
48.1%	2 ☐	Female	➔ *Go to Question 78*

H07058 | See Note 17A

77. When was the last time you had a prostate gland examination or blood test for prostate disease?

39.4%	5 ☐	Within the last 12 months
14.1%	4 ☐	1 to 2 years ago
7.6%	3 ☐	More than 2 but less than 5 years ago
5.2%	2 ☐	5 or more years ago
33.6%	1 ☐	Never had a prostate gland examination

➔ *Go to Question 84*

S07Q07 | See Note 17A and 17A1

78. When did you last have a Pap smear test?

55.5%	5 ☐	Within the last 12 months
25.8%	4 ☐	1 to 3 years ago
5.0%	3 ☐	More than 3 but less than 5 years ago
10.6%	2 ☐	5 or more years ago
2.9%	1 ☐	Never had a Pap smear test

H07059 | See Notes 17A and 17B

79. Are you under age 40?

35.7%	1 ☐	Yes	➔ *Go to Question 81*
64.3%	2 ☐	No	

H07060 | See Notes 17A, 17B, and 18

80. When was the last time your breasts were checked by mammography?

60.5%	5 ☐	Within the last 12 months
20.4%	4 ☐	1 to 2 years ago
8.3%	3 ☐	More than 2 but less than 5 years ago
6.0%	2 ☐	5 or more years ago
4.8%	1 ☐	Never had a mammogram

H07061 | See Notes 17A, 17B, and 18

81. Have you been pregnant in the last 12 months or are you pregnant now?

3.1%	1 ☐	Yes, I am currently pregnant	➔ *Go to Question 82*
7.2%	2 ☐	No, I am not currently pregnant, but have been pregnant in the past 12 months	➔ *Go to Question 83*
89.7%	3 ☐	No, I am not currently pregnant, and have not been pregnant in the past 12 months	➔ *Go to Question 84*

H07063 | See Notes 17A, 17B, and 19

82. In what trimester is your pregnancy?

14.3%	1 ☐	First trimester (up to 12 weeks after 1st day of last period)	➔ *Go to Question 84*
41.3%	2 ☐	Second trimester (13th through 27th week)	
44.4%	3 ☐	Third trimester (28th week until delivery)	

H07064 | See Notes 17A, 17B, and 19

83. In which trimester did you first receive prenatal care?

Percent of Responses*		
83.4%	4 ☐	First trimester (up to 12 weeks after 1st day of last period)
8.8%	3 ☐	Second trimester (13th through 27th week)
0.4%	2 ☐	Third trimester (28th week until delivery)
7.5%	1 ☐	Did not receive prenatal care

H07065 | See Notes 17A, 17B, and 19

ABOUT YOU

84. In general, how would you rate your overall health now?

H07066

Percent of Responses*		
18.7%	5 ☐	Excellent
36.9%	4 ☐	Very good
31.1%	3 ☐	Good
11.3%	2 ☐	Fair
1.9%	1 ☐	Poor

85. Are you limited in any way in any activities because of any impairment or health problem?

H07067

33.3%	1 ☐	Yes
66.7%	2 ☐	No

86. How tall are you without your shoes on? Please give your answer in feet and inches.

Example:

Height		Height	
Feet	Inches	Feet	Inches
5	6		
☐ 1	☐ 0	☐ 1	☐ 0
☐ 2	☐ 1	☐ 2	☐ 1
☐ 3	☐ 2	☐ 3	☐ 2
☐ 4	☐ 3	☐ 4	☐ 3
☑ 5	☐ 4	☐ 5	☐ 4
☐ 6	☐ 5	☐ 6	☐ 5
☐ 7	☑ 6	☐ 7	☐ 6
	☐ 7		☐ 7
	☐ 8		☐ 8
	☐ 9		☐ 9
	☐ 10		☐ 10
	☐ 11		☐ 11

H07068F, H07068I

Percent of Responses* 97.2%

87. How much do you weigh without your shoes on? Please give your answer in pounds.

H07069

Example:

Weight			Weight		
Pounds			Pounds		
1	6	0			
☐ 0	☐ 0	☑ 0	☐ 0	☐ 0	☐ 0
☑ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2
☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3
	☐ 4	☐ 4		☐ 4	☐ 4
	☐ 5	☐ 5		☐ 5	☐ 5
	☑ 6	☐ 6		☐ 6	☐ 6
	☐ 7	☐ 7		☐ 7	☐ 7
	☐ 8	☐ 8		☐ 8	☐ 8
	☐ 9	☐ 9		☐ 9	☐ 9

Percent of Responses* 96.7%

88. What is the highest grade or level of school that you have completed?

SREDA

Percent of Responses*		
0.8%	1 ☐	8th grade or less
2.8%	2 ☐	Some high school, but did not graduate
26.3%	3 ☐	High school graduate or GED
42.1%	4 ☐	Some college or 2-year degree
12.7%	5 ☐	4-year college graduate
15.3%	6 ☐	More than 4-year college degree

89. Are you of Hispanic or Latino origin or descent? (Mark "NO" if not Spanish/Hispanic/Latino.)

89.5%	A ☐	No, not Spanish, Hispanic, or Latino
3.0%	B ☐	Yes, Mexican, Mexican American, Chicano
1.7%	C ☐	Yes, Puerto Rican
0.2%	D ☐	Yes, Cuban
2.6%	E ☐	Yes, other Spanish, Hispanic, or Latino

H07070, H07070A – H07070E

90. What is your race? (Mark ONE OR MORE races to indicate what you consider yourself to be.)

SRRACEA - SRRACEE

80.5%	A ☐	White
9.7%	B ☐	Black or African American
2.9%	C ☐	American Indian or Alaska Native
5.0%	D ☐	Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
0.7%	E ☐	Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian, or Chamorro)

*Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.

91. What is your age now?

Percent of Responses*		
15.4%	1 ☐	18 to 24
13.5%	2 ☐	25 to 34
13.4%	3 ☐	35 to 44
12.9%	4 ☐	45 to 54
18.5%	5 ☐	55 to 64
15.6%	6 ☐	65 to 74
10.6%	7 ☐	75 or older

SRAGE

THANK YOU FOR TAKING THE TIME TO COMPLETE THE SURVEY! Your generous contribution will greatly aid efforts to improve the health of our military community.

Return your survey in the postage-paid envelope. If the envelope is missing, please send to:

Office of the Assistant Secretary of Defense (HA)
TMA/HPAE
c/o Synovate Survey Processing Center
PO Box 5030
Chicago, IL 60680-4138

Questions about the survey?

Email: **dod-surveyq3@synovate.net**

Toll-free phone (in the US, Puerto Rico and Canada):
1-877-236-2390, available 24 hours a day
Toll-free fax (in the US and Canada): 1-800-409-7681

International Toll-Free numbers:
Germany: 0 800 182 1532
Great Britain: 008 234 7139
Japan: 0053 11 30 814
South Korea: 003 0813 1286
Mexico: 001 877 238 5171
Philippines: 1 800 1116 2366

When calling or writing, please provide your name, address, and the 8-digit number above your address in the envelope.

Questions about your TRICARE coverage?

For additional information on TRICARE, or if you are not sure about your benefits, or if you don't have a primary care manager; contact the TRICARE Service Center in your region:

North: 1-877-874-2273
South: 1-800-444-5445
West: 1-888-874-9378
Outside the US: 1-888-777-8343

The website is:
www.tricare.osd.mil/tricareservicecenters

Veterans: Contact the US Department of Veterans Affairs at **1-877-222-VETS**; or go to **www.va.gov**

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

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APPENDIX A

ANNOTATED QUESTIONNAIRE – QUARTER IV

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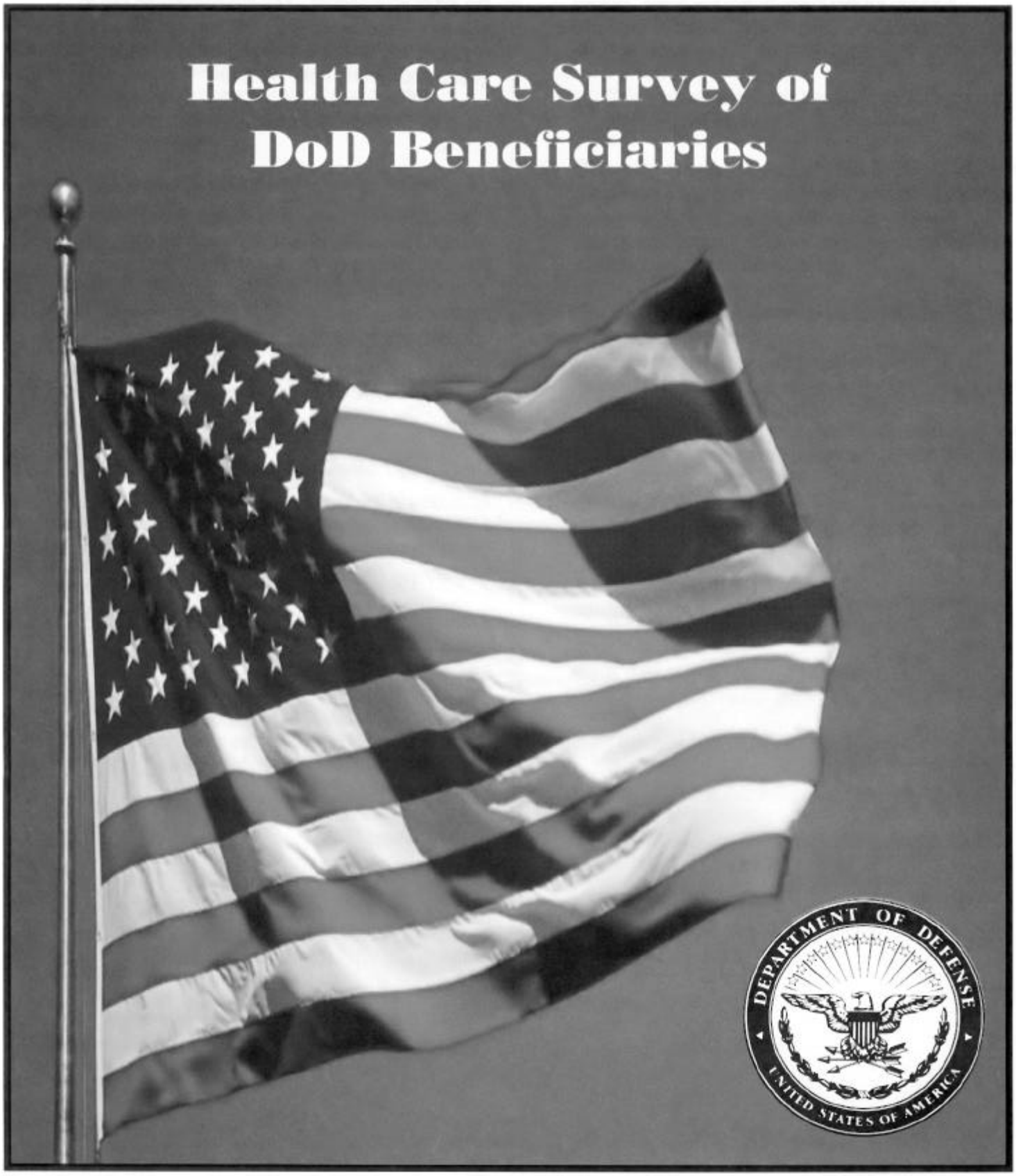
Health Care Survey of DoD Beneficiaries



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JULY, 2007

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According to the Privacy Act of 1974 (Public Law 93-579), the Department of Defense is required to inform you of the purposes and use of this survey. Please read it carefully.

Authority: 10 U.S.C., Chapter 55; Section 706, Public Law 102-484; E.O. 9397.

Purpose: This survey helps health policy makers gauge beneficiary satisfaction with the current military health care system and provides valuable input from beneficiaries that will be used to improve the Military Health System.

Routine Uses: None

Disclosure: Voluntary. Failure to respond will not result in any penalty to the respondent. However, maximum participation is encouraged so that data will be as complete and representative as possible.

YOUR PRIVACY

Your participation in this survey effort is very important. Your responses are confidential and your participation is voluntary. The number on the back of this survey is ONLY used to let us know if you returned your survey so we don't have to send you reminders.

This is your opportunity to tell officials of your opinions and experiences with the current military health care system. It is also an opportunity to provide feedback and identify areas where improvements are needed.

The survey processing center removes all identifying information before sending the results to the Department of Defense.

Your information is grouped with others and no individual information is shared. Only group statistics will be compiled and reported. No information about you as an individual will be disclosed.

SURVEY INSTRUCTIONS

Answer all the questions by checking the box to the left of your answer. You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

☑ Yes ➔ ***Go to Question 42***
☐ No

Please return the completed questionnaire in the enclosed postage-paid envelope within ***seven days***. If the envelope is missing, please send to:

Office of the Assistant Secretary of Defense (Health Affairs)
TMA/HPAE
c/o Synovate Survey Processing Center
PO Box 5030
Chicago, IL 60680-4138

SURVEY STARTS HERE

As an eligible TRICARE beneficiary, please complete this survey even if you did not receive your health care from a military facility.

Please recognize that some specific questions about TRICARE benefits may not apply to you, depending on your entitlement and particular TRICARE program.

This survey is about the health care of the person whose name appears on the envelope. The questionnaire should be completed by that person. If you are not the addressee, please give this survey to that person.

1. Are you the person whose name appears on the mailing label of this envelope? H07001

Percent of Responses*		
99.8%	1 ☐	Yes ➔ ***Go to Question 2***
0.2%	2 ☐	No ➔ Please give this questionnaire to the person addressed on the envelope.

2. By which of the following health plans are you currently covered? MARK ALL THAT APPLY. H07002A-H07002R

Military Health Plans

48.6%	A ☐	TRICARE Prime (including TRICARE Prime Remote and TRICARE Overseas)
15.6%	C ☐	TRICARE Extra or Standard (CHAMPUS)
1.1%	N ☐	TRICARE Plus
25.0%	O ☐	TRICARE for Life
1.6%	P ☐	TRICARE Supplemental Insurance
0.9%	Q ☐	TRICARE Reserve Select

Other Health Plans

26.3%	F ☐	Medicare
3.0%	G ☐	Federal Employees Health Benefit Program (FEHBP)
1.1%	H ☐	Medicaid
2.9%	I ☐	A civilian HMO (such as Kaiser)
12.6%	J ☐	Other civilian health insurance (such as Blue Cross)
1.2%	K ☐	Uniformed Services Family Health Plan (USFHP)
7.2%	M ☐	The Veterans Administration (VA)
0.3%	R ☐	Government health insurance from a country other than the US
10.1%	L ☐	Not sure

3. Currently, are you covered by Medicare Part A? Medicare is the federal health insurance program for people aged 65 or older and for certain persons with disabilities. Medicare Part A helps pay for inpatient hospital care. H07003

28.7%	1 ☐	Yes, I am now covered by Medicare Part A
71.3%	2 ☐	No, I am not covered by Medicare Part A

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

4. Currently, are you covered by Medicare Part B? Medicare is the federal health insurance program for people aged 65 or older and for certain persons with disabilities. Medicare Part B helps pay for doctor's services, outpatient hospital services, and certain other services.

H07004

Percent of Responses*		
27.2%	1 ☐	Yes, I am now covered by Medicare Part B
72.8%	2 ☐	No, I am not covered by Medicare Part B

5. Currently, are you covered by Medicare supplemental insurance? Medicare supplemental insurance, also called Medigap or MediSup, is usually obtained from private insurance companies and covers some of the costs not paid for by Medicare.

H07005

3.0%	1 ☐	Yes, I am now covered by Medicare supplemental insurance
97.0%	2 ☐	No, I am not covered by Medicare supplemental insurance

6. Which health plan did you use for all or most of your health care in the last 12 months? MARK ONLY ONE.

H07006 | See Note 1

46.9%	1 ☐	TRICARE Prime
9.0%	3 ☐	TRICARE Extra or Standard (CHAMPUS)
0.7%	11 ☐	TRICARE Plus
0.3%	12 ☐	TRICARE Reserve Select
21.8%	4 ☐	Medicare (may include TRICARE for Life)
2.1%	5 ☐	Federal Employees Health Benefit Program (FEHBP)
0.2%	6 ☐	Medicaid
2.5%	7 ☐	A civilian HMO (such as Kaiser)
9.1%	8 ☐	Other civilian health insurance (such as Blue Cross)
1.1%	9 ☐	Uniformed Services Family Health Plan (USFHP)
3.5%	10 ☐	The Veterans Administration (VA)
0.1%	13 ☐	Government health insurance from a country other than the US
2.7%	-5 ☐	Not sure
	-6 ☐	Did not use any health plan in the last 12 months ➔ ***Go to Question 8***

For the remainder of this questionnaire, the term health plan refers to the plan you indicated in Question 6.

7. How many months or years in a row have you been in this health plan?

H07007

See Note 1

Percent of Responses*		
2.1%	1 ☐	Less than 6 months
6.5%	2 ☐	6 up to 12 months
8.8%	3 ☐	12 up to 24 months
22.7%	4 ☐	2 up to 5 years
24.1%	5 ☐	5 up to 10 years
35.8%	6 ☐	10 or more years

YOUR PERSONAL DOCTOR OR NURSE

The next questions ask about your own health care. Do not include care you got when you stayed overnight in a hospital. Do not include the times you went for dental care visits.

8. A personal doctor or nurse is the health provider who knows you best. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant. Do you have one person you think of as your personal doctor or nurse?

H07008

See Note 2

Percent of Responses*		
66.8%	1 ☐	Yes
33.2%	2 ☐	No ➔ ***Go to Question 11***

9. Using any number from 0 to 10, where 0 is the worst personal doctor or nurse possible and 10 is the best personal doctor or nurse possible, what number would you use to rate your personal doctor or nurse?

H07009

See Note 2

0.6%	0 ☐	0 Worst personal doctor or nurse possible
0.2%	1 ☐	1
0.6%	2 ☐	2
1.1%	3 ☐	3
1.0%	4 ☐	4
5.9%	5 ☐	5
4.7%	6 ☐	6
11.9%	7 ☐	7
21.6%	8 ☐	8
17.0%	9 ☐	9
35.5%	10 ☐	10 Best personal doctor or nurse possible
	-6 ☐	I don't have a personal doctor or nurse

10. Did you have the same personal doctor or nurse before you joined this health plan?

H07010

See Note 2

26.7%	1 ☐	Yes ➔ ***Go to Question 12***
73.3%	2 ☐	No

11. Since you joined your health plan, how much of a problem, if any, was it to get a personal doctor or nurse you are happy with?

H07011

See Note 2

14.1%	1 ☐	A big problem
23.6%	2 ☐	A small problem
62.3%	3 ☐	Not a problem

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

GETTING HEALTH CARE FROM A SPECIALIST

When you answer the next questions, do not include dental visits.

12. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care.

In the last 12 months, did you or your doctor think you needed to see a specialist?

H07012 | See Note 3

Percent of Responses*			
57.8%	1 ☐	Yes	
42.2%	2 ☐	No	➔ *Go to Question 14*

13. In the last 12 months, how much of a problem, if any, was it to see a specialist that you needed to see?

H07013 | See Note 3

9.9%	1 ☐	A big problem
17.5%	2 ☐	A small problem
72.6%	3 ☐	Not a problem
	-6 ☐	I didn't need a specialist in the last 12 months

14. In the last 12 months, did you see a specialist?

H07014 | See Note 4

57.2%	1 ☐	Yes	
42.8%	2 ☐	No	➔ *Go to Question 16*

15. We want to know your rating of the specialist you saw most often in the last 12 months. Using any number from 0 to 10, where 0 is the worst specialist possible and 10 is the best specialist possible, what number would you use to rate the specialist?

H07015 | See Note 4

0.5%	0 ☐	0	Worst specialist possible
0.3%	1 ☐	1	
1.1%	2 ☐	2	
1.3%	3 ☐	3	
2.1%	4 ☐	4	
4.9%	5 ☐	5	
4.6%	6 ☐	6	
9.4%	7 ☐	7	
20.1%	8 ☐	8	
19.7%	9 ☐	9	
35.9%	10 ☐	10	Best specialist possible
	-6 ☐	I didn't see a specialist in the last 12 months	

CALLING DOCTORS' OFFICES

16. In the last 12 months, did you call a doctor's office or clinic during regular office hours to get help or advice for yourself?

H07016 | See Note 5

Percent of Responses*			
60.5%	1 ☐	Yes	
39.5%	2 ☐	No	➔ *Go to Question 18*

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

17. In the last 12 months, when you called during regular office hours, how often did you get the help or advice you needed?

H07017 | See Note 5

Percent of Responses*		
4.0%	1 ☐	Never
15.1%	2 ☐	Sometimes
29.9%	3 ☐	Usually
51.1%	4 ☐	Always
	-6 ☐	I didn't call for help or advice during regular office hours in the last 12 months

YOUR HEALTH CARE IN THE LAST 12 MONTHS

18. In the last 12 months, did you have an illness, injury, or condition that needed care right away in a clinic, emergency room, or doctor's office?

H07018 | See Note 6

Percent of Responses*			
46.5%	1 ☐	Yes	
53.5%	2 ☐	No	➔ *Go to Question 21*

19. In the last 12 months, when you needed care right away for an illness, injury, or condition, how often did you get care as soon as you wanted?

H07019 | See Note 6

5.4%	1 ☐	Never
13.2%	2 ☐	Sometimes
25.6%	3 ☐	Usually
55.8%	4 ☐	Always
	-6 ☐	I didn't need care right away for an illness, injury or condition in the last 12 months

20. In the last 12 months, when you needed care right away for an illness, injury, or condition, how long did you usually have to wait between trying to get care and actually seeing a provider?

H07020 | See Note 6

59.5%	1 ☐	Same day
15.3%	2 ☐	1 day
7.3%	3 ☐	2 days
4.9%	4 ☐	3 days
6.0%	5 ☐	4-7 days
3.3%	6 ☐	8-14 days
3.7%	7 ☐	15 days or longer
	-6 ☐	I didn't need care right away for an illness, injury or condition in the last 12 months

21. A health provider could be a general doctor, a specialist doctor, a nurse practitioner, a physician assistant, a nurse, or anyone else you would see for health care.

In the last 12 months, not counting the times you needed health care right away, did you make any appointments with a doctor or other health provider for health care?

H07021 | See Note 7

80.2%	1 ☐	Yes	
19.8%	2 ☐	No	➔ *Go to Question 24*

22. In the last 12 months, not counting times you needed health care right away, how often did you get an appointment for health care as soon as you wanted?

H07022 | See Note 7

Percent of Responses*		
5.6%	1 ☐	Never
16.5%	2 ☐	Sometimes
37.4%	3 ☐	Usually
40.5%	4 ☐	Always
	-6 ☐	I had no appointments in the last 12 months

23. In the last 12 months, not counting the times you needed health care right away, how many days did you usually have to wait between making an appointment and actually seeing a provider?

H07023 | See Note 7

10.1%	1 ☐	Same day
12.6%	2 ☐	1 day
22.9%	3 ☐	2-3 days
21.0%	4 ☐	4-7 days
16.3%	5 ☐	8-14 days
12.5%	6 ☐	15-30 days
4.7%	7 ☐	31 days or longer
	-6 ☐	I had no appointments in the last 12 months

24. In the last 12 months, how many times did you go to an emergency room to get care for yourself?

H07024

71.7%	1 ☐	None
17.7%	2 ☐	1
6.5%	3 ☐	2
2.1%	4 ☐	3
1.1%	5 ☐	4
0.6%	6 ☐	5 to 9
0.1%	7 ☐	10 or more

25. In the last 12 months (not counting times you went to an emergency room), how many times did you go to a doctor's office or clinic to get care for yourself?

H07025 | See Note 8

16.3%	1 ☐	None ➔ *Go to Question 38*
11.3%	2 ☐	1
16.2%	3 ☐	2
15.0%	4 ☐	3
13.8%	5 ☐	4
19.2%	6 ☐	5 to 9
8.1%	7 ☐	10 or more

26. In the last 12 months, did you or a doctor believe you needed any care, tests, or treatment?

H07026 | See Notes 8 and 9

87.3%	1 ☐	Yes
12.7%	2 ☐	No ➔ *Go to Question 28*

27. In the last 12 months, how much of a problem, if any, was it to get the care, tests or treatment you or a doctor believed necessary?

H07027 | See Notes 8 and 9

Percent of Responses*		
5.2%	1 ☐	A big problem
14.6%	2 ☐	A small problem
80.2%	3 ☐	Not a problem
	-6 ☐	I had no visits in the last 12 months

28. In the last 12 months, did you need approval from your health plan for any care, tests, or treatment?

H07028 | See Notes 8 and 10

40.5%	1 ☐	Yes
59.5%	2 ☐	No ➔ *Go to Question 30*

29. In the last 12 months, how much of a problem, if any, were delays in health care while you waited for approval from your health plan?

H07029 | See Notes 8 and 10

10.2%	1 ☐	A big problem
23.4%	2 ☐	A small problem
66.5%	3 ☐	Not a problem
	-6 ☐	I had no visits in the last 12 months

30. In the last 12 months, how often were you taken to the exam room within 15 minutes of your appointment?

H07030 | See Note 8

18.0%	1 ☐	Never
27.4%	2 ☐	Sometimes
39.2%	3 ☐	Usually
15.4%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months

31. In the last 12 months, how often did office staff at a doctor's office or clinic treat you with courtesy and respect?

H07031 | See Note 8

0.6%	1 ☐	Never
5.1%	2 ☐	Sometimes
22.3%	3 ☐	Usually
72.0%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months

32. In the last 12 months, how often were office staff at a doctor's office or clinic as helpful as you thought they should be?

H07032 | See Note 8

1.3%	1 ☐	Never
9.7%	2 ☐	Sometimes
36.7%	3 ☐	Usually
52.3%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

33. In the last 12 months, how often did doctors or other health providers listen carefully to you?

H07033
See Note 8

Percent of Responses*		
1.3%	1 ☐	Never
9.7%	2 ☐	Sometimes
34.8%	3 ☐	Usually
54.3%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months

34. In the last 12 months, how often did doctors or other health providers explain things in a way you could understand?

H07034
See Note 8

0.7%	1 ☐	Never
7.8%	2 ☐	Sometimes
32.7%	3 ☐	Usually
58.8%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months

35. In the last 12 months, how often did doctors or other health providers show respect for what you had to say?

H07035
See Note 8

1.2%	1 ☐	Never
9.2%	2 ☐	Sometimes
31.6%	3 ☐	Usually
58.0%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months

36. In the last 12 months, how often did doctors or other health providers spend enough time with you?

H07036
See Note 8

2.6%	1 ☐	Never
12.5%	2 ☐	Sometimes
40.0%	3 ☐	Usually
44.9%	4 ☐	Always
	-6 ☐	I had no visits in the last 12 months

37. Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last 12 months?

H07037
See Note 8

0.5%	0 ☐	0	Worst health care possible
0.5%	1 ☐	1	
0.9%	2 ☐	2	
2.0%	3 ☐	3	
2.5%	4 ☐	4	
5.9%	5 ☐	5	
6.0%	6 ☐	6	
12.9%	7 ☐	7	
21.9%	8 ☐	8	
20.6%	9 ☐	9	
26.3%	10 ☐	10	Best health care possible
	-6 ☐		I had no visits in the last 12 months

38. In the last 12 months, where did you go most often for your health care? MARK ONLY ONE ANSWER.

H07038

Percent of Responses*			
36.2%	1 ☐	A military facility –	This includes: Military clinic Military hospital PRIMUS clinic NAVCARE clinic
52.8%	2 ☐	A civilian facility –	This includes: Doctor's office Clinic Hospital Civilian TRICARE contractor
1.1%	3 ☐	Uniformed Services Family Health Plan facility (USFHP)	
4.2%	4 ☐	Veterans Affairs (VA) clinic or hospital	
5.6%	5 ☐	I went to none of the listed types of facilities in the last 12 months	

CIVILIAN PROVIDERS

The following questions ask about your experiences with the TRICARE civilian provider network. TRICARE, including TRICARE Prime and Extra, is the health care system of the Department of Defense that provides care for active duty and retired military personnel and their dependents. TRICARE includes the hospitals, clinics and pharmacies of the three services, supplemented by a civilian network. The TRICARE civilian provider network is made up of the doctors, clinics, hospitals and other health care providers who are part of DoD's preferred provider pool. The next seven questions refer to health services you received from the civilian network.

39. In the last 12 months, how much of your health care did you receive from the TRICARE civilian provider network?

S07V01
See Note 10B1

Percent of Responses*		
35.2%	1 ☐	All of my health care
10.0%	2 ☐	Most of my health care
19.8%	3 ☐	Some of my health care
35.0%	4 ☐	None of my health care
	-6 ☐	I did not need health care in the last 12 months ➔ ***Go to Question 55***

40. In the last 12 months, how much of a problem was it to get the health care you wanted from the TRICARE civilian provider network?

S07V02
See Note 10B1

7.2%	1 ☐	A big problem
14.5%	2 ☐	A small problem
78.2%	3 ☐	Not a problem
	-6 ☐	I did not try to get health care from the civilian network

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

41. A personal doctor or nurse is the health provider who knows you best. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant.

In the last 12 months, how much of a problem was it to find a conveniently located personal doctor or nurse from the TRICARE civilian provider network?

*Percent of Responses**

S07V06

See Notes 10B1 and 10B2

- *8.6%* 1 ☐ A big problem
- *11.9%* 2 ☐ A small problem
- *79.5%* 3 ☐ Not a problem ➔ ***Go to Question 43***
- -6 ☐ I did not try to find a personal doctor from the civilian network ➔ ***Go to Question 43***

42. What problems did you encounter in finding a personal doctor from the civilian network? MARK ALL THAT APPLY.

S07V11A-S07V11H | See Notes 10B1 and 10B2

- *43.9%* A ☐ Travel distance too long
- *17.4%* B ☐ Communicating with doctor(s)
- *33.6%* C ☐ Doctor(s) not taking new patients
- *13.9%* D ☐ Could not find the specialty I wanted
- *17.9%* E ☐ Did not like doctor(s)
- *32.8%* F ☐ Wait for an appointment was too long
- *22.1%* G ☐ Could not find information about doctors
- *27.4%* H ☐ Other _____

43. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care.

In the last 12 months, how much of a problem was it to find a conveniently located specialist from the TRICARE civilian provider network?

S07V07

See Notes 10B1 and 10B3

- *8.7%* 1 ☐ A big problem
- *13.4%* 2 ☐ A small problem
- *78.0%* 3 ☐ Not a problem ➔ ***Go to Question 45***
- -6 ☐ I did not try to find a specialist in the civilian network ➔ ***Go to Question 45***

44. What problems did you encounter in finding a network specialist? MARK ALL THAT APPLY.

- *50.7%* A ☐ Travel distance too long
- *12.1%* B ☐ Communicating with doctor(s)
- *25.0%* C ☐ Doctor(s) not taking new patients
- *11.0%* D ☐ Did not like doctor(s)
- *35.4%* E ☐ Wait for an appointment was too long
- *19.1%* F ☐ Could not find information about doctors
- *28.1%* G ☐ Other _____

S07V12A-S07V12G | See Notes 10B1 and 10B3

45. In the last 12 months, did you learn that a doctor whom you wanted to see had left the TRICARE civilian provider network?

*Percent of Responses**

S07V05

See Note 10B1

- *12.9%* 1 ☐ Yes
- *87.1%* 2 ☐ No
- -6 ☐ I did not want to see any network doctors

The following questions ask about your experiences with civilian providers that are not part of TRICARE's network. Under TRICARE Standard, TRICARE pays part of the cost when you see civilian doctors that are not preferred providers.

46. In the last 12 months, have you tried to make an appointment with a civilian doctor who is not part of TRICARE's civilian network?

*Percent of Responses**

S07V08

See Notes 10B1 and 10B4

- *14.2%* 1 ☐ Yes
- *79.4%* 2 ☐ No ➔ ***Go to Question 55***
- -5 ☐ Don't know

47. In the last 12 months, have you been told that a doctor you wanted to see was not seeing TRICARE patients or not seeing new TRICARE patients?

- *26.6%* 1 ☐ Yes, not seeing TRICARE patients
- *3.2%* 2 ☐ Yes, not seeing new TRICARE patients
- *70.1%* 3 ☐ No

S07V09

See Notes 10B1 and 10B4

48. In the last 12 months, how much of a problem has it been to find doctors who will accept TRICARE?

- *21.6%* 1 ☐ A big problem
- *23.2%* 2 ☐ A small problem
- *55.2%* 3 ☐ Not a problem

S07V10

See Notes 10B1 and 10B4

49. A personal doctor or nurse is the health provider who knows you best. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant.

In the last 12 months, how much of a problem was it to find a civilian personal doctor or nurse who would accept TRICARE?

S07V13 | See Notes 10B1, 10B4, and 10B5

- *20.8%* 1 ☐ A big problem
- *22.8%* 2 ☐ A small problem
- *56.4%* 3 ☐ Not a problem ➔ ***Go to Question 51***
- -6 ☐ I did not try to find a civilian personal doctor ➔ ***Go to Question 51***

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

50. What problems did you encounter in finding a personal doctor who would accept TRICARE? MARK ALL THAT APPLY.

*Percent of Responses**

35.1%	A ☐	Travel distance too long
9.7%	B ☐	Communicating with doctor(s)
47.6%	C ☐	Doctor(s) would not accept TRICARE fee schedule
19.1%	D ☐	Could not find the specialty I wanted
12.5%	E ☐	Did not like doctor(s)
23.8%	F ☐	Wait for an appointment was too long
19.2%	G ☐	Could not find information about doctors
24.9%	H ☐	Other _____

S07V14A-S07V14H | See Notes 10B1, 10B4, and 10B5

51. Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care.

In the last 12 months, have you tried to make an appointment with a civilian specialist who is not part of TRICARE's network?

S07V15

See Notes 10B1, 10B4, and 10B6

38.8%	1 ☐	Yes
39.3%	2 ☐	No ➔ *Go to Question 55*
21.9%	-5 ☐	Don't know ➔ *Go to Question 55*

52. What was the specialty of the last non-network civilian specialist you tried to see? MARK ONLY ONE.

13.2%	1 ☐	Surgeon
15.8%	2 ☐	Dermatologist
3.0%	3 ☐	Psychiatrist or psychologist
3.6%	4 ☐	Urologist
9.2%	5 ☐	Orthopedist
6.1%	6 ☐	Ear, nose and throat
6.4%	7 ☐	Cardiologist
1.3%	8 ☐	Allergist
5.2%	9 ☐	Obstetrician
36.1%	10 ☐	Other _____

S07V16 | See Notes 10B1, 10B4, and 10B6

53. In the last 12 months, how much of a problem was it to get an appointment with the specialist in Question 52?

22.9%	1 ☐	A big problem
19.7%	2 ☐	A small problem
57.4%	3 ☐	Not a problem ➔ *Go to Question 55*

S07V17 | See Notes 10B1, 10B4, 10B6, and 10B7

54. What problems did you encounter in finding this specialist? MARK ALL THAT APPLY.

S07V18A-S07V18G | See Notes 10B1, 10B4, 10B6, and 10B7

31.3%	A ☐	Travel distance too long
15.7%	B ☐	Communicating with doctor(s)
61.7%	C ☐	Doctor(s) would not accept TRICARE fee schedule
10.0%	D ☐	Did not like doctor(s)
32.7%	E ☐	Wait for an appointment was too long
11.4%	F ☐	Could not find information about doctors
22.3%	G ☐	Other _____

PRESCRIPTION MEDICINE

55. In the last 90 days, have you filled any prescriptions using your TRICARE benefit? A prescription means either a new prescription or a refill of an old prescription.

*Percent of Responses**

S07Y01

See Note 10C1

62.5%	1 ☐	Yes
37.5%	2 ☐	No ➔ *Go to Question 62*

56. In the last 12 months, where have you gotten information about the TRICARE mail order pharmacy? MARK ALL THAT APPLY.

S07Y36A-S07Y36I

See Note 10C1

13.4%	A ☐	The TRICARE website
1.8%	B ☐	On the internet, but not from the TRICARE website
26.9%	C ☐	Mailings
13.3%	D ☐	An MTF pharmacy
19.8%	E ☐	Military publications or periodicals
4.4%	F ☐	A friend or friends
3.8%	G ☐	Another source
17.5%	H ☐	I have gotten no information about the TRICARE mail order pharmacy in the last 12 months
25.8%	I ☐	I know nothing about the TRICARE mail order pharmacy

57. In the last 90 days, have you used the TRICARE mail order pharmacy?

S07Y35 | See Notes 10C1 and 10C2

19.2%	1 ☐	Yes ➔ *Go to Question 59*
80.8%	2 ☐	No

58. In the last 90 days, why did you not use the TRICARE mail order pharmacy? MARK ALL THAT APPLY.

S07Y37A-S07Y37N | See Notes 10C1 and 10C2

29.8%	A ☐	I did not know I could use the mail order pharmacy
23.5%	B ☐	I do not know how to use the mail order pharmacy
2.3%	C ☐	The mail order pharmacy costs too much
16.0%	D ☐	I do not feel comfortable getting drugs through the mail
1.8%	E ☐	The mail order pharmacy does not have the medication I need
2.9%	F ☐	The mail order pharmacy is too difficult to use
29.8%	G ☐	The civilian pharmacy is more convenient
6.5%	H ☐	I trust the civilian pharmacy more than others to fill prescriptions correctly
7.4%	I ☐	I get better instructions and information at the civilian pharmacy than at other pharmacies
20.8%	J ☐	The MTF pharmacy is more convenient
5.5%	K ☐	I trust the MTF pharmacy more than others to fill prescriptions correctly
4.7%	L ☐	I get better instructions and information at the MTF pharmacy than at other pharmacies
25.7%	M ☐	I needed my prescription filled immediately
11.8%	N ☐	Other reasons

➔ *Go to Question 62*

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

59. In the last 90 days, how often did you get prescription drugs from the TRICARE mail order pharmacy within 14 days of the day you placed your order?

S07Y22

See Notes 10C1 and 10C2

Percent of Responses*		
4.0%	1 ☐	Never
4.7%	2 ☐	Sometimes
22.0%	3 ☐	Usually
69.3%	4 ☐	Always
	-6 ☐	I did not order drugs from the mail-order pharmacy

60. In the last 90 days, have you tried to use the Express Scripts website to order refills? Express Scripts is the contractor that operates the TRICARE mail order pharmacy.

S07Y23

See Notes 10C1, 10C2, and 10C3

50.3%	1 ☐	Yes
49.7%	2 ☐	No ➔ ***Go to Question 62***

61. In the last 90 days, how much of a problem, if any, was it to order refills on the Express Scripts website?

S07Y24

See Notes 10C1, 10C2, and 10C3

3.2%	1 ☐	A big problem
9.1%	2 ☐	A small problem
87.7%	3 ☐	Not a problem
	-6 ☐	I did not try to use the Express Scripts website

YOUR HEALTH PLAN

The next questions ask about your experience with your health plan. By your health plan, we mean the health plan you marked in Question 6.

62. Claims are sent to a health plan for payment. You may send in the claims yourself, or doctors, hospitals, or others may do this for you. In the last 12 months, did you or anyone else send in any claims to your health plan?

H07039

See Note 11

Percent of Responses*		
53.8%	1 ☐	Yes
34.8%	2 ☐	No ➔ ***Go to Question 65***
11.5%	-5 ☐	Don't know ➔ ***Go to Question 65***

63. In the last 12 months, how often did you health plan handle your claims in a reasonable time?

H07040

See Note 11

2.8%	1 ☐	Never
6.7%	2 ☐	Sometimes
31.3%	3 ☐	Usually
45.5%	4 ☐	Always
13.6%	-5 ☐	Don't know
	-6 ☐	No claims were sent for me in the last 12 months

64. In the last 12 months, how often did your health plan handle your claims correctly?

H07041

See Note 11

Percent of Responses*		
1.9%	1 ☐	Never
5.5%	2 ☐	Sometimes
27.7%	3 ☐	Usually
52.0%	4 ☐	Always
13.0%	-5 ☐	Don't know
	-6 ☐	No claims were sent for me in the last 12 months

65. In the last 12 months, did you look for any information about how your health plan works in written material or on the Internet?

H07042

See Note 12

24.7%	1 ☐	Yes
75.3%	2 ☐	No ➔ ***Go to Question 67***

66. In the last 12 months, how much of a problem, if any, was it to find or understand this information?

H07043

See Note 12

12.3%	1 ☐	A big problem
30.3%	2 ☐	A small problem
57.4%	3 ☐	Not a problem
	-6 ☐	I didn't look for information from my health plan in the last 12 months

67. In the last 12 months, did you call your health plan's customer service to get information or help?

H07044

See Note 13

28.6%	1 ☐	Yes
71.4%	2 ☐	No ➔ ***Go to Question 69***

68. In the last 12 months, how much of a problem, if any, was it to get the help you needed when you called your health plan's customer service?

H07045

See Note 13

14.8%	1 ☐	A big problem
24.2%	2 ☐	A small problem
60.9%	3 ☐	Not a problem
	-6 ☐	I didn't call my health plan's customer service in the last 12 months

69. In the last 12 months, did you have to fill out any paperwork for your health plan?

H07046

See Note 14

24.5%	1 ☐	Yes
75.5%	2 ☐	No ➔ ***Go to Question 71***

70. In the last 12 months, how much of a problem, if any, did you have with paperwork for your health plan?

H07047

See Note 14

7.9%	1 ☐	A big problem
18.7%	2 ☐	A small problem
73.4%	3 ☐	Not a problem
	-6 ☐	I didn't have any experiences with paperwork for my health plan in the last 12 months

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

71. Using any number from 0 to 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your health plan?

H07048

Percent of Responses*			
0.8%	0 ☐	0	Worst health plan possible
0.4%	1 ☐	1	
1.2%	2 ☐	2	
1.4%	3 ☐	3	
2.0%	4 ☐	4	
8.3%	5 ☐	5	
6.0%	6 ☐	6	
13.0%	7 ☐	7	
20.9%	8 ☐	8	
18.0%	9 ☐	9	
28.0%	10 ☐	10	Best health plan possible

PREVENTIVE CARE

Preventive care is medical care you receive that is intended to maintain your good health or prevent a future medical problem. A physical or blood pressure screening are examples of preventive care.

72. When did you last have a blood pressure reading?

H07049

Percent of Responses*		
92.4%	3 ☐	Less than 12 months ago
4.9%	2 ☐	1 to 2 years ago
2.7%	1 ☐	More than 2 years ago

73. Do you know if your blood pressure is too high?

H07050

19.9%	1 ☐	Yes, it is too high
73.5%	2 ☐	No, it is not too high
6.7%	3 ☐	Don't know

74. When did you last have a flu shot?

H07051

56.6%	4 ☐	Less than 12 months ago
13.4%	3 ☐	1-2 years ago
16.2%	2 ☐	More than 2 years ago
13.8%	1 ☐	Never had a flu shot

75. Have you ever smoked at least 100 cigarettes in your entire life?

H07052

See Note 16

46.4%	1 ☐	Yes	
52.3%	2 ☐	No	➔ *Go to Question 81*
1.3%	-5 ☐	Don't know	➔ *Go to Question 81*

76. Do you now smoke every day, some days or not at all?

H07053

See Note 16

23.7%	4 ☐	Every day	➔ *Go to Question 78*
10.4%	3 ☐	Some days	➔ *Go to Question 78*
65.7%	2 ☐	Not at all	➔ *Go to Question 77*
0.2%	-5 ☐	Don't know	➔ *Go to Question 81*

77. How long has it been since you quit smoking cigarettes?

Percent of Responses*			
7.5%	3 ☐	Less than 12 months	➔ *Go to Question 78*
89.4%	2 ☐	12 months or more	➔ *Go to Question 81*
3.1%	-5 ☐	Don't know	➔ *Go to Question 81*

H07054

See Note 16

78. In the last 12 months, on how many visits were you advised to quit smoking by a doctor or other health provider in your plan?

H07055

See Notes 16 and 16A1

30.9%	1 ☐	None
20.8%	2 ☐	1 visit
31.6%	3 ☐	2 to 4 visits
10.3%	4 ☐	5 to 9 visits
6.3%	5 ☐	10 or more visits
	-6 ☐	I had no visits in the last 12 months

79. On how many visits was medication recommended or discussed to assist you with quitting smoking (for example: nicotine gum, patch, nasal spray, inhaler, prescription medication)?

H07056

See Notes 16 and 16A1

60.4%	1 ☐	None
17.4%	2 ☐	1 visit
16.8%	3 ☐	2 to 4 visits
2.7%	4 ☐	5 to 9 visits
2.7%	5 ☐	10 or more visits
	-6 ☐	I had no visits in the last 12 months

80. On how many visits did your doctor or health provider recommend or discuss methods and strategies (other than medication) to assist you with quitting smoking?

H07057

See Notes 16 and 16A1

61.3%	1 ☐	None
19.4%	2 ☐	1 visit
14.0%	3 ☐	2 to 4 visits
3.1%	4 ☐	5 to 9 visits
2.2%	5 ☐	10 or more visits
	-6 ☐	I had no visits in the last 12 months

81. Are you male or female?

H07058

See Note 17A

52.1%	1 ☐	Male	➔ *Go to Question 88*
47.9%	2 ☐	Female	

82. When did you last have a Pap smear test?

H07059

See Notes 17A and 17B

57.7%	5 ☐	Within the last 12 months
25.3%	4 ☐	1 to 3 years ago
5.3%	3 ☐	More than 3 but less than 5 years ago
9.0%	2 ☐	5 or more years ago
2.8%	1 ☐	Never had a Pap smear test

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

83. Are you under age 40?

Percent of Responses*			
38.4%	1 ☐	Yes ➔ *Go to Question 85*	H07060
61.6%	2 ☐	No	See Notes 17A, 17B, and 18

84. When was the last time your breasts were checked by mammography?

62.8%	5 ☐	Within the last 12 months
19.6%	4 ☐	1 to 2 years ago
7.5%	3 ☐	More than 2 but less than 5 years ago
5.2%	2 ☐	5 or more years ago
4.9%	1 ☐	Never had a mammogram

H07061 | See Notes 17A, 17B, and 18

85. Have you been pregnant in the last 12 months or are you pregnant now?

2.9%	1 ☐	Yes, I am currently pregnant ➔ *Go to Question 86*
6.5%	2 ☐	No, I am not currently pregnant, but have been pregnant in the past 12 months ➔ *Go to Question 87*
90.6%	3 ☐	No, I am not currently pregnant, and have not been pregnant in the past 12 months ➔ *Go to Question 88*

H07063 | See Notes 17A, 17B, and 19

86. In what trimester is your pregnancy?

21.9%	1 ☐	First trimester (up to 12 weeks after 1st day of last period) ➔ *Go to Question 88*
39.6%	2 ☐	Second trimester (13th through 27th week)
38.5%	3 ☐	Third trimester (28th week until delivery)

H07064 | See Notes 17A, 17B, and 19

87. In which trimester did you first receive prenatal care?

84.5%	4 ☐	First trimester (up to 12 weeks after 1st day of last period)
8.7%	3 ☐	Second trimester (13th through 27th week)
1.1%	2 ☐	Third trimester (28th week until delivery)
5.6%	1 ☐	Did not receive prenatal care

H07065 | See Notes 17A, 17B, and 19

ABOUT YOU

88. In general, how would you rate your overall health now?

H07066

Percent of Responses*		
15.5%	5 ☐	Excellent
35.5%	4 ☐	Very good
33.4%	3 ☐	Good
13.3%	2 ☐	Fair
2.3%	1 ☐	Poor

89. Are you limited in any way in any activities because of any impairment or health problem?

H07067

33.9%	1 ☐	Yes
66.1%	2 ☐	No

90. How tall are you without your shoes on? Please give your answer in feet and inches.

H07068F, H07068I

Example:

Height		Height	
Feet	Inches	Feet	Inches
5	6		
☐ 1	☐ 0	☐ 1	☐ 0
☐ 2	☐ 1	☐ 2	☐ 1
☐ 3	☐ 2	☐ 3	☐ 2
☐ 4	☐ 3	☐ 4	☐ 3
☑ 5	☐ 4	☐ 5	☐ 4
☐ 6	☐ 5	☐ 6	☐ 5
☐ 7	☑ 6	☐ 7	☐ 6
	☐ 7		☐ 7
	☐ 8		☐ 8
	☐ 9		☐ 9
	☐ 10		☐ 10
	☐ 11		☐ 11

Percent of Responses* 96.4%

91. How much do you weigh without your shoes on? Please give your answer in pounds.

H07069

Example:

Weight			Weight		
Pounds			Pounds		
1	6	0			
☐ 0	☐ 0	☑ 0	☐ 0	☐ 0	☐ 0
☑ 1	☐ 1	☐ 1	☐ 1	☐ 1	☐ 1
☐ 2	☐ 2	☐ 2	☐ 2	☐ 2	☐ 2
☐ 3	☐ 3	☐ 3	☐ 3	☐ 3	☐ 3
	☐ 4	☐ 4		☐ 4	☐ 4
	☐ 5	☐ 5		☐ 5	☐ 5
	☑ 6	☐ 6		☐ 6	☐ 6
	☐ 7	☐ 7		☐ 7	☐ 7
	☐ 8	☐ 8		☐ 8	☐ 8
	☐ 9	☐ 9		☐ 9	☐ 9

Percent of Responses* 95.8%

92. What is the highest grade or level of school that you have completed?

SREDA

Percent of Responses*		
0.9%	1 ☐	8th grade or less
2.5%	2 ☐	Some high school, but did not graduate
25.9%	3 ☐	High school graduate or GED
42.6%	4 ☐	Some college or 2-year degree
12.9%	5 ☐	4-year college graduate
15.2%	6 ☐	More than 4-year college degree

**Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.*

93. Are you of Hispanic or Latino origin or descent? (Mark "NO" if not Spanish/Hispanic/Latino.)

Percent of Responses*		
89.1%	A ☐	No, not Spanish, Hispanic, or Latino
2.8%	B ☐	Yes, Mexican, Mexican American, Chicano
1.9%	C ☐	Yes, Puerto Rican
0.2%	D ☐	Yes, Cuban
2.7%	E ☐	Yes, other Spanish, Hispanic, or Latino

H07070, H07070A-H07070E

94. What is your race? (Mark ONE OR MORE races to indicate what you consider yourself to be.)

SRRACEA-SRRACEE

78.4%	A ☐	White
9.5%	B ☐	Black or African American
1.5%	C ☐	American Indian or Alaska Native
5.4%	D ☐	Asian (e.g., Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
0.7%	E ☐	Native Hawaiian or other Pacific Islander (e.g., Samoan, Guamanian, or Chamorro)

95. What is your age now?

SRAGE

15.5%	1 ☐	18 to 24
14.3%	2 ☐	25 to 34
13.0%	3 ☐	35 to 44
12.5%	4 ☐	45 to 54
18.0%	5 ☐	55 to 64
14.4%	6 ☐	65 to 74
12.3%	7 ☐	75 or older

Percent of responses exclude values coded as missing or skipped, therefore denominators vary depending on number of eligible respondents per question.

THANK YOU FOR TAKING THE TIME TO COMPLETE THE SURVEY! Your generous contribution will greatly aid efforts to improve the health of our military community.

Return your survey in the postage-paid envelope. If the envelope is missing, please send to:

Office of the Assistant Secretary of Defense (HA)
TMA/HPAE
c/o Synovate Survey Processing Center
PO Box 5030
Chicago, IL 60680-4138

Questions about the survey?

Email: **4beneficiaries@synovate.net**

Toll-free phone (in the US, Puerto Rico and Canada):
1-877-236-2390, available 24 hours a day
Toll-free fax (in the US and Canada): 1-800-409-7681

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For additional information on TRICARE, or if you are not sure about your benefits, or if you don't have a primary care manager; contact the TRICARE Service Center in your region:

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West: 1-888-874-9378
Outside the US: 1-888-777-8343

The website is:
www.tricare.osd.mil/tricareservicecenters

Veterans: Contact the US Department of Veterans Affairs at **1-877-222-VETS**; or go to **www.va.gov**

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APPENDIX B

CODING SCHEME AND CODING TABLES – QUARTERS I-IV

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BASIC SAS AND ASCII/EBCDIC MISSING DATA AND NOT APPLICABLE CODES

SAS	ASCII/EBCDIC	
Numeric	Numeric	Description
.	-9	No response
.O	-7	Out of range error
.N	-6	Not Applicable or valid skip
.D	-5	Scalable response of “Don’t know” or “not sure”
.I	-4	Incomplete grid error
.C	-1	Question should have been skipped.

Missing values ‘.’ and incomplete grids ‘.I’ are encoded prior to implementation of the Coding Scheme Notes (see below).

Coding Table for Note 1:
H07006, H07007

N1	H07006 is:	H07007 is:	H07006 is coded as:	H07007 is coded as:	*
1	1-13, health plan, -5, not sure	Marked or missing response	Stands as original value	Stands as original value	
2	-6, no usage in past 12 months	Marked response	Stands as original value	.C, question should be skipped	F
3	-6, no usage in past 12 months	Missing response	Stands as original value	.N, valid skip	F
4	Missing response	Marked or missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 2:
H07008, H07009, H07010, H07011

N2	H07008 is:	H07009 is:	H07010 is:	H07011 is:	H07008 is coded as:	H07009 is coded as:	H07010 is coded as:	H07011 is coded as:	*
1	1: yes or missing response	-6: Don't have a personal Dr	Any value	Any value	2: no	.C, question should be skipped	.N, valid skip if missing; .C, question should be skipped, if marked	Stands as original value	B F
2	1: yes	0-10 or missing response	1: yes	1-3	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped	F
3	1: yes	0-10 or missing response	Missing response	1-3	Stands as original value	Stands as original value	2: no	Stands as original value	B
4	1: yes	0-10 or missing response	1: yes	Missing response	Stands as original value	Stands as original value	Stands as original value	.N, valid skip if missing	F
5	1: yes	0-10 or missing response	2: no	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	
6	1: yes	0-10 or missing response	Missing response	Missing response	Stands as original value	Stands as original value	Stands as original value	Stands as original value	
7	2: no or missing response	0-10	1: yes	1-3	1: yes	Stands as original value	Stands as original value	.C, question should be skipped	F B
8	2: no or missing response	0-10	Missing response	1-3	1: yes	Stands as original value	Stands as original value	Stands as original value	B
9	2: no or missing response	0-10	Missing response	Missing response	1: yes	Stands as original value	Stands as original value	Stands as original value	B
10	2: no	Missing response	1: yes	1-3	Stands as original value	.N, valid skip if missing	.C, question should be skipped	Stands as original value	F
11	2: no	-6: Don't have a personal Dr	Any value	Any value	Stands as original value	.C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	Stands as original value	B F

Coding Table for Note 2 continued:

N2	H07008 is:	H07009 is:	H07010 is:	H07011 is:	H07008 is coded as:	H07009 is coded as:	H07010 is coded as:	H07011 is coded as:	*
12	2: no or missing response	0-10 or missing	1: yes	Missing	1: yes	Stands as original value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	B F
13	2: no or missing response	0-10 or missing	2: no	Any value	1: yes	Stands as original value	Stands as original value	Stands as original value	B
14	2: no	Missing response	Missing response	Any value	Stands as original value	.N, valid skip if missing	.N, valid skip	Stands as original value	F
15	Missing response	Missing response	Missing response	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 3:
H07012, H07013

N3	H07012 is:	H07013 is:	H07012 is coded as:	H07013 is coded as:	*
1	1: yes	1, 2, 3, or missing response	Stands as original value	Stands as original value	
2	1: yes or missing response	-6: didn't need to see a specialist	2: No	.C question should be skipped	B F
3	2: no or missing response	1, 2, 3	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't need to see a specialist	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 4:
H07014, H07015

N4	H07014 is:	H07015 is:	H07014 is coded as:	H07015 is coded as:	*
1	1: yes	0-10, or missing response	Stands as original value	Stands as original value	
2	1: yes or missing response	-6: didn't need to see a specialist	2: No	.C question should be skipped	B F
3	2: no or missing response	0-10	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't need to see a specialist	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 5:
H07016, H07017

N5	H07016 is:	H07017 is:	H07016 is coded as:	H07017 is coded as:	*
1	1: yes	1-4: how often, or missing response	Stands as original value	Stands as original value	
2	1: yes or missing response	-6: no calls	2: no	.C, question should be skipped	B F
3	2: no or missing response	1-4: how often	1: yes	Stands as original value	B
4	2: no	-6: no calls or missing	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 6:
H07018, H07019, H07020

N6	H07018 is:	H07019-H07020 are:	H07018 is coded as:	H07019-H07020 are coded as:	*
1	1: yes	"All are blank"	Stands as original value	Stand as original value otherwise	
2	1:yes or missing response	"Blank or NA"	2: no	.N, valid skip if missing, .C, question should be skipped if marked	B F
3	1: yes	"One marked, and one NA"	Stands as original value	., missing if -6, stand as original value otherwise	F
4	1: yes	At least one is "marked"	Stands as original value	Stand as original value	
5	2: no	"One marked, and one NA"	Stands as original value	.C, question should be skipped if marked	F
6	2: no or missing response	At least one is "marked"	1: yes	., missing if -6, stand as original value otherwise	B F
7	2: no	"All are blank" or "Blank or NA"	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
8	Missing response	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 6:
Responses to H07019-H07020 are all missing.

Definition of "Blank or NA" in Coding Table for Note 6:
All of the following are true: H07019-H07020 are a combination of not applicable (-6) or missing.

Definition of "One marked and one NA" in Coding Table for Note 6:
H07019-H07020 have one response marked not applicable (-6) and one marked response (other than not applicable).

Definition of "marked" in Coding Table for Note 6:
Any pattern of marks outside the definitions "all are blank", "One marked and one NA", and "Blank or NA."

Coding Table for Note 7:
H07021, H07022, H07023

N7	H07021 is:	H07022-H07023 are:	H07021 is coded as:	H07022-H07023 are coded as:	*
1	1: yes	"All are blank"	Stands as original value	Stand as original value otherwise	
2	1:yes or missing response	"Blank or NA"	2: no	.N, valid skip if missing, .C, question should be skipped if marked	B F
3	1: yes	"One marked and one NA"	Stands as original value	., missing if -6, stand as original value otherwise	F
4	1: yes	At least one is "marked"	Stands as original value	Stand as original value	
5	2: no	"One marked and one NA"	Stands as original value	.C, question should be skipped if marked	F
6	2: no or missing response	At least one is "marked"	1: yes	., missing if -6, stands as original value otherwise	B F
7	2: no	"All are blank" or "Blank or NA"	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
8	Missing response	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 7:
Responses to H07022-H07023 are all missing.

Definition of "Blank or NA" in Coding Table for Note 7:
All of the following are true: H07022-H07023 are a combination of not applicable (-6) or missing.

Definition of "One marked and one NA" in Coding Table for Note 7:
H07022-H07023 have one response marked not applicable (-6) and one marked response (other than not applicable).

Definition of "marked" in Coding Table for Note 7:
Any pattern of marks outside the definitions "all are blank", "One marked and one NA", and "Blank or NA."

Coding Table for Note 8:
H07025, H07026-H07037

N8	H07025 is:	H07026-H07037 are:	H07025 is coded as:	H07026-H07037 are coded as:	*
1	1: None	At least one is "marked", "all are blank", or "blank or NA"	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
2	2-7, or missing response	"Blank or NA"	1: None	.N, valid skip if missing; .C, question should be skipped if marked	B F
3	2-7	At least one is "marked" or "all are blank"	Stands as original value	., missing if -6, stand as original value otherwise	F
4	Missing response	"All are blank"	Stands as original value	Stand as original value	
5	Missing response	At least one is "marked"	Stands as original value	., missing if -6, stand as original value otherwise	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 8:
Responses to H07026-H07037 are all missing.

Definition of "blank or NA" in Coding Table for Note 8:
All of the following are true: H07026-H07037 are a combination of not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 8:
Any pattern of marks outside the definitions "all are blank" and "Blank or NA."

Coding Table for Note 9:
H07026, H07027

N9	H07026 is:	H07027 is:	H07026 is coded as:	H07027 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	1: yes	1-3: how much of a problem, missing response	Stands as original value	Stands as original value	
3	1: yes, missing response	-6: No visits	2: no	.C, question should be skipped	B F
4	2: no, missing response	1-3: how much of a problem	1: yes	Stands as original value	B
5	2: no	-6: No visits or missing response	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 10:
H07028, H07029

N10	H07028 is:	H07029 is:	H07028 is coded as:	H07029 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	1: yes	1-3: how much of a problem, missing response	Stands as original value	Stands as original value	
3	1: yes, missing response	-6: No visits	2: no	.C, question should be skipped	B F
4	2: no, missing response	1-3: how much of a problem	1: yes	Stands as original value	B
5	2: no	-6: No visits or missing	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 11:
H07039, H07040-H07041

N11	H07039 is:	H07040-H07041 are:	H07039 is coded as:	H07040-H07041 are coded as:	*
1	1: yes	At least one is "marked", "all are blank" or "blank or don't know"	Stands as original value	., missing if -6, stand as original value otherwise	F
2	1: yes, -5: don't know, missing	"Blank or NA"	2: no	.N, valid skip if missing; .C, question should be skipped if marked	B F
3	2: no, -5: don't know, missing	At least one is "marked" or "blank or don't know"	1: yes	., missing if -6, stand as original value otherwise	B F
4	2: no	"Blank or NA" or "all are blank"	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	-5: don't know	"All are blank"	Stands as original value	.N, valid skip if missing	F
6	Missing response	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 11:
Responses to H07040-H07041 are all missing.

Definition of "blank or NA" in Coding Table for Note 11:
Responses to H07040-H07041 are either all not applicable (-6) or a combination of missing and not applicable (-6).

Definition of "blank or don't know" in Coding Table for Note 11:
Responses to H07040-H07041 are either all don't know (-5) or a combination of missing and don't know (-5).

Definition of "marked" in Coding Table for Note 11:
Any pattern of marks outside the definitions "all are blank," "blank or NA," or "blank or don't know."

Table for Note 12:
H07042, H07043

N12	H07042 is:	H07043 is:	H07042 is coded as:	H07043 is coded as:	*
1	1: yes	1, 2, 3: how much of a problem, missing response	Stands as original value	Stands as original value	
2	1: yes, or missing response	-6: didn't look for information in health plan	2: no	.C question should be skipped	B F
3	2: no, or missing response	1, 2, 3: how much of a problem	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't look for information in health plan	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 13:
H07044, H07045

N13	H07044 is:	H07045 is:	H07044 is coded as:	H07045 is coded as:	*
1	1: yes	1-3: how much of a problem, missing response	Stands as original value	Stands as original value	
2	1: yes, missing response	-6: didn't call health plan	2: no	.C question should be skipped	B F
3	2: no, missing response	1-3: how much of a problem	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't call health plan	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 14:
H07046, H07047

N14	H07046 is:	H07047 is:	H07046 is coded as:	H07047 is coded as:	*
1	1: yes	1-3: how much of a problem, missing response	Stands as original value	Stands as original value	
2	1: yes or missing response	-6: didn't have any experience	2: no	.C question should be skipped	B F
3	2: no or missing response	1-3: how much of a problem	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't have any experience	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 15A1:
S07G18, S07G19-S07G39

N15A1	S07G18 is:	S07G19 is:	S07G23 is:	S07G20-S07G22 S07G24-S07G39 are:	S07G18 is coded as:	S07G19 is coded as:	S07G23 is coded as:	S07G20-S07G22 S07G24-S07G39 are coded as:	*
1	1: Yes	3: Reservist not on active duty for contingency operation, 4: Not a reservist	3: Spouse/ Parent Reservist not on active duty for contingency operation, 4: Spouse/ Parent not a reservist	Any value	2: No	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	B F
2	1: Yes	3: Reservist not on active duty for contingency operation, 4: Not a reservist	1, 2 : Yes, missing	Any value	Stands as original value	Stands as original value	Stands as original value	Stand as original value	
3	1: Yes	1, 2 : Yes, Missing	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	Stand as original value	
4	2: No, missing response	1, 2 : Yes	Any value	Any value	1: Yes	Stands as original value	Stands as original value	Stand as original value	B
5	2: No, missing response	3: Reservist not on active duty for contingency operation, 4: Not a reservist, missing	1, 2 : Yes	Any value	1: Yes	Stands as original value	Stands as original value	Stand as original value	B
6	2: No	3: Reservist not on active duty for contingency operation, 4: Not a reservist, missing	3: Reservist not on active duty for contingency operation, 4: Not a reservist, missing	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	F

Coding Table for Note 15A1 continued:

N15A1	S07G18 is:	S07G19 is:	S07G23 is:	S07G20-S07G22 S07G24-S07G39 are:	S07G18 is coded as:	S07G19 is coded as:	S07G23 is coded as:	S07G20-S07G22 S07G24-S07G39 are coded as:	*
7	Missing response	Missing response	Missing response	Any value	Stands as original value	Stands as original value	Stands as original value	., if unmarked response to question with marked/ unmarked responses (1/2); stand as original value otherwise	F
8	Missing response	3: Reservist not on active duty for contingency operation, 4: Not a reservist	Any value	Any value	2: No	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	B F
9	Missing response	Any value	3: Reservist not on active duty for contingency operation, 4: Not a reservist	Any value	2: No	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	B F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 15A2:
S07G19, S07G20-S07G22

N15A2	S07G19 is:	S07G20-S07G22 are:	S07G19 is coded as:	S07G20-S07G22 are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stand as original value	
2	1, 2: Active Duty	Any value	Stands as original value	Stand as original value	
3	3, 4: Not Active Duty	Any value	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
4	Missing response	Any value	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 15A3:
S07G23, S07G24-S07G26

N15A3	S07G23 is:	S07G24-S07G26 are:	S07G23 is coded as:	S07G24-S07G26 are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stand as original value	
2	1, 2: Active Duty	Any value	Stands as original value	Stand as original value	
3	3, 4: Not Active Duty	Any value	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
4	Missing response	Any value	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 15A4:
S07G28, S07G29A-S07G29K, S07G30

N15A4	S07G28 is:	S07G29A-S07G29K are:	S07G30 is:	S07G28 is coded as:	S07G29A-S07G29K are coded as:	S07G30 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	Stands as original value	
2	3: Civilian Coverage	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	
3	1: Only TRICARE	Any value	Any value	Stands as original value	.N, valid skip if "unmarked", .C, question should be skipped if marked	.N, valid skip if missing, .C, question should be skipped if marked	F
4	2: Both, -5: Don't know	Any value	Any value	Stands as original value	.N, valid skip if "unmarked", .C, question should be skipped if marked	Stands as original value	F
5	Missing response	1: Marked	Any value	3: Civilian Coverage	Stand as original value	Stands as original value	B
6	Missing response	All are unmarked	1,2,3,-5	-5: Don't know	.N, valid skip if "unmarked", .C, question should be skipped if marked	Stands as original value	B
7	Missing response	All are unmarked	Missing	Stands as original value	Stand as original value	., if "unmarked"; Stand as original value otherwise	F

* Indication of backward coding (B) or forward coding (F).

Definition of "unmarked" in Coding Table for Note 15A4:
Responses to S07G29A-S07G29K are not marked as 1.

Coding Table for Note 15A5:
S07G32, S07G33-S07G34

N15A5	S07G32 is:	S07G33 is:	S07G34 is:	S07G32 is coded as:	S07G33 is coded as:	S07G34 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	Stands as original value	
2	Any value	-6: No personal doctor	-6: No personal doctor	-6: No personal doctor	Stands as original value	Stands as original value	B
3	1: Yes	Any value	Any value	Stands as original value	., missing if –6; stands as original value otherwise	., missing if –6; stands as original value otherwise	F
4	2: No	Any value	Any value	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	Stands as original value	F
5	-6: No personal doctor	Any value	Any value	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	.N, valid skip if missing, .C, question should be skipped if marked	F
6	Missing response	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 15A6:
S07G36, S07G37-S07G38

N15A6	S07G36 is:	S07G37 is:	S07G38 is:	S07G36 is coded as:	S07G37 is coded as:	S07G38 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	Stands as original value	
2	1: Yes	1: Yes, missing	Any value	Stands as original value	Stands as original value	Stands as original value	
3	1: Yes	2: No, 3: Don't know	Any value	Stands as original value	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
4	2: No, -5: Don't know	Any value	Any value	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 16:
H07052--H07057

N16	H07052 is:	H07053 is:	H07054 is:	H07055 is:	H07056-H07057 are:	H07052 is coded as:	H07053 is coded as:	H07054 is coded as:	H07055 is coded as:	H07056-H07057 are coded as:	*
1	1: ever smoked	3 or 4: still smoke	Any value	Any value	Any value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F
2	1: ever smoked	2: quit	2: quit >1 year ago or –5: don't know	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F
3	1: ever smoked	2: quit	3: quit <1 year ago, missing response	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	.N, if H07055=-6; stand as original value otherwise	F
4	1: ever smoked	-5: don't know, missing response	2: quit >1 year ago	Any value	Any value	Stands as original value	2: quit	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F B
5	1: ever smoked	-5: don't know, missing response	3: quit <1 year ago	Any value	Any value	Stands as original value	2: quit	Stands as original value	Stands as original value	.N, if H07055=-6; stand as original value otherwise	F B

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 16 continued:

N16	H07052 is:	H07053 is:	H07054 is:	H07055 is:	H07056-H07057 are:	H07052 is coded as:	H07053 is coded as:	H07054 is coded as:	H07055 is coded as:	H07056-H07057 are coded as:	*
6	1: ever smoked	-5:don't know	-5: don't know, missing response	Any value	Any value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F
7	1: ever smoked	Missing response	-5: don't know	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F
8	1: ever smoked	Missing response	Missing response	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F
9	2: never, -5: don't know, missing response	3 or 4: still smoke	Any value	Any value	Any value	1: ever smoked	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	B F
10	2: never or -5: don't know	2: quit, -5: don't know, or missing response	Any value	Any value	Any value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 16 continued:

N16	H07052 is:	H07053 is:	H07054 is:	H07055 is:	H07056-H07057 are:	H07052 is coded as:	H07053 is coded as:	H07054 is coded as:	H07055 is coded as:	H07056-H07057 are coded as:	*
11	Missing response	2: quit	Missing response	2-5: some visits	2-5: some visits	1: ever smoked	Stands as original value	3: quit <1 year ago	Stands as original value	Stand as original value	B
12	Missing response	2: quit, missing response	2: quit >1 year ago, -5: don't know	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F
13	Missing response	2: quit, missing response	3: quit <1 year ago, missing response	2-5: some visits	2-5: some visits	1: ever smoked	Stands as original value	Stands as original value	Stands as original value	Stand as original value	B
14	Missing response	2: quit, missing response	3: quit <1 year ago, missing response	1: none, -6: no visits, missing response	1: none, -6: no visits, missing response	Stands as original value	Stands as original value	Stands as original value	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F
15	Missing response	-5: don't know	Any value	Any value	Any value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 16A1:
H07055, H07056-H07057

N16A1	H07055 is:	H07056 Is:	H07057 is:	H07055 is coded as:	H07056 is coded as:	H07057 is coded as:	*
1	.N: No doctor visits	Any value	Any value	Stands as original value	.C, question should be skipped if marked; .N: No doctor visits, otherwise	.C, question should be skipped if marked; .N: No doctor visits, otherwise	F
2	1: None	.N: No doctor visits	.N: No doctor visits	Stands as original value	1: None	1: None	F
3	1: None	.N: No doctor visits	1-5, missing	Stands as original value	1: None	Stands as original value	F
4	1: None	1-5, missing	.N: No doctor visits	Stands as original value	Stands as original value	1: None	F
5	2-5: Visits, missing	.N: No doctor visits	.N: No doctor visits	Stands as original value	.:Missing	.:Missing	F
6	2-5: Visits, missing	.N: No doctor visits	1-5, missing	Stands as original value	.:Missing	Stands as original value	F
7	2-5: Visits, missing	1-5, missing	.N: No doctor visits	Stands as original value	Stands as original value	.:Missing	F
8	1-5: 0 or more visits	2-5: Visits	2-5: Visits	Stands as original value	H07055 if H07056 > H07055; Stand as original value otherwise	H07055 if H07057 > H07055; Stand as original value otherwise	F
9	1-5: 0 or more visits	2-5: Visits	Any value	Stands as original value	H07055 if H07056 > H07055; Stand as original value otherwise	Stands as original value	F
10	1-5: 0 or more visits	Any value	2-5: Visits	Stands as original value	Stands as original value	H07055 if H07056 > H07055; Stand as original value otherwise	F
11	Any value	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 17:

Note 17 (Part a)
H07058, SEX, XSEXA, H07059-H07065

N17A	H07058 is :	SEX is:	H07059--H07065 are:	XSEXA is coded as:
1	Missing response	F	Any marked	2, female
2	Missing response	F	All missing	2, female
3	Missing response	M	Any marked	1, male
4	Missing response	M	All missing	1, male
5	Missing response	Z, missing	Any marked	2, female
6	Missing response	Z	All missing	., missing value
7	Missing response	Missing	All missing	., missing value
8	1, male	Any value	All missing	1, male
9	1, male	F	Any marked	2, female
10	1, male	M, Z, or missing	Any marked	1, male
11	2, female	Any value	Any marked	2, female
12	2, female	M	All missing	1, male
13	2, female	F, Z, or missing	All missing	2, female

SEX (PNSEXCD) is the gender from the DEERS file. This variable is not used to override questionnaire responses, but to clear up any omissions or discrepancies in the responses.

XSEXA is the recoded gender variable after taking into account the self-reported response (H07058), any responses to gender-specific questions, and the gender of the sample beneficiary from DEERS.

Note 17 (Part B):
XSEXA, H07059 - H07065

N17B	XSEXA is:	H07059--H07065 are:	H07059--H07065 are coded as:	*
1	1: Male	"All are blank"	.N, valid skip	F
2	1: Male	At least one is "marked"	.N, valid skip if missing; .C, question should be skipped if marked	F
3	2: Female	"All are blank" or at least one is "marked"	Stands as original value	
4	Missing	"All are blank" or at least one is "marked"	Missing value	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 17b:
All variables H07059--H07065 are missing.

Definition of "marked" in Coding Table for Note 17b:
Any pattern of marks outside the definition "all are blank."

Coding Table for Note 18
XSEXA, AGE, H07060, H07061

N18	XSEXA is:	AGE is:	H07060 is:	H07061 is:	H07060 is coded as:	H07061 is coded as:	*
1	1: Male	Any value	.C, question should be skipped, or .N, valid skip	C, question should be skipped, or .N, valid skip	Stands as original value	Stands as original value	
2	2: Female	Any value	2: 40 or over	Marked, missing response	Stands as original value	Stand as original value	
3	2: Female	Any value	1: under 40	Marked, missing response	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
4	2: Female	Any value	Missing	Marked	2: > 40	Stands as original value	B
5	2: Female	< 40	Missing	Missing	1: < 40	.N, valid skip	F B
6	2: Female	>=40	Missing	Missing	1: < 40	.N, valid skip	F B
7	2: Female	Missing	Missing	Missing	Stands as original value	Stands as original value	
8	Missing	Any value	Missing	Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

AGE (DAGEQY) is from the DEERS file. This variable is not used to override questionnaire responses, but to clear up any omissions or discrepancies in the responses.

Coding Table for Note 19:
XSEXA, H07063, H07064, H07065

N19	XSEXA is:	H07063 is:	H07064 is:	H07065 is:	H07063 is coded as:	H07064 is coded as:	H07065 is coded as:	*
1	1: Male	Any value	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	
2	2: Female	1: pregnant now	1: first trimester	Any value	Stands as original value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
3	2: Female	1: pregnant now	2: second trimester	2: third trimester	Stands as original value	Stands as original value	.: missing value	F
4	2: Female	1: pregnant now	2: second trimester	4: first trimester, 3: second trimester, 1: Did not receive prenatal care, or missing	Stands as original value	Stands as original value	Stands as original value	
5	2: Female	1: pregnant now	3: third trimester, missing response	Any value	Stands as original value	Stands as original value	Stands as original value	
6	2: female	2: pregnant in last 12 months	Any value	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	Stands as original value	F
7	2: Female	3: not pregnant in past 12 months	Any value	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	F
8	2: Female	Missing response	1: first trimester	Any value	1: pregnant now	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	B F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 19 continued:

N19	XSEXA is:	H07063 is:	H07064 is:	H07065 is:	H07063 is coded as:	H07064 is coded as:	H07065 is coded as:	*
9	2: Female	Missing response	2: second trimester	2: third trimester	1: pregnant now	Stands as original value	.: missing value	B F
10	2: Female	Missing response	2: second trimester	4: first trimester, 3: second trimester, 1: Did not receive prenatal care	1: pregnant now	Stands as original value	Stands as original value	B
11	2: Female	Missing response	3: third trimester, missing response	Any value	1: pregnant now	Stands as original value	Stands as original value	B
12	2: Female	Missing response	Missing response	Any value	Stands as original value	Stands as original value	Stands as original value	F
13	Missing	Missing response	Marked, missing response	Any value	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

BASIC SAS AND ASCII/EBCDIC MISSING DATA AND NOT APPLICABLE CODES

SAS	ASCII/EBCDIC	
Numeric	Numeric	Description
.	-9	No response
.O	-7	Out of range error
.N	-6	Not Applicable or valid skip
.D	-5	Scalable response of “Don’t know” or “not sure”
.I	-4	Incomplete grid error
.C	-1	Question should have been skipped.

Missing values ‘.’ and incomplete grids ‘.I’ are encoded prior to implementation of the Coding Scheme Notes (see below).

Coding Table for Note 1:
H07006, H07007

N1	H07006 is:	H07007 is:	H07006 is coded as:	H07007 is coded as:	*
1	1-13, health plan, -5, not sure	Marked or missing response	Stands as original value	Stands as original value	
2	-6, no usage in past 12 months	Marked response	Stands as original value	.C, question should be skipped	F
3	-6, no usage in past 12 months	Missing response	Stands as original value	.N, valid skip	F
4	Missing response	Marked or missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 1A1:
S07001, S07002-S07008I

N1A1	S07001 is:	S07002-S07008I are:	S07001 is coded as:	S07002-S07008I are coded as:	*
1	2: No	At least one is "marked", "all are blank"	Stands as original value	.N, valid skip if missing or unmarked, .C, question should be skipped if marked	F
2	1: Yes, -5: Don't know, or missing response	"All are blank"	2: No	.N, valid skip	B F
3	1: Yes, -5: Don't know or missing response	At least one is "marked"	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 1A1:
Responses to S07002-S07008I are all missing or unmarked.

Definition of "marked" in Coding Table for Note 1A1:
Any pattern of marks outside the definitions "all are blank"

Coding Table for Note 1A2:
S07002, S07003-S07008I

N1A2	S07002 is:	S07003-S07008I are:	S07002 is coded as:	S07003-S07008I are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	2: No	At least one is "marked", "all are blank"	Stands as original value	.N, valid skip if missing or unmarked, .C, question should be skipped if marked	F
3	1: Yes or missing response	"All are blank"	2: No	.N, valid skip	B F
4	1: Yes or missing response	At least one is "marked"	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 1A2:
Responses to S07003-S07008I are all missing or unmarked.

Definition of "marked" in Coding Table for Note 1A2:
Any pattern of marks outside the definitions "all are blank".

Coding Table for Note 1A3:
S07007, S07008A-S07008I

N1A3	S07007 is:	S07008A-S07008I are:	S07007 is coded as:	S07008A-S07008I are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	2: No	At least one is "marked", "all are unmarked"	Stands as original value	.N, valid skip if unmarked, .C, question should be skipped if marked	F
3	1: Yes or missing response	"All are unmarked"	2: No	.N, valid skip	B F
4	1: Yes	At least one is "marked"	Stands as original value	Stands as original value	
5	Missing response	At least one is "marked"	Stands as original value	., if missing; Stands as original value otherwise	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are unmarked" in Coding Table for Note 1A3:
Responses to S07008A-S07008I are missing or unmarked.

Definition of "marked" in Coding Table for Note 1A3:
Any pattern of marks outside the definition "all are unmarked".

Coding Table for Note 2:
H07008, H07009, H07010, H07011

N2	H07008 is:	H07009 is:	H07010 is:	H07011 is:	H07008 is coded as:	H07009 is coded as:	H07010 is coded as:	H07011 is coded as:	*
1	1: yes or missing response	-6: Don't have a personal Dr	Any value	Any value	2: no	.C, question should be skipped	.N, valid skip if missing; .C, question should be skipped, if marked	Stands as original value	B F
2	1: yes	0-10 or missing response	1: yes	1-3	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped	F
3	1: yes	0-10 or missing response	Missing response	1-3	Stands as original value	Stands as original value	2: no	Stands as original value	B
4	1: yes	0-10 or missing response	1: yes	Missing response	Stands as original value	Stands as original value	Stands as original value	.N, valid skip if missing	F
5	1: yes	0-10 or missing response	2: no	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	
6	1: yes	0-10 or missing response	Missing response	Missing response	Stands as original value	Stands as original value	Stands as original value	Stands as original value	
7	2: no or missing response	0-10	1: yes	1-3	1: yes	Stands as original value	Stands as original value	.C, question should be skipped	F B
8	2: no or missing response	0-10	Missing response	1-3	1: yes	Stands as original value	Stands as original value	Stands as original value	B
9	2: no or missing response	0-10	Missing response	Missing response	1: yes	Stands as original value	Stands as original value	Stands as original value	B
10	2: no	Missing response	1: yes	1-3	Stands as original value	.N, valid skip if missing	.C, question should be skipped	Stands as original value	F
11	2: no	-6: Don't have a personal Dr	Any value	Any value	Stands as original value	.C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	Stands as original value	B F

Coding Table for Note 2 continued:

N2	H07008 is:	H07009 is:	H07010 is:	H07011 is:	H07008 is coded as:	H07009 is coded as:	H07010 is coded as:	H07011 is coded as:	*
12	2: no or missing response	0-10 or missing	1: yes	Missing	1: yes	Stands as original value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	B F
13	2: no or missing response	0-10 or missing	2: no	Any value	1: yes	Stands as original value	Stands as original value	Stands as original value	B
14	2: no	Missing response	Missing response	Any value	Stands as original value	.N, valid skip if missing	.N, valid skip	Stands as original value	F
15	Missing response	Missing response	Missing response	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 3:
H07012, H07013

N3	H07012 is:	H07013 is:	H07012 is coded as:	H07013 is coded as:	*
1	1: yes	1, 2, 3, or missing response	Stands as original value	Stands as original value	
2	1: yes or missing response	-6: didn't need to see a specialist	2: No	.C question should be skipped	B F
3	2: no or missing response	1, 2, 3	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't need to see a specialist	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 4:
H07014, H07015

N4	H07014 is:	H07015 is:	H07014 is coded as:	H07015 is coded as:	*
1	1: yes	0-10, or missing response	Stands as original value	Stands as original value	
2	1: yes or missing response	-6: didn't need to see a specialist	2: No	.C question should be skipped	B F
3	2: no or missing response	0-10	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't need to see a specialist	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 5:
H07016, H07017

N5	H07016 is:	H07017 is:	H07016 is coded as:	H07017 is coded as:	*
1	1: yes	1-4: how often, or missing response	Stands as original value	Stands as original value	
2	1: yes or missing response	-6: no calls	2: no	.C, question should be skipped	B F
3	2: no or missing response	1-4: how often	1: yes	Stands as original value	B
4	2: no	-6: no calls or missing	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 6:
H07018, H07019, H07020

N6	H07018 is:	H07019-H07020 are:	H07018 is coded as:	H07019-H07020 are coded as:	*
1	1: yes	"All are blank"	Stands as original value	Stand as original value otherwise	
2	1:yes or missing response	"Blank or NA"	2: no	.N, valid skip if missing, .C, question should be skipped if marked	B F
3	1: yes	"One marked, and one NA"	Stands as original value	., missing if -6, stands as original value otherwise	F
4	1: yes	At least one is "marked"	Stands as original value	Stands as original value	
5	2: no	"One marked, and one NA"	Stands as original value	.C, question should be skipped if marked	F
6	2: no or missing response	At least one is "marked"	1: yes	., missing if -6, stands as original value otherwise	B F
7	2: no	"All are blank" or "Blank or NA"	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
8	Missing response	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 6:
Responses to H07019-H07020 are all missing.

Definition of "Blank or NA" in Coding Table for Note 6:
All of the following are true: H07019-H07020 are a combination of not applicable (-6) or missing.

Definition of "One marked and one NA" in Coding Table for Note 6:
H07019-H07020 have one response marked not applicable (-6) and one marked response (other than not applicable).

Definition of "marked" in Coding Table for Note 6:
Any pattern of marks outside the definitions "all are blank", "One marked and one NA", and "Blank or NA."

Coding Table for Note 7:
H07021, H07022, H07023

N7	H07021 is:	H07022-H07023 are:	H07021 is coded as:	H07022-H07023 are coded as:	*
1	1: yes	"All are blank"	Stands as original value	Stands as original value otherwise	
2	1:yes or missing response	"Blank or NA"	2: no	.N, valid skip if missing, .C, question should be skipped if marked	B F
3	1: yes	"One marked and one NA"	Stands as original value	., missing if -6, stands as original value otherwise	F
4	1: yes	At least one is "marked"	Stands as original value	Stands as original value	
5	2: no	"One marked and one NA"	Stands as original value	.C, question should be skipped if marked	F
6	2: no or missing response	At least one is "marked"	1: yes	., missing if -6, stands as original value otherwise	B F
7	2: no	"All are blank" or "Blank or NA"	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
8	Missing response	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 7:
Responses to H07022-H07023 are all missing.

Definition of "Blank or NA" in Coding Table for Note 7:
All of the following are true: H07022-H07023 are a combination of not applicable (-6) or missing.

Definition of "One marked and one NA" in Coding Table for Note 7:
H07022-H07023 have one response marked not applicable (-6) and one marked response (other than not applicable).

Definition of "marked" in Coding Table for Note 7:
Any pattern of marks outside the definitions "all are blank", "One marked and one NA", and "Blank or NA."

Coding Table for Note 8:
H07025, H07026-H07037

N8	H07025 is:	H07026-H07037 are:	H07025 is coded as:	H07026-H07037 are coded as:	*
1	1: None	At least one is "marked", "all are blank", or "blank or NA"	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
2	2-7, or missing response	"Blank or NA"	1: None	.N, valid skip if missing; .C, question should be skipped if marked	B F
3	2-7	At least one is "marked" or "all are blank"	Stands as original value	., missing if -6, stands as original value otherwise	F
4	Missing response	"All are blank"	Stands as original value	Stand as original value	
5	Missing response	At least one is "marked"	Stands as original value	., missing if -6, stands as original value otherwise	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 8:
Responses to H07026-H07037 are all missing.

Definition of "blank or NA" in Coding Table for Note 8:
All of the following are true: H07026-H07037 are a combination of not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 8:
Any pattern of marks outside the definitions "all are blank" and "Blank or NA."

Coding Table for Note 9:
H07026, H07027

N9	H07026 is:	H07027 is:	H07026 is coded as:	H07027 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	1: yes	1-3: how much of a problem, missing response	Stands as original value	Stands as original value	
3	1: yes, missing response	-6: No visits	2: no	.C, question should be skipped	B F
4	2: no, missing response	1-3: how much of a problem	1: yes	Stands as original value	B
5	2: no	-6: No visits or missing response	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 10:
H07028, H07029

N10	H07028 is:	H07029 is:	H07028 is coded as:	H07029 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	1: yes	1-3: how much of a problem, missing response	Stands as original value	Stands as original value	
3	1: yes, missing response	-6: No visits	2: no	.C, question should be skipped	B F
4	2: no, missing response	1-3: how much of a problem	1: yes	Stands as original value	B
5	2: no	-6: No visits or missing	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 11:
H07039, H07040-H07041

N11	H07039 is:	H07040-H07041 are:	H07039 is coded as:	H07040-H07041 are coded as:	*
1	1: yes	At least one is "marked", "all are blank" or "blank or don't know"	Stands as original value	., missing if -6, stand as original value otherwise	F
2	1: yes, -5: don't know, missing	"Blank or NA"	2: no	.N, valid skip if missing; .C, question should be skipped if marked	B F
3	2: no, -5: don't know, missing	At least one is "marked" or "blank or don't know"	1: yes	., missing if -6, stand as original value otherwise	B F
4	2: no	"Blank or NA" or "all are blank"	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	-5: don't know	"All are blank"	Stands as original value	.N, valid skip if missing	F
6	Missing response	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 11:
Responses to H07040-H07041 are all missing.

Definition of "blank or NA" in Coding Table for Note 11:
Responses to H07040-H07041 are either all not applicable (-6) or a combination of missing and not applicable (-6).

Definition of "blank or don't know" in Coding Table for Note 11:
Responses to H07040-H07041 are either all don't know (-5) or a combination of missing and don't know (-5).

Definition of "marked" in Coding Table for Note 11:
Any pattern of marks outside the definitions "all are blank," "blank or NA," or "blank or don't know."

Table for Note 12:
H07042, H07043

N12	H07042 is:	H07043 is:	H07042 is coded as:	H07043 is coded as:	*
1	1: yes	1, 2, 3: how much of a problem, missing response	Stands as original value	Stands as original value	
2	1: yes, or missing response	-6: didn't look for information in health plan	2: no	.C question should be skipped	B F
3	2: no, or missing response	1, 2, 3: how much of a problem	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't look for information in health plan	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 13:
H07044, H07045

N13	H07044 is:	H07045 is:	H07044 is coded as:	H07045 is coded as:	*
1	1: yes	1-3: how much of a problem, missing response	Stands as original value	Stands as original value	
2	1: yes, missing response	-6: didn't call health plan	2: no	.C question should be skipped	B F
3	2: no, missing response	1-3: how much of a problem	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't call health plan	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 14:
H07046, H07047

N14	H07046 is:	H07047 is:	H07046 is coded as:	H07047 is coded as:	*
1	1: yes	1-3: how much of a problem, missing response	Stands as original value	Stands as original value	
2	1: yes or missing response	-6: didn't have any experience	2: no	.C question should be skipped	B F
3	2: no or missing response	1-3: how much of a problem	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't have any experience	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 15A1:
S07G18, S07G19-S07G39

N15A1	S07G18 is:	S07G19 is:	S07G23 is:	S07G20-S07G22 S07G24-S07G39 are:	S07G18 is coded as:	S07G19 is coded as:	S07G23 is coded as:	S07G20-S07G22 S07G24-S07G39 are coded as:	*
1	1: Yes	3: Reservist not on active duty for contingency operation, 4: Not a reservist	3: Spouse/ Parent Reservist not on active duty for contingency operation, 4: Spouse/ Parent not a reservist	Any value	2: No	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing or unmarked; .C, question should be skipped if marked	B F
2	1: Yes	3: Reservist not on active duty for contingency operation, 4: Not a reservist	1, 2 : Yes, missing	Any value	Stands as original value	Stand as original value	Stand as original value	Stand as original value	
3	1: Yes	1, 2 : Yes, Missing	Any value	Any value	Stands as original value	Stand as original value	Stand as original value	Stand as original value	
4	2: No, missing response	1, 2 : Yes	Any value	Any value	1: Yes	Stand as original value	Stand as original value	Stand as original value	B
5	2: No, missing response	3: Reservist not on active duty for contingency operation, 4: Not a reservist, missing	1, 2 : Yes	Any value	1: Yes	Stand as original value	Stand as original value	Stand as original value	B
6	2: No	3: Reservist not on active duty for contingency operation, 4: Not a reservist, missing	3: Reservist not on active duty for contingency operation, 4: Not a reservist, missing	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing or unmarked; .C, question should be skipped if marked	F

Coding Table for Note 15A1 continued:

N15A1	S07G18 is:	S07G19 is:	S07G23 is:	S07G20-S07G22 S07G24-S07G39 are:	S07G18 is coded as:	S07G19 is coded as:	S07G23 is coded as:	S07G20-S07G22 S07G24-S07G39 are coded as:	*
7	Missing response	Missing response	Missing response	Any value	Stands as original value	Stands as original value	Stands as original value	., if unmarked response to question with marked/ unmarked responses (1/2); Stand as original value otherwise	F
8	Missing response	3: Reservist not on active duty for contingency operation, 4: Not a reservist, missing	3: Reservist not on active duty for contingency operation, 4: Not a reservist	Any value	2: No	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing or unmarked; .C, question should be skipped if marked	B F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 15A2:
S07G19, S07G20-S07G22

N15A2	S07G19 is:	S07G20-S07G22 are:	S07G19 is coded as:	S07G20-S07G22 are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	1, 2: Active Duty	Any value	Stands as original value	Stands as original value	
3	3, 4: Not Active Duty	Any value	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
4	Missing response	Any value	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 15A3:
S07G23, S07G24-S07G26

N15A3	S07G23 is:	S07G24-S07G26 are:	S07G23 is coded as:	S07G24-S07G26 are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	1, 2: Active Duty	Any value	Stands as original value	Stands as original value	
3	3, 4: Not Active Duty	Any value	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
4	Missing response	Any value	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 15A4:
S07G28, S07G29A-S07G29K, S07G30

N15A4	S07G28 is:	S07G29A-S07G29K are:	S07G30 is:	S07G28 is coded as:	S07G29A-S07G29K are coded as:	S07G30 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	Stands as original value	
2	3: Civilian Coverage	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	
3	1: Only TRICARE	Any value	Any value	Stands as original value	.N, valid skip if "unmarked", .C, question should be skipped if marked	.N, valid skip if missing, .C, question should be skipped if marked	F
4	2: Both, -5: Don't know	Any value	Any value	Stands as original value	.N, valid skip if "unmarked", .C, question should be skipped if marked	Stands as original value	F
5	Missing response	1: Marked	Any value	3: Civilian Coverage	Stand as original value	Stand as original value	B
6	Missing response	All are unmarked	1,2,3,-5	-5: Don't know	.N, valid skip if "unmarked", .C, question should be skipped if marked	Stand as original value	B
7	Missing response	All are unmarked	Missing response	Stands as original value	Stand as original value	., if "unmarked"; Stand as original value otherwise	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are unmarked" in Coding Table for Note 15A4:
Responses to S07G29A-S07G29K are missing or unmarked.

Definition of "marked" in Coding Table for Note 15A4:
Any pattern of marks outside the definition "all are unmarked".

Coding Table for Note 15A5:
S07G32, S07G33-S07G34

N15A5	S07G32 is:	S07G33 is:	S07G34 is:	S07G32 is coded as:	S07G33 is coded as:	S07G34 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	Stands as original value	
2	Any value	-6: No personal doctor	-6: No personal doctor	-6: No personal doctor	Stands as original value	Stands as original value	B
3	1: Yes	Any Value	Any Value	Stands as original value	., missing if –6; Stand as original value otherwise	., missing if –6; Stand as original value otherwise	F
4	2: No	1:Yes, 2:No, -5:Don't know, missing	1-2:Difficult, 3: Same -5:Don't know, -6: No personal doctor, missing	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	Stands as original value	F
5	2: No	-6: No personal doctor	1-2:Difficult, 3: Same -5:Don't know, missing	Stands as original value	.C, question should be skipped	Stands as original value	F
6	-6: No personal doctor	1:Yes, 2:No, -5:Don't know, missing	1-2:Difficult, 3: Same -5:Don't know, -6: No personal doctor, missing	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	.N, valid skip if missing, .C, question should be skipped if marked	F
7	-6: No personal doctor	-6: No personal doctor	1-2:Difficult, 3: Same -5:Don't know, missing	Stands as original value	.C, question should be skipped	.N, valid skip if missing, .C, question should be skipped if marked	F
8	Missing response	Any value	Any value	Stands as original value	Stand as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 15A6:
S07G36, S07G37-S07G38

N15A6	S07G36 is:	S07G37 is:	S07G38 is:	S07G36 is coded as:	S07G37 is coded as:	S07G38 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	Stands as original value	
2	1: Yes	1: Yes, missing	Any value	Stands as original value	Stand as original value	Stand as original value	
3	1: Yes, missing	2: No, 3: Don't know	Any value	Stands as original value	Stand as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
4	2: No, -5: Don't know	Any value	Any value	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	1: Yes, missing	Any value	Stands as original value	Stand as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 16:
H07052--H07057

N16	H07052 is:	H07053 is:	H07054 is:	H07055 is:	H07056-H07057 are:	H07052 is coded as:	H07053 is coded as:	H07054 is coded as:	H07055 is coded as:	H07056-H07057 are coded as:	*
1	1: ever smoked	3 or 4: still smoke	Any value	Any value	Any value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F
2	1: ever smoked	2: quit	2: quit >1 year ago or –5: don't know	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F
3	1: ever smoked	2: quit	3: quit <1 year ago, missing response	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F
4	1: ever smoked	-5: don't know, missing response	2: quit >1 year ago	Any value	Any value	Stands as original value	2: quit	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F B
5	1: ever smoked	-5: don't know, missing response	3: quit <1 year ago	Any value	Any value	Stands as original value	2: quit	Stands as original value	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F B

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 16 continued:

N16	H07052 is:	H07053 is:	H07054 is:	H07055 is:	H07056-H07057 are:	H07052 is coded as:	H07053 is coded as:	H07054 is coded as:	H07055 is coded as:	H07056-H07057 are coded as:	*
6	1: ever smoked	-5:don't know	-5: don't know, missing response	Any value	Any value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F
7	1: ever smoked	Missing response	-5: don't know	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F
8	1: ever smoked	Missing response	Missing response	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F
9	2: never, -5: don't know, missing response	3 or 4: still smoke	Any value	Any value	Any value	1: ever smoked	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	B F
10	2: never or -5: don't know	2: quit, -5: don't know, or missing response	Any value	Any value	Any value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 16 continued:

N16	H07052 is:	H07053 is:	H07054 is:	H07055 is:	H07056-H07057 are:	H07052 is coded as:	H07053 is coded as:	H07054 is coded as:	H07055 is coded as:	H07056-H07057 are coded as:	*
11	Missing response	2: quit	Missing response	2-5: some visits	2-5: some visits	1: ever smoked	Stands as original value	3: quit <1 year ago	Stands as original value	Stand as original value	B
12	Missing response	2: quit, missing response	2: quit >1 year ago, -5: don't know	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F
13	Missing response	2: quit, missing response	3: quit <1 year ago, missing response	2-5: some visits	2-5: some visits	1: ever smoked	Stands as original value	Stands as original value	Stands as original value	Stand as original value	B
14	Missing response	2: quit, missing response	3: quit <1 year ago, missing response	1: none, -6: no visits, missing response	1: none, -6: no visits, missing response	Stands as original value	Stands as original value	Stands as original value	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F
15	Missing response	-5: don't know	Any value	Any value	Any value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 16A1:
H07055, H07056-H07057

N16A1	H07055 is:	H07056 Is:	H07057 is:	H07055 is coded as:	H07056 is coded as:	H07057 is coded as:	*
1	.N: No doctor visits	Any value	Any value	Stands as original value	.C, question should be skipped if marked; .N: No doctor visits, otherwise	.C, question should be skipped if marked; .N: No doctor visits, otherwise	F
2	1: None	.N: No doctor visits	.N: No doctor visits	Stands as original value	1: None	1: None	F
3	1: None	.N: No doctor visits	1-5, missing	Stands as original value	1: None	Stands as original value	F
4	1: None	1-5, missing	.N: No doctor visits	Stands as original value	Stands as original value	1: None	F
5	2-5: Visits, missing	.N: No doctor visits	.N: No doctor visits	Stands as original value	.:Missing	.:Missing	F
6	2-5: Visits, missing	.N: No doctor visits	1-5, missing	Stands as original value	.:Missing	Stands as original value	F
7	2-5: Visits, missing	1-5, missing	.N: No doctor visits	Stands as original value	Stands as original value	.:Missing	F
8	1-5: 0 or more visits	2-5: Visits	2-5: Visits	Stands as original value	H07055 if H07056 > H07055; Stand as original value otherwise	H07055 if H07057 > H07055; Stand as original value otherwise	F
9	1-5: 0 or more visits	2-5: Visits	Any value	Stands as original value	H07055 if H07056 > H07055; Stand as original value otherwise	Stands as original value	F
10	1-5: 0 or more visits	Any value	2-5: Visits	Stands as original value	Stands as original value	H07055 if H07056 > H07055; Stand as original value otherwise	F
11	Any value	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 17:

Note 17 (Part a)
H07058, SEX, XSEXA, H07059-H07065

N17A	H07058 is :	SEX is:	H07059--H07065 are:	XSEXA is coded as:
1	Missing response	F	Any marked	2, female
2	Missing response	F	All missing	2, female
3	Missing response	M	Any marked	1, male
4	Missing response	M	All missing	1, male
5	Missing response	Z, missing	Any marked	2, female
6	Missing response	Z	All missing	., missing value
7	Missing response	Missing	All missing	., missing value
8	1, male	Any value	All missing	1, male
9	1, male	F	Any marked	2, female
10	1, male	M, Z, or missing	Any marked	1, male
11	2, female	Any value	Any marked	2, female
12	2, female	M	All missing	1, male
13	2, female	F, Z, or missing	All missing	2, female

SEX (PNSEXCD) is the gender from the DEERS file. This variable is not used to override questionnaire responses, but to clear up any omissions or discrepancies in the responses.

XSEXA is the recoded gender variable after taking into account the self-reported response (H07058), any responses to gender-specific questions, and the gender of the sample beneficiary from DEERS.

Note 17 (Part B):
XSEXA, H07059 - H07065

N17B	XSEXA is:	H07059--H07065 are:	H07059--H07065 are coded as:	*
1	1: Male	"All are blank"	.N, valid skip	F
2	1: Male	At least one is "marked"	.N, valid skip if missing; .C, question should be skipped if marked	F
3	2: Female	"All are blank" or at least one is "marked"	Stands as original value	
4	Missing	"All are blank" or at least one is "marked"	Missing value	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 17b:
All variables H07059--H07065 are missing.

Definition of "marked" in Coding Table for Note 17b:
Any pattern of marks outside the definition "all are blank."

Coding Table for Note 18
XSEXA, AGE, H07060, H07061

N18	XSEXA is:	AGE is:	H07060 is:	H07061 is:	H07060 is coded as:	H07061 is coded as:	*
1	1: Male	Any value	.C, question should be skipped, or .N, valid skip	C, question should be skipped, or .N, valid skip	Stands as original value	Stands as original value	
2	2: Female	Any value	2: 40 or over	Marked, missing response	Stands as original value	Stand as original value	
3	2: Female	Any value	1: under 40	Marked, missing response	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
4	2: Female	Any value	Missing	Marked	2: > 40	Stands as original value	B
5	2: Female	< 40	Missing	Missing	1: < 40	.N, valid skip	F B
6	2: Female	>=40	Missing	Missing	1: < 40	.N, valid skip	F B
7	2: Female	Missing	Missing	Missing	Stands as original value	Stands as original value	
8	Missing	Any value	Missing	Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

AGE (DAGEQY) is from the DEERS file. This variable is not used to override questionnaire responses, but to clear up any omissions or discrepancies in the responses.

Coding Table for Note 19:
XSEXA, H07063, H07064, H07065

N19	XSEXA is:	H07063 is:	H07064 is:	H07065 is:	H07063 is coded as:	H07064 is coded as:	H07065 is coded as:	*
1	1: Male	Any value	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	
2	2: Female	1: pregnant now	1: first trimester	Any value	Stands as original value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
3	2: Female	1: pregnant now	2: second trimester	2: third trimester	Stands as original value	Stands as original value	.: missing value	F
4	2: Female	1: pregnant now	2: second trimester	4: first trimester, 3: second trimester, 1: Did not receive prenatal care, or missing	Stands as original value	Stands as original value	Stands as original value	
5	2: Female	1: pregnant now	3: third trimester, missing response	Any value	Stands as original value	Stands as original value	Stands as original value	
6	2: female	2: pregnant in last 12 months	Any value	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	Stands as original value	F
7	2: Female	3: not pregnant in past 12 months	Any value	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	F
8	2: Female	Missing response	1: first trimester	Any value	1: pregnant now	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	B F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 19 continued:

N19	XSEXA is:	H07063 is:	H07064 is:	H07065 is:	H07063 is coded as:	H07064 is coded as:	H07065 is coded as:	*
9	2: Female	Missing response	2: second trimester	2: third trimester	1: pregnant now	Stands as original value	.: missing value	B F
10	2: Female	Missing response	2: second trimester	4: first trimester, 3: second trimester, 1: Did not receive prenatal care	1: pregnant now	Stands as original value	Stands as original value	B
11	2: Female	Missing response	3: third trimester, missing response	Any value	1: pregnant now	Stands as original value	Stands as original value	B
12	2: Female	Missing response	Missing response	Any value	Stands as original value	Stands as original value	Stands as original value	F
13	Missing	Missing response	Marked, missing response	Any value	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

BASIC SAS AND ASCII/EBCDIC MISSING DATA AND NOT APPLICABLE CODES

SAS	ASCII/EBCDIC	
Numeric	Numeric	Description
.	-9	No response
.O	-7	Out of range error
.N	-6	Not Applicable or valid skip
.D	-5	Scalable response of “Don’t know” or “not sure”
.I	-4	Incomplete grid error
.C	-1	Question should have been skipped.

Missing values ‘.’ and incomplete grids ‘.I’ are encoded prior to implementation of the Coding Scheme Notes (see below).

Coding Table for Note 1:
H07006, H07007

N1	H07006 is:	H07007 is:	H07006 is coded as:	H07007 is coded as:	*
1	1-13, health plan, -5, not sure	Marked or missing response	Stands as original value	Stands as original value	
2	-6, no usage in past 12 months	Marked response	Stands as original value	.C, question should be skipped	F
3	-6, no usage in past 12 months	Missing response	Stands as original value	.N, valid skip	F
4	Missing response	Marked or missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 1A1:
S07001, S07002-S07008I

N1A1	S07001 is:	S07002-S07008I are:	S07001 is coded as:	S07002-S07008I are coded as:	*
1	2: No	At least one is "marked", "all are blank"	Stands as original value	.N, valid skip if missing or unmarked, .C, question should be skipped if marked	F
2	1: Yes, -5: Don't know, or missing response	"All are blank"	2: No	.N, valid skip	B F
3	1: Yes, -5: Don't know or missing response	At least one is "marked"	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 1A1:
Responses to S07002-S07008I are all missing or unmarked.

Definition of "marked" in Coding Table for Note 1A1:
Any pattern of marks outside the definitions "all are blank"

Coding Table for Note 1A2:
S07002, S07003-S07008I

N1A2	S07002 is:	S07003-S07008I are:	S07002 is coded as:	S07003-S07008I are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	2: No	At least one is "marked", "all are blank"	Stands as original value	.N, valid skip if missing or unmarked, .C, question should be skipped if marked	F
3	1: Yes or missing response	"All are blank"	2: No	.N, valid skip	B F
4	1: Yes or missing response	At least one is "marked"	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 1A2:
Responses to S07003-S07008I are all missing or unmarked.

Definition of "marked" in Coding Table for Note 1A2:
Any pattern of marks outside the definitions "all are blank".

Coding Table for Note 1A3:
S07007, S07008A-S07008I

N1A3	S07007 is:	S07008A-S07008I are:	S07007 is coded as:	S07008A-S07008I are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	2: No	At least one is "marked", "all are unmarked"	Stands as original value	.N, valid skip if unmarked, .C, question should be skipped if marked	F
3	1: Yes or missing response	"All are unmarked"	2: No	.N, valid skip	B F
4	1: Yes	At least one is "marked"	Stands as original value	Stands as original value	
5	Missing response	At least one is "marked"	Stands as original value	., if missing; Stands as original value otherwise	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are unmarked" in Coding Table for Note 1A3:
Responses to S07008A-S07008I are missing or unmarked.

Definition of "marked" in Coding Table for Note 1A3:
Any pattern of marks outside the definition "all are unmarked".

Coding Table for Note 2:
H07008, H07009, H07010, H07011

N2	H07008 is:	H07009 is:	H07010 is:	H07011 is:	H07008 is coded as:	H07009 is coded as:	H07010 is coded as:	H07011 is coded as:	*
1	1: yes or missing response	-6: Don't have a personal Dr	Any value	Any value	2: no	.C, question should be skipped	.N, valid skip if missing; .C, question should be skipped, if marked	Stands as original value	B F
2	1: yes	0-10 or missing response	1: yes	1-3	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped	F
3	1: yes	0-10 or missing response	Missing response	1-3	Stands as original value	Stands as original value	2: no	Stands as original value	B
4	1: yes	0-10 or missing response	1: yes	Missing response	Stands as original value	Stands as original value	Stands as original value	.N, valid skip if missing	F
5	1: yes	0-10 or missing response	2: no	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	
6	1: yes	0-10 or missing response	Missing response	Missing response	Stands as original value	Stands as original value	Stands as original value	Stands as original value	
7	2: no or missing response	0-10	1: yes	1-3	1: yes	Stands as original value	Stands as original value	.C, question should be skipped	F B
8	2: no or missing response	0-10	Missing response	1-3	1: yes	Stands as original value	Stands as original value	Stands as original value	B
9	2: no or missing response	0-10	Missing response	Missing response	1: yes	Stands as original value	Stands as original value	Stands as original value	B
10	2: no	Missing response	1: yes	1-3	Stands as original value	.N, valid skip if missing	.C, question should be skipped	Stands as original value	F
11	2: no	-6: Don't have a personal Dr	Any value	Any value	Stands as original value	.C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	Stands as original value	B F

Coding Table for Note 2 continued:

N2	H07008 is:	H07009 is:	H07010 is:	H07011 is:	H07008 is coded as:	H07009 is coded as:	H07010 is coded as:	H07011 is coded as:	*
12	2: no or missing response	0-10 or missing	1: yes	Missing	1: yes	Stands as original value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	B F
13	2: no or missing response	0-10 or missing	2: no	Any value	1: yes	Stands as original value	Stands as original value	Stands as original value	B
14	2: no	Missing response	Missing response	Any value	Stands as original value	.N, valid skip if missing	.N, valid skip	Stands as original value	F
15	Missing response	Missing response	Missing response	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 3:
H07012, H07013

N3	H07012 is:	H07013 is:	H07012 is coded as:	H07013 is coded as:	*
1	1: yes	1, 2, 3, or missing response	Stands as original value	Stands as original value	
2	1: yes or missing response	-6: didn't need to see a specialist	2: No	.C question should be skipped	B F
3	2: no or missing response	1, 2, 3	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't need to see a specialist	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 4:
H07014, H07015

N4	H07014 is:	H07015 is:	H07014 is coded as:	H07015 is coded as:	*
1	1: yes	0-10, or missing response	Stands as original value	Stands as original value	
2	1: yes or missing response	-6: didn't need to see a specialist	2: No	.C question should be skipped	B F
3	2: no or missing response	0-10	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't need to see a specialist	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 5:
H07016, H07017

N5	H07016 is:	H07017 is:	H07016 is coded as:	H07017 is coded as:	*
1	1: yes	1-4: how often, or missing response	Stands as original value	Stands as original value	
2	1: yes or missing response	-6: no calls	2: no	.C, question should be skipped	B F
3	2: no or missing response	1-4: how often	1: yes	Stands as original value	B
4	2: no	-6: no calls or missing	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 6:
H07018, H07019, H07020

N6	H07018 is:	H07019-H07020 are:	H07018 is coded as:	H07019-H07020 are coded as:	*
1	1: yes	"All are blank"	Stands as original value	Stand as original value otherwise	
2	1:yes or missing response	"Blank or NA"	2: no	.N, valid skip if missing, .C, question should be skipped if marked	B F
3	1: yes	"One marked, and one NA"	Stands as original value	., missing if -6, stands as original value otherwise	F
4	1: yes	At least one is "marked"	Stands as original value	Stands as original value	
5	2: no	"One marked, and one NA"	Stands as original value	.C, question should be skipped if marked	F
6	2: no or missing response	At least one is "marked"	1: yes	., missing if -6, stands as original value otherwise	B F
7	2: no	"All are blank" or "Blank or NA"	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
8	Missing response	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 6:
Responses to H07019-H07020 are all missing.

Definition of "Blank or NA" in Coding Table for Note 6:
All of the following are true: H07019-H07020 are a combination of not applicable (-6) or missing.

Definition of "One marked and one NA" in Coding Table for Note 6:
H07019-H07020 have one response marked not applicable (-6) and one marked response (other than not applicable).

Definition of "marked" in Coding Table for Note 6:
Any pattern of marks outside the definitions "all are blank", "One marked and one NA", and "Blank or NA."

Coding Table for Note 7:
H07021, H07022, H07023

N7	H07021 is:	H07022-H07023 are:	H07021 is coded as:	H07022-H07023 are coded as:	*
1	1: yes	"All are blank"	Stands as original value	Stands as original value otherwise	
2	1:yes or missing response	"Blank or NA"	2: no	.N, valid skip if missing, .C, question should be skipped if marked	B F
3	1: yes	"One marked and one NA"	Stands as original value	., missing if -6, stands as original value otherwise	F
4	1: yes	At least one is "marked"	Stands as original value	Stands as original value	
5	2: no	"One marked and one NA"	Stands as original value	.C, question should be skipped if marked	F
6	2: no or missing response	At least one is "marked"	1: yes	., missing if -6, stands as original value otherwise	B F
7	2: no	"All are blank" or "Blank or NA"	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
8	Missing response	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 7:
Responses to H07022-H07023 are all missing.

Definition of "Blank or NA" in Coding Table for Note 7:
All of the following are true: H07022-H07023 are a combination of not applicable (-6) or missing.

Definition of "One marked and one NA" in Coding Table for Note 7:
H07022-H07023 have one response marked not applicable (-6) and one marked response (other than not applicable).

Definition of "marked" in Coding Table for Note 7:
Any pattern of marks outside the definitions "all are blank", "One marked and one NA", and "Blank or NA."

Coding Table for Note 8:
H07025, H07026-H07037

N8	H07025 is:	H07026-H07037 are:	H07025 is coded as:	H07026-H07037 are coded as:	*
1	1: None	At least one is "marked", "all are blank", or "blank or NA"	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
2	2-7, or missing response	"Blank or NA"	1: None	.N, valid skip if missing; .C, question should be skipped if marked	B F
3	2-7	At least one is "marked" or "all are blank"	Stands as original value	., missing if -6, stands as original value otherwise	F
4	Missing response	"All are blank"	Stands as original value	Stand as original value	
5	Missing response	At least one is "marked"	Stands as original value	., missing if -6, stands as original value otherwise	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 8:
Responses to H07026-H07037 are all missing.

Definition of "blank or NA" in Coding Table for Note 8:
All of the following are true: H07026-H07037 are a combination of not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 8:
Any pattern of marks outside the definitions "all are blank" and "Blank or NA."

Coding Table for Note 9:
H07026, H07027

N9	H07026 is:	H07027 is:	H07026 is coded as:	H07027 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	1: yes	1-3: how much of a problem, missing response	Stands as original value	Stands as original value	
3	1: yes, missing response	-6: No visits	2: no	.C, question should be skipped	B F
4	2: no, missing response	1-3: how much of a problem	1: yes	Stands as original value	B
5	2: no	-6: No visits or missing response	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 10:
H07028, H07029

N10	H07028 is:	H07029 is:	H07028 is coded as:	H07029 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	1: yes	1-3: how much of a problem, missing response	Stands as original value	Stands as original value	
3	1: yes, missing response	-6: No visits	2: no	.C, question should be skipped	B F
4	2: no, missing response	1-3: how much of a problem	1: yes	Stands as original value	B
5	2: no	-6: No visits or missing	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 10A1:
S07B02, S07B03, S07B04

N10A1	S07B02 is:	S07B03 & S07B04 are:	S07B02 is coded as:	S07B03 & S07B04 are coded as:	*
1	1: yes	At least one is "marked" or "all are blank"	Stands as original value	Stand as original value	
2	2: no or missing response	At least one is "marked"	1: yes	Stand as original value	B
3	2: no	"All are blank"	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
4	Missing response	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 10A1:
Responses to S07B03 and S07B04 are both missing.

Definition of "marked" in Coding Table for Note 10A1:
Any pattern of marks outside the definitions "all are blank"

Coding Table for Note 11:
H07039, H07040-H07041

N11	H07039 is:	H07040-H07041 are:	H07039 is coded as:	H07040-H07041 are coded as:	*
1	1: yes	At least one is "marked", "all are blank" or "blank or don't know"	Stands as original value	., missing if -6, stand as original value otherwise	F
2	1: yes, -5: don't know, missing	"Blank or NA"	2: no	.N, valid skip if missing; .C, question should be skipped if marked	B F
3	2: no, -5: don't know, missing	At least one is "marked" or "blank or don't know"	1: yes	., missing if -6, stand as original value otherwise	B F
4	2: no	"Blank or NA" or "all are blank"	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	-5: don't know	"All are blank"	Stands as original value	.N, valid skip if missing	F
6	Missing response	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 11:
Responses to H07040-H07041 are all missing.

Definition of "blank or NA" in Coding Table for Note 11:
Responses to H07040-H07041 are either all not applicable (-6) or a combination of missing and not applicable (-6).

Definition of "blank or don't know" in Coding Table for Note 11:
Responses to H07040-H07041 are either all don't know (-5) or a combination of missing and don't know (-5).

Definition of "marked" in Coding Table for Note 11:
Any pattern of marks outside the definitions "all are blank," "blank or NA," or "blank or don't know."

Table for Note 12:
H07042, H07043

N12	H07042 is:	H07043 is:	H07042 is coded as:	H07043 is coded as:	*
1	1: yes	1, 2, 3: how much of a problem, missing response	Stands as original value	Stands as original value	
2	1: yes, or missing response	-6: didn't look for information in health plan	2: no	.C question should be skipped	B F
3	2: no, or missing response	1, 2, 3: how much of a problem	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't look for information in health plan	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 13:
H07044, H07045

N13	H07044 is:	H07045 is:	H07044 is coded as:	H07045 is coded as:	*
1	1: yes	1-3: how much of a problem, missing response	Stands as original value	Stands as original value	
2	1: yes, missing response	-6: didn't call health plan	2: no	.C question should be skipped	B F
3	2: no, missing response	1-3: how much of a problem	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't call health plan	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 14:
H07046, H07047

N14	H07046 is:	H07047 is:	H07046 is coded as:	H07047 is coded as:	*
1	1: yes	1-3: how much of a problem, missing response	Stands as original value	Stands as original value	
2	1: yes or missing response	-6: didn't have any experience	2: no	.C question should be skipped	B F
3	2: no or missing response	1-3: how much of a problem	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't have any experience	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 15B1:
S07Q01, S07Q02

N15B1	S07Q01 is:	S07Q02 is:	S07Q01 is coded as:	S07Q02 is coded as:	*
1	1: yes	1-4: time since last blood stool test, missing response, or -5: don't know	Stands as original value	Stands as original value	
2	1: yes, or missing response	-6: never had a blood stool	2: No	.C question should be skipped	B F
3	2: no, -5: don't know, or missing response	1-4: time since last blood stool test	1: yes	Stands as original value	B
4	2: no, -5: don't know	Missing, –6: never had a blood stool, or -5: don't know	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response, or -5: don't know	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 15B2:
S07Q03, S07Q04-S07Q05

N15B2	S07Q03 is:	S07Q04-S07Q05 are:	S07Q03 is coded as:	S07Q04-S07Q05 are coded as:	*
1	1: yes	At least one is "marked", "all are blank" or "blank or don't know"	Stands as original value	Stand as original value	F
2	1: yes, -5: don't know, missing	"Blank or NA"	2: no	.N, valid skip if missing; .C, question should be skipped if marked	B F
3	2: no, -5: don't know, missing	At least one is "marked" or "blank or don't know"	1: yes	Stand as original value	B F
4	2: no	"Blank or NA" or "all are blank"	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	-5: don't know	"All are blank"	Stands as original value	.N, valid skip if missing	F
6	Missing response	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 15B2:
Responses to S07Q04-S07Q05 are all missing.

Definition of "blank or NA" in Coding Table for Note 15B2:
Responses to S07Q04-S07Q05 are either all not applicable (-6) or a combination of missing and not applicable (-6).

Definition of "blank or don't know" in Coding Table for Note 15B2:
Responses to S07Q04-S07Q05 are either all don't know (-5) or a combination of missing and don't know (-5).

Definition of "marked" in Coding Table for Note 15B2:
Any pattern of marks outside the definitions "all are blank," "blank or NA," or "blank or don't know."

Coding Table for Note 16:
H07052--H07057

N16	H07052 is:	H07053 is:	H07054 is:	H07055 is:	H07056-H07057 are:	H07052 is coded as:	H07053 is coded as:	H07054 is coded as:	H07055 is coded as:	H07056-H07057 are coded as:	*
1	1: ever smoked	3 or 4: still smoke	Any value	Any value	Any value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F
2	1: ever smoked	2: quit	2: quit >1 year ago or –5: don't know	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F
3	1: ever smoked	2: quit	3: quit <1 year ago, missing response	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F
4	1: ever smoked	-5: don't know, missing response	2: quit >1 year ago	Any value	Any value	Stands as original value	2: quit	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F B
5	1: ever smoked	-5: don't know, missing response	3: quit <1 year ago	Any value	Any value	Stands as original value	2: quit	Stands as original value	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F B

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 16 continued:

N16	H07052 is:	H07053 is:	H07054 is:	H07055 is:	H07056-H07057 are:	H07052 is coded as:	H07053 is coded as:	H07054 is coded as:	H07055 is coded as:	H07056-H07057 are coded as:	*
6	1: ever smoked	-5:don't know	-5: don't know, missing response	Any value	Any value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F
7	1: ever smoked	Missing response	-5: don't know	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F
8	1: ever smoked	Missing response	Missing response	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F
9	2: never, -5: don't know, missing response	3 or 4: still smoke	Any value	Any value	Any value	1: ever smoked	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	B F
10	2: never or -5: don't know	2: quit, -5: don't know, or missing response	Any value	Any value	Any value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 16 continued:

N16	H07052 is:	H07053 is:	H07054 is:	H07055 is:	H07056-H07057 are:	H07052 is coded as:	H07053 is coded as:	H07054 is coded as:	H07055 is coded as:	H07056-H07057 are coded as:	*
11	Missing response	2: quit	Missing response	2-5: some visits	2-5: some visits	1: ever smoked	Stands as original value	3: quit <1 year ago	Stands as original value	Stand as original value	B
12	Missing response	2: quit, missing response	2: quit >1 year ago, -5: don't know	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F
13	Missing response	2: quit, missing response	3: quit <1 year ago, missing response	2-5: some visits	2-5: some visits	1: ever smoked	Stands as original value	Stands as original value	Stands as original value	Stand as original value	B
14	Missing response	2: quit, missing response	3: quit <1 year ago, missing response	1: none, -6: no visits, missing response	1: none, -6: no visits, missing response	Stands as original value	Stands as original value	Stands as original value	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F
15	Missing response	-5: don't know	Any value	Any value	Any value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 16A1:
H07055, H07056-H07057

N16A1	H07055 is:	H07056 Is:	H07057 is:	H07055 is coded as:	H07056 is coded as:	H07057 is coded as:	*
1	.N: No doctor visits	Any value	Any value	Stands as original value	.C, question should be skipped if marked; .N: No doctor visits, otherwise	.C, question should be skipped if marked; .N: No doctor visits, otherwise	F
2	1: None	.N: No doctor visits	.N: No doctor visits	Stands as original value	1: None	1: None	F
3	1: None	.N: No doctor visits	1-5, missing	Stands as original value	1: None	Stands as original value	F
4	1: None	1-5, missing	.N: No doctor visits	Stands as original value	Stands as original value	1: None	F
5	2-5: Visits, missing	.N: No doctor visits	.N: No doctor visits	Stands as original value	.:Missing	.:Missing	F
6	2-5: Visits, missing	.N: No doctor visits	1-5, missing	Stands as original value	.:Missing	Stands as original value	F
7	2-5: Visits, missing	1-5, missing	.N: No doctor visits	Stands as original value	Stands as original value	.:Missing	F
8	1-5: 0 or more visits	2-5: Visits	2-5: Visits	Stands as original value	H07055 if H07056 > H07055; Stand as original value otherwise	H07055 if H07057 > H07055; Stand as original value otherwise	F
9	1-5: 0 or more visits	2-5: Visits	Any value	Stands as original value	H07055 if H07056 > H07055; Stand as original value otherwise	Stands as original value	F
10	1-5: 0 or more visits	Any value	2-5: Visits	Stands as original value	Stands as original value	H07055 if H07056 > H07055; Stand as original value otherwise	F
11	Any value	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 17:

Note 17 (Part a)
H07058, SEX, XSEXA, H07059-H07065

N17A	H07058 is :	SEX is:	S07Q07 is:	H07059--H07065 are:	XSEXA is coded as:
1	Missing response	F	Marked	Any marked	2, female
2	Missing response	F	Missing response	All missing	2, female
3	Missing response	M	Marked	Any marked	1, male
4	Missing response	M	Missing response	All missing	1, male
14	Missing response	Any value	Marked	All missing	1, male
5	Missing response	Any value	Missing response	Any marked	2, female
15	Missing response	Z	Marked	Any marked	., missing value
6	Missing response	Z, missing	Missing response	All missing	., missing value
8	1, male	Any value	Any value	All missing	1, male
9	1, male	F	Missing response	Any marked	2, female
10	1, male	M, Z, or Missing	Any value	Any marked	1, male
16	1, male	F	Marked	Any marked	1, male
11	2, female	Any value	Any value	Any marked	2, female
12	2, female	M	Marked	All missing	1, male
13	2, female	F, Z, or missing	Marked	All missing	2, female
17	2, female	Any value	Missing response	All missing	2, female

SEX (PNSEXCD) is the gender from the DEERS file. This variable is not used to override questionnaire responses, but to clear up any omissions or discrepancies in the responses.

XSEXA is the recoded gender variable after taking into account the self-reported response (H07058), any responses to gender-specific questions, and the gender of the sample beneficiary from DEERS.

Note 17A1 (Part A1):
XSEXA, S07Q07

N17A1	XSEXA is:	S07Q07 is:	S07Q07 is coded as:	*
1	1: Male	Marked, missing	Stands as original value	
2	2: Female	Marked or multiple response	.C, question should be skipped	F
3	2: Female	Missing response	.N, valid skip	F
4	Missing	Any response	Missing value	F

* Indication of backward coding (B) or forward coding (F).

Note 17 (Part B):
XSEXA, H07059 - H07065

N17B	XSEXA is:	H07059--H07065 are:	H07059--H07065 are coded as:	*
1	1: Male	"All are blank"	.N, valid skip	F
2	1: Male	At least one is "marked"	.N, valid skip if missing; .C, question should be skipped if marked	F
3	2: Female	"All are blank" or at least one is "marked"	Stands as original value	
4	Missing	"All are blank" or at least one is "marked"	Missing value	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 17b:
All variables H07059--H07065 are missing.

Definition of "marked" in Coding Table for Note 17b:
Any pattern of marks outside the definition "all are blank."

Coding Table for Note 18
XSEXA, AGE, H07060, H07061

N18	XSEXA is:	AGE is:	H07060 is:	H07061 is:	H07060 is coded as:	H07061 is coded as:	*
1	1: Male	Any value	.C, question should be skipped, or .N, valid skip	C, question should be skipped, or .N, valid skip	Stands as original value	Stands as original value	
2	2: Female	Any value	2: 40 or over	Marked, missing response	Stands as original value	Stand as original value	
3	2: Female	Any value	1: under 40	Marked, missing response	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
4	2: Female	Any value	Missing	Marked	2: > 40	Stands as original value	B
5	2: Female	< 40	Missing	Missing	1: < 40	.N, valid skip	F B
6	2: Female	>=40	Missing	Missing	1: < 40	.N, valid skip	F B
7	2: Female	Missing	Missing	Missing	Stands as original value	Stands as original value	
8	Missing	Any value	Missing	Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

AGE (DAGEQY) is from the DEERS file. This variable is not used to override questionnaire responses, but to clear up any omissions or discrepancies in the responses.

Coding Table for Note 19:
XSEXA, H07063, H07064, H07065

N19	XSEXA is:	H07063 is:	H07064 is:	H07065 is:	H07063 is coded as:	H07064 is coded as:	H07065 is coded as:	*
1	1: Male	Any value	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	
2	2: Female	1: pregnant now	1: first trimester	Any value	Stands as original value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
3	2: Female	1: pregnant now	2: second trimester	2: third trimester	Stands as original value	Stands as original value	.: missing value	F
4	2: Female	1: pregnant now	2: second trimester	4: first trimester, 3: second trimester, 1: Did not receive prenatal care, or missing	Stands as original value	Stands as original value	Stands as original value	
5	2: Female	1: pregnant now	3: third trimester, missing response	Any value	Stands as original value	Stands as original value	Stands as original value	
6	2: Female	2: pregnant in last 12 months	Any value	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	Stands as original value	F
7	2: Female	3: not pregnant in past 12 months	Any value	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	F
8	2: Female	Missing response	1: first trimester	Any value	1: pregnant now	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	B F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 19 continued:

N19	XSEXA is:	H07063 is:	H07064 is:	H07065 is:	H07063 is coded as:	H07064 is coded as:	H07065 is coded as:	*
9	2: Female	Missing response	2: second trimester	2: third trimester	1: pregnant now	Stands as original value	.: missing value	B F
10	2: Female	Missing response	2: second trimester	4: first trimester, 3: second trimester, 1: Did not receive prenatal care	1: pregnant now	Stands as original value	Stands as original value	B
11	2: Female	Missing response	3: third trimester, missing response	Any value	1: pregnant now	Stands as original value	Stands as original value	B
12	2: Female	Missing response	Missing response	Any value	Stands as original value	Stands as original value	Stands as original value	F
13	Missing	Missing response	Marked, missing response	Any value	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

BASIC SAS AND ASCII/EBCDIC MISSING DATA AND NOT APPLICABLE CODES

SAS	ASCII/EBCDIC	
Numeric	Numeric	Description
.	-9	No response
.O	-7	Out of range error
.N	-6	Not Applicable or valid skip
.D	-5	Scalable response of "Don't know" or "not sure"
.I	-4	Incomplete grid error
.C	-1	Question should have been skipped.

Missing values '.' and incomplete grids '.I' are encoded prior to implementation of the Coding Scheme Notes (see below).

Coding Table for Note 1:
H07006, H07007

N1	H07006 is:	H07007 is:	H07006 is coded as:	H07007 is coded as:	*
1	1-13, health plan, -5, not sure	Marked or missing response	Stands as original value	Stands as original value	
2	-6, no usage in past 12 months	Marked response	Stands as original value	.C, question should be skipped	F
3	-6, no usage in past 12 months	Missing response	Stands as original value	.N, valid skip	F
4	Missing response	Marked or missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 2:
H07008, H07009, H07010, H07011

N2	H07008 is:	H07009 is:	H07010 is:	H07011 is:	H07008 is coded as:	H07009 is coded as:	H07010 is coded as:	H07011 is coded as:	*
1	1: yes or missing response	-6: Don't have a personal Dr	Any value	Any value	2: no	.C, question should be skipped	.N, valid skip if missing; .C, question should be skipped, if marked	Stands as original value	B F
2	1: yes	0-10 or missing response	1: yes	1-3	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped	F
3	1: yes	0-10 or missing response	Missing response	1-3	Stands as original value	Stands as original value	2: no	Stands as original value	B
4	1: yes	0-10 or missing response	1: yes	Missing response	Stands as original value	Stands as original value	Stands as original value	.N, valid skip if missing	F
5	1: yes	0-10 or missing response	2: no	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	
6	1: yes	0-10 or missing response	Missing response	Missing response	Stands as original value	Stands as original value	Stands as original value	Stands as original value	
7	2: no or missing response	0-10	1: yes	1-3	1: yes	Stands as original value	Stands as original value	.C, question should be skipped	B F
8	2: no or missing response	0-10	Missing response	1-3	1: yes	Stands as original value	Stands as original value	Stands as original value	B
9	2: no or missing response	0-10	Missing response	Missing response	1: yes	Stands as original value	Stands as original value	Stands as original value	B
10	2: no	Missing response	1: yes	1-3	Stands as original value	.N, valid skip if missing	.C, question should be skipped	Stands as original value	F
11	2: no	-6: Don't have a personal Dr	Any value	Any value	Stands as original value	.C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	Stands as original value	B F

Coding Table for Note 2 continued:

N2	H07008 is:	H07009 is:	H07010 is:	H07011 is:	H07008 is coded as:	H07009 is coded as:	H07010 is coded as:	H07011 is coded as:	*
12	2: no or missing response	0-10 or missing	1: yes	Missing	1: yes	Stands as original value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	B F
13	2: no or missing response	0-10 or missing	2: no	Any value	1: yes	Stands as original value	Stands as original value	Stands as original value	B
14	2: no	Missing response	Missing response	Any value	Stands as original value	.N, valid skip if missing	.N, valid skip	Stands as original value	F
15	Missing response	Missing response	Missing response	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 3:
H07012, H07013

N3	H07012 is:	H07013 is:	H07012 is coded as:	H07013 is coded as:	*
1	1: yes	1, 2, 3, or missing response	Stands as original value	Stands as original value	
2	1: yes or missing response	-6: didn't need to see a specialist	2: No	.C question should be skipped	B F
3	2: no or missing response	1, 2, 3	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't need to see a specialist	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 4:
H07014, H07015

N4	H07014 is:	H07015 is:	H07014 is coded as:	H07015 is coded as:	*
1	1: yes	0-10, or missing response	Stands as original value	Stands as original value	
2	1: yes or missing response	-6: didn't need to see a specialist	2: No	.C question should be skipped	B F
3	2: no or missing response	0-10	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't need to see a specialist	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 5:
H07016, H07017

N5	H07016 is:	H07017 is:	H07016 is coded as:	H07017 is coded as:	*
1	1: yes	1-4: how often, or missing response	Stands as original value	Stands as original value	
2	1: yes or missing response	-6: no calls	2: no	.C, question should be skipped	B F
3	2: no or missing response	1-4: how often	1: yes	Stands as original value	B
4	2: no	-6: no calls or missing	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 6:
H07018, H07019, H07020

N6	H07018 is:	H07019-H07020 are:	H07018 is coded as:	H07019-H07020 are coded as:	*
1	1: yes	"All are blank"	Stands as original value	Stand as original value otherwise	
2	1:yes or missing response	"Blank or NA"	2: no	.N, valid skip if missing, .C, question should be skipped if marked	B F
3	1: yes	"One marked, and one NA"	Stands as original value	., missing if -6, stands as original value otherwise	F
4	1: yes	At least one is "marked"	Stands as original value	Stand as original value	
5	2: no	"One marked, and one NA"	Stands as original value	.C, question should be skipped if marked	F
6	2: no or missing response	At least one is "marked"	1: yes	., missing if -6, stands as original value otherwise	B F
7	2: no	"All are blank" or "Blank or NA"	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
8	Missing response	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 6:
Responses to H07019-H07020 are all missing.

Definition of "Blank or NA" in Coding Table for Note 6:
All of the following are true: H07019-H07020 are a combination of not applicable (-6) or missing.

Definition of "One marked and one NA" in Coding Table for Note 6:
H07019-H07020 have one response marked not applicable (-6) and one marked response (other than not applicable).

Definition of "marked" in Coding Table for Note 6:
Any pattern of marks outside the definitions "all are blank", "One marked and one NA", and "Blank or NA."

Coding Table for Note 7:
H07021, H07022, H07023

N7	H07021 is:	H07022-H07023 are:	H07021 is coded as:	H07022-H07023 are coded as:	*
1	1: yes	"All are blank"	Stands as original value	Stand as original value otherwise	
2	1:yes or missing response	"Blank or NA"	2: no	.N, valid skip if missing, .C, question should be skipped if marked	B F
3	1: yes	"One marked and one NA"	Stands as original value	., missing if -6, stand as original value otherwise	F
4	1: yes	At least one is "marked"	Stands as original value	Stand as original value	
5	2: no	"One marked and one NA"	Stands as original value	.C, question should be skipped if marked	F
6	2: no or missing response	At least one is "marked"	1: yes	., missing if -6, stand as original value otherwise	B F
7	2: no	"All are blank" or "Blank or NA"	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
8	Missing response	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 7:
Responses to H07022-H07023 are all missing.

Definition of "Blank or NA" in Coding Table for Note 7:
All of the following are true: H07022-H07023 are a combination of not applicable (-6) or missing.

Definition of "One marked and one NA" in Coding Table for Note 7:
H07022-H07023 have one response marked not applicable (-6) and one marked response (other than not applicable).

Definition of "marked" in Coding Table for Note 7:
Any pattern of marks outside the definitions "all are blank", "One marked and one NA", and "Blank or NA."

Coding Table for Note 8:
H07025, H07026-H07037

N8	H07025 is:	H07026-H07037 are:	H07025 is coded as:	H07026-H07037 are coded as:	*
1	1: None	At least one is "marked", "all are blank", or "blank or NA"	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
2	2-7, or missing response	"Blank or NA"	1: None	.N, valid skip if missing; .C, question should be skipped if marked	B F
3	2-7	At least one is "marked" or "all are blank"	Stands as original value	., missing if -6, stand as original value otherwise	F
4	Missing response	"All are blank"	Stands as original value	Stand as original value	
5	Missing response	At least one is "marked"	Stands as original value	., missing if -6, stand as original value otherwise	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 8:
Responses to H07026-H07037 are all missing.

Definition of "blank or NA" in Coding Table for Note 8:
All of the following are true: H07026-H07037 are a combination of not applicable (-6) or missing.

Definition of "marked" in Coding Table for Note 8:
Any pattern of marks outside the definitions "all are blank" and "Blank or NA."

Coding Table for Note 9:
H07026, H07027

N9	H07026 is:	H07027 is:	H07026 is coded as:	H07027 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	1: yes	1-3: how much of a problem, missing response	Stands as original value	Stands as original value	
3	1: yes, missing response	-6: No visits	2: no	.C, question should be skipped	B F
4	2: no, missing response	1-3: how much of a problem	1: yes	Stands as original value	B
5	2: no	-6: No visits or missing response	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 10:
H07028, H07029

N10	H07028 is:	H07029 is:	H07028 is coded as:	H07029 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	1: yes	1-3: how much of a problem, missing response	Stands as original value	Stands as original value	
3	1: yes, missing response	-6: No visits	2: no	.C, question should be skipped	B F
4	2: no, missing response	1-3: how much of a problem	1: yes	Stands as original value	B
5	2: no	-6: No visits or missing	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
6	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 10B1:
S07V01, S07V02, S07V05-S07V18G

N10B1	S07V01 is:	S07V02, S07V05-S07V18G are:	S07V01 is coded as:	S07V02, S07V05-S07V18G are coded as:	*
1	1,2,3,4: some or no healthcare	"All are blank" or at least one is "marked"	Stands as original value	Stand as original value	
2	1,2,3: at least some healthcare or missing response	"Blank or NA"	-6: didn't need healthcare in past 12 months	.N, valid skip if missing; .C, question should be skipped if marked	B F
3	4: no healthcare	"Blank or NA"	Stands as original value	Stand as original value	
4	-6: didn't need healthcare in past 12 months	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	Missing response	Any value	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 10B1:
S07V02, S07V05-S07V18G are all missing or unmarked.

Definition of "blank or NA" in Coding Table for Note 10B1:
S07V02, S07V05-S07V18G are either not applicable (-6), or a combination of not applicable (-6) and missing or unmarked.

Definition of "marked" in Coding Table for Note 10B1:
Any pattern of marks outside the definitions "all are blank" or "blank or NA."

Coding Table for Note 10B2:
S07V06, S07V11A-S07V11H

N10B2	S07V06 is:	S07V11A-S07V11H are:	S07V06 is coded as:	S07V11A-S07V11H are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stand as original value	
2	3: no problem, -6: didn't try to find Dr	Any value	Stands as original value	.N, valid skip if unmarked, .C, question should be skipped if marked	F
3	1-2: problem	Any value	Stands as original value	Stand as original value	
4	Missing response	At least one is "Marked"	Stands as original value	Stand as original value	
5	Missing response	"All are blank"	Stands as original value	.,if "Not marked"	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 10B2:
Responses to S07V11A-S07V11H are all unmarked.

Definition of "marked" in Coding Table for Note 10B2:
Any pattern of marks outside the definitions "all are blank."

Coding Table for Note 10B3:
S07V07, S07V12A-S07V12G

N10B3	S07V07 is:	S07V12A-S07V12G are:	S07V06 is coded as:	S07V12A-S07V12G are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stand as original value	
2	3: no problem, -6: didn't try to find Dr	Any value	Stands as original value	.N, valid skip if unmarked, .C, question should be skipped if marked	F
3	1-2: problem	Any value	Stands as original value	Stand as original value	
4	Missing response	At least one is "Marked"	Stands as original value	Stand as original value	
5	Missing response	"All are blank"	Stands as original value	.,if "Not marked"	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 10B3:
Responses to S07V12A-S07V12H are all unmarked.

Definition of "marked" in Coding Table for Note 10B3:
Any pattern of marks outside the definitions "all are blank."

Coding Table for Note 10B4:
S07V08, S07V09-S07V10, S07V13-S07V18G

N10B4	S07V08 is:	S07V08, S07V09-S07V10, S07V13-S07V18G are:	S07V08 is coded as:	S07V08, S07V09-S07V10, S07V13-S07V18G are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stand as original value	
2	1: yes, -5: don't know, missing response	Any value	Stands as original value	Stand as original value	
3	2: no	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 10B5:
S07V13, S07V14A-S07V14H

N10B5	S07V13 is:	S07V14A-S07V14H are:	S07V06 is coded as:	S07V14A-S07V14H are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stand as original value	
2	3: no problem, -6: didn't try to find Dr	Any value	Stands as original value	.N, valid skip if unmarked, .C, question should be skipped if marked	F
3	1-2: problem	Any value	Stands as original value	Stand as original value	
4	Missing response	At least one is "Marked"	Stands as original value	Stand as original value	
5	Missing response	"All are blank"	Stands as original value	.,if "Not marked"	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 10B5:
Responses to S07V14A-S07V14H are all unmarked.

Definition of "marked" in Coding Table for Note 10B5:
Any pattern of marks outside the definitions "all are blank."

Coding Table for Note 10B6:
S07V15, S07V16, S07V17, S07V18A-S07V18G

N10B6	S07V15 is:	S07V16, S07V17, S07V18A-S07V18G are:	S07V15 is coded as:	S07V16, S07V17, S07V18A-S07V18G are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stand as original value	
2	1: yes	Any value	Stands as original value	Stand as original value	
3	2: no, -5: Don't know	Any value	Stands as original value	.N, valid skip if unmarked, .C, question should be skipped if marked	F
4	Missing response	At least one is "Marked"	1: yes	Stand as original value	B
5	Missing response	"All are blank"	Stands as original value	., if "Not marked"	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 10B6:
Responses to S07V16, S07V17, S07V18A-S07V18G are all missing or unmarked.

Definition of "marked" in Coding Table for Note 10B6:
Any pattern of marks outside the definitions "all are blank."

Coding Table for Note 10B7:
S07V17, S07V18A-S07V18G

N10B7	S07V17 is:	S07V18A-S07V18G are:	S07V17 is coded as:	S07V18A-S07V18G are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	3: no problem	Any value	Stands as original value	.N, valid skip if unmarked, .C, question should be skipped if marked	F
3	1-2: problem	Any value	Stands as original value	Stands as original value	
4	Missing response	At least one is "Marked"	Stands as original value	Stand as original value	
5	Missing response	"All are blank"	Stands as original value	., if "Not marked"	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 10B7:
Responses to S07V18A-S07V18G are all unmarked.

Definition of "marked" in Coding Table for Note 10B7:
Any pattern of marks outside the definitions "all are blank."

Coding Table for Note 10C1:
S07Y01, S07Y36A-S07Y36I S07Y35 S07Y37A-S07Y37N S07Y22 S07Y23 S07Y24

N10C1	S07Y01 is:	S07Y36A-S07Y36I S07Y35 S07Y37A-S07Y37N S07Y22 S07Y23 S07Y24 are:	S07Y01 is coded as:	S07Y36A-S07Y36I S07Y35 S07Y37A-S07Y37N S07Y22 S07Y23 S07Y24 are coded as:	*
1	2: No	Any value	Stands as original value	.N, valid skip if missing/unmarked, .C, question should be skipped if marked	F
2	1: Yes, or missing response	"Blank or NA"	2: No	.N, valid skip if missing/unmarked; .C, question should be skipped if marked	B F
3	1: Yes	At least one is "marked" or "All are blank"	Stands as original value	Stands as original value	
4	Missing response	At least one is "marked"	Stands as original value	Stand as original value	
5	Missing response	"All are blank"	Stands as original value	. if "Not marked"	F

* Indication of backward coding (B) or forward coding (F).

Definition of "All are blank" in Coding Table for Note 10C1:
Responses to S07Y36A-S07Y36I S07Y35 S07Y37A-S07Y37N S07Y22 S07Y23 S07Y24 are all missing/unmarked.

Definition of "Blank or NA" in Coding Table for Note 10C1:
All of the following are true: S07Y36A-S07Y36I S07Y35 S07Y37A-S07Y37N S07Y22 S07Y23 S07Y24 are a combination of not applicable (-6) or missing/unmarked.

Definition of "marked" in Coding Table for Note 10C1:
Any pattern of marks outside the definitions "All are missing/unmarked" and "Blank or NA."

Coding Table for Note 10C2:
S07Y35, S07Y37A-S07Y37N, S07Y22-S07Y24

N10C2	S07Y35 is:	S07Y37A-S07Y37N are:	S07Y22 is:	S07Y23-S07Y24 are:	S07Y35 is coded as:	S07Y37A-S07Y37N are coded as:	S07Y22- is coded as:	S07Y23-S07Y24 are coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stand as original value	Stand as original value	Stand as original value	
2	2: No	Any value	Any value	Any value	Stands as original value	Stand as original value	.N, valid skip if missing, .C, question should be skipped if marked	.N, valid skip if missing, .C, question should be skipped if marked	F
3	1: Yes	Any value	Any value	Any value	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	., missing if -6, stand as original value otherwise	Stand as original value	F
4	Missing response	Any value	Any value	Any value	Stands as original value	Stand as original value	., missing if -6, stand as original value otherwise	., missing if -6, stand as original value otherwise	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 10C3:
S07Y23, S07Y24

N10C3	S07Y23 is:	S07Y24 is:	S07Y23 is coded as:	S07Y24 is coded as:	*
1	.N, valid skip, or .C, question should be skipped	.N, valid skip, or .C, question should be skipped	Stands as original value	Stands as original value	
2	1: yes	1, 2, 3, or missing response	Stands as original value	Stands as original value	
3	1: yes, or missing response	-6: didn't try to use the Express Scripts website	2: No	.C question should be skipped	B F
4	2: no or missing response	1, 2, 3	1: yes	Stands as original value	B
5	2: no	Missing, or –6: didn't try to use the Express Scripts website	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
6	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 11:
H07039, H07040-H07041

N11	H07039 is:	H07040-H07041 are:	H07039 is coded as:	H07040-H07041 are coded as:	*
1	1: yes	At least one is "marked", "all are blank" or "blank or don't know"	Stands as original value	., missing if -6, stand as original value otherwise	F
2	1: yes, -5: don't know, missing	"Blank or NA"	2: no	.N, valid skip if missing; .C, question should be skipped if marked	B F
3	2: no, -5: don't know, missing	At least one is "marked" or "blank or don't know"	1: yes	., missing if -6, stand as original value otherwise	B F
4	2: no	"Blank or NA" or "all are blank"	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
5	-5: don't know	"All are blank"	Stands as original value	.N, valid skip if missing	F
6	Missing response	"All are blank"	Stands as original value	Stand as original value	

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 11:
Responses to H07040-H07041 are all missing.

Definition of "blank or NA" in Coding Table for Note 11:
Responses to H07040-H07041 are either all not applicable (-6) or a combination of missing and not applicable (-6).

Definition of "blank or don't know" in Coding Table for Note 11:
Responses to H07040-H07041 are either all don't know (-5) or a combination of missing and don't know (-5).

Definition of "marked" in Coding Table for Note 11:
Any pattern of marks outside the definitions "all are blank," "blank or NA," or "blank or don't know."

Table for Note 12:
H07042, H07043

N12	H07042 is:	H07043 is:	H07042 is coded as:	H07043 is coded as:	*
1	1: yes	1, 2, 3: how much of a problem, missing response	Stands as original value	Stands as original value	
2	1: yes, or missing response	-6: didn't look for information in health plan	2: no	.C question should be skipped	B F
3	2: no, or missing response	1, 2, 3: how much of a problem	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't look for information in health plan	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 13:
H07044, H07045

N13	H07044 is:	H07045 is:	H07044 is coded as:	H07045 is coded as:	*
1	1: yes	1-3: how much of a problem, missing response	Stands as original value	Stands as original value	
2	1: yes, missing response	-6: didn't call health plan	2: no	.C question should be skipped	B F
3	2: no, missing response	1-3: how much of a problem	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't call health plan	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 14:
H07046, H07047

N14	H07046 is:	H07047 is:	H07046 is coded as:	H07047 is coded as:	*
1	1: yes	1-3: how much of a problem, missing response	Stands as original value	Stands as original value	
2	1: yes or missing response	-6: didn't have any experience	2: no	.C question should be skipped	B F
3	2: no or missing response	1-3: how much of a problem	1: yes	Stands as original value	B
4	2: no	Missing, or –6: didn't have any experience	Stands as original value	.N, valid skip if missing, .C, question should be skipped if marked	F
5	Missing response	Missing response	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 16:
H07052--H07057

N16	H07052 is:	H07053 is:	H07054 is:	H07055 is:	H07056-H07057 are:	H07052 is coded as:	H07053 is coded as:	H07054 is coded as:	H07055 is coded as:	H07056-H07057 are coded as:	*
1	1: ever smoked	3 or 4: still smoke	Any value	Any value	Any value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F
2	1: ever smoked	2: quit	2: quit >1 year ago or –5: don't know	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F
3	1: ever smoked	2: quit	3: quit <1 year ago, missing response	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F
4	1: ever smoked	-5: don't know, missing response	2: quit >1 year ago	Any value	Any value	Stands as original value	2: quit	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F B
5	1: ever smoked	-5: don't know, missing response	3: quit <1 year ago	Any value	Any value	Stands as original value	2: quit	Stands as original value	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F B

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 16 continued:

N16	H07052 is:	H07053 is:	H07054 is:	H07055 is:	H07056-H07057 are:	H07052 is coded as:	H07053 is coded as:	H07054 is coded as:	H07055 is coded as:	H07056-H07057 are coded as:	*
6	1: ever smoked	-5:don't know	-5: don't know, missing response	Any value	Any value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F
7	1: ever smoked	Missing response	-5: don't know	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F
8	1: ever smoked	Missing response	Missing response	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F
9	2: never, -5: don't know, missing response	3 or 4: still smoke	Any value	Any value	Any value	1: ever smoked	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	B F
10	2: never or -5: don't know	2: quit, -5: don't know, or missing response	Any value	Any value	Any value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 16 continued:

N16	H07052 is:	H07053 is:	H07054 is:	H07055 is:	H07056-H07057 are:	H07052 is coded as:	H07053 is coded as:	H07054 is coded as:	H07055 is coded as:	H07056-H07057 are coded as:	*
11	Missing response	2: quit	Missing response	2-5: some visits	2-5: some visits	1: ever smoked	Stands as original value	3: quit <1 year ago	Stands as original value	Stand as original value	B
12	Missing response	2: quit, missing response	2: quit >1 year ago, -5: don't know	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F
13	Missing response	2: quit, missing response	3: quit <1 year ago, missing response	2-5: some visits	2-5: some visits	1: ever smoked	Stands as original value	Stands as original value	Stands as original value	Stand as original value	B
14	Missing response	2: quit, missing response	3: quit <1 year ago, missing response	1: none, -6: no visits, missing response	1: none, -6: no visits, missing response	Stands as original value	Stands as original value	Stands as original value	Stands as original value	.N, if H07055=-6; Stand as original value otherwise	F
15	Missing response	-5: don't know	Any value	Any value	Any value	Stands as original value	Stands as original value	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	.C, question should be skipped if marked, .N, valid skip if missing	F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 16A1:
H07055, H07056-H07057

N16A1	H07055 is:	H07056 Is:	H07057 is:	H07055 is coded as:	H07056 is coded as:	H07057 is coded as:	*
1	.N: No doctor visits	Any value	Any value	Stands as original value	.C, question should be skipped if marked; .N: No doctor visits, otherwise	.C, question should be skipped if marked; .N: No doctor visits, otherwise	F
2	1: None	.N: No doctor visits	.N: No doctor visits	Stands as original value	1: None	1: None	F
3	1: None	.N: No doctor visits	1-5, missing	Stands as original value	1: None	Stands as original value	F
4	1: None	1-5, missing	.N: No doctor visits	Stands as original value	Stands as original value	1: None	F
5	2-5: Visits, missing	.N: No doctor visits	.N: No doctor visits	Stands as original value	.:Missing	.:Missing	F
6	2-5: Visits, missing	.N: No doctor visits	1-5, missing	Stands as original value	.:Missing	Stands as original value	F
7	2-5: Visits, missing	1-5, missing	.N: No doctor visits	Stands as original value	Stands as original value	.:Missing	F
8	1-5: 0 or more visits	2-5: Visits	2-5: Visits	Stands as original value	H07055 if H07056 > H07055; Stands as original value otherwise	H07055 if H07057 > H07055; Stands as original value otherwise	F
9	1-5: 0 or more visits	2-5: Visits	Any value	Stands as original value	H07055 if H07056 > H07055; Stand as original value otherwise	Stands as original value	F
10	1-5: 0 or more visits	Any value	2-5: Visits	Stands as original value	Stands as original value	H07055 if H07056 > H07055; Stands as original value otherwise	F
11	Any value	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 17:

Note 17 (Part a)
H07058, SEX, XSEXA, H07059-H07065

N17A	H07058 is :	SEX is:	H07059--H07065 are:	XSEXA is coded as:
1	Missing response	F	Any marked	2, female
2	Missing response	F	All missing	2, female
3	Missing response	M	Any marked	1, male
4	Missing response	M	All missing	1, male
5	Missing response	Z, missing	Any marked	2, female
6	Missing response	Z	All missing	., missing value
7	Missing response	Missing	All missing	., missing value
8	1, male	Any value	All missing	1, male
9	1, male	F	Any marked	2, female
10	1, male	M, Z, or missing	Any marked	1, male
11	2, female	Any value	Any marked	2, female
12	2, female	M	All missing	1, male
13	2, female	F, Z, or missing	All missing	2, female

SEX (PNSEXCD) is the gender from the DEERS file. This variable is not used to override questionnaire responses, but to clear up any omissions or discrepancies in the responses.

XSEXA is the recoded gender variable after taking into account the self-reported response (H07058), any responses to gender-specific questions, and the gender of the sample beneficiary from DEERS.

Note 17 (Part B):
XSEXA, H07059 - H07065

N17B	XSEXA is:	H07059--H07065 are:	H07059--H07065 are coded as:	*
1	1: Male	"All are blank"	.N, valid skip	F
2	1: Male	At least one is "marked"	.N, valid skip if missing; .C, question should be skipped if marked	F
3	2: Female	"All are blank" or at least one is "marked"	Stands as original value	
4	Missing	"All are blank" or at least one is "marked"	Missing value	F

* Indication of backward coding (B) or forward coding (F).

Definition of "all are blank" in Coding Table for Note 17b:
All variables H07059--H07065 are missing.

Definition of "marked" in Coding Table for Note 17b:
Any pattern of marks outside the definition "all are blank."

Coding Table for Note 18
XSEXA, AGE, H07060, H07061

N18	XSEXA is:	AGE is:	H07060 is:	H07061 is:	H07060 is coded as:	H07061 is coded as:	*
1	1: Male	Any value	.C, question should be skipped, or .N, valid skip	C, question should be skipped, or .N, valid skip	Stands as original value	Stands as original value	
2	2: Female	Any value	2: 40 or over	Marked, missing response	Stands as original value	Stands as original value	
3	2: Female	Any value	1: under 40	Marked, missing response	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
4	2: Female	Any value	Missing	Marked	2: > 40	Stands as original value	B
5	2: Female	< 40	Missing	Missing	1: < 40	.N, valid skip	F B
6	2: Female	>=40	Missing	Missing	1: < 40	.N, valid skip	F B
7	2: Female	Missing	Missing	Missing	Stands as original value	Stands as original value	
8	Missing	Any value	Missing	Missing	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

AGE (DAGEQY) is from the DEERS file. This variable is not used to override questionnaire responses, but to clear up any omissions or discrepancies in the responses.

Coding Table for Note 19:
XSEXA, H07063, H07064, H07065

N19	XSEXA is:	H07063 is:	H07064 is:	H07065 is:	H07063 is coded as:	H07064 is coded as:	H07065 is coded as:	*
1	1: Male	Any value	Any value	Any value	Stands as original value	Stands as original value	Stands as original value	
2	2: Female	1: pregnant now	1: first trimester	Any value	Stands as original value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	F
3	2: Female	1: pregnant now	2: second trimester	2: third trimester	Stands as original value	Stands as original value	.: missing value	F
4	2: Female	1: pregnant now	2: second trimester	4: first trimester, 3: second trimester, 1: Did not receive prenatal care, or missing	Stands as original value	Stands as original value	Stands as original value	
5	2: Female	1: pregnant now	3: third trimester, missing response	Any value	Stands as original value	Stands as original value	Stands as original value	
6	2: Female	2: pregnant in last 12 months	Any value	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	Stands as original value	F
7	2: Female	3: not pregnant in past 12 months	Any value	Any value	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	.N, valid skip if missing; .C, question should be skipped if marked	F
8	2: Female	Missing response	1: first trimester	Any value	1: pregnant now	Stands as original value	.N, valid skip if missing; .C, question should be skipped if marked	B F

* Indication of backward coding (B) or forward coding (F).

Coding Table for Note 19 continued:

N19	XSEXA is:	H07063 is:	H07064 is:	H07065 is:	H07063 is coded as:	H07064 is coded as:	H07065 is coded as:	*
9	2: Female	Missing response	2: second trimester	2: third trimester	1: pregnant now	Stands as original value	.: missing value	B F
10	2: Female	Missing response	2: second trimester	4: first trimester, 3: second trimester, 1: Did not receive prenatal care	1: pregnant now	Stands as original value	Stands as original value	B
11	2: Female	Missing response	3: third trimester, missing response	Any value	1: pregnant now	Stands as original value	Stands as original value	B
12	2: Female	Missing response	Missing response	Any value	Stands as original value	Stands as original value	Stands as original value	F
13	Missing	Missing response	Marked, missing response	Any value	Stands as original value	Stands as original value	Stands as original value	

* Indication of backward coding (B) or forward coding (F).

APPENDIX C

MAPPING THE MILITARY TREATMENT FACILITY (MTF) TO THE CATCHMENT AREA

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GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2007
0001	0001	FOX AHC-REDSTONE ARSENAL	761
0003	0003	LYSTER AHC-FT. RUCKER	994
0004	0004	42ND MEDICAL GROUP-MAXWELL	923
0005	0005	BASSETT ACH-FT. WAINWRIGHT	746
0005	0204	TMC FT. RICHARDSON	531
0006	0006	3rd MED GRP-ELMENDORF	1008
0008	0008	R W BLISS AHC-FT. HUACHUCA	990
0009	0009	56th MED GRP-LUKE	907
0010	0010	355th MED GRP-DAVIS MONTHAN	1012
0013	0013	314th MED GRP-LITTLE ROCK	1140
0014	0014	60th MED GRP-TRAVIS	957
0018	0018	30th MED GRP-VANDENBERG	1099
0019	0019	95th MED GRP-EDWARDS	1013
0024	0024	NH CAMP PENDLETON	1010
0024	0208	BMC MCB CAMP PENDLETON	43
0024	0209	BMC BARSTOW	2
0024	0210	BMC EDSON RANGE ANNEX	47
0024	0269	BMC YUMA	61
0024	1657	BMC CAMP DELMAR MCB	8
0024	1659	BMC SAN ONOFRE MCB	19
0024	6216	TRICARE OUTPATIENT-OCEANSIDE	48
0026	0026	NACC PORT HUENEME	1031
0028	0028	NH LEMOORE	1049
0028	0319	NBHC FALLON	146
0029	0029	NMC SAN DIEGO	917
0029	0230	NBHC MCRD SAN DIEGO	25
0029	0232	BMC MCAS MIRAMAR	98
0029	0233	NBHC CORONADO	22
0029	0239	NBHC EL CENTRO	9
0029	0409	SD E COUNTY PRIMARY CARE CLIN	10
0029	0414	BMA NALF SAN CLEMENTE	3
0029	0701	NBHC NAVSTA SAN DIEGO	97
0029	6207	TRICARE OUTPATIENT-CLAIREMONT	100
0030	0030	NH TWENTYNINE PALMS	1160
0030	0212	NBHC NAVWPNCEN CHINA LAKE	98
0032	0032	EVANS ACH-FT. CARSON	363
0032	7293	TMC 10-FT. CARSON	243
0032	7300	TMC 9-FT. CARSON	209
0032	7301	WARRIOR CLINIC-FT. CARSON	304
0033	0033	10th MED GROUP-USAF ACADEMY CO	920
0037	0037	WALTER REED AMC-WASHINGTON DC	612
0037	0256	DILORENZO TRICARE HEALTH CLIN	522
0037	7298	DILORENZO TRICARE HLTH CLN ARL	65
0038	0038	NH PENSACOLA	474
0038	0107	NBHC NSA MID-SOUTH	125
0038	0260	NBHC NAS PENSACOLA	89
0038	0261	NBHC MILTON WHITING FIELD	72
0038	0262	NBHC NATTC PENSACOLA	43
0038	0265	NBHC NAVCOASTSYSC PANAMA CITY	30
0038	0297	NACC NEW ORLEANS	34
0038	0316	NBHC GULFPORT	98
0038	0317	NBHC MERIDIAN	58
0038	0436	NBHC NAS BELLE CHASE	61
0038	0513	NBHC NTTC PENSACOLA	35
0038	0654	NBHC PASCAGOULA	20

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2007
0038	1990	BMC NAVSUPPACT EAST BANK	27
0039	0039	NH JACKSONVILLE	728
0039	0266	NBHC NAS JACKSONVILLE	114
0039	0275	NBHC ALBANY	26
0039	0276	NBHC ATHENS	23
0039	0277	NBHC MARIETTA	44
0039	0337	NACC KINGS BAY	173
0039	0517	NBHC KEY WEST	74
0042	0042	96th MED GRP-EGLIN	969
0043	0043	325th MED GRP-TYNDALL	999
0045	0045	6th MED GRP-MACDILL	948
0046	0046	45th MED GRP-PATRICK	801
0047	0047	EISENHOWER AMC-FT. GORDON	421
0047	0273	AHC FT. MCPHERSON	220
0047	1550	TMC-4-STOCKADE-FT. GORDON	180
0047	7197	CONNELLY HLTH CLINIC-FT.GORDON	125
0047	7239	SOUTHCOM CLINIC	58
0047	8924	RODRIGUEZ ARMY HEALTH CLINIC	43
0048	0048	MARTIN ACH-FT. BENNING	651
0048	1315	CTMC-FT. BENNING	64
0048	1316	WINDER FPC-FT. BENNING	195
0048	1551	TMC-1-FT. BENNING	163
0048	1552	TMC-2-FT. BENNING	42
0048	1555	TMC-5-FT. BENNING	11
0049	0049	WINN ACH-FT. STEWART	283
0049	0272	TUTTLE AHC-HUNTER ARMY AIRFLD	318
0049	1562	TMC-1-FT. STEWART	7
0049	1563	TMC-2-FT. STEWART	1
0049	1564	TMC-3-FT. STEWART	7
0049	7443	COMBINED HEALTH CLINIC	520
0049	7445	TMC-5-FT. STEWART	31
0051	0051	78th MED GRP-ROBINS	1009
0052	0052	TRIPLER AMC-FT SHAFTER	685
0052	0437	SCHOFIELD BARRACKS AHC	190
0052	0534	TMC-1-SCHOF 25th-SCHOFIELD BKS	383
0053	0053	366th MED GRP-MOUNTAIN HOME	1102
0055	0055	375th MED GRP-SCOTT	956
0056	0056	NHC GREAT LAKES	975
0056	1660	NBHC NCTC INPR GREAT LAKES	67
0056	1959	NBHC NTC GREAT LAKES	108
0057	0057	IRWIN ACH-FT. RILEY	397
0057	1539	AVIATION CLINIC-FT. RILEY	87
0057	7289	CTMC-FT. RILEY	638
0057	7337	CALDWELL CLINIC	78
0058	0058	MUNSON AHC-FT. LEAVENWORTH	849
0058	7297	RICHARDS-GEBAUR CL-KANSAS CITY	130
0060	0060	BLANCHFIELD ACH-FT. CAMPBELL	387
0060	1506	AVIATION MEDICINE CLINIC	187
0060	7307	LA POINTE HEALTH CLINIC	628
0061	0061	IRELAND ACH-FT. KNOX	875
0061	0290	ROCK ISLAND ARSENAL AHC	18
0061	0313	SELFRIDGE AHC-SELFRIDGE ANGB	46
0061	1237	TMC CONTRACT SPARTA-FT. MCCOY	240
0062	0062	2nd MED GRP-BARKSDALE	1078
0064	0064	BAYNE-JONES ACH-FT. POLK	1171

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2007
0066	0066	79th MED GRP-ANDREWS	962
0067	0067	NNMC BETHESDA	775
0067	0301	NBHC INDIAN HEAD	28
0067	0322	BMC COLTS NECK EARLE	21
0067	0347	BMC WILLOW GROVE	87
0067	0348	BMC MECHANICSBURG	12
0067	0386	NBHC DAHLGREN	37
0067	0401	BMC LAKEHURST	18
0067	0404	BMC SUGAR GROVE	4
0067	0522	NBHC ANDREWS AFB	57
0067	0703	NBHC WASHINGTON NAVY YARD	107
0068	0068	NHC PATUXENT RIVER	1059
0069	0069	KIMBROUGH AMB CAR CEN-FT MEADE	549
0069	0308	KIRK AHC-ABERDEEN PRVNG GD	158
0069	0309	BARQUIST ARMY HEALTH CLINIC	117
0069	0352	DUNHAM AHC-CARLISLE BARRACKS	189
0069	0545	OHC EDGEWOOD ARS	27
0073	0073	81st MED GRP-KEESLER	1024
0074	0074	14th MED GRP-COLUMBUS	1172
0075	0075	L. WOOD ACH-FT. LEONARD WOOD	1131
0076	0076	509th MED GRP-WHITEMAN	1059
0077	0077	341st MED GRP-MALMSTROM	1106
0078	0078	55th MED GRP-OFFUTT	982
0079	0079	99th MED GRP-O'CALLAGHAN HOSP	913
0083	0083	377th MED GRP-KIRTLAND	931
0086	0086	KELLER ACH-WEST POINT	638
0086	1815	MOLOGNE TMC	621
0089	0089	WOMACK AMC-FT. BRAGG	266
0089	7143	ROBINSON CLINIC-FT. BRAGG	382
0089	7286	JOEL CLINIC-FT. BRAGG	187
0089	7294	CLARK CLINIC-FT. BRAGG	395
0091	0091	NH CAMP LEJEUNE	1195
0091	0333	BMC MCAS NEW RIVER	32
0091	1662	BMC CAMP GEIGER MCB	9
0091	1663	BMC CAMP JOHNSON MCB	10
0091	1664	BMC COURTHOUSE BAY MCB	17
0091	1992	BMC BLDG 15 MCB CAMP LEJEUNE	33
0092	0092	NH CHERRY POINT	1148
0094	0094	5th MED GRP-MINOT	1189
0095	0095	88th MED GRP-WRIGHT-PATTERSON	870
0096	0096	72nd MED GRP-TINKER	1053
0098	0098	REYNOLDS ACH-FT. SILL	1181
0100	0035	NACC GROTON	289
0100	0100	NAVAL HLTH CLINIC NEW ENGLAND	318
0100	0299	NBHC NAS BRUNSWICK	130
0100	0321	NACC PORTSMOUTH	149
0100	0328	NBHC SARATOGA SPRINGS	142
0101	0101	20th MED GRP-SHAW	1092
0103	0103	NH CHARLESTON	331
0103	0511	NBHC WPNSTA CHARLESTON	902
0104	0104	NH BEAUFORT	1010
0104	0358	NBHC MCRD PARRIS ISLAND	170
0104	0360	NBHC MCAS BEAUFORT	58
0105	0105	MONCRIEF ACH-FT. JACKSON	1110
0108	0108	WILLIAM BEAUMONT AMC-FT. BLISS	264

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2007
0108	0327	AHC MCAFEE-WHITE SANDS MSL RAN	19
0108	1617	TMC MED EXAM-FT. BLISS	820
0109	0109	BROOKE AMC-FT. SAM HOUSTON	853
0110	0110	DARNALL AMC-FT. HOOD	155
0110	1592	MONROE CONSOLIDATED-FT. HOOD	258
0110	1597	TMC-10-FT. HOOD	50
0110	1599	TMC-12-FT. HOOD	55
0110	1601	TMC-14-FT. HOOD	100
0110	6014	CHARLES MOORE HLTH CLN-FT HOOD	293
0110	7236	BENNETT FAM CARE CLINIC-HOOD	379
0112	0112	7th MED GRP-DYESS	1131
0113	0113	82nd MED GRP-SHEPPARD	989
0117	0117	59th MED WING-LACKLAND	1024
0118	0118	NH CORPUS CHRISTI	581
0118	0369	NBHC KINGSVILLE	112
0118	0370	NBHC FORT WORTH	263
0118	0656	NBHC INGLESIDE	162
0119	0119	75th MED GRP-HILL	1021
0120	0120	1st MED GRP-LANGLEY	1114
0121	0121	MCDONALD AHC-FT. EUSTIS	835
0121	0372	MONROE AHC-FT. MONROE	118
0121	0464	AHC FT. STORY	52
0122	0122	KENNER AHC-FT. LEE	985
0123	0123	DEWITT ACH-FT. BELVOIR	408
0123	0390	ANDREW RADER AHC-FT. MYER	100
0123	6200	FAMILY HEALTH CENTER FAIRFAX	155
0123	6201	FAMILY HEALTH CENTER WOODBRIDG	217
0124	0124	NMC PORTSMOUTH	956
0124	0380	NBHC NSY NORFOLK	15
0124	0381	NBHC YORKTOWN	25
0124	0382	NBHC DAM NECK	84
0124	0519	NBHC CHESAPEAKE	15
0124	6214	TRICARE OUTPATIENT CL VA BEACH	84
0124	6221	TRICARE OUTPATIENT CHESAPEAKE	71
0125	0125	MADIGAN AMC-FT. LEWIS	496
0125	0247	MONTEREY AHC	128
0125	1646	NISQUALLY FAM MED CL-FT. LEWIS	318
0125	1649	OKUBO FAM PRACT CLIN-FT LEWIS	167
0126	0126	NH BREMERTON	646
0126	0398	NBHC PUGET SOUND	33
0126	1656	NBHC SUBASE BANGOR	232
0126	7138	NHCL EVERETT	154
0127	0127	NH OAK HARBOR	1169
0128	0128	92nd MED GRP-FAIRCHILD	948
0129	0129	90th MED GRP-F.E. WARREN	1108
0131	0131	WEED ACH-FT. IRWIN	1270
0131	0206	YUMA PROVING GROUND AHC	24
0231	0231	NBHC NAS NORTH ISLAND	1246
0248	0248	61st MED SQUAD-LOS ANGELES	1164
0252	0252	21st MED GRP-PETERSON	1013
0280	0280	NHC HAWAII	811
0280	0284	NBHC NAVCAMS EASTPAC	40
0280	0285	BMC MCAS KANEOHE BAY	226
0280	1987	NBHC MCB CAMP H.M. SMITH	79
0306	0306	NHC ANNAPOLIS	477

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2007
0306	0525	NBHC BANCROFT HALL	792
0310	0310	66th MED GRP-HANSCOM	1093
0330	0330	GUTHRIE AHC-FT. DRUM	320
0330	7113	CONNOR CTMC	981
0364	0364	17th MED GRP-GOODFELLOW	1101
0366	0366	12th MED GRP-RANDOLPH	851
0378	0378	NBHC LITTLE CREEK	1021
0385	0385	NHC QUANTICO	839
0385	1670	BMC OCS BROWN FIELD	79
0385	1671	NBHC THE BASIC SCHOOL	177
0387	0387	NBHC OCEANA	1175
0405	0405	NBHC MAYPORT	1022
0407	0407	NBHC NTC SAN DIEGO	1029
0508	0508	NBHC NAVSTA SEWELLS	1450
0606	0606	HEIDELBERG MEDDAC	265
0606	1003	AHC MANNHEIM	182
0606	1135	AHC FRIEDBERG	120
0606	1144	AHC BABENHAUSEN	10
0606	1145	AHC BUEDINGEN	30
0606	7152	AHC COLEMAN	64
0606	8987	AHC PATCH BKS	174
0606	8995	AHC HANAU	137
0606	8996	AHC BUTZBACH	101
0606	8998	AHC DARMSTADT	160
0607	0607	LANDSTUHL REGIONAL MEDCEN	228
0607	0611	VICENZA MEDICAL SERVICES CNTR	161
0607	0614	AHC SHAPE	70
0607	1126	AHC BAUMHOLDER	318
0607	1128	AHC KAISERSLAUTERN	110
0607	1147	AHC WIESBADEN	254
0607	1154	AHC LIVORNO	23
0607	8977	AHC BRUSSELS	22
0607	8992	AHC DEXHEIM	53
0609	0609	AHC WUERZBURG	91
0609	1013	AHC BAMBERG	156
0609	1014	AHC ILLESHEIM	68
0609	1015	AHC KATTERBACH	170
0609	1016	AHC GRAFENWOEHR	104
0609	1017	AHC VILSECK	266
0609	1019	AHC HOHENFELS	139
0609	1124	AHC SCHWEINFURT	308
0609	1127	AHC KITZINGEN	24
0609	1235	AHC GIEBELSTADT	17
0612	0612	121st CSH-SEOUL	169
0612	1156	USAHC CAMP STANLEY	72
0612	1157	USAHC CAMP CASEY	407
0612	8903	USAHC CAMP HUMPHREYS	228
0612	8907	USAHC-CAMP WALKER	74
0612	8910	USAHC-CAMP HIALEAH	5
0612	8912	USAHC-CAMP RED CLOUD	108
0612	8913	USAHC-CAMP CARROLL	48
0612	8916	USAHC-YONGSAN	295
0612	8917	USAHC-CAMP LONG	38
0620	0620	NH GUAM-AGANA	623
0620	0871	BMC NAVSTA GUAM	436

GEOGRAPHIC SAMPLING STRATA	DMIS ID	FACILITY NAME	# SAMPLED IN 2007
0621	0621	NH OKINAWA	1024
0621	0861	BMC MCAS FUTENMA	49
0621	0862	BMC EVANS-CAMP FOSTER	195
0621	1269	BMC CAMP KINSER	42
0621	7032	BMC CAMP BUSH/COURTNEY	72
0621	7033	BMC CAMP HANSEN	9
0621	7107	BMC CAMP SCHWAB-OKINAWA	3
0622	0622	NH YOKOSUKA	556
0622	0625	BMC IWAKUNI	219
0622	0852	NBHC COMFLEACT SASEBO	254
0622	0853	NBHC NAF ATSUGI	270
0622	7288	BMA HARIO SASEBO JP	15
0622	8934	NBHC NSF DIEGO GARCIA	33
0622	8938	BMC YOKOHOMA	6
0622	8939	BMC CHINHEA	18
0633	0633	48th MED GRP-LAKENHEATH	960
0633	0653	422 ABS MED FLT-CROUGHTON	77
0633	0814	423RD ABS OL-A-RAF UPWOOD	118
0633	7234	MENWITH HILL MEDICAL CENTER	62
0633	7235	426TH ABS MED AID STATION	1
0804	0804	18th MED GRP-KADENA AB	1298
0805	0799	470 MED FLT-GEILENKIRCHEN	234
0805	0805	52nd MED GROUP-SPANGDAHLEM	1055
0806	0806	435th MEDICAL GROUP-RAMSTEIN	1308
6215	6215	TRICARE OUTPATIENT-CHULA VISTA	944
7139	7139	1st SPEC OPS MED GRP-HURLBURT	1208

APPENDIX D

RESPONSE RATE TABLES – QUARTERS I-IV AND COMBINED ANNUAL

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TABLE D.1

RESPONSE RATES BY XOCONUS

	Q1 2007		Q2 2007		Q3 2007		Q4 2007		COMBINED	
	RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W
Europe	18.0	20.2	18.8	21.3	16.7	17.6	14.3	15.8	17.0	18.8
In Conus/Missing Region	28.2	46.1	28.5	45.5	24.8	41.8	23.0	40.3	26.1	43.4
Latin America	26.1	44.3	29.3	45.6	21.3	29.7	19.4	29.2	24.1	37.9
Western Pacific	17.0	19.3	20.9	22.3	15.3	15.7	14.5	16.9	16.9	18.6

RR=Unweighted
RR_W=Weighted

TABLE D.2

RESPONSE RATES BY SEX

	Q1 2007		Q2 2007		Q3 2007		Q4 2007		COMBINED	
	RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W
Female	32.2	47.4	32.1	46.0	28.7	43.3	27.2	41.1	30.1	44.5
Male	23.0	42.5	24.1	43.0	20.0	38.2	18.4	37.6	21.4	40.3

RR=Unweighted
RR_W=Weighted

TABLE D.3

RESPONSE RATES BY CONUS/OCONUS INDICATOR

	Q1 2007		Q2 2007		Q3 2007		Q4 2007		COMBINED	
	RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W
In Conus	27.7	46.2	28.0	45.5	24.2	41.9	22.6	40.6	25.6	43.5
Invalid/Missing	38.6	37.1	38.9	43.7	37.2	34.6	31.4	25.1	36.4	35.5
Not in Conus	18.3	22.5	20.8	24.3	16.5	18.1	14.9	17.5	17.6	20.7

RR=Unweighted
RR_W=Weighted

TABLE D.4

RESPONSE RATES BY BENEFICIARY CATEGORY

	Q1 2007		Q2 2007		Q3 2007		Q4 2007		COMBINED	
	RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W
Active Duty and Guard/Reserve	17.3	16.0	18.4	16.9	15.0	13.5	13.3	12.0	16.0	14.6
Dependent of Active Duty & Guard/Reserve	23.9	25.4	24.3	25.5	20.0	21.4	19.4	20.0	21.9	23.1
Retiree/Depend of Retir/Surviv/Other 65+	76.3	75.5	73.8	72.8	70.5	69.9	69.6	69.5	72.5	71.9
Retiree/Depend of Retir/Surviv/Other <65	50.2	50.4	50.5	50.4	45.3	45.2	42.4	43.1	47.1	47.3

RR=Unweighted
RR_W=Weighted

TABLE D.5

RESPONSE RATES BY CATCHMENT AREA

	Q1 2007		Q2 2007		Q3 2007		Q4 2007		COMBINED	
	RR	RR_w	RR	RR_w	RR	RR_w	RR	RR_w	RR	RR_w
Agana	24.0	29.9	23.2	22.8	18.0	19.9	22.2	35.2	21.9	27.1
Andrews AFB	29.2	43.7	29.3	39.9	25.1	36.6	22.3	30.1	26.4	37.5
Barksdale AFB	20.7	24.8	24.9	30.9	20.7	26.9	24.2	27.5	22.6	27.6
Brooke AMC-Ft. Sam Houston	35.8	58.5	35.1	43.4	33.1	51.1	33.7	51.0	34.4	51.3
Davis-Monthan AFB	25.5	35.9	29.8	38.2	24.9	33.2	23.2	34.5	25.8	35.5
Dyess AFB	23.0	30.7	20.3	24.0	21.3	27.0	19.2	24.1	20.9	26.5
Edwards AFB	25.0	29.7	25.8	30.3	20.9	23.7	18.8	26.7	22.6	27.6
Eglin AFB	33.8	57.2	32.8	44.8	24.4	41.3	22.3	29.3	28.4	43.3
Elmendorf AFB/Ft Wainwright	23.5	32.5	26.8	30.0	26.2	36.0	21.1	28.6	24.4	31.7
Evans ACH-Ft. Carson	24.3	41.0	19.8	39.8	15.9	27.2	15.6	24.5	18.9	33.6
F.E. Warren AFB	23.4	27.0	22.4	26.9	18.1	23.3	15.9	20.1	19.9	24.4
Fairchild AFB	23.0	25.5	32.6	43.5	27.5	34.9	26.7	39.7	27.5	36.0
Ft Wainwright	15.8	21.3	13.5	21.8	12.2	15.7	11.0	12.3	13.1	17.7
Ft. Belvoir	41.3	51.9	44.3	52.8	31.1	36.4	29.3	36.5	36.4	44.1
Ft. Benning	21.0	39.8	18.4	33.7	13.7	26.1	15.8	25.3	17.2	31.2
Ft. Bliss	24.1	31.0	19.5	30.1	18.4	29.8	15.1	24.5	19.2	28.7
Ft. Bragg	22.2	31.0	23.4	29.5	19.5	26.3	18.5	25.5	20.9	28.1
Ft. Campbell	18.2	25.9	20.6	32.5	16.9	26.1	14.7	21.1	17.6	26.4
Ft. Drum	11.8	13.2	11.1	12.6	11.5	13.0	9.9	10.5	11.1	12.3
Ft. Eustis	31.6	52.3	28.0	38.4	23.8	30.8	18.2	25.5	25.8	40.3
Ft. Gordon	29.5	39.7	28.5	36.2	27.8	42.8	25.5	35.8	27.8	38.8
Ft. Hood	19.6	30.5	19.4	28.7	16.2	25.9	12.4	21.7	16.9	26.6
Ft. Huachuca	22.2	28.9	22.9	30.2	22.5	29.4	12.8	16.0	20.0	26.1
Ft. Irwin	16.3	29.5	15.7	14.7	10.0	24.9	11.9	37.5	13.5	27.2
Ft. Jackson	22.6	41.0	23.0	44.5	22.7	43.6	19.8	51.7	22.0	45.5
Ft. Knox	24.9	35.1	22.8	36.7	17.9	23.9	16.8	27.6	20.5	30.9
Ft. Leavenworth	29.2	37.0	26.6	33.7	26.9	33.2	24.2	29.2	26.7	33.3
Ft. Lee	28.6	41.0	21.5	30.6	16.3	22.0	21.2	30.3	21.9	31.1
Ft. Leonard Wood	21.7	33.6	23.3	33.2	16.4	28.7	15.2	28.8	19.1	31.0
Ft. Meade	24.3	31.9	29.1	37.4	23.7	29.6	21.4	28.6	24.6	32.0
Ft. Polk	21.7	26.3	16.8	22.4	16.8	35.7	16.3	33.3	17.8	29.7
Ft. Riley	17.4	24.0	20.8	32.0	13.6	19.1	13.2	23.0	16.3	24.6
Ft. Ritchie	32.9	36.2	29.6	33.2	21.7	26.6	20.2	25.2	26.1	30.5
Ft. Rucker	28.0	33.3	29.7	38.6	21.6	27.5	25.5	38.0	26.2	34.4
Ft. Sill	22.8	33.3	22.4	32.2	15.3	22.2	15.3	19.4	18.9	26.7
Ft. Stewart	20.5	30.4	19.7	28.0	12.1	20.8	14.2	25.0	16.6	26.2
Hill AFB	24.8	33.4	30.0	38.8	23.7	32.9	20.7	28.5	24.8	33.4
Kadena AFB	16.8	17.7	21.8	25.9	16.9	17.2	14.8	15.7	17.6	19.1

TABLE D.5 (continued)

	Q1 2007		Q2 2007		Q3 2007		Q4 2007		COMBINED	
	RR	RR_w	RR	RR_w	RR	RR_w	RR	RR_w	RR	RR_w
Keesler AFB	24.7	41.4	27.7	42.9	23.1	38.5	24.8	38.7	25.1	40.4
Kirtland AFB	24.3	29.2	30.3	36.1	23.6	26.1	26.6	31.0	26.3	30.9
Lackland AFB	29.8	46.3	26.5	40.5	24.9	40.5	27.7	50.3	27.2	44.3
Landstuhl	17.3	21.0	18.8	22.8	16.8	20.1	14.4	20.0	16.8	20.9
Landstuhl AMC/other German	16.3	19.5	15.7	19.1	15.4	16.0	10.0	11.1	14.4	16.6
Langley AFB	25.0	38.2	28.3	40.0	25.6	33.6	21.9	35.0	25.2	36.5
Laughlin AFB/Sheppard AFB	31.6	41.9	27.7	42.5	25.3	37.2	27.0	34.4	27.9	39.1
Luke AFB	25.8	33.4	30.6	40.8	29.5	37.4	24.9	29.6	27.7	35.3
MacDill AFB	32.6	49.1	33.5	45.8	27.5	32.8	28.8	37.6	30.6	41.7
Madigan AMC-Ft. Lewis	29.2	43.7	25.6	39.5	25.8	37.8	23.9	39.1	26.1	40.0
Maxwell AFB	34.1	42.0	38.1	42.1	33.9	42.0	26.8	27.4	33.2	38.0
Mountain Home AFB	26.0	35.5	25.9	34.8	21.7	39.2	20.4	24.2	23.5	34.0
NACC Portsmouth New Hamp.	26.5	29.5	25.5	31.7	25.0	26.4	25.8	25.8	25.7	28.4
NBHC Mayport	28.0	31.4	22.9	26.6	21.9	23.7	20.3	24.1	23.3	26.5
NBHC Nas North Island	24.6	27.2	28.4	38.9	19.9	27.5	17.8	19.4	22.7	28.7
NBHC Ntc San Diego	20.5	25.4	26.7	36.7	25.2	41.2	22.3	31.2	23.7	34.2
NH 29-Palms	14.5	27.1	14.2	20.8	9.6	16.3	9.1	17.1	11.9	20.6
NH Beaufort	15.3	27.2	16.3	22.4	11.7	28.5	11.1	35.2	13.6	28.7
NH Bremerton	27.5	35.3	30.3	43.8	22.5	34.0	21.4	32.7	25.3	36.4
NH Camp Lejeune	15.8	23.1	15.0	17.0	16.6	25.1	12.9	14.4	15.1	20.0
NH Camp Pendleton/Ft Irwin	21.0	32.5	22.8	37.5	19.5	33.0	15.2	26.5	19.6	32.3
NH Charleston	24.4	51.3	22.6	40.8	19.6	25.5	18.1	32.2	21.1	37.9
NH Cherry Point	26.7	47.5	21.0	44.3	20.0	39.9	18.9	36.4	21.7	42.2
NH Corpus Christi	23.0	27.4	24.0	26.4	23.9	26.9	26.4	30.3	24.3	27.7
NH Great Lakes	17.2	37.5	19.7	32.7	29.2	34.2	15.5	18.4	20.1	33.3
NH Guantanamo Bay	25.6	22.1	34.5	32.8	19.0	18.6	3.3	0.3	23.1	20.8
NH Jacksonville/Key West	25.8	43.7	22.5	34.9	20.5	36.7	20.4	30.7	22.3	36.5
NH LeMoore	18.3	28.0	25.1	30.7	20.6	31.8	16.6	27.6	20.1	29.4
NH Oak Harbor	17.8	27.4	22.6	31.5	19.0	30.7	18.1	22.0	19.4	28.2
NH Patuxent River	32.3	37.3	28.9	42.6	23.7	28.3	26.0	31.8	27.7	35.4
NH Pensacola	26.6	44.3	36.2	55.7	23.5	40.8	21.5	36.4	26.9	44.7
NH Yokosuka/other Asian	19.0	22.2	23.6	23.1	14.4	15.7	14.3	14.5	17.8	19.0
NMC Portsmouth	28.1	41.0	26.2	38.2	21.2	26.4	23.0	37.1	24.6	35.9
NMC San Diego	22.9	34.2	23.7	33.5	20.5	31.6	20.1	30.4	21.7	32.5
NMCL Quantico	28.4	31.8	32.2	37.4	22.2	25.5	19.6	24.7	25.6	29.9
NNMC Bethesda	34.9	45.7	34.4	48.3	27.3	41.6	28.7	45.2	31.4	45.4
Naples	16.7	17.0	21.1	27.8	16.9	16.8	17.5	17.8	18.1	20.1
Naval Health Care New England	22.1	25.5	24.9	30.4	21.9	27.4	19.5	22.4	21.6	26.4
Nellis AFB	29.6	44.5	30.9	44.6	28.4	47.1	29.6	42.5	29.6	44.5
Norfolk	27.0	27.1	26.9	26.9	20.8	20.8	17.9	17.8	23.1	22.9
Offutt AFB	31.2	38.6	33.0	36.6	29.5	36.6	25.7	30.4	29.8	35.5

TABLE D.5 (continued)

	Q1 2007		Q2 2007		Q3 2007		Q4 2007		COMBINED	
	RR	RR_w	RR	RR_w	RR	RR_w	RR	RR_w	RR	RR_w
Okinawa	14.1	14.4	19.5	22.6	16.4	16.7	8.9	9.6	14.8	15.9
Out of catchment-north	36.8	56.4	36.5	55.3	31.5	49.5	30.0	51.1	33.6	52.9
Out of catchment-overseas	34.0	37.9	34.5	42.8	32.1	32.6	27.2	25.8	31.8	35.0
Out of catchment-south	34.1	57.6	32.5	57.1	29.9	54.9	29.6	54.7	31.6	56.1
Out of catchment-west	35.1	55.0	35.9	57.1	34.0	55.8	31.9	51.0	34.2	54.7
Patrick AFB	33.8	47.2	38.1	52.1	29.1	33.8	29.6	40.7	32.7	43.8
Pearl Harbor	25.5	27.1	25.9	28.0	20.5	22.6	19.2	19.8	22.8	24.4
Peterson AFB	32.8	39.0	29.8	32.9	24.5	27.5	24.4	27.8	27.9	31.8
Port Hueneme	22.4	23.7	32.0	36.9	24.9	26.8	18.6	20.9	24.5	27.1
RAF Lakenheath/other Europe	19.4	26.9	21.4	23.9	20.2	21.7	17.2	19.4	19.6	23.1
Randolph AFB	36.9	41.3	43.0	48.9	36.2	39.3	27.4	33.9	35.9	40.8
Redstone Ars/Ft McClellan	34.2	46.9	33.2	41.2	29.1	34.1	26.0	31.7	30.6	38.6
Robins AFB	27.4	29.9	29.0	29.8	16.9	19.3	21.4	26.3	23.7	26.3
Scott AFB	31.7	46.6	31.7	40.4	28.7	34.8	26.6	35.6	29.9	41.0
Seoul	12.1	13.3	17.5	17.6	9.1	8.8	10.0	9.6	12.2	12.4
Shaw AFB	24.9	31.2	24.8	29.6	21.5	25.0	15.9	19.6	21.8	26.3
Spangdahlem/Ramstein AFB	21.3	23.9	23.0	24.0	19.6	20.6	16.3	17.1	20.1	21.4
Tinker AFB	25.7	32.1	27.3	32.6	21.4	24.9	21.8	28.8	24.0	29.7
Travis AFB	32.2	48.2	29.5	44.1	27.1	42.4	21.8	29.7	27.7	41.4
Tricare Outpat-Chula Vista	40.3	40.3	42.4	42.4	39.5	39.5	37.8	37.8	40.0	39.9
Tripler AMC	20.0	33.5	20.1	30.9	18.0	29.9	16.7	24.0	18.7	29.7
Tyndall AFB	24.3	28.0	26.5	30.8	22.0	26.3	20.1	23.8	23.2	27.2
USAF Acad. Hospital	32.1	52.1	38.9	54.5	30.8	46.8	30.4	43.7	33.1	49.4
Virginia Beach	19.2	22.4	23.1	26.6	17.3	22.8	15.2	16.9	18.7	22.7
Walter Reed AMC	30.5	51.6	37.8	46.7	29.2	37.6	24.0	31.4	30.4	42.0
West Point	22.4	41.2	24.1	32.0	16.5	19.9	13.1	23.8	19.0	29.4
Wright Patterson AFB	39.0	51.7	36.6	46.2	35.3	49.6	29.3	39.2	35.0	46.7
Wuerzburg	15.1	15.9	13.2	15.1	12.2	12.7	9.5	10.5	12.7	13.5
Yokota AB	14.6	15.6	18.9	20.9	14.4	16.2	16.5	18.4	16.1	17.8

RR=Unweighted
RR_W=Weighted

TABLE D.6

RESPONSE RATES BY SERVICE AFFILIATION

	Q1 2007		Q2 2007		Q3 2007		Q4 2007		COMBINED	
	RR	RR_w	RR	RR_w	RR	RR_w	RR	RR_w	RR	RR_w
Administrative	22.8	21.6	29.3	29.6	27.2	25.1	26.8	29.2	26.5	26.6
Air Force	26.2	40.2	27.8	39.8	23.8	36.5	21.9	32.6	24.9	37.3
Army	22.6	35.7	22.2	33.8	18.2	28.8	16.9	27.8	20.0	31.6
Coast Guard	24.2	24.3	27.7	28.8	18.0	18.8	14.9	18.5	21.0	22.6
Missing/Unknown	27.6	32.6	40.0	58.6	35.3	45.5	27.5	35.8	33.0	43.9
Navy	22.6	34.0	24.4	34.9	20.1	30.0	18.5	29.2	21.4	32.1
Noncatchment	32.8	59.1	32.3	59.6	29.8	56.6	28.6	56.0	30.9	57.8
Support Contractor	39.2	47.7	38.7	46.2	35.8	43.7	32.0	40.8	36.4	44.5
USTF	59.0	69.4	48.0	57.0	41.0	45.5	47.5	59.8	48.7	57.7

RR=Unweighted
RR_W=Weighted

TABLE D.7

RESPONSE RATES BY BRANCH OF SERVICE

	Q1 2007		Q2 2007		Q3 2007		Q4 2007		COMBINED	
	RR	RR_w	RR	RR_w	RR	RR_w	RR	RR_w	RR	RR_w
Air Force	29.7	51.8	30.2	50.5	26.7	47.9	24.9	45.7	27.9	49.0
Army	25.1	41.4	25.0	40.7	21.5	37.5	19.7	35.6	22.8	38.8
Coast Guard	33.1	48.2	31.5	44.4	26.4	34.5	23.3	37.1	28.4	41.1
Marine Corps	19.7	31.9	21.2	34.1	17.6	32.3	15.4	27.1	18.5	31.4
Navy	27.8	45.0	29.7	46.2	24.8	39.9	24.0	41.1	26.5	43.1
Other/Unknown	50.0	56.2	46.6	57.2	47.9	65.0	39.8	54.0	45.9	58.0

RR=Unweighted
RR_W=Weighted

TABLE D.8

RESPONSE RATES BY TRICARE NEXT GENERATION OF CONTRACTS REGION GROUPING

	Q1 2007		Q2 2007		Q3 2007		Q4 2007		COMBINED	
	RR	RR_w	RR	RR_w	RR	RR_w	RR	RR_w	RR	RR_w
Missing Data	38.6	37.1	38.9	43.7	37.2	34.6	31.4	25.1	36.4	35.5
North	28.8	46.0	29.0	44.7	24.7	39.2	22.7	39.4	26.3	42.3
Overseas	18.3	22.5	20.8	24.3	16.5	18.1	14.9	17.5	17.6	20.7
South	28.2	49.1	27.8	47.3	23.9	44.3	23.3	44.0	25.8	46.2
West	26.4	43.3	27.6	44.4	24.0	42.1	21.9	38.1	25.0	42.0

RR=Unweighted
RR_W=Weighted

TABLE D.9

RESPONSE RATES BY COMBINED GEOGRAPHIC AREA

		Q1 2007		Q2 2007		Q3 2007		Q4 2007		COMBINED	
TNEX Region	Catchment	RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W
Missing Data	Out of catchment-overseas	38.6	36.8	38.9	43.7	37.2	34.7	31.3	24.8	36.4	35.4
North	Andrews AFB	29.2	43.7	29.3	39.9	25.1	36.6	22.3	30.1	26.4	37.5
North	Ft. Belvoir	41.3	51.9	44.3	52.8	31.1	36.4	29.3	36.5	36.4	44.1
North	Ft. Bragg	22.2	31.0	23.4	29.5	19.5	26.3	18.5	25.5	20.9	28.1
North	Ft. Campbell	18.2	25.9	20.6	32.5	16.9	26.1	14.7	21.1	17.6	26.4
North	Ft. Drum	11.8	13.2	11.1	12.6	11.5	13.0	9.9	10.5	11.1	12.3
North	Ft. Eustis	31.6	52.3	28.0	38.4	23.8	30.8	18.2	25.5	25.8	40.3
North	Ft. Knox	24.9	35.1	22.8	36.7	17.9	23.9	16.8	27.6	20.5	30.9
North	Ft. Lee	28.6	41.0	21.5	30.6	16.3	22.0	21.2	30.3	21.9	31.1
North	Ft. Meade	24.3	31.9	29.1	37.4	23.7	29.6	21.4	28.6	24.6	32.0
North	Ft. Ritchie	32.9	36.2	29.6	33.2	21.7	26.6	20.2	25.2	26.1	30.5
North	Langley AFB	25.0	38.2	28.3	40.0	25.6	33.6	21.9	35.0	25.2	36.5
North	NACC Portsmouth New Hamp.	26.5	29.5	25.5	31.7	25.0	26.4	25.8	25.8	25.7	28.4
North	NH Camp Lejeune	15.8	23.1	15.0	17.0	16.6	25.1	12.9	14.4	15.1	20.0
North	NH Cherry Point	26.7	47.5	21.0	44.3	20.0	39.9	18.9	36.4	21.7	42.2
North	NH Great Lakes	17.2	37.5	19.7	32.7	29.2	34.2	15.5	18.4	20.1	33.3
North	NH Patuxent River	32.3	37.3	28.9	42.6	23.7	28.3	26.0	31.8	27.7	35.4
North	NMC Portsmouth	28.1	41.0	26.2	38.2	21.2	26.4	23.0	37.1	24.6	35.9
North	NMCL Quantico	28.4	31.8	32.2	37.4	22.2	25.5	19.6	24.7	25.6	29.9
North	NNMC Bethesda	34.9	45.7	34.4	48.3	27.3	41.6	28.7	45.2	31.4	45.4
North	Naval Health Care New England	22.1	25.5	24.9	30.4	21.9	27.4	19.5	22.4	21.6	26.4
North	Norfolk	27.0	27.1	26.9	26.9	20.8	20.8	17.9	17.8	23.1	22.9
North	Out of catchment-north	36.8	56.4	36.5	55.3	31.5	49.5	30.0	51.1	33.6	52.9
North	Scott AFB	31.7	46.6	31.7	40.4	28.7	34.8	26.6	35.6	29.9	41.0
North	Virginia Beach	19.2	22.4	23.1	26.6	17.3	22.8	15.2	16.9	18.7	22.7
North	Walter Reed AMC	30.5	51.6	37.8	46.7	29.2	37.6	24.0	31.4	30.4	42.0
North	West Point	22.4	41.2	24.1	32.0	16.5	19.9	13.1	23.8	19.0	29.4
North	Wright Patterson AFB	39.0	51.7	36.6	46.2	35.3	49.6	29.3	39.2	35.0	46.7
Overseas	Agana	24.0	29.9	23.2	22.8	18.0	19.9	22.2	35.2	21.9	27.1
Overseas	Kadena AFB	16.8	17.7	21.8	25.9	16.9	17.2	14.8	15.7	17.6	19.1
Overseas	Landstuhl	17.3	21.0	18.8	22.8	16.8	20.1	14.4	20.0	16.8	20.9
Overseas	Landstuhl AMC/other German	16.3	19.5	15.7	19.1	15.4	16.0	10.0	11.1	14.4	16.6
Overseas	NH Guantanamo Bay	25.6	22.1	34.5	32.8	19.0	18.6	3.3	0.3	23.1	20.8
Overseas	NH Yokosuka/other Asian	19.0	22.2	23.6	23.1	14.4	15.7	14.3	14.5	17.8	19.0
Overseas	Naples	16.7	17.0	21.1	27.8	16.9	16.8	17.5	17.8	18.1	20.1
Overseas	Okinawa	14.1	14.4	19.5	22.6	16.4	16.7	8.9	9.6	14.8	15.9
Overseas	Out of catchment-overseas	24.1	39.8	25.7	40.7	20.8	28.3	18.9	27.7	22.3	34.4
Overseas	RAF Lakenheath/other Europe	19.4	26.9	21.4	23.9	20.2	21.7	17.2	19.4	19.6	23.1
Overseas	Seoul	12.1	13.3	17.5	17.6	9.1	8.8	10.0	9.6	12.2	12.4
Overseas	Spangdahlem/Ramstein AFB	21.3	23.9	23.0	24.0	19.6	20.6	16.3	17.1	20.1	21.4

TABLE D.9 (continued)

TNEX Region	Catchment	Q1 2007		Q2 2007		Q3 2007		Q4 2007		COMBINED	
		RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W
Overseas	Wuerzburg	15.1	15.9	13.2	15.1	12.2	12.7	9.5	10.5	12.7	13.5
Overseas	Yokota AB	14.6	15.6	18.9	20.9	14.4	16.2	16.5	18.4	16.1	17.8
South	Barksdale AFB	20.7	24.8	24.9	30.9	20.7	26.9	24.2	27.5	22.6	27.6
South	Brooke AMC-Ft. Sam Houston	35.8	58.5	35.1	43.4	33.1	51.1	33.7	51.0	34.4	51.3
South	Dyess AFB	23.0	30.7	20.3	24.0	21.3	27.0	19.2	24.1	20.9	26.5
South	Eglin AFB	33.8	57.2	32.8	44.8	24.4	41.3	22.3	29.3	28.4	43.3
South	Ft. Benning	21.0	39.8	18.4	33.7	13.7	26.1	15.8	25.3	17.2	31.2
South	Ft. Gordon	29.5	39.7	28.5	36.2	27.8	42.8	25.5	35.8	27.8	38.8
South	Ft. Hood	19.6	30.5	19.4	28.7	16.2	25.9	12.4	21.7	16.9	26.6
South	Ft. Jackson	22.6	41.0	23.0	44.5	22.7	43.6	19.8	51.7	22.0	45.5
South	Ft. Polk	21.7	26.3	16.8	22.4	16.8	35.7	16.3	33.3	17.8	29.7
South	Ft. Rucker	28.0	33.3	29.7	38.6	21.6	27.5	25.5	38.0	26.2	34.4
South	Ft. Sill	22.8	33.3	22.4	32.2	15.3	22.2	15.3	19.4	18.9	26.7
South	Ft. Stewart	20.5	30.4	19.7	28.0	12.1	20.8	14.2	25.0	16.6	26.2
South	Keesler AFB	24.7	41.4	27.7	42.9	23.1	38.5	24.8	38.7	25.1	40.4
South	Lackland AFB	29.8	46.3	26.5	40.5	24.9	40.5	27.7	50.3	27.2	44.3
South	Laughlin AFB/Sheppard AFB	31.6	41.9	27.7	42.5	25.3	37.2	27.0	34.4	27.9	39.1
South	MacDill AFB	32.6	49.1	33.5	45.8	27.5	32.8	28.8	37.6	30.6	41.7
South	Maxwell AFB	34.1	42.0	38.1	42.1	33.9	42.0	26.8	27.4	33.2	38.0
South	NBHC Mayport	28.0	31.4	22.9	26.6	21.9	23.7	20.3	24.1	23.3	26.5
South	NH Beaufort	15.3	27.2	16.3	22.4	11.7	28.5	11.1	35.2	13.6	28.7
South	NH Charleston	24.4	51.3	22.6	40.8	19.6	25.5	18.1	32.2	21.1	37.9
South	NH Corpus Christi	23.0	27.4	24.0	26.4	23.9	26.9	26.4	30.3	24.3	27.7
South	NH Jacksonville/Key West	25.8	43.7	22.5	34.9	20.5	36.7	20.4	30.7	22.3	36.5
South	NH Pensacola	26.6	44.3	36.2	55.7	23.5	40.8	21.5	36.4	26.9	44.7
South	Out of catchment-south	34.1	57.6	32.5	57.1	29.9	54.9	29.6	54.7	31.6	56.1
South	Patrick AFB	33.8	47.2	38.1	52.1	29.1	33.8	29.6	40.7	32.7	43.8
South	Randolph AFB	36.9	41.3	43.0	48.9	36.2	39.3	27.4	33.9	35.9	40.8
South	Redstone Ars/Ft McClellan	34.2	46.9	33.2	41.2	29.1	34.1	26.0	31.7	30.6	38.6
South	Robins AFB	27.4	29.9	29.0	29.8	16.9	19.3	21.4	26.3	23.7	26.3
South	Shaw AFB	24.9	31.2	24.8	29.6	21.5	25.0	15.9	19.6	21.8	26.3
South	Tinker AFB	25.7	32.1	27.3	32.6	21.4	24.9	21.8	28.8	24.0	29.7
South	Tyndall AFB	24.3	28.0	26.5	30.8	22.0	26.3	20.1	23.8	23.2	27.2
West	Davis-Monthan AFB	25.5	35.9	29.8	38.2	24.9	33.2	23.2	34.5	25.8	35.5
West	Edwards AFB	25.0	29.7	25.8	30.3	20.9	23.7	18.8	26.7	22.6	27.6
West	Elmendorf AFB/Ft Wainwright	23.5	32.5	26.8	30.0	26.2	36.0	21.1	28.6	24.4	31.7
West	Evans ACH-Ft. Carson	24.3	41.0	19.8	39.8	15.9	27.2	15.6	24.5	18.9	33.6
West	F.E. Warren AFB	23.4	27.0	22.4	26.9	18.1	23.3	15.9	20.1	19.9	24.4
West	Fairchild AFB	23.0	25.5	32.6	43.5	27.5	34.9	26.7	39.7	27.5	36.0
West	Ft Wainwright	15.8	21.3	13.5	21.8	12.2	15.7	11.0	12.3	13.1	17.7
West	Ft. Bliss	24.1	31.0	19.5	30.1	18.4	29.8	15.1	24.5	19.2	28.7
West	Ft. Huachuca	22.2	28.9	22.9	30.2	22.5	29.4	12.8	16.0	20.0	26.1

TABLE D.9 (continued)

TNEX Region	Catchment	Q1 2007		Q2 2007		Q3 2007		Q4 2007		COMBINED	
		RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W
West	Ft. Irwin	16.3	29.5	15.7	14.7	10.0	24.9	11.9	37.5	13.5	27.2
West	Ft. Leavenworth	29.2	37.0	26.6	33.7	26.9	33.2	24.2	29.2	26.7	33.3
West	Ft. Leonard Wood	21.7	33.6	23.3	33.2	16.4	28.7	15.2	28.8	19.1	31.0
West	Ft. Riley	17.4	24.0	20.8	32.0	13.6	19.1	13.2	23.0	16.3	24.6
West	Hill AFB	24.8	33.4	30.0	38.8	23.7	32.9	20.7	28.5	24.8	33.4
West	Kirtland AFB	24.3	29.2	30.3	36.1	23.6	26.1	26.6	31.0	26.3	30.9
West	Luke AFB	25.8	33.4	30.6	40.8	29.5	37.4	24.9	29.6	27.7	35.3
West	Madigan AMC-Ft. Lewis	29.2	43.7	25.6	39.5	25.8	37.8	23.9	39.1	26.1	40.0
West	Mountain Home AFB	26.0	35.5	25.9	34.8	21.7	39.2	20.4	24.2	23.5	34.0
West	NBHC Nas North Island	24.6	27.2	28.4	38.9	19.9	27.5	17.8	19.4	22.7	28.7
West	NBHC Ntc San Diego	20.5	25.4	26.7	36.7	25.2	41.2	22.3	31.2	23.7	34.2
West	NH 29-Palms	14.5	27.1	14.2	20.8	9.6	16.3	9.1	17.1	11.9	20.6
West	NH Bremerton	27.5	35.3	30.3	43.8	22.5	34.0	21.4	32.7	25.3	36.4
West	NH Camp Pendleton/Ft Irwin	21.0	32.5	22.8	37.5	19.5	33.0	15.2	26.5	19.6	32.3
West	NH LeMoore	18.3	28.0	25.1	30.7	20.6	31.8	16.6	27.6	20.1	29.4
West	NH Oak Harbor	17.8	27.4	22.6	31.5	19.0	30.7	18.1	22.0	19.4	28.2
West	NMC San Diego	22.9	34.2	23.7	33.5	20.5	31.6	20.1	30.4	21.7	32.5
West	Nellis AFB	29.6	44.5	30.9	44.6	28.4	47.1	29.6	42.5	29.6	44.5
West	Offutt AFB	31.2	38.6	33.0	36.6	29.5	36.6	25.7	30.4	29.8	35.5
West	Out of catchment-west	35.1	55.0	35.9	57.1	34.0	55.8	31.9	51.0	34.2	54.7
West	Pearl Harbor	25.5	27.1	25.9	28.0	20.5	22.6	19.2	19.8	22.8	24.4
West	Peterson AFB	32.8	39.0	29.8	32.9	24.5	27.5	24.4	27.8	27.9	31.8
West	Port Hueneme	22.4	23.7	32.0	36.9	24.9	26.8	18.6	20.9	24.5	27.1
West	Travis AFB	32.2	48.2	29.5	44.1	27.1	42.4	21.8	29.7	27.7	41.4
West	Tricare Outpat-Chula Vista	40.3	40.3	42.4	42.4	39.5	39.5	37.8	37.8	40.0	39.9
West	Tripler AMC	20.0	33.5	20.1	30.9	18.0	29.9	16.7	24.0	18.7	29.7
West	USAF Acad. Hospital	32.1	52.1	38.9	54.5	30.8	46.8	30.4	43.7	33.1	49.4

RR=Unweighted
RR_W=Weighted

TABLE D.10

RESPONSE RATES BY BENEFICIARY CATEGORY AND SEX

		Q1 2007		Q2 2007		Q3 2007		Q4 2007		COMBINED	
		RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W
Active Duty and Guard/Reserve	Female	19.7	18.3	21.1	20.2	18.1	17.8	16.3	16.3	18.8	18.2
Active Duty and Guard/Reserve	Male	16.9	15.6	17.9	16.4	14.4	12.8	12.8	11.3	15.5	14.0
Dependent of Active Duty & Guard/Reserve	Female	25.4	26.9	25.5	26.7	21.5	22.8	20.8	21.3	23.3	24.5
Dependent of Active Duty & Guard/Reserve	Male	13.5	14.6	15.2	15.7	10.2	11.2	10.0	10.7	12.1	13.0
Retiree/Depend of Retir/Surviv/Other 65+	Female	72.6	71.3	69.5	68.5	67.0	66.2	64.2	63.8	68.4	67.5
Retiree/Depend of Retir/Surviv/Other 65+	Male	80.6	80.3	78.4	77.4	74.2	74.0	75.3	75.7	77.1	76.8
Retiree/Depend of Retir/Surviv/Other <65	Female	49.5	49.1	49.0	47.8	45.5	45.2	42.6	42.2	46.7	46.1
Retiree/Depend of Retir/Surviv/Other <65	Male	51.1	51.8	52.4	53.2	45.0	45.2	42.1	44.1	47.6	48.5

RR=Unweighted
RR_W=Weighted

TABLE D.11

RESPONSE RATES BY BENEFICIARY CATEGORY AND SERVICE

		Q1 2007		Q2 2007		Q3 2007		Q4 2007		COMBINED	
Beneficiary Category	Service	RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W	RR	RR_W
Active Duty and Guard/Reserve	Air Force	19.1	19.2	21.0	21.0	17.8	18.1	16.1	16.5	18.5	18.8
	Army	16.3	14.7	15.9	14.7	12.9	11.5	10.9	9.5	14.0	12.6
	Coast Guard	22.3	21.9	24.0	23.8	17.7	18.6	16.1	16.4	19.9	20.1
	Marine Corps	11.3	10.1	13.0	11.5	8.8	7.7	7.6	7.3	10.2	9.2
	Navy	17.9	16.5	19.9	18.4	16.1	14.6	14.8	13.8	17.2	15.8
	Other/Unknown	56.7	56.7	44.7	45.6	40.8	43.4	35.4	36.4	44.4	45.6
Dependent of Active Duty & Guard/Reserve	Air Force	26.4	28.1	26.7	28.1	22.7	23.6	20.9	21.0	24.2	25.2
	Army	21.1	22.8	21.1	22.4	17.2	19.0	17.4	18.2	19.2	20.6
	Coast Guard	34.8	33.3	30.8	33.4	29.1	27.5	22.3	21.1	29.2	28.8
	Marine Corps	23.5	24.7	23.0	23.6	20.5	23.9	18.6	20.0	21.3	23.0
	Navy	25.0	27.1	26.9	28.3	20.5	21.2	20.9	22.3	23.3	24.8
	Other/Unknown	38.3	30.6	38.5	44.2	43.5	51.6	36.9	37.7	39.3	41.3
Retiree/Depend of Retir/Surviv/Other 65+	Air Force	77.2	76.3	77.3	76.2	74.8	75.0	71.1	71.8	75.1	74.8
	Army	76.4	75.8	70.5	68.6	67.8	67.0	67.7	66.6	70.4	69.3
	Coast Guard	80.0	82.0	69.7	67.8	47.4	42.5	62.1	64.0	65.3	64.8
	Marine Corps	67.2	68.3	72.1	73.2	73.7	74.5	59.4	63.2	68.3	70.0
	Navy	76.0	74.4	74.3	74.1	68.4	67.0	72.5	71.7	72.9	71.9
	Other/Unknown	100.0	100.0	66.7	71.1	75.0	74.8	100.0	100.0	81.3	83.4
Retiree/Depend of Retir/Surviv/Other <65	Air Force	52.4	53.7	50.8	51.3	46.2	47.8	43.7	44.7	48.3	49.4
	Army	49.1	50.0	50.3	50.9	44.6	44.4	41.1	42.8	46.2	47.0
	Coast Guard	59.3	57.9	47.0	43.7	47.4	45.9	44.6	42.3	49.6	47.7
	Marine Corps	44.8	42.0	47.8	45.8	42.3	39.4	38.6	35.2	43.4	40.7
	Navy	49.1	48.5	51.0	50.2	45.4	44.3	43.0	43.5	47.0	46.6
	Other/Unknown	45.8	42.4	70.8	64.3	81.0	84.9	57.1	65.2	62.9	63.2

RR=Unweighted
RR_W=Weighted

APPENDIX E

TECHNICAL DESCRIPTION OF THE 2007 TRICARE BENEFICIARY REPORTS

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The beneficiary reports will present 12 scores for each region and catchment area in the MHS and for the MHS overall. Scores will enable users to compare providers to national benchmarks in these areas: getting needed care; getting care quickly; courteous and helpful office staff; how well doctors communicate; customer service; claims processing; rating of the health plan, health care, personal doctor, and specialist; preventive care standards, and health behavior. These scores are made up of three different types, described in Table E.1: CAHPS composites, ratings, and TMA standard composites. A trend page compares composites and ratings with values from previous quarters, calculates a quarterly trend, and tests the trend for statistical significance in the quarterly version of the beneficiary reports. In the annual version, results from 3 years are presented.

TABLE E.1

CONTENT OF THE 2007 TRICARE BENEFICIARY REPORTS

CAHPS COMPOSITES
The CAHPS composites group together survey responses to a set of related HCSDB questions taken from CAHPS. Scores expressed as CAHPS composites profile TRICARE beneficiaries' satisfaction with their ability to get needed care, the speed with which they receive care, interactions with their doctor, their experience with doctors' offices, their experience with customer service representatives, and their experience with claims processing. Scores are presented in relation to national benchmarks.
SATISFACTION RATINGS
Scores expressed as ratings reflect beneficiaries' self-rated satisfaction with their health plan, health care, and personal providers. The scores, adjusted for patient age and health status, are presented relative to national benchmarks.
TMA STANDARD COMPOSITES
Two TMA standard composite scores are reported. One score is based on how the preventive care that beneficiaries received compares with Healthy People 2010 standards. Preventive care indicators to be combined are prenatal care, hypertension screening, mammography, and Pap smears. Another composite combines a non-smoking rate, the rate at which smokers are counseled to quit, and rate of non-obese BMI ratio.

Table E.2 lists the questions and response choices for the CAHPS composites in the beneficiary reports. Question numbers refer to the CAHPS 3.0 Adult Questionnaire (Commercial). Response choices for each question within a composite are collapsed into three-item scales so that all composites have the same range. Along with the composites, mean responses to each question are presented and compared to national civilian benchmarks.

Four scores are based on respondents' ratings of health care and health care providers: health plan, health care, personal doctor, and specialist. These ratings are measures of overall beneficiary satisfaction. Questions about these aspects of care request beneficiaries to rate their health plan, health care, and physicians on a scale of 0 to 10, with 0 being the worst and 10 being the best. The rating score will be the mean. For the purpose of presentation, the mean are multiplied by 100 so that the score are presented on a scale of 0 to 100.

TABLE E.2

CAHPS 3.0 QUESTIONS AND RESPONSE CHOICES
EXPRESSED AS COMPOSITE SCORES AND RATINGS

ADULT QUESTIONNAIRE CAHPS 3.0	GETTING NEEDED CARE	RESPONSE CHOICE
Q7	Since you joined your health plan, how much of a problem, if any, was it to get a personal doctor or nurse you are happy with?	A big problem A small problem Not a problem
Q9	In the last 12 months, how much of a problem, if any, was it to see a specialist that you needed to see?	A big problem A small problem Not a problem
Q22	In the last 12 months, how much of a problem, if any, was it to get the care, tests, or treatment you or your doctor believed necessary?	A big problem A small problem Not a problem
Q24	In the last 12 months, how much of a problem, if any, were delays in health care while you waited for approval from your health plan?	A big problem A small problem Not a problem
	GETTING CARE QUICKLY	
Q14	In the last 12 months, when you called during regular office hours, how often did you get the help or advice you needed?	Never Sometimes Usually Always
Q18	In the last 12 months, not counting the times you needed health care right away, how often did you get an appointment for healthcare as soon as you wanted?	Never Sometimes Usually Always
Q16	In the last 12 months, when you needed care right away for an illness, injury, or condition, how often did you get care as soon as you wanted?	Never Sometimes Usually Always
Q25	In the last 12 months, how often were you taken to the exam room within 15 minutes of your appointment?	Never Sometimes Usually Always

Adult Questionnaire CAHPS 3.0	Courteous and Helpful Office Staff	Response Choice
Q26	In the last 12 months, how often did office staff at a doctor's office or clinic treat you with courtesy and respect?	Never Sometimes Usually Always
Q27	In the last 12 months, how often were office staff at a doctor's office or clinic as helpful as you thought they should be?	Never Sometimes Usually Always
	How Well Doctors Communicate	
Q28	In the last 12 months, how often did doctors or other health providers listen carefully to you?	Never Sometimes Usually Always
Q29	In the last 12 months, how often did doctors or other health providers explain things in a way you could understand?	Never Sometimes Usually Always
Q30	In the last 12 months, how often did doctors or other health providers show respect for what you had to say?	Never Sometimes Usually Always
Q31	In the last 12 months, how often did doctors or other health providers spend enough time with you?	Never Sometimes Usually Always
	Customer Service	
Q33	In the last 12 months, did you look for any information about how your health plan works in written material or on the internet?	Yes No
Q34	In the last 12 months, how much of a problem, if any, was it to find or understand this information?	A big problem A small problem Not a problem
Q36	In the last 12 months, how much of a problem, if any, was it to get the help you needed when you called your health plan's customer service?	A big problem A small problem Not a problem
Q38	In the last 12 months, how much of a problem, if any, did you have with paperwork for your health plan?	A big problem A small problem Not a problem

Adult Supplemental Questionnaire CAHPS 3.0	Claims Processing	Response Choice
CP2	In the last 12 months, how often did your health plan handle your claims in a reasonable time?	Never Sometimes Usually Always Don't Know
CP3	In the last 12 months, how often did your health plan handle your claims correctly?	Never Sometimes Usually Always Don't Know
Adult Questionnaire CAHPS 3.0	**Rating of All Health Care**	
Q32	Using any number from 0 to 10, where 0 is the worst health care possible and 10 is the best health care possible, what number would you use to rate all your health care in the last 12 months?	0 Worst health care possible 1 2 3 4 5 6 7 8 9 10 Best health care possible
	Rating of Health Plan	
Q39	Using any number from 0 to 10, where 0 is the worst health plan possible and 10 is the best health plan possible, what number would you use to rate your health plan?	0 Worst health plan possible 1 2 3 4 5 6 7 8 9 10 Best health plan possible

ADULT QUESTIONNAIRE CAHPS 3.0	RATING OF PERSONAL DOCTOR	RESPONSE CHOICE
Q5	Using any number from 0 to 10, where 0 is the worst personal doctor or nurse possible and 10 is the best personal doctor or nurse possible, what number would you use to rate your personal doctor or nurse?	0 Worst personal doctor or nurse possible 1 2 3 4 5 6 7 8 9 10 Best personal doctor or nurse possible
	RATING OF SPECIALIST	
Q11	We want to know your rating of the specialist you saw most often in the last 12 months. Using any number from 0 to 10, where 0 is the worst specialist possible and 10 is the best specialist possible, what number would you use to rate the specialist?	0 Worst specialist possible 1 2 3 4 5 6 7 8 9 10 Best specialist possible

The preventive care composite in the beneficiary reports measures MHS performance in terms of meeting TMA's goals for the provision of preventive services. The composite is calculated by combining the responses to individual questions pertaining to these goals. Questions and responses from the present version of the 2007 HCSDB that are incorporated into the preventive care composite are presented in Table E.3. When individual scores in the preventive care composite are combined, the resulting composite is weighted by the number of questions to which a normal population has responded. Therefore, the weight a particular question receives in the composite score is based on the number of responses it "receives". The resulting proportion is presented as a percentage.

TABLE E.3

QUESTIONS AND RESPONSE CHOICES ON PREVENTIVE CARE
EXPRESSED AS A STANDARD TMA COMPOSITE

2007 Q1 ADULT HCSDB QUESTION	COMPOSITE PREVENTIVE CARE	RESPONSE CHOICES
H07049	When did you last have a blood pressure reading?	Less than 12 months ago 1 to 2 years ago More than 2 years ago
H07050	Do you know if your blood pressure is too high?	Yes, it is too high No, it is not too high Don't know
H07059	When did you last have a Pap smear test?	Within the last 12 months 1 to 3 years ago More than 3 but less than 5 years ago 5 or more years ago Never had a Pap smear
H07061	When was the last time your breasts were checked by mammography?	Within the last 12 months 1 to 2 years ago More than 2 but less than 5 years ago 5 or more years ago Never had a mammogram
H07065	In which trimester did you first receive prenatal care?	First trimester Second trimester Third trimester Did not receive prenatal care
H07068F, H07068I	How tall are you without your shoes on? Please give your answer in feet and inches.	_____ feet _____ inches
H07069	How much do your weigh without your shoes on? Please give your answer in pounds.	_____ pounds

The healthy behavior composite measures the success of TMA's efforts to reduce smoking and obesity rates. The composite consists of a non-smoking rate, which is the proportion of adults not smoking or who quit more than a year ago, the counseled to quit rate, which is the proportion of smokers with office visits who were counseled to quit during at least one visit, and the rate of adults with non-obese BMI ratio. The composite weights these three measures equally.

TABLE E.4

CAHPS 3.0 QUESTIONS AND RESPONSE CHOICES
EXPRESSED AS COMPOSITE SCORES AND RATINGS

ADULT SUPPLEMENTAL QUESTIONNAIRE CAHPS 3.0	SMOKING	RESPONSE CHOICE
H12	Have you ever smoked at least 100 cigarettes in your entire life?	Yes No Don't know
H13	Do you now smoke every day, some days or not at all?	Every day Some days Not at all Don't know
H14	How long has it been since you quit smoking cigarettes?	12 months or less More than 12 months Don't know
H15	In the last 12 months, on how many visits were you advised to quit smoking by a doctor or other health provider in your plan?	None 1 visit 2 to 4 visits 5 to 9 visits 10 or more visits I had no visits in the last 12 months

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APPENDIX F

SAS CODE FOR FILE DEVELOPMENT – QUARTERS I-IV

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F.1 Q4FY2007\PROGRAMS\WEIGHTING\MERGESYN.SAS - COMBINE ITEM RESPONSE DATA FROM SURVEY CONTRACTOR WITH THE MPR SAMPLING AND DEERS VARIABLES.

```
*************************************************************************
*
* PROGRAM:  Changed from MERGENRC.SAS to MERGESYN.SAS
* TASK:     QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (6077-300)
* PURPOSE:  COMBINE ITEM RESPONSE DATA FROM SYNOVATE WITH THE MPR SAMPLING AND
*           DEERS VARIABLES.  ALSO, CONSTRUCT XREGION AND CONUS.
* WRITTEN:  01/31/2001 BY KEITH RATHBUN
*
* MODIFIED: 1) 03/13/2002 BY KEITH RATHBUN for 2002 survey: Added MPCSMPL,
*              SERVAREA and DCATCH.  Drop SUBDEMO.
*           2) 03/11/2003 BY KEITH RATHBUN for 2003 survey: Removed the
*              processing involving the FLAG_FIN file.  NRC now sends
*              all records regardless of FLAG_FIN.
*           3) 09/28/2004 BY JACQUELINE AGUFA: Moved the code that contructs
*              XREGION, XTNEXREG and CONUS to CONVARQ.SAS.
*           4) 10/20/2004 BY KEITH RATHBUN: Recode unknown values of
*              MRTLSTAT into one group.
*           5) 06/22/2005 BY JACQUELINE AGUFA: Add ACV to mergenrc.sd2
*
* INPUTS:   1) DODyyQn.SD2 - Quarterly DOD Health Survey Data from Synovate
*              where n = Quarter Number
                   yy = Survey Administration Year
*           3) BWT.SD7 - MPR Sampling and DEERS variables
*           4) SAMPLA02.SD2 - DEERS variables
*
* OUTPUTS:  1) MERGESYN.SD2 - Quarterly DOD Health Survey Data
*              (Combined SYNOVATE, MPR, and DEERS variables)
*
*************************************************************************;
LIBNAME  INr        "G:\Q4FY2007"; /*Restricted folder*/
LIBNAME  INv6  v612 "..\..\DATA\afinal";
LIBNAME  INv8  v8   "..\..\DATA\afinal";
LIBNAME  OUT   v612 "..\..\DATA\afinal";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

************************************************************************
* Define fielding start date so AGE can be recalculated based on DOB.
* Also assign quarter and number of eligibility periods.
************************************************************************;
%LET FIELDATE = 07012007; * mmddyyyy;
%LET FIELDLBL = July 1st 2007;
%LET QUARTER  = Q4FY2007;
%LET NUMPD    = 27; *Add 1 to number of Quarters processed each quarter;

************************************************************************
* SORT the Synovate-Provided file and the original sample (BWT).
************************************************************************;
PROC SORT DATA=INv8.dod07q4f OUT=SYNFILE;
     BY MPRID;
RUN;

DATA SYNFILE;
   LENGTH MPRID $8;
   SET SYNFILE;
RUN;

PROC SORT DATA=INv8.BWT OUT=BWT; BY MPRID; RUN;

************************************************************************
* Attach DEERS variables to the combined file that were ommited from the
* BWT file.
************************************************************************;
PROC SORT DATA=INr.SAMPLA02 OUT=SAMPLA02
         (KEEP=MPRID DAGEQY DBENCAT DCATCH DMEDELG DSPONSVC /*LEGDDSCD (JMA 09/18/2007)*/
               MBRRELCD
               MEDTYPE MRTLSTAT PATCAT PCM RACEETHN
               PNLCATCD PNBRTHDT PAYPLNCD E1-E&NUMPD ACV);
   BY MPRID;
```

```
RUN;

*************************************************************************
* Attach the original sampling variables to the combined file.
*************************************************************************;
DATA MERGESYN;
   MERGE BWT SYNFILE(in=in2) SAMPLA02(in=in1);
   BY MPRID;
   /*FLAG_FIN = COMPRESS(FLAG_FIN); *Trim off the blanks; Apr 3 2007 */

   ***********************************************************************
   * DROP variables that are not needed.
   ***********************************************************************;
   DROP SVCCD GEOSMPL GEOCELL /*EBG_COM*/ EBSMPL
        D_INSTAL /*GROUP_geosmpl*/ ;


   LABEL  /*CACSMPL  = 'CACSMPL - Catchment Area' */ /*Dec 15, 2006*/
          BWT      = 'BWT - Basic Sampling Weight'
          ENBGSMPL = 'ENBGSMPL - Beneficiary/Enrollment Status'
          NHFF     = 'NHFF - Stratum Sample Size'
          SEXSMPL  = 'SEXSMPL - Sex'
          STRATUM  = 'Stratum'
          SVCSMPL  = 'SVCSMPL - Branch of Service'
          FLAG_FIN = 'Final Disposition'
         ;
   IF IN2 AND NOT IN1 THEN
      PUT "ERROR: MPRID Not Found in both the SYNOVATE and MPR files, MPRID = " MPRID;

   IF IN2 AND IN1 THEN OUTPUT MERGESYN;
RUN;

DATA OUT.MERGESYN;
   SET MERGESYN(/*RENAME=(COMMENT_FLAG=CMNTFLAG)*/);
   BY MPRID;
   ***********************************************************************
   * Construct MPCSMPL.
   ***********************************************************************;
   IF PAYPLNCD = 'MO' THEN
      MPCSMPL = 2;
   ELSE IF PAYPLNCD = 'MW' THEN
      MPCSMPL = 3;
   ELSE
      MPCSMPL = 1;
   ***********************************************************************
   * Calculate FIELDAGE based on PNBRTHDT using fielding period
   * starting date.
   ***********************************************************************;
   FIELDATE = INPUT("&FIELDATE",mmddyy8.);
   DOB = SUBSTR(PNBRTHDT,5,2) || SUBSTR(PNBRTHDT,7,2) || SUBSTR(PNBRTHDT,1,4);
   BRTHDATE = INPUT(DOB,mmddyy8.);

   FIELDAGE = PUT(INT((FIELDATE - BRTHDATE)/365.25),Z3.);
   LABEL MPCSMPL  = "MPCSMPL - Military Personnel Category";
   LABEL FIELDAGE = "Age as of &FIELDLBL";
   LABEL DCATCH   = "Catchment Area";

   LENGTH QUARTER $8;
   QUARTER = "&QUARTER";
   LABEL  QUARTER  = 'Survey Quarter';

   LENGTH ONTIME $3;
   ONTIME = "YES";
   LABEL ONTIME = "Responded Within 8 weeks of Mail-Out";

   ***********************************************************************
   * Recode unknown values of MRTLSTAT into one 'Unknown' group (Z).
   ***********************************************************************;
   IF MRTLSTAT NOT IN ("A","D","I","L","M","N","S","W","Z"," ") THEN MRTLSTAT = "Z";

   DROP FIELDATE DOB BRTHDATE PNBRTHDT PAYPLNCD;
```

```
RUN;

TITLE1 "Quarterly DOD Health Survey - Combine SYNOVATE, MPR and DEERS variables (6077-300)";
TITLE2 "Program Name: MERGESYN.SAS By Jacqueline Agufa";
TITLE3 "Program Inputs: DODyyQn.SD7, BWT.SD7, FRAMEA.SD2 -- Program Output: MERGESYN.SD2";

PROC CONTENTS; RUN;

PROC FORMAT;
   Value $ACV
     'A'='Active Duty Prime'
     'B'='TRICARE Global Remote Overseas Prime Active Duty'
     'D'='TRICARE Senior Prime enrollee'
     'E'='Non-Active Duty Prime'
     'F'='TRICARE Global Remote Overseas Prime ADFM'
     'G'='TRICARE Plus (CHAMPUS/TFL Eligible)'
     'H'='TRICARE Overseas Prime AD'
     'J'='TRICARE Overseas Prime ADFM'
     'L'='TRICARE Plus (w/o civilian healthcare)'
     'M'='AD not reported as enrolled'
     'R'='TRICARE Reserve Select'
     'Q'='Active Duty enrolled to Op Forces'
     'U'='USFHP/USTF'
 ' ','Z'='Not enrolled in TRICARE Prime or USFHP'
         ;

  VALUE $ENBGS
          '01' = "Active duty"
          '02' = "Active duty fam,Prime,civ PCM"
          '03' = "Active duty fam,Prime,mil PCM"
          '04' = "Active duty fam,non-enrollee"
          '05' = "Retired,<65,civ PCM"
          '06' = "Retired,<65,mil PCM"
          '07' = "Retired,<65,non-enrollee"
          '08' = "Retired,65+,civ PCM"
          '09' = "Retired,65+,mil PCM"
          '10' = "Retired,65+,non-enrollee"
          '11' = "TRICARE Reserve Select"
  ;

RUN;

PROC FREQ DATA=OUT.MERGESYN(DROP=MPRID PRN MIQCNTL);
  TABLES WEB FLAG_FIN DAGEQY*FIELDAGE ACV PCM ENBGSMPL
         ACV*PCM ACV*ENBGSMPL
         _ALL_ /MISSING LIST;
  FORMAT ACV $ACV. ENBGSMPL $ENBGS.;
RUN;
```

F.2.A Q1FY2007\PROGRAMS\CODINGSCHEME\CSCHM07Q.SAS - IMPLEMENT CODING SCHEME AND CODING TABLES FOR QUARTER 1 FY2007.

```
*****************************************************************************;
*  Program:  Cschm07q.sas
*  Written:  06/04/2001
*   Author:  C. Rankin
*
*    Input:  MERGESYN.SD2 - Merged MPR Sampling, DEERS, and Synovate Response Data
*   Output:  CSCHM07Q.SD2 - Coding scheme file
*
* Modified:  9/20/2001 - Recodes removed (stored in recodes_old.sas)
*           10/31/2001 - Revised notes 16 and 17 (became notes 26 and 27)
*            3/22/2002 - Updated Variable names for Q1 2002 and added
*                        Include file RENAME.SAS to change the variable
*                        names from 01 to 02. Skipping 01 designation to make
*                        survey reflect year of fielding
*            5/09/2002 - Change to logic in TFL supplement
*            3/17/2003 - Updated Variables names for Q1 2003
*            4/11/2003 - Added note 19a to accomodate Q1 2003 error where
*                        an option on most of the questionnaires was omitted for
*                        H03062
*            5/27/2003 - Updated Variable names for Q2 2003
*            12/05/2003 - Updated Variable names for Q4 2003
*            3/25/2004 - Updated Variable names for Q1 2004
*            6/3/2004 - Updated Variable names for Q2 2004
*            8/23/2004 - Updated Variable names for Q3 2004
*            1/13/2005 - Updated Variable names for Q4 2004
*            4/13/2005 - Updated Variable names for Q1 2005
*            7/20/2005 - Updated Variable names for Q2 2005
*            10/14/2005 - Updated Variable names for Q3 2005
*            12/22/2005 - Updated Variable names for Q4 2005
*            3/20/2006 - Updated Variable names for Q2 FY 2006
*            12/11/2006 - Updated Variable names for Q1 FY 2007
*  Purpose:  Apply Coding Scheme Specifications to DoD Health Care Survey
*            Response Data, check for consistency in responses and skip
*            patterns
*  Include
*    files:  Cschm07q.fmt
*
*****************************************************************************;

OPTIONS PS=80 LS=120 NOCENTER COMPRESS=YES PAGENO=1 SOURCE SOURCE2;
*OPTIONS OBS=100;

LIBNAME LIBRARY v612 "..\..\DATA\AFINAL\FMTLIB";
LIBNAME IN      v612 "..\..\DATA\AFINAL";
LIBNAME OUT     v612 "..\..\DATA\AFINAL";

%LET INDATA=MERGESYN;
%LET OUTDATA=CSCHM07Q;
%LET PERIOD=October, 2005 to September, 2006;

/* Variable names in survey -- become recoded varibles */

%Let varlist1 =

 H07001  H07002A H07002C H07002F H07002G H07002H H07002I H07002J H07002K
 H07002L H07002M H07002N H07002O H07002P H07002Q H07002R H07003  H07004  H07005
 H07006  H07007  H07008  H07009  H07010  H07011  H07012  H07013  H07014
 H07015  H07016  H07017  H07018  H07019  H07020  H07021  H07022  H07023
 H07024  H07025  H07026  H07027  H07028  H07029  H07030  H07031  H07032
 H07033  H07034  H07035  H07036  H07037  H07038  H07039  H07040  H07041
 H07042  H07043  H07044  H07045  H07046  H07047  H07048

 S07G18   S07G19   S07G20   S07G21   S07G22   S07G23   S07G24   S07G25
 S07G26   S07G27   S07G28   S07G29A  S07G29B  S07G29C  S07G29D  S07G29E
 S07G29F  S07G29G  S07G29H  S07G29I  S07G29J  S07G29K
 S07G30   S07G31   S07G32   S07G33   S07G34   S07G35   S07G36   S07G37
 S07G38   S07G39

 H07049  H07050
```

```
 H07051  H07052  H07053  H07054  H07055  H07056  H07057  H07058  H07059
 H07060  H07061  H07063  H07064  H07065  H07066  H07067

 H07068F H07068I H07069

 H07070  H07070A H07070B H07070C H07070D H07070E
 SRRACEA SRRACEB SRRACEC SRRACED SRRACEE SRAGE SREDA
 ;

/*  _O variables are the original values from the survey response */

%Let varlist2 =
 H07001_O H07002AO H07002CO H07002FO H07002GO H07002HO H07002IO H07002JO H07002KO
 H07002LO H07002MO H07002NO H07002OO H07002PO H07002QO H07002RO H07003_O H07004_O
 H07005_O
 H07006_O H07007_O H07008_O H07009_O H07010_O H07011_O H07012_O H07013_O H07014_O
 H07015_O H07016_O H07017_O H07018_O H07019_O H07020_O H07021_O H07022_O H07023_O
 H07024_O H07025_O H07026_O H07027_O H07028_O H07029_O H07030_O H07031_O H07032_O
 H07033_O H07034_O H07035_O H07036_O H07037_O H07038_O H07039_O H07040_O H07041_O
 H07042_O H07043_O H07044_O H07045_O H07046_O H07047_O H07048_O

 S07G18_O  S07G19_O  S07G20_O  S07G21_O  S07G22_O  S07G23_O  S07G24_O  S07G25_O
 S07G26_O  S07G27_O  S07G28_O  S07G29AO  S07G29BO  S07G29CO  S07G29DO  S07G29EO
 S07G29FO  S07G29GO  S07G29HO  S07G29IO  S07G29JO  S07G29KO
 S07G30_O  S07G31_O  S07G32_O  S07G33_O  S07G34_O  S07G35_O  S07G36_O  S07G37_O
 S07G38_O  S07G39_O


 H07049_O H07050_O
 H07051_O H07052_O H07053_O H07054_O H07055_O H07056_O H07057_O H07058_O H07059_O
 H07060_O H07061_O H07063_O H07064_O H07065_O H07066_O H07067_O

 H07068FO H07068IO H07069_O

 H07070_O H07070AO H07070BO H07070CO H07070DO H07070EO
 SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO SRAGE_O SREDA_O
 ;

TITLE  "DoD 2007 Survey Form A -- &PERIOD";
TITLE2 "Apply Coding Scheme";



DATA MERGESYN;

  SET IN.MERGESYN(RENAME=(H07H69  = H07069CH
                          H07H68F = H07068F
                          H07H68FN= H07068FN
                          H07H68I = H07068I
                          H07H68IN= H07068IN
                          H07H69N = H07069N
                          ));


*********************************************************************;
* Code added by Jacqueline Agufa 09/15/2004 to fix name of race variable;
*********************************************************************;

  RENAME SRACEA = SRRACEA;
  RENAME SRACEB = SRRACEB;
  RENAME SRACEC = SRRACEC;
  RENAME SRACED = SRRACED;
  RENAME SRACEE = SRRACEE;


  **** update variables with both filled items and check boxes
  **** Per Eric Schone;


  IF H07068F LT 1      THEN H07068F=H07068FN;
  IF H07068I IN (-9,.) THEN H07068I=H07068IN;
```

```
  H07069= COMPRESS(H07069CH,' ')*1;

  DROP H07069CH;


  IF H07069=0   AND H07069N=-9     THEN H07069 =H07069N;
  IF H07069<100 AND H07069N NE -9  THEN H07069 =H07069N;


  *** Correct odd height and weights Per Eric Schone;

  IF H07068F < 2 OR
     H07068F > 8
  THEN H07068F= -7;

  IF 0 <= H07069 < 40 OR
     H07069 > 500
  THEN H07069= -7;


  /* JMA
  ****Multiple responses were given to this question so H07070 is being created
  ****from the multiple responses.;
  */


  IF H07070B=1 THEN H07070=2;
  ELSE IF H07070E=1 THEN H07070=5;
  ELSE IF H07070C=1 THEN H07070=3;
  ELSE IF H07070D=1 THEN H07070=4;
  ELSE IF H07070A=1 THEN H07070=1;

RUN;


DATA OUT.CSCHM07Q;

  LENGTH &VARLIST1. &VARLIST2. 4. MPRID $8.;
  INFORMAT &VARLIST2. 4.;
  %INCLUDE "CSCHM07Q.FMT";


/* label and format statements for original variables */


   SET MERGESYN;



*************************************************************;
**** Recodes for invalid responses:***************************;
*************************************************************;


/* This is a version of the coding scheme and coding tables for the
   FY 2007 HCSDB Form A.
   The following tables outline the coding of screening questions (skip),
   and subsequent items to be answered (or not answered in a series
   following a skip question.) */

/* First set up new variables that capture the original values */
/* recode the initial numeric values to the SAS numeric values */
/* specified in the coding scheme                              */

  SEX=PNSEXCD;
  AGE=INPUT(DAGEQY,8.);

  ARRAY RECODE(*) &VARLIST1;
  ARRAY   ORIG(*) &VARLIST2;

  DO I = 1 to DIM(ORIG);
      ORIG(I) = RECODE(I);
      IF ORIG(I) < 0 THEN DO;
```

```
            IF ORIG(I)= -9 THEN RECODE(I)=.;
        ELSE IF ORIG(I)= -8 THEN RECODE(I)=.A;
        ELSE IF ORIG(I)= -7 THEN RECODE(I)=.O;
        ELSE IF ORIG(I)= -6 THEN RECODE(I)=.N;
        ELSE IF ORIG(I)= -5 THEN RECODE(I)=.D;
        ELSE IF ORIG(I)= -4 THEN RECODE(I)=.I;
        ELSE IF ORIG(I)= -1 THEN RECODE(I)=.C;
        ELSE RECODE(I)=RECODE(I);
     END;
  END;
  DROP I;



/* recode selected responses to be 1=marked, 2=unmarked */

  ARRAY   MARKED(*)
          H07002A H07002C H07002F H07002G H07002H H07002I H07002J H07002K
          H07002L H07002M H07002N H07002O H07002P H07002Q H07002R

          S07G29A  S07G29B  S07G29C  S07G29D  S07G29E  S07G29F
          S07G29G  S07G29H  S07G29I  S07G29J  S07G29K

          H07070A H07070B H07070C H07070D H07070E

          SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
              ;


  ARRAY INFORMAT(*)
          H07002AO H07002CO H07002FO H07002GO H07002HO H07002IO H07002JO
          H07002KO H07002LO H07002MO H07002NO H07002OO H07002PO H07002QO H07002RO

          S07G29AO  S07G29BO  S07G29CO  S07G29DO  S07G29EO
          S07G29FO  S07G29GO  S07G29HO  S07G29IO  S07G29JO  S07G29KO

          H07070AO H07070BO H07070CO H07070DO H07070EO

          SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO

             ;


  DO J=1 TO DIM(INFORMAT);
     IF INFORMAT(J) NOT IN (.,-9) THEN MARKED(J)=1;
     ELSE MARKED(J)=2;
  END;
  DROP J;

  FORMAT
          H07002A H07002C H07002F H07002G H07002H H07002I H07002J H07002K
          H07002L H07002M H07002N H07002O H07002P H07002Q H07002R

          S07G29A  S07G29B  S07G29C  S07G29D  S07G29E  S07G29F
          S07G29G  S07G29H  S07G29I  S07G29J  S07G29K

          H07070A H07070B H07070C H07070D H07070E

          SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
        MARKED.;


*********************************************************************;

/*  skip coding scheme for all surveys not returned  **/

  IF FLAG_FIN NE 1 THEN GOTO NOSURVEY;

/** Note 1 -- H07006, H07007 health plan usage  **/

  IF H07006 > 0 OR H07006 =.D THEN N1=1;
  ELSE IF H07006=.N  THEN DO;
     IF H07007 NOT=. THEN DO;
```

```
         N1=2;
         H07007=.C;
      END;
      ELSE DO;
         N1=3;
         H07007=.N;
      END;
   END;
   ELSE IF H07006=.   THEN N1=4;


/** Note 2 -- H07008 H07009 H07010 H07011:  Personal doctor or nurse **/

   IF H07008 IN (1,.) AND H07009 = .N THEN DO;
      H07008 = 2;
      H07009 =.C;
      IF H07010=. THEN H07010=.N;
      ELSE H07010=.C;
      N2=1;
   END;
   ELSE IF H07008 IN (1) AND H07009 NE .N  THEN DO;
      IF H07010 IN (1) AND H07011 IN (1,2,3) THEN DO;
         H07011=.C;
         N2=2;
      END;
      ELSE IF H07010 IN (.) AND H07011 IN (1,2,3) THEN DO;
         H07010=2;
         N2=3;
      END;
      ELSE IF H07010 IN (1) AND H07011 IN (.) THEN DO;
         H07011=.N;
         N2=4;
      END;
      ELSE IF H07010 IN (2) THEN DO;
         N2=5;
      END;
      ELSE IF H07010 IN (.) AND H07011 IN (.) THEN DO;
         N2=6;
      END;
   END;
   ELSE IF H07008 IN (2,.) THEN DO;
      IF H07009 NOT IN (.N, .) AND H07010 IN (1) AND H07011 IN (1,2,3)
      THEN DO;
         H07008=1;
         H07011=.C;
         N2=7;
      END;
      ELSE IF H07009 NOT IN (.N, .) AND H07010 IN (.) AND H07011 IN (1,2,3)
      THEN DO;
         H07008=1;
         N2=8;
      END;
      ELSE IF H07009 NOT IN (.N, .) AND H07010 IN (.) AND H07011 IN (.)
      THEN DO;
         H07008=1;
         N2=9;
      END;
      ELSE IF H07008=2 AND H07009 IN (.) AND H07010 IN (1) AND H07011 IN (1,2,3)
      THEN DO;
         H07009=.N;
         H07010=.C;
         N2=10;
      END;
      ELSE IF H07008 = 2 AND H07009 IN (.N)
      THEN DO;
         H07009=.C;
         IF H07010=. THEN H07010=.N;
         ELSE H07010=.C;
         N2=11;
      END;
      ELSE IF H07010 IN (1)
      THEN DO;
         H07008=1;
```

```
        IF H07011=. THEN H07011=.N;
        ELSE H07011=.C;
        N2=12;
     END;
     ELSE IF H07010 IN (2)
     THEN DO;
        H07008=1;
        N2=13;
     END;
     ELSE IF H07008=2 AND H07009 In (.) AND H07010= . THEN DO;
        H07009=.N;
        H07010=.N;
        N2=14;
     END;
     ELSE IF H07008=. AND H07009=. AND H07010=. THEN DO;
        N2=15;
     END;
  END;



/** Note 3 -- H07012, H07013:  needed to see a specialist in last 12 months **/

  IF H07012=1 AND H07013 IN (1,2,3,.) THEN N3=1;
  ELSE IF H07012 IN (1,.) AND H07013=.N THEN DO;
     H07012=2;
     H07013=.C;
     N3=2;
  END;
  ELSE IF H07012 IN (2,.) AND H07013 IN (1,2,3) THEN DO;
     H07012=1;
     N3=3;
  END;
  ELSE IF H07012=2 AND H07013 IN (.,.N) THEN DO;
     IF H07013=. THEN H07013=.N;
     ELSE H07013=.C;
     N3=4;
  END;
  ELSE IF H07012=.  AND H07013=.  THEN N3=5;



/** Note 4 -- H07014, H07015: saw a specialist in last 12 months **/

  IF H07014=1 AND H07015 IN (0,1,2,3,4,5,6,7,8,9,10,.) THEN N4=1;
  ELSE IF H07014 IN (1,.) AND H07015=.N THEN DO;
     H07014=2;
     H07015=.C;
     N4=2;
  END;
  ELSE IF H07014 IN (2,.) AND H07015 IN (0,1,2,3,4,5,6,7,8,9,10) THEN DO;
     H07014=1;
     N4=3;
  END;
  ELSE IF H07014=2 AND H07015 IN (.,.N) THEN DO;
     IF H07015=. THEN H07015=.N;
     ELSE H07015=.C;
     N4=4;
  END;
  ELSE IF H07014=.  AND H07015=.  THEN N4=5;



/** Note 5 -- called a doctor's office:  H07016, H07017 **/

  IF H07016=1 AND H07017 IN (1,2,3,4,.) THEN N5=1;
  ELSE IF H07016 IN (1,.) AND H07017=.N THEN DO;
     H07016=2;
     H07017=.C;
     N5=2;
  END;
  ELSE IF H07016 IN (2,.) AND H07017 IN (1,2,3,4) THEN DO;
```

```
      H07016=1;
      N5=3;
   END;
   ELSE IF H07016=2 AND H07017 IN (.,.N) THEN DO;
      IF H07017=. THEN H07017=.N;
      ELSE H07017=.C;
      N5=4;
   END;
   ELSE IF H07016=.  AND H07017=.  THEN N5=5;


/** Note 6 -- H07018,H07019,H07020:  illness or injury **/

   ARRAY NOTE6 H07019 H07020;
   N6MARK=0;
   N6NMISS=0;
   N6NN=0;

   DO OVER NOTE6;
      IF NOTE6 NE . THEN N6NMISS+1;
      IF NOTE6 NOT IN (.N,.) THEN N6MARK+1;
      IF NOTE6 EQ .N THEN N6NN+1;
   END;


   IF H07018=1 AND N6NMISS=0 THEN DO;
        N6=1;
   END;
   ELSE IF H07018 IN (1,.) AND N6NMISS>0 AND N6MARK=0 THEN DO;
      H07018=2;
      N6=2;
      DO OVER NOTE6;
         IF NOTE6=. THEN NOTE6=.N;
         ELSE NOTE6=.C;
      END;
   END;
   ELSE IF H07018=1 AND N6MARK=1 AND N6NN=1 THEN  DO;
      DO OVER NOTE6;
         IF NOTE6=.N THEN NOTE6=.;
      END;
      N6=3;
   END;
   ELSE IF H07018=1 AND N6MARK>0 THEN DO;
      N6=4;
   END;
   ELSE IF H07018=2 AND N6MARK=1 AND N6NN=1  THEN  DO;
      H07019=.C;
      H07020=.C;
      N6=5;
   END;
   ELSE IF H07018 IN (2,.) AND N6MARK>0 THEN DO;
      H07018=1;
      N6=6;
      DO OVER NOTE6;
         IF NOTE6=.N THEN NOTE6=.;
      END;
   END;
   ELSE IF H07018=2 AND (N6NMISS=0 OR (N6NMISS>0 AND N6MARK=0)) THEN DO;
      N6=7;
      DO OVER NOTE6;
         IF NOTE6=. THEN NOTE6=.N;
         ELSE NOTE6=.C;
      END;
   END;
   ELSE IF H07018=.  AND N6NMISS=0 THEN N6=8;


   DROP N6NMISS N6MARK N6NN;


/** Note 7 -- H07021,H07022,H07023:  regular or routine healthcare **/

   ARRAY NOTE7 H07022 H07023;
```

```
  N7MARK=0;
  N7NMISS=0;
  N7NN=0;

  DO OVER NOTE7;
     IF NOTE7 NE . THEN N7NMISS+1;
     IF NOTE7 NOT IN (.N,.) THEN N7MARK+1;
     IF NOTE7 EQ .N THEN N7NN+1;
  END;

  IF H07021=1 AND N7NMISS=0 THEN DO;
       N7=1;
  END;
  ELSE IF H07021 IN (1,.) AND N7NMISS>0 AND N7MARK=0 THEN DO;
     H07021=2;
     N7=2;
     DO OVER NOTE7;
        IF NOTE7=. THEN NOTE7=.N;
        ELSE NOTE7=.C;
     END;
  END;
  ELSE IF H07021=1 AND N7MARK=1 AND N7NN=1 THEN  DO;
     DO OVER NOTE7;
        IF NOTE7=.N THEN NOTE7=.;
     END;
     N7=3;
  END;
  ELSE IF H07021=1 AND N7MARK>0 THEN DO;
     N7=4;
  END;
  ELSE IF H07021=2 AND N7MARK=1 AND N7NN=1  THEN  DO;
     H07022=.C;
     H07023=.C;
     N7=5;
  END;
  ELSE IF H07021 IN (2,.) AND N7MARK>0 THEN DO;
     H07021=1;
     N7=6;
     DO OVER NOTE7;
        IF NOTE7=.N THEN NOTE7=.;
     END;
  END;
  ELSE IF H07021=2 AND (N7NMISS=0 OR (N7NMISS>0 AND N7MARK=0)) THEN DO;
     N7=7;
     DO OVER NOTE7;
        IF NOTE7=. THEN NOTE7=.N;
        ELSE NOTE7=.C;
     END;
  END;
  ELSE IF H07021=.  AND N7NMISS=0 THEN N7=8;


  DROP N7NMISS N7MARK N7NN;



/** Note 8 -- H07025, H07026-H07037: doctor's office or clinic **/

  ARRAY NOTE8  H07026-H07037;

  N8MARK=0;
  N8NMISS=0;

  DO OVER NOTE8;
     IF NOTE8 NE . THEN N8NMISS+1;
     IF NOTE8 NOT IN  (., .N) THEN N8MARK+1;
  END;


  IF H07025=1 THEN DO;
     N8=1;
     DO OVER NOTE8;
        IF NOTE8=. THEN NOTE8=.N;
```

```
        ELSE NOTE8=.C;
     END;
  END;
  ELSE IF H07025 IN (2,3,4,5,6,7,.) AND N8NMISS>0 AND N8MARK=0 THEN DO;
     H07025=1;
     N8=2;
     DO OVER NOTE8;
        IF NOTE8=. THEN NOTE8=.N;
        ELSE NOTE8=.C;
     END;
  END;
  ELSE IF H07025 IN (2,3,4,5,6,7) AND (N8NMISS=0 OR N8MARK>0) THEN DO;
     DO OVER NOTE8;
        IF NOTE8=.N THEN NOTE8=.;
     END;
     N8=3;
  END;
  ELSE IF H07025=.  AND N8NMISS=0 THEN N8=4;
  ELSE IF H07025 IN (.) AND N8MARK>0 THEN DO;
     N8=5;
     DO OVER NOTE8;
        IF NOTE8=.N THEN NOTE8=.;
     END;
  END;

  DROP N8NMISS N8MARK;



/** Note 9 -- You or doctor believed you needed care, tests or treatment:
               H07026, H07027 **/


  IF H07026 IN (.N, .C) THEN N9=1;
  ELSE IF H07026=1 AND H07027 IN (1,2,3,.) THEN N9=2;
  ELSE IF H07026 IN (1,.) AND H07027=.N THEN DO;
     H07026=2;
     H07027=.C;
     N9=3;
  END;
  ELSE IF H07026 IN (2,.) AND H07027 IN (1,2,3) THEN DO;
     H07026=1;
     N9=4;
  END;
  ELSE IF H07026=2 AND H07027 IN (.,.N) THEN DO;
     IF H07027=. THEN H07027=.N;
     ELSE H07027=.C;
     N9=5;
  END;
  ELSE IF H07026=.  AND H07027=.  THEN N9=6;



/** Note 10 -- Needed approval from healthplan for care, tests or treatment:
               H07028, H07029 **/

  IF H07028 IN (.N, .C) THEN N10=1;
  ELSE IF H07028=1 AND H07029 IN (1,2,3,.) THEN N10=2;
  ELSE IF H07028 IN (1,.) AND H07029=.N THEN DO;
     H07028=2;
     H07029=.C;
     N10=3;
  END;
  ELSE IF H07028 IN (2,.) AND H07029 IN (1,2,3) THEN DO;
     H07028=1;
     N10=4;
  END;
  ELSE IF H07028=2 AND H07029 IN (.,.N) THEN DO;
     IF H07029=. THEN H07029=.N;
     ELSE H07029=.C;
     N10=5;
  END;
  ELSE IF H07028=.  AND H07029=.  THEN N10=6;
```

```
/** Note 11 -- H07039, H07040-H07041: claims to health plan **/

   ARRAY NOTE11 H07040-H07041;
  N11MARK=0;
  N11NMISS=0;
  N11NDK=0;

  DO OVER NOTE11;
     IF NOTE11 NE . THEN N11NMISS+1;
     IF NOTE11 NOT IN (.N,.) THEN N11MARK+1;
     IF NOTE11 NOT IN (.,.D) THEN N11NDK+1;
  END;

  IF H07039=1 AND
     (N11NMISS=0 OR (N11MARK>0 and N11NDK>0) or (N11NMISS>0 AND N11NDK=0))
  THEN DO;
     N11=1;
     DO OVER NOTE11;
        IF NOTE11=.N THEN NOTE11=.;
     END;
  END;
  ELSE IF H07039 IN (1,.,.D) AND N11NMISS>0 AND N11MARK=0 THEN DO;
     N11=2;
     H07039=2;
     DO OVER NOTE11;
        IF NOTE11=. THEN NOTE11=.N;
        ELSE NOTE11=.C;
     END;
  END;
  ELSE IF H07039 IN (2,.,.D) AND
          ((N11MARK>0 AND N11NDK>0) OR (N11NMISS>0 AND N11NDK=0))
       THEN DO;
     H07039=1;
     N11=3;
     DO OVER NOTE11;
        IF NOTE11=.N THEN NOTE11=.;
     END;
  END;
  ELSE IF H07039 IN (2) AND (N11NMISS=0 OR (N11NMISS>0 AND N11MARK=0)) THEN DO;
     N11=4;
     DO OVER NOTE11;
        IF NOTE11=. THEN NOTE11=.N;
        ELSE NOTE11=.C;
     END;
  END;
  ELSE IF H07039 IN (.D) AND N11NMISS=0 THEN DO;
     N11=5;
     DO OVER NOTE11;
        NOTE11=.N;
     END;
  END;
  ELSE IF H07039 IN (.)  AND N11NMISS=0 THEN N11=6;

  DROP N11NMISS N11MARK N11NDK;



/** NOTE12  -- H07042, H07043: **/

  IF H07042=1 AND H07043 IN (1,2,3,.) THEN N12=1;
  ELSE IF H07042 IN (1,.) AND H07043=.N THEN DO;
     H07042=2;
     H07043=.C;
     N12=2;
  END;
  ELSE IF H07042 IN (2,.) AND H07043 IN (1,2,3) THEN DO;     /* JMA per Daisy's suggestion
3/20/03  */
     H07042=1;
     N12=3;
  END;
```

```
  ELSE IF H07042=2 AND H07043 IN (.N,.) THEN DO;
     IF H07043=. THEN H07043=.N;
     ELSE H07043=.C;
     N12=4;
  END;
  ELSE IF H07042=. AND H07043=. THEN N12=5;


/** NOTE13 -- H07044, H07045: health plan's customer service **/

  IF H07044=1 AND H07045 IN (1,2,3,.) THEN N13=1;
  ELSE IF H07044 IN (1,.) AND H07045=.N THEN DO;
     H07044=2;
     H07045=.C;
     N13=2;
  END;
  ELSE IF H07044 IN (2,.) AND H07045 IN (1,2,3) THEN DO;
     H07044=1;
     N13=3;
  END;
  ELSE IF H07044=2 AND H07045 IN (.N,.) THEN DO;
     IF H07045=. THEN H07045=.N;
     ELSE H07045=.C;
     N13=4;
  END;
  ELSE IF H07044=. AND H07045=. THEN N13=5;


/** NOTE14  -- H07046, H07047: paperwork  **/

  IF H07046=1 AND H07047 IN (1,2,3,.) THEN N14=1;
  ELSE IF H07046 IN (1,.) AND H07047=.N THEN DO;
     H07046=2;
     H07047=.C;
     N14=2;
  END;
  ELSE IF H07046 IN (2,.) AND H07047 IN (1,2,3) THEN DO;
     H07046=1;
     N14=3;
  END;
  ELSE IF H07046=2 AND H07047 IN (.N,.)THEN DO;
     IF H07047=. THEN  H07047=.N;
     ELSE H07047=.C;
     N14=4;
  END;
  ELSE IF H07046=.  AND H07047=. THEN N14=5;

/** Note 15A1 -- S07G18, S07G19-S07G39: self/parent/spouse reservist on active duty
                                        for more than 30 consecutive days in support
                                        of contingency operations in past year
 **/

   ARRAY NOTE15A1  S07G19-S07G28 S07G30-S07G39;
   ARRAY NOTE15A12 S07G29A--S07G29K;

  N15A1MARK=0;
  N15A1NMISS=0;

  DO OVER NOTE15A1;
     IF NOTE15A1 NE . THEN N15A1NMISS+1;
     IF NOTE15A1 NOT IN (.N,.) THEN N15A1MARK+1;
  END;


  DO OVER NOTE15A12;
     IF NOTE15A12 NOT IN  (.,2) THEN N15A1NMISS+1;
     IF NOTE15A12 NOT IN (.N,.,2) THEN N15A1MARK+1;
  END;

  IF S07G18=1
  THEN DO;
     IF S07G19 IN (3,4) AND S07G23 IN (3,4) THEN DO;
        N15A1=1;
```

```
      S07G18=2;
      DO OVER NOTE15A1;
         IF NOTE15A1 = . THEN NOTE15A1=.N;
         ELSE NOTE15A1=.C;
      END;
      DO OVER NOTE15A12;
         IF NOTE15A12 IN (.,2) THEN NOTE15A12=.N;
         ELSE NOTE15A12=.C;
      END;
   END;
   ELSE IF S07G19 IN (3,4)   THEN N15A1=2;
   ELSE IF S07G19 IN (1,2,.) THEN N15A1=3;
END;
ELSE IF S07G18 IN (2, .) THEN DO;
   IF S07G19 IN (1,2) THEN DO;
      N15A1=4;
      S07G18=1;
   END;
   ELSE IF S07G23 IN (1,2) THEN DO;
      N15A1=5;
      S07G18=1;
   END;
   ELSE IF S07G18 IN (2) THEN DO;
      IF S07G19 IN (3,4,.) AND S07G23 IN (3,4,.) THEN DO;
         N15A1=6;
         DO OVER NOTE15A1;
            IF NOTE15A1 = . THEN NOTE15A1=.N;
            ELSE NOTE15A1=.C;
         END;
         DO OVER NOTE15A12;
            IF NOTE15A12 IN (.,2) THEN NOTE15A12=.N;
            ELSE NOTE15A12=.C;
         END;
      END;
   END;
   ELSE IF S07G18 IN (.) THEN DO;
      IF S07G19 IN (.) AND S07G23 IN (.) THEN DO;
         N15A1=7;
         DO OVER NOTE15A12;
            IF NOTE15A12 IN (2) THEN NOTE15A12=.;
         END;
      END;
      ELSE IF S07G19 IN (3,4) THEN DO;
         N15A1=8;
         S07G18=2;
         DO OVER NOTE15A1;
            IF NOTE15A1 = . THEN NOTE15A1=.N;
            ELSE NOTE15A1=.C;
         END;
         DO OVER NOTE15A12;
            IF NOTE15A12 IN (.,2) THEN NOTE15A12=.N;
            ELSE NOTE15A12=.C;
         END;
      END;
      ELSE IF S07G23 IN (3,4) THEN DO;
         N15A1=9;
         S07G18=2;
         DO OVER NOTE15A1;
            IF NOTE15A1 = . THEN NOTE15A1=.N;
            ELSE NOTE15A1=.C;
         END;
         DO OVER NOTE15A12;
            IF NOTE15A12 IN (.,2) THEN NOTE15A12=.N;
            ELSE NOTE15A12=.C;
         END;
      END;
   END;
END;

DROP N15A1NMISS N15A1MARK;


/** Note 15A2 -- S07G19, S07G20-S07G22
```

```
                : self reservist on active duty
                  for more than 30 consecutive days in support
                  of contingency operations in past year
 **/


  ARRAY NOTE15A2 S07G20--S07G22
                 ;

  IF S07G19 In (.N, .C)
  THEN N15A2=1;
  ELSE IF S07G19 IN (1,2) THEN DO;
     N15A2=2;
  END;
  ELSE IF S07G19 IN (3,4) THEN DO;
     N15A2=3;
     DO OVER NOTE15A2;
        IF NOTE15A2=. THEN NOTE15A2=.N;
        ELSE NOTE15A2=.C;
     END;
  END;
  ELSE IF S07G19=.  THEN N15A2=4;



/** Note 15A3 -- S07G23, S07G24-S07G26
                : spouse/parent reservist on active duty
                  for more than 30 consecutive days in support
                  of contingency operations in past year
 **/


  ARRAY NOTE15A3 S07G24--S07G26
                 ;

  IF S07G23 In (.N, .C)
  THEN N15A3=1;
  ELSE IF S07G23 IN (1,2) THEN DO;
     N15A3=2;
  END;
  ELSE IF S07G23 IN (3,4) THEN DO;
     N15A3=3;
     DO OVER NOTE15A3;
        IF NOTE15A3=. THEN NOTE15A3=.N;
        ELSE NOTE15A3=.C;
     END;
  END;
  ELSE IF S07G23=.  THEN N15A3=4;



/** Note 15A4 -- S07G28, S07G29A-S07G30
                : current health care coverage **/


  ARRAY NOTE15A4 S07G29A--S07G29K
                 ;

  N15A4NMISS=0;


  DO OVER NOTE15A4;
     IF NOTE15A4 IN (1) THEN N15A4NMISS+1;
  END;


  IF S07G28 In (.N, .C)
  THEN N15A4=1;
  ELSE IF S07G28 IN (3) THEN DO;
     N15A4=2;
  END;
  ELSE IF S07G28 IN (1) THEN DO;
     N15A4=3;
```

```
      DO OVER NOTE15A4;
         IF NOTE15A4 IN (.,2) THEN NOTE15A4=.N;
         ELSE NOTE15A4=.C;
      END;

      IF S07G30 IN (.) THEN S07G30=.N;
      ELSE S07G30=.C;
   END;
   ELSE IF S07G28 IN (2,.D) THEN DO;
      N15A4=4;
      DO OVER NOTE15A4;
         IF NOTE15A4 IN (.,2) THEN NOTE15A4=.N;
         ELSE NOTE15A4=.C;
      END;
   END;
   ELSE IF S07G28=.  THEN DO;
      IF N15A4NMISS > 0 THEN DO;
         N15A4=5;
         S07G28=3;
      END;
      ELSE IF S07G30 IN (1,2,3,.D) THEN DO;
         N15A4=6;
         S07G28=.D;
         DO OVER NOTE15A4;
            IF NOTE15A4 IN (.,2) THEN NOTE15A4=.N;
            ELSE NOTE15A4=.C;
         END;
      END;
      ELSE DO;
         N15A4=7;
         DO OVER NOTE15A4;
            IF NOTE15A4 IN (2) THEN NOTE15A4=.;
         END;
      END;
   END;


   DROP N15A4NMISS;


/** Note 15A5 -- S07G32, S07G33-S07G34
                : Personal Dr **/


   IF S07G32 In (.N, .C) AND S07G33 IN (.N, .C) AND S07G34 IN (.N, .C)
   THEN N15A5=1;
   ELSE IF S07G33 IN (.N) AND S07G34 IN (.N) THEN DO;
      N15A5=2;

      S07G32=.N;
   END;
   ELSE IF S07G32 IN (1) THEN DO;
      N15A5=3;

      IF S07G33 IN (.N) THEN S07G33=.;
      IF S07G34 IN (.N) THEN S07G34=.;
   END;
   ELSE IF S07G32 IN (2) THEN DO;
      N15A5=4;
      IF S07G33 IN (.) THEN S07G33=.N;
      ELSE S07G33=.C;
   END;
   ELSE IF S07G32 IN (.N) THEN DO;
      N15A5=5;
      IF S07G33 IN (.) THEN S07G33=.N;
      ELSE S07G33=.C;
      IF S07G34 IN (.) THEN S07G34=.N;
      ELSE S07G34=.C;
   END;
   ELSE IF S07G32=.  THEN N15A5=6;


/** Note 15A6 -- S07G36, S07G37-S07G38
```

```
                : Deactivated after Nov 6, 2003 **/


  IF S07G36 In (.N, .C)
  THEN N15A6=1;
  ELSE IF S07G36 IN (1) THEN DO;
     IF S07G37 IN (1, .) THEN N15A6=2;
     ELSE IF S07G37 IN (2, 3) THEN DO;
        N15A6=3;
        IF S07G38 IN (.) THEN S07G38=.N;
        ELSE S07G38=.C;
     END;
  END;
  ELSE IF S07G36 IN (2, .D) THEN DO;
     N15A6=4;
     IF S07G37 IN (.) THEN S07G37=.N;
     ELSE S07G37=.C;
     IF S07G38 IN (.) THEN S07G38=.N;
     ELSE S07G38=.C;
  END;
  ELSE IF S07G36=.  THEN N15A6=5;




/** Note 16 -- smoking:  H07052, H07053-H07057  **/

  ARRAY NOTE16 H07055 H07056 H07057;

  IF H07052=1 and H07053 IN (3,4) THEN DO;  /* still smoke */
     IF H07054 NE . THEN H07054=.C;
     ELSE H07054=.N;

     IF H07055 EQ .N THEN DO;               /* jma Sep 19 2006 */
        H07056 = .N;
        H07057 = .N;
     END;
     N16=1;
  END;
  ELSE IF H07052=1 AND H07053=2 THEN DO;         /* quit */
     /* JMA March 25 2004,
        Updated because H07056 and H07057 have been added to the
        skip pattern */
     IF H07054 IN (2,.D) THEN DO;               /* > 1 year ago */
        DO OVER NOTE16;
           IF NOTE16=. THEN NOTE16=.N;
           ELSE NOTE16=.C;
        END;
        N16=2;
     END;
     ELSE IF H07054 IN (3,.) THEN DO;          /* < 1 year ago */
        IF H07055 EQ .N THEN DO;               /* jma Sep 19 2006 */
           H07056 = .N;
           H07057 = .N;
        END;

        N16=3;

     END;
  END;
  ELSE IF H07052=1 AND H07053 IN (.D,.) THEN DO;  /* don't know */
     IF H07054=2 THEN DO;                        /* > 1 year ago */

        /* JMA March 25 2004,
        Updated because H07056 and H07057 have been added to the
        skip pattern */

        DO OVER NOTE16;
           IF NOTE16=. THEN NOTE16=.N;
           ELSE NOTE16=.C;
        END;
        H07053=2;
        N16=4;
```

```
   END;
   ELSE IF H07054=3 THEN DO;            /* < 1 year ago */
      H07053=2;

      IF H07055 EQ .N THEN DO;          /* jma Sep 19 2006 */
         H07056 = .N;
         H07057 = .N;
      END;

      N16=5;
   END;
   ELSE IF H07053 IN (.D) AND H07054 IN (.D,.) THEN DO;
      N16=6;
      IF H07054=. THEN H07054=.N;
      ELSE H07054=.C;
      DO OVER NOTE16;
         IF NOTE16=. THEN NOTE16=.N;
         ELSE NOTE16=.C;
      END;
   END;
   ELSE IF H07053 IN (.) AND H07054 IN (.D) THEN DO;
      N16=7;
      DO OVER NOTE16;
         IF NOTE16=. THEN NOTE16=.N;
         ELSE NOTE16=.C;
      END;
   END;
   ELSE IF H07053 IN (.) AND H07054 IN (.) THEN DO;
      N16=8;

      IF H07055 EQ .N THEN DO;               /* jma Sep 19 2006 */
         H07056 = .N;
         H07057 = .N;
      END;
   END;
END;
ELSE IF H07052 IN (2,.D,.) AND H07053 IN (3,4) THEN DO;
   H07052=1;

   IF H07054 NE . THEN H07054=.C;
   ELSE H07054=.N;

   IF H07055 EQ .N THEN DO;               /* jma Sep 19 2006 */
      H07056 = .N;
      H07057 = .N;
   END;

   N16=9;
END;
ELSE IF H07052 IN (2,.D) AND H07053 IN (2,.D, .) THEN DO; /*never smoke*/
   /* JMA March 25 2004,
      Updated because H07056 and H07057 have been added to the
      skip pattern */

   IF H07053 NE . THEN H07053 =.C;
   ELSE H07053=.N;

   IF H07054 NE . THEN H07054 =.C;
   ELSE H07054=.N;

   DO OVER NOTE16;
      IF NOTE16=. THEN NOTE16=.N;
      ELSE NOTE16=.C;
   END;

   N16=10;
END;
ELSE IF H07052 IN ( .) THEN DO;
   IF (H07053 IN (2) AND
       H07054 IN (.) AND
      (H07055 IN (2,3,4,5) OR H07056 IN (2,3,4,5) OR H07057 IN (2,3,4,5)))
   THEN DO;
      /* JMA March 25 2004,
```

```
          Updated because H07056 and H07057 have been added to the
          skip pattern */

       H07052=1;
       H07054=3;
       N16=11;
    END;
    ELSE IF H07053 IN (2,.) THEN DO; /*MRE/blank*/
       IF H07054 IN (2, .D) THEN DO;
           /* JMA March 25 2004,
           Updated because H07056 and H07057 have been added to the
           skip pattern */

           DO OVER NOTE16;
              IF NOTE16=. THEN NOTE16=.N;
              ELSE NOTE16=.C;
           END;
           N16=12;
       END;
       ELSE IF H07054 IN (3,.) THEN DO;
          IF (H07055 IN (2,3,4,5) OR H07056 IN (2,3,4,5) OR H07057 IN (2,3,4,5))
          THEN DO;
             H07052=1;
             N16=13;
          END;
          ELSE DO;

             IF H07055 EQ .N THEN DO;               /* jma Sep 19 2006 */
                H07056 = .N;
                H07057 = .N;
             END;

             N16=14;
          END;
       END;
    END;
    ELSE IF H07053=.D THEN DO; /*MRE/blank*/
       /* JMA March 25 2004,
          Updated because H07056 and H07057 have been added to the
          skip pattern */

       IF H07054 NE . THEN H07054 =.C;
       ELSE H07054=.N;

       DO OVER NOTE16;
          IF NOTE16=. THEN NOTE16=.N;
          ELSE NOTE16=.C;
       END;

       N16=15;
    END;
  END;


/** Note 17 - gender H07058, SEX, H07059--H07065,
             XSEXA */

/* 1/21/98 use SRSEX & responses to gender specific questions
   if there is discrepancy between SRSEX and SEX */
/* set imputed MALE, FMALE based on gender specific questions */


  ARRAY fmaleval H07059 H07060 H07061 H07063 H07064 H07065
                 ;

  cntfmale=0;
  DO OVER fmaleval;           /* mammogram/pap smear/PREGNANT*/
     IF fmaleval>0 THEN cntfmale=cntfmale+1;
  END;

  IF cntfmale>0 THEN FMALE=1;
  ELSE FMALE = 0;
```

```
  IF H07058=. THEN DO;
     IF (SEX='F' AND FMALE) THEN DO;
        N17a=1;
        XSEXA=2;
     END;
     ELSE IF (SEX='F' AND FMALE=0) THEN DO;
        N17a=2;
        XSEXA=2;
     END;
     ELSE IF (SEX='M' AND FMALE) THEN DO;
        N17a=3;
        XSEXA=1;
     END;
     ELSE IF (SEX='M' AND FMALE=0) THEN DO;
        N17a=4;
        XSEXA=1;
     END;
     ELSE IF ((SEX IN ('Z',' ') AND FMALE)) THEN DO;
        N17a=5;
        XSEXA=2;
     END;
     ELSE IF (SEX='Z' AND FMALE=0) THEN DO;
        N17a=6;
        XSEXA=.;
     END;
     ELSE IF (SEX=' ' AND FMALE=0) THEN DO;
        N17a=7;
        XSEXA=.;
     END;
  END;
  ELSE IF (H07058=1) THEN DO;
     IF FMALE=0 THEN DO;
        N17a=8;
        XSEXA=1;
     END;
     ELSE IF FMALE THEN DO;
        IF SEX='F' THEN DO;
           N17a=9;
           XSEXA=2;
        END;
        ELSE DO;
           N17a=10;
           XSEXA=1;
        END;
     END;
  END;
  ELSE IF (H07058=2) THEN DO;
     IF FMALE THEN DO;
       N17a=11;
       XSEXA=2;
     END;
     ELSE IF FMALE=0 THEN DO;
        IF SEX='M' THEN DO;
          N17a=12;
          XSEXA=1;
        END;
        ELSE DO;
           N17a=13;
           XSEXA=2;
        END;
     END;
  END;


/* Note 17b - gender vs mammogram/paps/pregnancy */
/*   REDEFINE FMALE TO LOOK ONLY AT MAMMOGRAM, PAP SMEAR ENTRIES and PREGNANCY */

  ARRAY NOTE17b H07059 H07060 H07061 H07063 H07064 H07065
                 ;

  cntfmale=0;
  DO OVER NOTE17b;           /* mammogram/pap smear/PREGNANT*/
```

```
      IF NOTE17b NE . THEN cntfmale=cntfmale+1;
   END;

   IF cntfmale>0 THEN FMALE=1;
   ELSE FMALE = 0;

   IF XSEXA=1 THEN DO;   /* male */
      IF FMALE=0 THEN DO;
         N17b=1;
         DO OVER NOTE17b;
            NOTE17b=.N;
         END;
      END;   /* valid skip */
      ELSE IF FMALE=1 THEN DO;
         N17b=2;
         DO OVER NOTE17b;
            IF NOTE17b=. THEN NOTE17b = .N;
            ELSE NOTE17b=.C;
         END;
      END;   /* inconsistent response */
   END;
   ELSE IF XSEXA=2 THEN  N17b=3; /* female */
   ELSE IF XSEXA=. THEN DO;      /*  missing sex  */
      N17b=4;
      DO OVER NOTE17b;
         NOTE17b=.;
      END;
   END;



   DROP FMALE CNTFMALE;


/* Note 18 - breast exam for female 40 or over  */

   IF XSEXA=1 THEN DO;  /* male */
      IF  (H07060=.C OR H07060=.N) AND (H07061=.C OR H07061=.N)
      THEN N18 = 1;
   END;
   ELSE IF XSEXA=2 THEN DO;
      IF H07060=2 THEN N18=2;         /* female 40 or over */
      ELSE IF H07060=1 THEN DO;   /* female < 40 */
         IF H07061 NE . THEN H07061=.C;
         ELSE H07061=.N;
         N18=3;
      END;
      ELSE IF H07060=. THEN DO;
         IF H07061 NE . THEN DO;
            H07060=2;
            N18=4;
         END;
         ELSE IF H07061=.  THEN DO;
            IF AGE<40 THEN DO;
               H07060 = 1;
               H07061=.N;
               N18=5;
            END;
            ELSE IF AGE >= 40 THEN DO;
               H07060=1;
               H07061=.N;
               N18=6;
            END;
            ELSE IF AGE=. THEN N18=7;
         END;
      END;
   END;
   ELSE IF XSEXA=. THEN N18=8;



/* Note 19 - gender vs Pregnancy */
```

```
  IF XSEXA=1 THEN N19=1;          /* male     */
  ELSE IF XSEXA=2 THEN DO;        /* female   */
     IF H07063=1 THEN DO;         /* pregnant */
        IF H07064=1 THEN DO;
           N19=2;
           IF H07065=. THEN H07065 = .N;
           ELSE H07065=.C;
        END;
        ELSE IF H07064=2 AND H07065 IN (2) THEN DO;
           N19=3;
           H07065=.;
        END;
        ELSE IF H07064=2 AND H07065 IN (4,3,1,.) THEN DO;
           N19=4;
        END;
        ELSE IF H07064 IN (3,.) THEN N19=5;
     END;
     ELSE IF H07063=2 THEN DO;
        IF H07064=. THEN H07064 = .N;
        ELSE H07064=.C;
        N19=6;
     END;
     ELSE IF H07063=3 THEN DO;
        N19=7;
        IF H07064=. THEN H07064 = .N;
        ELSE H07064=.C;
        IF H07065=. THEN H07065=.N;
        ELSE H07065=.C;
     END;
     ELSE IF H07063 IN (.) THEN DO;
        IF H07064=1 THEN DO;
           N19=8;
           H07063=1;
           IF H07065=. THEN H07065 = .N;
           ELSE H07065=.C;
        END;
        ELSE IF H07064=2 AND H07065 IN (2) THEN DO;
           N19=9;
           H07063=1;
           H07065=.;
        END;
        ELSE IF H07064=2 AND H07065 IN (4,3,1) THEN DO;
           H07063=1;
           N19=10;
        END;
        ELSE IF H07064=3 THEN DO;
           H07063=1;
           N19=11;
        END;
        ELSE IF H07064=. THEN DO;
           N19=12;
        END;
     END;
  END;
  ELSE IF XSEXA=. AND H07063 IN (.) THEN N19=13;



  DROP AGE SEX;


NOSURVEY:

/* missing values */

  ARRAY MISS MISS_9 MISS_8 MISS_7 MISS_6 MISS_5 MISS_4 MISS_1 ;
  MISS_TOT=0;
  DO OVER MISS;
     MISS = 0;
  END;
  ARRAY MISSARAY &VARLIST2.;
```

```
  DO OVER MISSARAY;
     IF (MISSARAY EQ -9 ) THEN MISS_9 = MISS_9 + 1;
     ELSE IF (MISSARAY EQ -8) THEN MISS_8 = MISS_8 + 1;
     ELSE IF (MISSARAY EQ -7) THEN MISS_7 = MISS_7 + 1;
     ELSE IF (MISSARAY EQ -6) THEN MISS_6 = MISS_6 + 1;
     ELSE IF (MISSARAY EQ -5) THEN MISS_5 = MISS_5 + 1;
     ELSE IF (MISSARAY EQ -4) THEN MISS_4 = MISS_4 + 1;
     ELSE IF (MISSARAY EQ -1) THEN MISS_1 = MISS_1 + 1;
  END;
  DO OVER MISS;
     MISS_TOT=MISS_TOT + MISS;
  END;

*****************************************;

 OUTPUT;

RUN;


PROC FORMAT;
   VALUE GRID
     0='0'
     1-9999='>=1' ;
   VALUE $GRIDB
     1-5 = '1-5' ;
   VALUE $AGE
     018-039='<40'
     040-120='>=40';
   VALUE SCALE
     0-10='0-10';
   VALUE MARK
     1-6='Marked' ;
   VALUE MARKB
     2-7='Marked';

   VALUE MARKC
    1='1'
   2-HIGH='>1';

RUN;


proc contents data=out.cschm07q;
run;
```

F.2.B Q1FY2007\PROGRAMS\CODINGSCHEME\CSCHM07Q.FMT - INCLUDE FILE FOR CODING SCHEME FOR QUARTER 1 FY2007.

```
/*  Formats for original answers to survey questions,
     after variables have been recoded */

        FORMAT H07001   H07001_O YN.
               H07003   H07003_O MEDA.
               H07004   H07004_O MEDB.
               H07005   H07005_O MEDSUPP.
               H07006   H07006_O HPLAN1_.
               H07007   H07007_O HPTIME.

               H07008 H07008_O   H07010 H07010_O   H07012 H07012_O
               H07014 H07014_O   H07016 H07016_O   H07018 H07018_O
               H07021 H07021_O   H07026 H07026_O   H07028 H07028_O
                 YN.

               H07009   H07009_O RATE1_.
               H07011   H07011_O PROB1_.
               H07013   H07013_O PROB2_.
               H07015   H07015_O RATE2_.
               H07017   H07017_O OFTEN1_.
               H07019   H07019_O OFTEN2_.
               H07020   H07020_O TIME1_.
               H07022   H07022_O OFTEN3_.
               H07023   H07023_O TIME2_.
               H07024   H07024_O OFTEN4_.
               H07025   H07025_O OFTEN4_.

               H07027   H07027_O PROB3_.
               H07029   H07029_O PROB3a.

               H07030-H07036   H07030_O--H07036_O OFTEN5_.

               H07037   H07037_O RATE3_.

               H07038   H07038_O PLACE.

               H07039   H07039_O YNDNK.

               H07040--H07041  H07040_O--H07041_O OFTEN6_.

               H07042 H07042_O   H07044 H07044_O
               H07046 H07046_O   H07060 H07060_O
               H07067 H07067_O
                  YN.

               H07043   H07043_O PROB8_.
               H07045   H07045_O PROB9_.
               H07047   H07047_O PROB10_.
               H07048   H07048_O RATE4_.

               H07049   H07049_O TIME5_.
               H07050   H07050_O YNBP_.
               H07051   H07051_O TIME7_.
               H07052   H07052_O YNDNK.
               H07053   H07053_O TIME8_.
               H07054   H07054_O TIME9_.
               H07055   H07055_O OFTEN7_.
               H07056   H07056_O OFTEN7_.
               H07057   H07057_O OFTEN7_.
               H07058   H07058_O SEX.
               H07059   H07059_O TIME11_.
               H07061   H07061_O TIME12_.
               H07063   H07063_O YNPREG.
               H07064   H07064_O PREG1_.
               H07065   H07065_O PREG2_.
               H07066   H07066_O HEALTH.

               H07068F H07068FO
               H07068I H07068IO
```

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      H07069  H07069_O
        TIME14_.

      SREDA    SREDA_O  EDUC.
      H07070   H07070_O HISP.
      SRAGE    SRAGE_O  AGEGRP.

      S07G18  S07G18_O YN.
      S07G19  S07G19_O RSRV1_.
      S07G20  S07G20_O
      S07G24  S07G24_O RSRV2_.
      S07G21  S07G21_O RSRV3_.
      S07G22  S07G22_O RSRV4_.
      S07G23  S07G23_O RSRV5_.
      S07G25  S07G25_O RSRV6_.
      S07G26  S07G26_O RSRV7_.
      S07G27  S07G27_O RSRV8_.
      S07G28  S07G28_O RSRV9_.
      S07G30  S07G30_O RSRV10_.
      S07G31  S07G31_O RSRV11_.
      S07G32  S07G32_O
      S07G33  S07G33_O RSRV12_.
      S07G34  S07G34_O RSRV13_.
      S07G35  S07G35_O RSRV13_.
      S07G36  S07G36_O RSRV14_.
      S07G37  S07G37_O
      S07G39  S07G39_O RSRV15_.
      S07G38  S07G38_O RSRV16_.


      MISS_1   MISS_4-MISS_9 MISS_TOT 4.
      e1 e2 e3 e4 e5 e6 e7 e8 e9 e10 e11 e12 e13 e14 e15 e16 e17
      e18 e19 e20 e21 e22 e23 e24
         $e_.;


LABEL H07001_O='Are you the person listed on envelope'
      H07001  ='Are you the person listed on envelope'
      H07002AO='Health plan(s) covered: TRICARE Prime'
      H07002A ='Health plan(s) covered: TRICARE Prime'
      H07002CO='Health plan(s) covered: TRICARE Ext/Stnd'
      H07002C ='Health plan(s) covered: TRICARE Ext/Stnd'
      H07002NO='Health plan(s) covered: TRICARE Plus'
      H07002N ='Health plan(s) covered: TRICARE Plus'
      H07002OO='Health plan(s) covered: TRICARE For Life'
      H07002O ='Health plan(s) covered: TRICARE For Life'
      H07002PO='Health plan(s) covered: TRICARE Supplmntl Ins'
      H07002P ='Health plan(s) covered: TRICARE Supplmntl Ins'
      H07002QO='Health plan(s) covered: TRICARE Reserve Select'
      H07002Q ='Health plan(s) covered: TRICARE Reserve Select'
      H07002FO='Health plan(s) covered: MEDICARE'
      H07002F ='Health plan(s) covered: MEDICARE'
      H07002GO='Health plan(s) covered: FEHBP'
      H07002G ='Health plan(s) covered: FEHBP'
      H07002HO='Health plan(s) covered: Medicaid'
      H07002H ='Health plan(s) covered: Medicaid'
      H07002IO='Health plan(s) covered: Civilian HMO'
      H07002I ='Health plan(s) covered: Civilian HMO'
      H07002JO='Health plan(s) covered: Other civilian'
      H07002J ='Health plan(s) covered: Other civilian'
      H07002KO='Health plan(s) covered: USFHP'
      H07002K ='Health plan(s) covered: USFHP'
      H07002MO='Health plan(s) covered: Veterans'
      H07002M ='Health plan(s) covered: Veterans'
      H07002RO='Health plan(s) covered: Gov Hlth ins-other cntry'
      H07002R ='Health plan(s) covered: Gov Hlth ins-other cntry'
      H07002LO='Health plan(s) covered: Not sure'
      H07002L ='Health plan(s) covered: Not sure'
      H07003  ='Currently Covered Medicare Part A'
      H07003_O='Currently Covered Medicare Part A'
      H07004  ='Currently Covered Medicare Part B'
      H07004_O='Currently Covered Medicare Part B'
      H07005  ='Currently Covered Medicare Supplemental'
```

```
H07005_O='Currently Covered Medicare Supplemental'
H07006_O='Which health plan did you use most'
H07006  ='Which health plan did you use most'
H07007_O='Yrs in a row with health plan'
H07007  ='Yrs in a row with health plan'
H07008_O='Have one person think of as personal Dr'
H07008  ='Have one person think of as personal Dr'
H07009_O='Rating of your personal Dr or nurs'
H07009  ='Rating of your personal Dr or nurs'
H07010_O='Same prs Dr/nurs before joined hlth pln'
H07010  ='Same prs Dr/nurs before joined hlth pln'
H07011_O='Health plan: prblm to get Dr happy with'
H07011  ='Health plan: prblm to get Dr happy with'
H07012_O='In lst yr:you/Dr think you need spclst'
H07012  ='In lst yr:you/Dr think you need spclst'
H07013_O='In lst yr:how much prblm see spclst'
H07013  ='In lst yr:how much prblm see spclst'
H07014_O='In lst yr:did you see a specialist'
H07014  ='In lst yr:did you see a specialist'
H07015_O='Rating of specialist seen in lst yr'
H07015  ='Rating of specialist seen in lst yr'
H07016_O='In lst yr:call Dr for help/advice'
H07016  ='In lst yr:call Dr for help/advice'
H07017_O='In lst yr:when call how often get hlp nd'
H07017  ='In lst yr:when call how often get hlp nd'
H07018_O='In lst yr:ill/injry/cond care right away'
H07018  ='In lst yr:ill/injry/cond care right away'
H07019_O='In lst yr:get urgnt care as soon as wntd'
H07019  ='In lst yr:get urgnt care as soon as wntd'
H07020_O='In lst yr:wait btwn try get care,see prv'
H07020  ='In lst yr:wait btwn try get care,see prv'
H07021_O='In lst yr:make appts non-urgnt hlth care'
H07021  ='In lst yr:make appts non-urgnt hlth care'
H07022_O='In lst yr:non-urg hlth cre appt whn wntd'
H07022  ='In lst yr:non-urg hlth cre appt whn wntd'
H07023_O='In lst yr:days btwn appt & see prvder'
H07023  ='In lst yr:days btwn appt & see prvder'
H07024_O='In lst yr:goto emrgncy rm for own care'
H07024  ='In lst yr:goto emrgncy rm for own care'
H07025_O='In lst yr:goto Dr office/clinic for care'
H07025  ='In lst yr:goto Dr office/clinic for care'
H07026_O='In lst yr:think need care/tests/trtmnt'
H07026  ='In lst yr:think need care/tests/trtmnt'
H07027_O='In lst yr:prblm to get care thght ncssry'
H07027  ='In lst yr:prblm to get care thght ncssry'
H07028_O='In lst yr:need apprvl care/tests/trtmnt'
H07028  ='In lst yr:need apprvl care/tests/trtmnt'
H07029_O='In lst yr:prblm w/delays wait for apprv'
H07029  ='In lst yr:prblm w/delays wait for apprv'
H07030_O='In lst yr:wait within 15 min appt see Dr'
H07030  ='In lst yr:wait within 15 min appt see Dr'
H07031_O='In lst yr:how oftn treat w/crtsy/rspct'
H07031  ='In lst yr:how oftn treat w/crtsy/rspct'
H07032_O='In lst yr:how oftn staff helpful'
H07032  ='In lst yr:how oftn staff helpful'
H07033_O='In lst yr:how oftn Drs listen to you'
H07033  ='In lst yr:how oftn Drs listen to you'
H07034_O='In lst yr:how oftn Drs explain things'
H07034  ='In lst yr:how oftn Drs explain things'
H07035_O='In lst yr:how oftn Drs show respect'
H07035  ='In lst yr:how oftn Drs show respect'
H07036_O='In lst yr:how oftn Drs spend enough time'
H07036  ='In lst yr:how oftn Drs spend enough time'
H07037_O='Rating of all health care in lst yr'
H07037  ='Rating of all health care in lst yr'
H07038_O='In lst yr:fclty use most for Health care'
H07038  ='In lst yr:fclty use most for Health care'
H07039_O='In lst yr:send in any claims'
H07039  ='In lst yr:send in any claims'
H07040_O='In lst yr:hlth pln handle in rsnble time'
H07040  ='In lst yr:hlth pln handle in rsnble time'
H07041_O='In lst yr:how oftn handle correctly'
H07041  ='In lst yr:how oftn handle correctly'
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H07042_O='In lst yr:info in written materials'
H07042  ='In lst yr:info in written materials'
H07043_O='In lst yr:prblm to find/undrstnd mtrls'
H07043  ='In lst yr:prblm to find/undrstnd mtrls'
H07044_O='In lst yr:hlth plan customer srvc help'
H07044  ='In lst yr:hlth plan customer srvc help'
H07045_O='In lst yr:prblm get help from cstmr srvc'
H07045  ='In lst yr:prblm get help from cstmr srvc'
H07046_O='In lst yr:fill out paperwork'
H07046  ='In lst yr:fill out paperwork'
H07047_O='In lst yr:prblms with paperwork'
H07047  ='In lst yr:prblms with paperwork'
H07048  ='Rating of all experience with hlth plan'
H07048_O='Rating of all experience with hlth plan'
H07049_O='Blood pressure: when lst reading'
H07049  ='Blood pressure: when lst reading'
H07050_O='Blood pressure: know if too high or not'
H07050  ='Blood pressure: know if too high or not'
H07051_O='When did you lst have a flu shot'
H07051  ='When did you lst have a flu shot'
H07052  ='Smoked at least 100 cigarettes in life'
H07052_O='Smoked at least 100 cigarettes in life'
H07053  ='Smoke everyday, some days or not at all'
H07053_O='Smoke everyday, some days or not at all'
H07054_O='How long since you quit smoking'
H07054  ='How long since you quit smoking'
H07055_O='Lst yr: # visits advised to quit smoking'
H07055  ='Lst yr: # visits advised to quit smoking'
H07056  ='# visits recom medic assist quit smoking'
H07056_O='# visits recom medic assist quit smoking'
H07057  ='# vist discu meth/strag asst quit smokng'
H07057_O='# vist discu meth/strag asst quit smokng'
H07058_O='Are you male or female'
H07058  ='Are you male or female'
H07059_O='Lst have a Pap smear test'
H07059  ='Lst have a Pap smear test'
H07060_O='Are you under age 40'
H07060  ='Are you under age 40'
H07061_O='Lst time: breasts checked mammography'
H07061  ='Lst time: breasts checked mammography'
H07063_O='Been pregnant in lst yr or pregnant now'
H07063  ='Been pregnant in lst yr or pregnant now'
H07064_O='In what trimester is your pregnancy'
H07064  ='In what trimester is your pregnancy'
H07065_O='Trimester first received prenatal care'
H07065  ='Trimester first received prenatal care'
H07066_O='In gnrl, how would you rate ovrall hlth'
H07066  ='In gnrl, how would you rate ovrall hlth'
H07067_O='Impairment/Hlth prblm limit activities'
H07067  ='Impairment/Hlth prblm limit activities'

H07068FO='Height without shoes (feet)'
H07068F ='Height without shoes (feet)'
H07068IO='Height without shoes (inches)'
H07068I ='Height without shoes (inches)'
H07069_O='Weight without shoes'
H07069  ='Weight without shoes'

SREDA_O ='Highest grade completed'
SREDA   ='Highest grade completed'
H07070_O='Are you Spanish/Hispanic/Latino'
H07070  ='Are you Spanish/Hispanic/Latino'
H07070AO='Not Spanish/Hispanic/Latino'
H07070A ='Not Spanish/Hispanic/Latino'
H07070BO='Mexican, Mexican American, Chicano'
H07070B ='Mexican, Mexican American, Chicano'
H07070CO='Puerto Rican'
H07070C ='Puerto Rican'
H07070DO='Cuban'
H07070D ='Cuban'
H07070EO='Other Spanish, Hispanic, or Latino'
H07070E ='Other Spanish, Hispanic, or Latino'
SRRACEAO='Race: White'
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SRRACEA ='Race: White'
SRRACEBO='Race: Black or African American'
SRRACEB ='Race: Black or African American'
SRRACECO='Race: American Indian or Alaska Native'
SRRACEC ='Race: American Indian or Alaska Native'
SRRACEDO='Race: Asian'
SRRACED ='Race: Asian'
SRRACEEO='Race: Native Hawaiian/other Pacific Isl.'
SRRACEE ='Race: Native Hawaiian/other Pacific Isl.'
SRAGE_O ='What is your age now'
SRAGE   ='What is your age now'

S07G18  ='Self/Spouse/Parent rsrvst actv duty >30 cnscutv dys'
S07G18_O='Self/Spouse/Parent rsrvst actv duty >30 cnscutv dys'
S07G19  ='Resv actvatd-cntngncy oprtns- >30 cnscutv dys'
S07G19_O='Resv actvatd-cntngncy oprtns- >30 cnscutv dys'
S07G20  ='Operatn rcntly actvatd-cntngncy opratns'
S07G20_O='Operatn rcntly actvatd-cntngncy opratns'
S07G21  ='When activated for cntngncy opratn'
S07G21_O='When activated for cntngncy opratn'
S07G22  ='Time period of initial activation orders'
S07G22_O='Time period of initial activation orders'
S07G23  ='Sps/prnt resv actvatd-cntngncy oprtns- >30 cnscutv dys'
S07G23_O='Sps/prnt resv actvatd-cntngncy oprtns- >30 cnscutv dys'
S07G24  ='Operatn Sps/prnt rcntly actvatd-cntngncy opratns'
S07G24_O='Operatn Sps/prnt rcntly actvatd-cntngncy opratns'
S07G25  ='When Sps/prnt activated for cntngncy opratn'
S07G25_O='When Sps/prnt activated for cntngncy opratn'
S07G26  ='Time period of initial Sps/prnt activation orders'
S07G26_O='Time period of initial Sps/prnt activation orders'
S07G27  ='Cvln hlth ins:Bfr bcmng elgbl for TRICARE'
S07G27_O='Cvln hlth ins:Bfr bcmng elgbl for TRICARE'
S07G28  ='Current health care coverage'
S07G28_O='Current health care coverage'
S07G29A ='Dnt Use TRICARE:grtr choice of drs /w civ plan'
S07G29AO='Dnt Use TRICARE:grtr choice of drs /w civ plan'
S07G29B ='Dnt Use TRICARE:btr cstmr srvc /w civ plan'
S07G29BO='Dnt Use TRICARE:btr cstmr srvc /w civ plan'
S07G29C ='Dnt Use TRICARE:Prsnl dr not available'
S07G29CO='Dnt Use TRICARE:Prsnl dr not available'
S07G29D ='Dnt Use TRICARE:Benefits poor'
S07G29DO='Dnt Use TRICARE:Benefits poor'
S07G29E ='Dnt Use TRICARE:get care easier /w civ plan'
S07G29EO='Dnt Use TRICARE:get care easier /w civ plan'
S07G29F ='Dnt Use TRICARE:Cost less /w civ plan'
S07G29FO='Dnt Use TRICARE:Cost less /w civ plan'
S07G29G ='Dnt Use TRICARE:no mltry facilities near me'
S07G29GO='Dnt Use TRICARE:no mltry facilities near me'
S07G29H ='Dnt Use TRICARE:prefer civilian drs'
S07G29HO='Dnt Use TRICARE:prefer civilian drs'
S07G29I ='Dnt Use TRICARE:prefer civilian hospitals'
S07G29IO='Dnt Use TRICARE:prefer civilian hospitals'
S07G29J ='Dnt Use TRICARE:happy /w civ plan'
S07G29JO='Dnt Use TRICARE:happy /w civ plan'
S07G29K ='Dnt Use TRICARE:another reason'
S07G29KO='Dnt Use TRICARE:another reason'
S07G30  ='Self/plcy holder pay all/part cvlan hlth ins'
S07G30_O='Self/plcy holder pay all/part cvlan hlth ins'
S07G31  ='Prblm gttng info frm TRICARE benefits'
S07G31_O='Prblm gttng info frm TRICARE benefits'
S07G32  ='Is personal Dr a civilian'
S07G32_O='Is personal Dr a civilian'
S07G33  ='Personal Dr accpts TRICARE'
S07G33_O='Personal Dr accpts TRICARE'
S07G34  ='Snc TRICARE elgbl: difficult to see psrnl dr'
S07G34_O='Snc TRICARE elgbl: difficult to see psrnl dr'
S07G35  ='Snc TRICARE elgbl: difficult to see spclst'
S07G35_O='Snc TRICARE elgbl: difficult to see spclst'
S07G36  ='Self/fam Rsrvst deactivated aftr 11/6/03'
S07G36_O='Self/fam Rsrvst deactivated aftr 11/6/03'
S07G37  ='TRICARE Elgbl bfr rsrvst rprtd to actv dty'
S07G37_O='TRICARE Elgbl bfr rsrvst rprtd to actv dty'
S07G38  ='Time eligible for this coverage'
```

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  S07G38_O='Time eligible for this coverage'
  S07G39  ='TRICARE Elgbl aftr self/rsrvst deactivated'
  S07G39_O='TRICARE Elgbl aftr self/rsrvst deactivated'


  N1 = "Coding Scheme Note 1"
  N2 = "Coding Scheme Note 2"
  N3 = "Coding Scheme Note 3"
  N4 = "Coding Scheme Note 4"
  N5 = "Coding Scheme Note 5"
  N6 = "Coding Scheme Note 6"
  N7 = "Coding Scheme Note 7"
  N8 = "Coding Scheme Note 8"
  N9 = "Coding Scheme Note 9"
  N10= "Coding Scheme Note 10"
  N11= "Coding Scheme Note 11"
  N12= "Coding Scheme Note 12"
  N13 = "Coding Scheme Note 13"
  N14 = "Coding Scheme Note 14"
  N15A1 = "Coding Scheme Note 15A1"
  N15A2 = "Coding Scheme Note 15A2"
  N15A3 = "Coding Scheme Note 15A3"
  N15A4 = "Coding Scheme Note 15A4"
  N15A5 = "Coding Scheme Note 15A5"
  N15A6 = "Coding Scheme Note 15A6"
  N16 = "Coding Scheme Note 16"
  N17A= "Coding Scheme Note 17A"
  N17B= "Coding Scheme Note 17B"
  N18 = "Coding Scheme Note 18"
  N19 = "Coding Scheme Note 19"



  MISS_1 = "Count of: Violates Skip Pattern"
  MISS_4 = "Count of: Incomplete grid error"
  MISS_5 = "Count of: Scalable reponse of Don't know"
  MISS_6 = "Count of: Not applicable - valid skip"
  MISS_7 = "Count of: Out-of-range error"
  MISS_8 = "Count of: Multiple response error"
  MISS_9 = "Count of: No response - invalid skip"
  MISS_TOT = "Total number of missing responses"
  XSEXA = "Male or Female  - R"
;
```

F.2.C Q2FY2007\PROGRAMS\CODINGSCHEME\CSCHM07Q.SAS - IMPLEMENT CODING SCHEME AND CODING TABLES FOR QUARTER 2 FY2007.

```
*****************************************************************************;
*  Program:  Cschm07q.sas
*  Written:  06/04/2001
*   Author:  C. Rankin
*
*    Input:  MERGESYN.SD2 - Merged MPR Sampling, DEERS, and Synovate Response Data
*   Output:  CSCHM07Q.SD2 - Coding scheme file
*
* Modified:  9/20/2001 - Recodes removed (stored in recodes_old.sas)
*           10/31/2001 - Revised notes 16 and 17 (became notes 26 and 27)
*            3/22/2002 - Updated Variable names for Q1 2002 and added
*                        Include file RENAME.SAS to change the variable
*                        names from 01 to 02. Skipping 01 designation to make
*                        survey reflect year of fielding
*            5/09/2002 - Change to logic in TFL supplement
*            3/17/2003 - Updated Variables names for Q1 2003
*            4/11/2003 - Added note 19a to accomodate Q1 2003 error where
*                        an option on most of the questionnaires was omitted for
*                        H03062
*            5/27/2003 - Updated Variable names for Q2 2003
*            12/05/2003 - Updated Variable names for Q4 2003
*            3/25/2004 - Updated Variable names for Q1 2004
*            6/3/2004 - Updated Variable names for Q2 2004
*            8/23/2004 - Updated Variable names for Q3 2004
*            1/13/2005 - Updated Variable names for Q4 2004
*            4/13/2005 - Updated Variable names for Q1 2005
*            7/20/2005 - Updated Variable names for Q2 2005
*            10/14/2005 - Updated Variable names for Q3 2005
*            12/22/2005 - Updated Variable names for Q4 2005
*            3/20/2006 - Updated Variable names for Q2 FY 2006
*            12/11/2006 - Updated Variable names for Q1 FY 2007
*  Purpose:  Apply Coding Scheme Specifications to DoD Health Care Survey
*            Response Data, check for consistency in responses and skip
*            patterns
*  Include
*    files:  Cschm07q.fmt
*
*****************************************************************************;

OPTIONS PS=80 LS=120 NOCENTER COMPRESS=YES PAGENO=1 SOURCE SOURCE2;
*OPTIONS OBS=100;

LIBNAME LIBRARY v612 "..\..\DATA\AFINAL\FMTLIB";
LIBNAME IN      v612 "..\..\DATA\AFINAL";
LIBNAME OUT     v612 "..\..\DATA\AFINAL";

%LET INDATA=MERGESYN;
%LET OUTDATA=CSCHM07Q;
%LET PERIOD=January, 2006 to December, 2006;

/* Variable names in survey -- become recoded varibles */

%Let varlist1 =

 H07001  H07002A H07002C H07002F H07002G H07002H H07002I H07002J H07002K
 H07002L H07002M H07002N H07002O H07002P H07002Q H07002R H07003  H07004  H07005
 H07006  H07007
 S07001  S07002  S07003  S07004  S07005  S07006  S07007  S07008A S07008B
 S07008C S07008D S07008E S07008F S07008G S07008H S07008I
 H07008  H07009  H07010  H07011  H07012  H07013  H07014
 H07015  H07016  H07017  H07018  H07019  H07020  H07021  H07022  H07023
 H07024  H07025  H07026  H07027  H07028  H07029  H07030  H07031  H07032
 H07033  H07034  H07035  H07036  H07037  H07038  H07039  H07040  H07041
 H07042  H07043  H07044  H07045  H07046  H07047  H07048

 S07G18   S07G19   S07G20   S07G21   S07G22   S07G23   S07G24   S07G25
 S07G26   S07G27   S07G28   S07G29A  S07G29B  S07G29C  S07G29D  S07G29E
 S07G29F  S07G29G  S07G29H  S07G29I  S07G29J  S07G29K
 S07G30   S07G31   S07G32   S07G33   S07G34   S07G35   S07G36   S07G37
```

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 S07G38   S07G39

 H07049  H07050
 H07051  H07052  H07053  H07054  H07055  H07056  H07057  H07058  H07059
 H07060  H07061  H07063  H07064  H07065  H07066  H07067

 H07068F H07068I H07069

 H07070  H07070A H07070B H07070C H07070D H07070E
 SRRACEA SRRACEB SRRACEC SRRACED SRRACEE SRAGE SREDA
 ;

/*  _O variables are the original values from the survey response */

%Let varlist2 =
 H07001_O H07002AO H07002CO H07002FO H07002GO H07002HO H07002IO H07002JO H07002KO
 H07002LO H07002MO H07002NO H07002OO H07002PO H07002QO H07002RO H07003_O H07004_O
 H07005_O H07006_O H07007_O
 S07001_O S07002_O S07003_O S07004_O S07005_O S07006_O S07007_O S07008AO S07008BO
 S07008CO S07008DO S07008EO S07008FO S07008GO S07008HO S07008IO
 H07008_O H07009_O H07010_O H07011_O H07012_O H07013_O H07014_O
 H07015_O H07016_O H07017_O H07018_O H07019_O H07020_O H07021_O H07022_O H07023_O
 H07024_O H07025_O H07026_O H07027_O H07028_O H07029_O H07030_O H07031_O H07032_O
 H07033_O H07034_O H07035_O H07036_O H07037_O H07038_O H07039_O H07040_O H07041_O
 H07042_O H07043_O H07044_O H07045_O H07046_O H07047_O H07048_O

 S07G18_O  S07G19_O  S07G20_O  S07G21_O  S07G22_O  S07G23_O  S07G24_O  S07G25_O
 S07G26_O  S07G27_O  S07G28_O  S07G29AO  S07G29BO  S07G29CO  S07G29DO  S07G29EO
 S07G29FO  S07G29GO  S07G29HO  S07G29IO  S07G29JO  S07G29KO
 S07G30_O  S07G31_O  S07G32_O  S07G33_O  S07G34_O  S07G35_O  S07G36_O  S07G37_O
 S07G38_O  S07G39_O


 H07049_O H07050_O
 H07051_O H07052_O H07053_O H07054_O H07055_O H07056_O H07057_O H07058_O H07059_O
 H07060_O H07061_O H07063_O H07064_O H07065_O H07066_O H07067_O

 H07068FO H07068IO H07069_O

 H07070_O H07070AO H07070BO H07070CO H07070DO H07070EO
 SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO SRAGE_O SREDA_O
 ;

TITLE  "DoD 2007 Survey Form A -- &PERIOD";
TITLE2 "Apply Coding Scheme";



DATA MERGESYN;

  SET IN.MERGESYN(RENAME=(H07H69  = H07069CH
                          H07H68F = H07068F
                          H07H68FN= H07068FN
                          H07H68I = H07068I
                          H07H68IN= H07068IN
                          H07H69N = H07069N
                          ));


*********************************************************************;
* Code added by Jacqueline Agufa 09/15/2004 to fix name of race variable;
*********************************************************************;

  RENAME SRACEA = SRRACEA;
  RENAME SRACEB = SRRACEB;
  RENAME SRACEC = SRRACEC;
  RENAME SRACED = SRRACED;
  RENAME SRACEE = SRRACEE;


  **** update variables with both filled items and check boxes
  **** Per Eric Schone;
```

```
  IF H07068F LT 1      THEN H07068F=H07068FN;
  IF H07068I IN (-9,.) THEN H07068I=H07068IN;


  H07069= COMPRESS(H07069CH,' ')*1;

  DROP H07069CH;


  IF H07069=0   AND H07069N=-9     THEN H07069 =H07069N;
  IF H07069<100 AND H07069N NE -9  THEN H07069 =H07069N;


  *** Correct odd height and weights Per Eric Schone;

  IF H07068F < 2 OR
     H07068F > 8
  THEN H07068F= -7;

  IF 0 <= H07069 < 40 OR
     H07069 > 500
  THEN H07069= -7;


  /* JMA
  ****Multiple responses were given to this question so H07070 is being created
  ****from the multiple responses.;
  */


  IF H07070B=1 THEN H07070=2;
  ELSE IF H07070E=1 THEN H07070=5;
  ELSE IF H07070C=1 THEN H07070=3;
  ELSE IF H07070D=1 THEN H07070=4;
  ELSE IF H07070A=1 THEN H07070=1;

  IF S07004>12 THEN S07004=12;

RUN;


DATA OUT.CSCHM07Q;

  LENGTH &VARLIST1. &VARLIST2. 4. MPRID $8.;
  INFORMAT &VARLIST2. 4.;
  %INCLUDE "CSCHM07Q.FMT";


/* label and format statements for original variables */


   SET MERGESYN;



*************************************************************;
**** Recodes for invalid responses:***************************;
*************************************************************;


/* This is a version of the coding scheme and coding tables for the
   FY 2007 HCSDB Form A.
   The following tables outline the coding of screening questions (skip),
   and subsequent items to be answered (or not answered in a series
   following a skip question.) */

/* First set up new variables that capture the original values */
/* recode the initial numeric values to the SAS numeric values */
/* specified in the coding scheme                              */

  SEX=PNSEXCD;
  AGE=INPUT(DAGEQY,8.);
```

```
  ARRAY RECODE(*) &VARLIST1;
  ARRAY   ORIG(*) &VARLIST2;

  DO I = 1 to DIM(ORIG);
      ORIG(I) = RECODE(I);
      IF ORIG(I) < 0 THEN DO;
              IF ORIG(I)= -9 THEN RECODE(I)=.;
         ELSE IF ORIG(I)= -8 THEN RECODE(I)=.A;
         ELSE IF ORIG(I)= -7 THEN RECODE(I)=.O;
         ELSE IF ORIG(I)= -6 THEN RECODE(I)=.N;
         ELSE IF ORIG(I)= -5 THEN RECODE(I)=.D;
         ELSE IF ORIG(I)= -4 THEN RECODE(I)=.I;
         ELSE IF ORIG(I)= -1 THEN RECODE(I)=.C;
         ELSE RECODE(I)=RECODE(I);
      END;
  END;
  DROP I;



/* recode selected responses to be 1=marked, 2=unmarked */

  ARRAY   MARKED(*)
           H07002A H07002C H07002F H07002G H07002H H07002I H07002J H07002K
           H07002L H07002M H07002N H07002O H07002P H07002Q H07002R

           S07008A S07008B
           S07008C S07008D S07008E S07008F S07008G S07008H S07008I

           S07G29A  S07G29B  S07G29C  S07G29D  S07G29E  S07G29F
           S07G29G  S07G29H  S07G29I  S07G29J  S07G29K

           H07070A H07070B H07070C H07070D H07070E

           SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
               ;


  ARRAY INFORMAT(*)
           H07002AO H07002CO H07002FO H07002GO H07002HO H07002IO H07002JO
           H07002KO H07002LO H07002MO H07002NO H07002OO H07002PO H07002QO H07002RO

           S07008AO S07008BO
           S07008CO S07008DO S07008EO S07008FO S07008GO S07008HO S07008IO

           S07G29AO  S07G29BO  S07G29CO  S07G29DO  S07G29EO S07G29FO
           S07G29GO  S07G29HO  S07G29IO  S07G29JO  S07G29KO

           H07070AO H07070BO H07070CO H07070DO H07070EO

           SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO

              ;


  DO J=1 TO DIM(INFORMAT);
     IF INFORMAT(J) NOT IN (.,-9) THEN MARKED(J)=1;
     ELSE MARKED(J)=2;
  END;
  DROP J;

  FORMAT
           H07002A H07002C H07002F H07002G H07002H H07002I H07002J H07002K
           H07002L H07002M H07002N H07002O H07002P H07002Q H07002R

           S07008A S07008B
           S07008C S07008D S07008E S07008F S07008G S07008H S07008I

           S07G29A  S07G29B  S07G29C  S07G29D  S07G29E
           S07G29F  S07G29G  S07G29H  S07G29I  S07G29J  S07G29K

           H07070A H07070B H07070C H07070D H07070E
```

```
          SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
        MARKED.;


*********************************************************************;

/*  skip coding scheme for all surveys not returned  **/

  IF FLAG_FIN NE 1 THEN GOTO NOSURVEY;

/** Note 1 -- H07006, H07007 health plan usage  **/

  IF H07006 > 0 OR H07006 =.D THEN N1=1;
  ELSE IF H07006=.N  THEN DO;
     IF H07007 NOT=. THEN DO;
        N1=2;
        H07007=.C;
     END;
     ELSE DO;
        N1=3;
        H07007=.N;
     END;
  END;
  ELSE IF H07006=.   THEN N1=4;


/** Note 1A1 -- S07001, S07002-S07008I: Eligible for TRICARE Reserve Select **/

  ARRAY NOTE1A11 S07002-S07007;
  ARRAY NOTE1A12 S07008A--S07008I;

  N1A1NMISS=0;

  DO OVER NOTE1A11;
     IF NOTE1A11 NE . THEN N1A1NMISS+1;
  END;

  DO OVER NOTE1A12;
     IF NOTE1A12 NOT IN  (.,2)   THEN N1A1NMISS+1;
  END;


  IF S07001=2 THEN DO;
     N1A1=1;
     DO OVER NOTE1A11;
        IF NOTE1A11=. THEN NOTE1A11=.N;
        ELSE NOTE1A11=.C;
     END;
     DO OVER NOTE1A12;
        IF NOTE1A12 IN (.,2) THEN NOTE1A12=.N;
        ELSE NOTE1A12=.C;
     END;
  END;
  ELSE IF S07001 IN (1,.D,.) AND N1A1NMISS=0 THEN DO;
     S07001=2;
     N1A1=2;
     DO OVER NOTE1A11;
        NOTE1A11=.N;
     END;
     DO OVER NOTE1A12;
        NOTE1A12=.N;
     END;
  END;
  ELSE IF S07001 IN (1,.D,.) AND (N1A1NMISS GT 0) THEN DO;
     N1A1=3;
  END;

  DROP N1A1NMISS;


/** Note 1A2 -- S07002, S07003-S07008I: Covered by TRICARE Reserve Select **/
```

```
      ARRAY NOTE1A21 S07003-S07007;
      ARRAY NOTE1A22 S07008A--S07008I;

      N1A2NMISS=0;

      DO OVER NOTE1A21;
         IF NOTE1A21 NE . THEN N1A2NMISS+1;
      END;

      DO OVER NOTE1A22;
         IF NOTE1A22 NOT IN  (.,2)   THEN N1A2NMISS+1;
      END;


      IF S07002 IN (.N,.C) THEN N1A2=1;
      ELSE IF S07002=2 THEN DO;
         N1A2=2;
         DO OVER NOTE1A21;
            IF NOTE1A21=. THEN NOTE1A21=.N;
            ELSE NOTE1A21=.C;
         END;
         DO OVER NOTE1A22;
            IF NOTE1A22 IN (.,2) THEN NOTE1A22=.N;
            ELSE NOTE1A22=.C;
         END;
      END;
      ELSE IF S07002 IN (1,.) AND N1A2NMISS=0 THEN DO;
         S07002=2;
         N1A2=3;
         DO OVER NOTE1A21;
            NOTE1A21=.N;
         END;
         DO OVER NOTE1A22;
            NOTE1A22=.N;
         END;
      END;
      ELSE IF S07002 IN (1, .) AND (N1A2NMISS>0) THEN DO;
         N1A2=4;
      END;

      DROP N1A2NMISS;


    /** Note 1A3 -- S07007, S07008A-S07008I: Elect not to purchase or drpped TRICARE Reserve Select
**/

      ARRAY NOTE1A3 S07008A--S07008I;

      N1A3NMISS=0;

      DO OVER NOTE1A3;
         IF NOTE1A3 NOT IN  (.,2)   THEN N1A3NMISS+1;
      END;


      IF S07007 IN (.N,.C) THEN N1A3=1;
      ELSE IF S07007=2 THEN DO;
         N1A3=2;
         DO OVER NOTE1A3;
            IF NOTE1A3 IN (.,2) THEN NOTE1A3=.N;
            ELSE NOTE1A3=.C;
         END;
      END;
      ELSE IF S07007 IN (1,.) AND N1A3NMISS=0 THEN DO;
         S07007=2;
         N1A3=3;
         DO OVER NOTE1A3;
            NOTE1A3=.N;
         END;
      END;
      ELSE IF S07007 IN (1) AND (N1A3NMISS>0) THEN DO;
         N1A3=4;
      END;
```

```
  ELSE IF S07007 IN (.) AND (N1A3NMISS>0) THEN DO;
     N1A3=5;
     DO OVER NOTE1A3;
        NOTE1A3=.;
     END;
  END;

  DROP N1A3NMISS;


/** Note 2 -- H07008 H07009 H07010 H07011:  Personal doctor or nurse **/

  IF H07008 IN (1,.) AND H07009 = .N THEN DO;
     H07008 = 2;
     H07009 =.C;
     IF H07010=. THEN H07010=.N;
     ELSE H07010=.C;
     N2=1;
  END;
  ELSE IF H07008 IN (1) AND H07009 NE .N  THEN DO;
     IF H07010 IN (1) AND H07011 IN (1,2,3) THEN DO;
        H07011=.C;
        N2=2;
     END;
     ELSE IF H07010 IN (.) AND H07011 IN (1,2,3) THEN DO;
        H07010=2;
        N2=3;
     END;
     ELSE IF H07010 IN (1) AND H07011 IN (.) THEN DO;
        H07011=.N;
        N2=4;
     END;
     ELSE IF H07010 IN (2) THEN DO;
        N2=5;
     END;
     ELSE IF H07010 IN (.) AND H07011 IN (.) THEN DO;
        N2=6;
     END;
  END;
  ELSE IF H07008 IN (2,.) THEN DO;
     IF H07009 NOT IN (.N, .) AND H07010 IN (1) AND H07011 IN (1,2,3)
     THEN DO;
        H07008=1;
        H07011=.C;
        N2=7;
     END;
     ELSE IF H07009 NOT IN (.N, .) AND H07010 IN (.) AND H07011 IN (1,2,3)
     THEN DO;
        H07008=1;
        N2=8;
     END;
     ELSE IF H07009 NOT IN (.N, .) AND H07010 IN (.) AND H07011 IN (.)
     THEN DO;
        H07008=1;
        N2=9;
     END;
     ELSE IF H07008=2 AND H07009 IN (.) AND H07010 IN (1) AND H07011 IN (1,2,3)
     THEN DO;
        H07009=.N;
        H07010=.C;
        N2=10;
     END;
     ELSE IF H07008 = 2 AND H07009 IN (.N)
     THEN DO;
        H07009=.C;
        IF H07010=. THEN H07010=.N;
        ELSE H07010=.C;
        N2=11;
     END;
     ELSE IF H07010 IN (1)
     THEN DO;
        H07008=1;
        IF H07011=. THEN H07011=.N;
```

```
        ELSE H07011=.C;
        N2=12;
     END;
     ELSE IF H07010 IN (2)
     THEN DO;
        H07008=1;
        N2=13;
     END;
     ELSE IF H07008=2 AND H07009 In (.) AND H07010= . THEN DO;
        H07009=.N;
        H07010=.N;
        N2=14;
     END;
     ELSE IF H07008=. AND H07009=. AND H07010=. THEN DO;
        N2=15;
     END;
  END;



/** Note 3 -- H07012, H07013:  needed to see a specialist in last 12 months **/

  IF H07012=1 AND H07013 IN (1,2,3,.) THEN N3=1;
  ELSE IF H07012 IN (1,.) AND H07013=.N THEN DO;
     H07012=2;
     H07013=.C;
     N3=2;
  END;
  ELSE IF H07012 IN (2,.) AND H07013 IN (1,2,3) THEN DO;
     H07012=1;
     N3=3;
  END;
  ELSE IF H07012=2 AND H07013 IN (.,.N) THEN DO;
     IF H07013=. THEN H07013=.N;
     ELSE H07013=.C;
     N3=4;
  END;
  ELSE IF H07012=.  AND H07013=.  THEN N3=5;



/** Note 4 -- H07014, H07015: saw a specialist in last 12 months **/

  IF H07014=1 AND H07015 IN (0,1,2,3,4,5,6,7,8,9,10,.) THEN N4=1;
  ELSE IF H07014 IN (1,.) AND H07015=.N THEN DO;
     H07014=2;
     H07015=.C;
     N4=2;
  END;
  ELSE IF H07014 IN (2,.) AND H07015 IN (0,1,2,3,4,5,6,7,8,9,10) THEN DO;
     H07014=1;
     N4=3;
  END;
  ELSE IF H07014=2 AND H07015 IN (.,.N) THEN DO;
     IF H07015=. THEN H07015=.N;
     ELSE H07015=.C;
     N4=4;
  END;
  ELSE IF H07014=.  AND H07015=.  THEN N4=5;



/** Note 5 -- called a doctor's office:  H07016, H07017 **/

  IF H07016=1 AND H07017 IN (1,2,3,4,.) THEN N5=1;
  ELSE IF H07016 IN (1,.) AND H07017=.N THEN DO;
     H07016=2;
     H07017=.C;
     N5=2;
  END;
  ELSE IF H07016 IN (2,.) AND H07017 IN (1,2,3,4) THEN DO;
     H07016=1;
```

```
     N5=3;
  END;
  ELSE IF H07016=2 AND H07017 IN (.,.N) THEN DO;
     IF H07017=. THEN H07017=.N;
     ELSE H07017=.C;
     N5=4;
  END;
  ELSE IF H07016=.  AND H07017=.  THEN N5=5;


/** Note 6 -- H07018,H07019,H07020:  illness or injury **/

  ARRAY NOTE6 H07019 H07020;
  N6MARK=0;
  N6NMISS=0;
  N6NN=0;

  DO OVER NOTE6;
     IF NOTE6 NE . THEN N6NMISS+1;
     IF NOTE6 NOT IN (.N,.) THEN N6MARK+1;
     IF NOTE6 EQ .N THEN N6NN+1;
  END;


  IF H07018=1 AND N6NMISS=0 THEN DO;
       N6=1;
  END;
  ELSE IF H07018 IN (1,.) AND N6NMISS>0 AND N6MARK=0 THEN DO;
     H07018=2;
     N6=2;
     DO OVER NOTE6;
        IF NOTE6=. THEN NOTE6=.N;
        ELSE NOTE6=.C;
     END;
  END;
  ELSE IF H07018=1 AND N6MARK=1 AND N6NN=1 THEN  DO;
     DO OVER NOTE6;
        IF NOTE6=.N THEN NOTE6=.;
     END;
     N6=3;
  END;
  ELSE IF H07018=1 AND N6MARK>0 THEN DO;
     N6=4;
  END;
  ELSE IF H07018=2 AND N6MARK=1 AND N6NN=1  THEN  DO;
     H07019=.C;
     H07020=.C;
     N6=5;
  END;
  ELSE IF H07018 IN (2,.) AND N6MARK>0 THEN DO;
     H07018=1;
     N6=6;
     DO OVER NOTE6;
        IF NOTE6=.N THEN NOTE6=.;
     END;
  END;
  ELSE IF H07018=2 AND (N6NMISS=0 OR (N6NMISS>0 AND N6MARK=0)) THEN DO;
     N6=7;
     DO OVER NOTE6;
        IF NOTE6=. THEN NOTE6=.N;
        ELSE NOTE6=.C;
     END;
  END;
  ELSE IF H07018=.  AND N6NMISS=0 THEN N6=8;


  DROP N6NMISS N6MARK N6NN;


/** Note 7 -- H07021,H07022,H07023:  regular or routine healthcare **/

  ARRAY NOTE7 H07022 H07023;
  N7MARK=0;
```

```
  N7NMISS=0;
  N7NN=0;

  DO OVER NOTE7;
     IF NOTE7 NE . THEN N7NMISS+1;
     IF NOTE7 NOT IN (.N,.) THEN N7MARK+1;
     IF NOTE7 EQ .N THEN N7NN+1;
  END;

  IF H07021=1 AND N7NMISS=0 THEN DO;
       N7=1;
  END;
  ELSE IF H07021 IN (1,.) AND N7NMISS>0 AND N7MARK=0 THEN DO;
     H07021=2;
     N7=2;
     DO OVER NOTE7;
        IF NOTE7=. THEN NOTE7=.N;
        ELSE NOTE7=.C;
     END;
  END;
  ELSE IF H07021=1 AND N7MARK=1 AND N7NN=1 THEN  DO;
     DO OVER NOTE7;
        IF NOTE7=.N THEN NOTE7=.;
     END;
     N7=3;
  END;
  ELSE IF H07021=1 AND N7MARK>0 THEN DO;
     N7=4;
  END;
  ELSE IF H07021=2 AND N7MARK=1 AND N7NN=1  THEN  DO;
     H07022=.C;
     H07023=.C;
     N7=5;
  END;
  ELSE IF H07021 IN (2,.) AND N7MARK>0 THEN DO;
     H07021=1;
     N7=6;
     DO OVER NOTE7;
        IF NOTE7=.N THEN NOTE7=.;
     END;
  END;
  ELSE IF H07021=2 AND (N7NMISS=0 OR (N7NMISS>0 AND N7MARK=0)) THEN DO;
     N7=7;
     DO OVER NOTE7;
        IF NOTE7=. THEN NOTE7=.N;
        ELSE NOTE7=.C;
     END;
  END;
  ELSE IF H07021=.  AND N7NMISS=0 THEN N7=8;


  DROP N7NMISS N7MARK N7NN;



/** Note 8 -- H07025, H07026-H07037: doctor's office or clinic **/

  ARRAY NOTE8  H07026-H07037;

  N8MARK=0;
  N8NMISS=0;

  DO OVER NOTE8;
     IF NOTE8 NE . THEN N8NMISS+1;
     IF NOTE8 NOT IN  (., .N) THEN N8MARK+1;
  END;


  IF H07025=1 THEN DO;
     N8=1;
     DO OVER NOTE8;
        IF NOTE8=. THEN NOTE8=.N;
        ELSE NOTE8=.C;
```

```
      END;
   END;
   ELSE IF H07025 IN (2,3,4,5,6,7,.) AND N8NMISS>0 AND N8MARK=0 THEN DO;
      H07025=1;
      N8=2;
      DO OVER NOTE8;
         IF NOTE8=. THEN NOTE8=.N;
         ELSE NOTE8=.C;
      END;
   END;
   ELSE IF H07025 IN (2,3,4,5,6,7) AND (N8NMISS=0 OR N8MARK>0) THEN DO;
      DO OVER NOTE8;
         IF NOTE8=.N THEN NOTE8=.;
      END;
      N8=3;
   END;
   ELSE IF H07025=.  AND N8NMISS=0 THEN N8=4;
   ELSE IF H07025 IN (.) AND N8MARK>0 THEN DO;
      N8=5;
      DO OVER NOTE8;
         IF NOTE8=.N THEN NOTE8=.;
      END;
   END;

   DROP N8NMISS N8MARK;



/** Note 9 -- You or doctor believed you needed care, tests or treatment:
               H07026, H07027 **/


   IF H07026 IN (.N, .C) THEN N9=1;
   ELSE IF H07026=1 AND H07027 IN (1,2,3,.) THEN N9=2;
   ELSE IF H07026 IN (1,.) AND H07027=.N THEN DO;
      H07026=2;
      H07027=.C;
      N9=3;
   END;
   ELSE IF H07026 IN (2,.) AND H07027 IN (1,2,3) THEN DO;
      H07026=1;
      N9=4;
   END;
   ELSE IF H07026=2 AND H07027 IN (.,.N) THEN DO;
      IF H07027=. THEN H07027=.N;
      ELSE H07027=.C;
      N9=5;
   END;
   ELSE IF H07026=.  AND H07027=.  THEN N9=6;



/** Note 10 -- Needed approval from healthplan for care, tests or treatment:
               H07028, H07029 **/

   IF H07028 IN (.N, .C) THEN N10=1;
   ELSE IF H07028=1 AND H07029 IN (1,2,3,.) THEN N10=2;
   ELSE IF H07028 IN (1,.) AND H07029=.N THEN DO;
      H07028=2;
      H07029=.C;
      N10=3;
   END;
   ELSE IF H07028 IN (2,.) AND H07029 IN (1,2,3) THEN DO;
      H07028=1;
      N10=4;
   END;
   ELSE IF H07028=2 AND H07029 IN (.,.N) THEN DO;
      IF H07029=. THEN H07029=.N;
      ELSE H07029=.C;
      N10=5;
   END;
   ELSE IF H07028=.  AND H07029=.  THEN N10=6;
```

```
/** Note 11 -- H07039, H07040-H07041: claims to health plan **/

   ARRAY NOTE11 H07040-H07041;
  N11MARK=0;
  N11NMISS=0;
  N11NDK=0;

  DO OVER NOTE11;
     IF NOTE11 NE . THEN N11NMISS+1;
     IF NOTE11 NOT IN (.N,.) THEN N11MARK+1;
     IF NOTE11 NOT IN (.,.D) THEN N11NDK+1;
  END;

  IF H07039=1 AND
     (N11NMISS=0 OR (N11MARK>0 and N11NDK>0) or (N11NMISS>0 AND N11NDK=0))
  THEN DO;
     N11=1;
     DO OVER NOTE11;
        IF NOTE11=.N THEN NOTE11=.;
     END;
  END;
  ELSE IF H07039 IN (1,.,.D) AND N11NMISS>0 AND N11MARK=0 THEN DO;
     N11=2;
     H07039=2;
     DO OVER NOTE11;
        IF NOTE11=. THEN NOTE11=.N;
        ELSE NOTE11=.C;
     END;
  END;
  ELSE IF H07039 IN (2,.,.D) AND
           ((N11MARK>0 AND N11NDK>0) OR (N11NMISS>0 AND N11NDK=0))
        THEN DO;
     H07039=1;
     N11=3;
     DO OVER NOTE11;
        IF NOTE11=.N THEN NOTE11=.;
     END;
  END;
  ELSE IF H07039 IN (2) AND (N11NMISS=0 OR (N11NMISS>0 AND N11MARK=0)) THEN DO;
     N11=4;
     DO OVER NOTE11;
        IF NOTE11=. THEN NOTE11=.N;
        ELSE NOTE11=.C;
     END;
  END;
  ELSE IF H07039 IN (.D) AND N11NMISS=0 THEN DO;
     N11=5;
     DO OVER NOTE11;
        NOTE11=.N;
     END;
  END;
  ELSE IF H07039 IN (.)  AND N11NMISS=0 THEN N11=6;

  DROP N11NMISS N11MARK N11NDK;



/** NOTE12  -- H07042, H07043: **/

  IF H07042=1 AND H07043 IN (1,2,3,.) THEN N12=1;
  ELSE IF H07042 IN (1,.) AND H07043=.N THEN DO;
     H07042=2;
     H07043=.C;
     N12=2;
  END;
  ELSE IF H07042 IN (2,.) AND H07043 IN (1,2,3) THEN DO;     /* JMA per Daisy's suggestion
3/20/03  */
     H07042=1;
     N12=3;
  END;
  ELSE IF H07042=2 AND H07043 IN (.N,.) THEN DO;
```

```
     IF H07043=. THEN H07043=.N;
     ELSE H07043=.C;
     N12=4;
  END;
  ELSE IF H07042=. AND H07043=. THEN N12=5;


/** NOTE13 -- H07044, H07045: health plan's customer service **/

  IF H07044=1 AND H07045 IN (1,2,3,.) THEN N13=1;
  ELSE IF H07044 IN (1,.) AND H07045=.N THEN DO;
     H07044=2;
     H07045=.C;
     N13=2;
  END;
  ELSE IF H07044 IN (2,.) AND H07045 IN (1,2,3) THEN DO;
     H07044=1;
     N13=3;
  END;
  ELSE IF H07044=2 AND H07045 IN (.N,.) THEN DO;
     IF H07045=. THEN H07045=.N;
     ELSE H07045=.C;
     N13=4;
  END;
  ELSE IF H07044=. AND H07045=. THEN N13=5;


/** NOTE14  -- H07046, H07047: paperwork  **/

  IF H07046=1 AND H07047 IN (1,2,3,.) THEN N14=1;
  ELSE IF H07046 IN (1,.) AND H07047=.N THEN DO;
     H07046=2;
     H07047=.C;
     N14=2;
  END;
  ELSE IF H07046 IN (2,.) AND H07047 IN (1,2,3) THEN DO;
     H07046=1;
     N14=3;
  END;
  ELSE IF H07046=2 AND H07047 IN (.N,.)THEN DO;
     IF H07047=. THEN  H07047=.N;
     ELSE H07047=.C;
     N14=4;
  END;
  ELSE IF H07046=.  AND H07047=. THEN N14=5;

/** Note 15A1 -- S07G18, S07G19-S07G39: self/parent/spouse reservist on active duty
                                        for more than 30 consecutive days in support
                                        of contingency operations in past year
 **/

   ARRAY NOTE15A1  S07G19-S07G28 S07G30-S07G39;
   ARRAY NOTE15A12 S07G29A--S07G29K;

  N15A1MARK=0;
  N15A1NMISS=0;

  DO OVER NOTE15A1;
     IF NOTE15A1 NE . THEN N15A1NMISS+1;
     IF NOTE15A1 NOT IN (.N,.) THEN N15A1MARK+1;
  END;


  DO OVER NOTE15A12;
     IF NOTE15A12 NOT IN  (.,2) THEN N15A1NMISS+1;
     IF NOTE15A12 NOT IN (.N,.,2) THEN N15A1MARK+1;
  END;

  IF S07G18=1
  THEN DO;
     IF S07G19 IN (3,4) AND S07G23 IN (3,4) THEN DO;
        N15A1=1;
        S07G18=2;
```

```
      DO OVER NOTE15A1;
         IF NOTE15A1 = . THEN NOTE15A1=.N;
         ELSE NOTE15A1=.C;
      END;
      DO OVER NOTE15A12;
         IF NOTE15A12 IN (.,2) THEN NOTE15A12=.N;
         ELSE NOTE15A12=.C;
      END;
   END;
   ELSE IF S07G19 IN (3,4)   THEN N15A1=2;
   ELSE IF S07G19 IN (1,2,.) THEN N15A1=3;
END;
ELSE IF S07G18 IN (2, .) THEN DO;
   IF S07G19 IN (1,2) THEN DO;
      N15A1=4;
      S07G18=1;
   END;
   ELSE IF S07G23 IN (1,2) THEN DO;
      N15A1=5;
      S07G18=1;
   END;
   ELSE IF S07G18 IN (2) THEN DO;
      IF S07G19 IN (3,4,.) AND S07G23 IN (3,4,.) THEN DO;
         N15A1=6;
         DO OVER NOTE15A1;
            IF NOTE15A1 = . THEN NOTE15A1=.N;
            ELSE NOTE15A1=.C;
         END;
         DO OVER NOTE15A12;
            IF NOTE15A12 IN (.,2) THEN NOTE15A12=.N;
            ELSE NOTE15A12=.C;
         END;
      END;
   END;
   ELSE IF S07G18 IN (.) THEN DO;
      IF S07G19 IN (.) AND S07G23 IN (.) THEN DO;
         N15A1=7;
         DO OVER NOTE15A12;
            IF NOTE15A12 IN (2) THEN NOTE15A12=.;
         END;
      END;
      ELSE IF S07G19 IN (3,4,.) AND S07G23 IN (3,4) THEN DO;
         N15A1=8;
         S07G18=2;
         DO OVER NOTE15A1;
            IF NOTE15A1 = . THEN NOTE15A1=.N;
            ELSE NOTE15A1=.C;
         END;
         DO OVER NOTE15A12;
            IF NOTE15A12 IN (.,2) THEN NOTE15A12=.N;
            ELSE NOTE15A12=.C;
         END;
      END;
   END;
END;

DROP N15A1NMISS N15A1MARK;


/** Note 15A2 -- S07G19, S07G20-S07G22
               : self reservist on active duty
                 for more than 30 consecutive days in support
                 of contingency operations in past year
 **/


ARRAY NOTE15A2 S07G20--S07G22
               ;

IF S07G19 In (.N, .C)
THEN N15A2=1;
ELSE IF S07G19 IN (1,2) THEN DO;
   N15A2=2;
```

```
  END;
  ELSE IF S07G19 IN (3,4) THEN DO;
     N15A2=3;
     DO OVER NOTE15A2;
        IF NOTE15A2=. THEN NOTE15A2=.N;
        ELSE NOTE15A2=.C;
     END;
  END;
  ELSE IF S07G19=.  THEN N15A2=4;



/** Note 15A3 -- S07G23, S07G24-S07G26
                : spouse/parent reservist on active duty
                  for more than 30 consecutive days in support
                  of contingency operations in past year
 **/


  ARRAY NOTE15A3 S07G24--S07G26
                 ;

  IF S07G23 In (.N, .C)
  THEN N15A3=1;
  ELSE IF S07G23 IN (1,2) THEN DO;
     N15A3=2;
  END;
  ELSE IF S07G23 IN (3,4) THEN DO;
     N15A3=3;
     DO OVER NOTE15A3;
        IF NOTE15A3=. THEN NOTE15A3=.N;
        ELSE NOTE15A3=.C;
     END;
  END;
  ELSE IF S07G23=.  THEN N15A3=4;



/** Note 15A4 -- S07G28, S07G29A-S07G30
                : current health care coverage **/


  ARRAY NOTE15A4 S07G29A--S07G29K
                 ;

  N15A4NMISS=0;


  DO OVER NOTE15A4;
     IF NOTE15A4 IN (1) THEN N15A4NMISS+1;
  END;


  IF S07G28 In (.N, .C)
  THEN N15A4=1;
  ELSE IF S07G28 IN (3) THEN DO;
     N15A4=2;
  END;
  ELSE IF S07G28 IN (1) THEN DO;
     N15A4=3;
     DO OVER NOTE15A4;
        IF NOTE15A4 IN (.,2) THEN NOTE15A4=.N;
        ELSE NOTE15A4=.C;
     END;

     IF S07G30 IN (.) THEN S07G30=.N;
     ELSE S07G30=.C;
  END;
  ELSE IF S07G28 IN (2,.D) THEN DO;
     N15A4=4;
     DO OVER NOTE15A4;
        IF NOTE15A4 IN (.,2) THEN NOTE15A4=.N;
        ELSE NOTE15A4=.C;
```

```
      END;
   END;
   ELSE IF S07G28=.  THEN DO;
      IF N15A4NMISS > 0 THEN DO;
         N15A4=5;
         S07G28=3;
      END;
      ELSE IF S07G30 IN (1,2,3,.D) THEN DO;
         N15A4=6;
         S07G28=.D;
         DO OVER NOTE15A4;
            IF NOTE15A4 IN (.,2) THEN NOTE15A4=.N;
            ELSE NOTE15A4=.C;
         END;
      END;
      ELSE DO;
         N15A4=7;
         DO OVER NOTE15A4;
            IF NOTE15A4 IN (2) THEN NOTE15A4=.;
         END;
      END;
   END;


   DROP N15A4NMISS;


/** Note 15A5 -- S07G32, S07G33-S07G34
                : Personal Dr **/


   IF S07G32 In (.N, .C) AND S07G33 IN (.N, .C) AND S07G34 IN (.N, .C)
   THEN N15A5=1;
   ELSE IF S07G33 IN (.N) AND S07G34 IN (.N) THEN DO;
      N15A5=2;

      S07G32=.N;
   END;
   ELSE IF S07G32 IN (1) THEN DO;
      N15A5=3;

      IF S07G33 IN (.N) THEN S07G33=.;
      IF S07G34 IN (.N) THEN S07G34=.;
   END;
   ELSE IF S07G32 IN (2) AND S07G33 IN (1,2,.D,.) THEN DO;
      N15A5=4;
      IF S07G33 IN (.) THEN S07G33=.N;
      ELSE S07G33=.C;
   END;
   ELSE IF S07G32 IN (2) AND S07G33 IN (.N) AND S07G34 IN (1,2,3,.D,.) THEN DO;
      N15A5=5;
      S07G33=.C;
   END;
   ELSE IF S07G32 IN (.N) AND S07G33 IN (1,2,.D,.) THEN DO;
      N15A5=6;
      IF S07G33 IN (.) THEN S07G33=.N;
      ELSE S07G33=.C;
      IF S07G34 IN (.) THEN S07G34=.N;
      ELSE S07G34=.C;
   END;
   ELSE IF S07G32 IN (.N) AND S07G33 IN (.N) AND S07G34 IN (1,2,3,.D,.) THEN DO;
      N15A5=7;
      S07G33=.C;
      IF S07G34 IN (.) THEN S07G34=.N;
      ELSE S07G34=.C;
   END;
   ELSE IF S07G32=.  THEN N15A5=8;


/** Note 15A6 -- S07G36, S07G37-S07G38
                : Deactivated after Nov 6, 2003 **/
```

```
  IF S07G36 In (.N, .C)
  THEN N15A6=1;
  ELSE IF S07G36 IN (1) AND S07G37 IN (1, .) THEN N15A6=2;
  ELSE IF S07G36 IN (1,.) AND S07G37 IN (2, 3) THEN DO;
     N15A6=3;
     IF S07G38 IN (.) THEN S07G38=.N;
     ELSE S07G38=.C;
  END;
  ELSE IF S07G36 IN (2, .D) THEN DO;
     N15A6=4;
     IF S07G37 IN (.) THEN S07G37=.N;
     ELSE S07G37=.C;
     IF S07G38 IN (.) THEN S07G38=.N;
     ELSE S07G38=.C;
  END;
  ELSE IF S07G36=.  THEN N15A6=5;



/** Note 16 -- smoking:  H07052, H07053-H07057  **/

  ARRAY NOTE16 H07055 H07056 H07057;

  IF H07052=1 and H07053 IN (3,4) THEN DO;  /* still smoke */
     IF H07054 NE . THEN H07054=.C;
     ELSE H07054=.N;

     N16=1;
  END;
  ELSE IF H07052=1 AND H07053=2 THEN DO;         /* quit */
     /* JMA March 25 2004,
        Updated because H07056 and H07057 have been added to the
        skip pattern */
     IF H07054 IN (2,.D) THEN DO;               /* > 1 year ago */
        DO OVER NOTE16;
           IF NOTE16=. THEN NOTE16=.N;
           ELSE NOTE16=.C;
        END;
        N16=2;
     END;
     ELSE IF H07054 IN (3,.) THEN DO;          /* < 1 year ago */

        N16=3;

     END;
  END;
  ELSE IF H07052=1 AND H07053 IN (.D,.) THEN DO;  /* don't know */
     IF H07054=2 THEN DO;                        /* > 1 year ago */

        /* JMA March 25 2004,
        Updated because H07056 and H07057 have been added to the
        skip pattern */

        DO OVER NOTE16;
           IF NOTE16=. THEN NOTE16=.N;
           ELSE NOTE16=.C;
        END;
        H07053=2;
        N16=4;
     END;
     ELSE IF H07054=3 THEN DO;            /* < 1 year ago */
        H07053=2;
        N16=5;
     END;
     ELSE IF H07053 IN (.D) AND H07054 IN (.D,.) THEN DO;
        N16=6;
        IF H07054=. THEN H07054=.N;
        ELSE H07054=.C;
        DO OVER NOTE16;
           IF NOTE16=. THEN NOTE16=.N;
           ELSE NOTE16=.C;
        END;
```

```
   END;
   ELSE IF H07053 IN (.) AND H07054 IN (.D) THEN DO;
      N16=7;
      DO OVER NOTE16;
         IF NOTE16=. THEN NOTE16=.N;
         ELSE NOTE16=.C;
      END;
   END;
   ELSE IF H07053 IN (.) AND H07054 IN (.) THEN DO;
      N16=8;
   END;
END;
ELSE IF H07052 IN (2,.D,.) AND H07053 IN (3,4) THEN DO;
   H07052=1;

   IF H07054 NE . THEN H07054=.C;
   ELSE H07054=.N;


   N16=9;
END;
ELSE IF H07052 IN (2,.D) AND H07053 IN (2,.D, .) THEN DO; /*never smoke*/
   /* JMA March 25 2004,
      Updated because H07056 and H07057 have been added to the
      skip pattern */

   IF H07053 NE . THEN H07053 =.C;
   ELSE H07053=.N;

   IF H07054 NE . THEN H07054 =.C;
   ELSE H07054=.N;

   DO OVER NOTE16;
      IF NOTE16=. THEN NOTE16=.N;
      ELSE NOTE16=.C;
   END;

   N16=10;
END;
ELSE IF H07052 IN ( .) THEN DO;
   IF (H07053 IN (2) AND
       H07054 IN (.) AND
      (H07055 IN (2,3,4,5) OR H07056 IN (2,3,4,5) OR H07057 IN (2,3,4,5)))
   THEN DO;
      /* JMA March 25 2004,
         Updated because H07056 and H07057 have been added to the
         skip pattern */

      H07052=1;
      H07054=3;
      N16=11;
   END;
   ELSE IF H07053 IN (2,.) THEN DO; /*MRE/blank*/
      IF H07054 IN (2, .D) THEN DO;
          /* JMA March 25 2004,
          Updated because H07056 and H07057 have been added to the
          skip pattern */

          DO OVER NOTE16;
             IF NOTE16=. THEN NOTE16=.N;
             ELSE NOTE16=.C;
          END;
          N16=12;
      END;
      ELSE IF H07054 IN (3,.) THEN DO;
         IF (H07055 IN (2,3,4,5) OR H07056 IN (2,3,4,5) OR H07057 IN (2,3,4,5))
         THEN DO;
            H07052=1;
            N16=13;
         END;
         ELSE DO;

            N16=14;
```

```
          END;
       END;
     END;
     ELSE IF H07053=.D THEN DO; /*MRE/blank*/
        /* JMA March 25 2004,
           Updated because H07056 and H07057 have been added to the
           skip pattern */

        IF H07054 NE . THEN H07054 =.C;
        ELSE H07054=.N;

        DO OVER NOTE16;
           IF NOTE16=. THEN NOTE16=.N;
           ELSE NOTE16=.C;
        END;

        N16=15;
     END;
  END;


/** Note 16A1 -- advise from doctor on smoking:  H07055-H07057  **/

   IF H07055 EQ .N THEN DO;               /* jma Sep 19 2006 */
      IF H07056 IN (.,.N) THEN H07056 = .N;
      ELSE H07056=.C;
      IF H07057 IN (.,.N) THEN H07057 = .N;
      ELSE H07057=.C;
      N16A1=1;
   END;
   ELSE IF H07055 EQ 1 AND (H07056 =.N AND H07057=.N) THEN DO; /* jma May 10 2007 */
        H07056 = 1;
        H07057 = 1;
        N16A1=2;
   END;
   ELSE IF H07055 EQ 1 AND (H07056 =.N) THEN DO; /* jma May 10 2007 */
        H07056 = 1;
        N16A1=3;
   END;
   ELSE IF H07055 EQ 1 AND (H07057=.N) THEN DO; /* jma May 10 2007 */
        H07057 = 1;
        N16A1=4;
   END;
   ELSE IF H07055 IN (2,3,4,5,.) AND (H07056 =.N AND H07057= .N) THEN DO; /* jma May 10 2007 */
        H07056 = .;
        H07057 = .;
        N16A1=5;
   END;
   ELSE IF H07055 IN (2,3,4,5,.) AND (H07056 =.N) THEN DO; /* jma May 10 2007 */
        H07056 = .;
        N16A1=6;
   END;
   ELSE IF H07055 IN (2,3,4,5,.) AND (H07057= .N) THEN DO; /* jma May 10 2007 */
        H07057 = .;
        N16A1=7;
   END;
   ELSE IF H07055 GE 1 AND (H07056 > H07055 AND H07057 > H07055) THEN DO; /* jma May 10 2007 */
        H07056 = H07055;
        H07057 = H07055;
        N16A1=8;
   END;
   ELSE IF H07055 GE 1 AND (H07056 > H07055) THEN DO; /* jma May 10 2007 */
        H07056 = H07055;
        N16A1=9;
   END;
   ELSE IF H07055 GE 1 AND (H07057 > H07055) THEN DO; /* jma May 10 2007 */
        H07057 = H07055;
        N16A1=10;
   END;
   ELSE N16A1=11;

/** Note 17 - gender H07058, SEX, H07059--H07065,
              XSEXA */
```

```
/* 1/21/98 use SRSEX & responses to gender specific questions
   if there is discrepancy between SRSEX and SEX */
/* set imputed MALE, FMALE based on gender specific questions */


  ARRAY fmaleval H07059 H07060 H07061 H07063 H07064 H07065
                 ;

  cntfmale=0;
  DO OVER fmaleval;           /* mammogram/pap smear/PREGNANT*/
     IF fmaleval>0 THEN cntfmale=cntfmale+1;
  END;

  IF cntfmale>0 THEN FMALE=1;
  ELSE FMALE = 0;


  IF H07058=. THEN DO;
     IF (SEX='F' AND FMALE) THEN DO;
        N17a=1;
        XSEXA=2;
     END;
     ELSE IF (SEX='F' AND FMALE=0) THEN DO;
        N17a=2;
        XSEXA=2;
     END;
     ELSE IF (SEX='M' AND FMALE) THEN DO;
        N17a=3;
        XSEXA=1;
     END;
     ELSE IF (SEX='M' AND FMALE=0) THEN DO;
        N17a=4;
        XSEXA=1;
     END;
     ELSE IF ((SEX IN ('Z',' ') AND FMALE)) THEN DO;
        N17a=5;
        XSEXA=2;
     END;
     ELSE IF (SEX='Z' AND FMALE=0) THEN DO;
        N17a=6;
        XSEXA=.;
     END;
     ELSE IF (SEX=' ' AND FMALE=0) THEN DO;
        N17a=7;
        XSEXA=.;
     END;
  END;
  ELSE IF (H07058=1) THEN DO;
     IF FMALE=0 THEN DO;
        N17a=8;
        XSEXA=1;
     END;
     ELSE IF FMALE THEN DO;
        IF SEX='F' THEN DO;
           N17a=9;
           XSEXA=2;
        END;
        ELSE DO;
           N17a=10;
           XSEXA=1;
        END;
     END;
  END;
  ELSE IF (H07058=2) THEN DO;
     IF FMALE THEN DO;
       N17a=11;
       XSEXA=2;
     END;
     ELSE IF FMALE=0 THEN DO;
        IF SEX='M' THEN DO;
          N17a=12;
          XSEXA=1;
```

```
        END;
        ELSE DO;
           N17a=13;
           XSEXA=2;
        END;
     END;
  END;


/* Note 17b - gender vs mammogram/paps/pregnancy */
/*   REDEFINE FMALE TO LOOK ONLY AT MAMMOGRAM, PAP SMEAR ENTRIES and PREGNANCY */

  ARRAY NOTE17b H07059 H07060 H07061 H07063 H07064 H07065
                 ;

  cntfmale=0;
  DO OVER NOTE17b;           /* mammogram/pap smear/PREGNANT*/
     IF NOTE17b NE . THEN cntfmale=cntfmale+1;
  END;

  IF cntfmale>0 THEN FMALE=1;
  ELSE FMALE = 0;

  IF XSEXA=1 THEN DO;   /* male */
     IF FMALE=0 THEN DO;
        N17b=1;
        DO OVER NOTE17b;
           NOTE17b=.N;
        END;
     END;   /* valid skip */
     ELSE IF FMALE=1 THEN DO;
        N17b=2;
        DO OVER NOTE17b;
           IF NOTE17b=. THEN NOTE17b = .N;
           ELSE NOTE17b=.C;
        END;
     END;   /* inconsistent response */
  END;
  ELSE IF XSEXA=2 THEN  N17b=3; /* female */
  ELSE IF XSEXA=. THEN DO;      /*  missing sex  */
     N17b=4;
     DO OVER NOTE17b;
        NOTE17b=.;
     END;
  END;



  DROP FMALE CNTFMALE;


/* Note 18 - breast exam for female 40 or over  */

  IF XSEXA=1 THEN DO;  /* male */
     IF  (H07060=.C OR H07060=.N) AND (H07061=.C OR H07061=.N)
     THEN N18 = 1;
  END;
  ELSE IF XSEXA=2 THEN DO;
     IF H07060=2 THEN N18=2;         /* female 40 or over */
     ELSE IF H07060=1 THEN DO;   /* female < 40 */
        IF H07061 NE . THEN H07061=.C;
        ELSE H07061=.N;
        N18=3;
     END;
     ELSE IF H07060=. THEN DO;
        IF H07061 NE . THEN DO;
           H07060=2;
           N18=4;
        END;
        ELSE IF H07061=.  THEN DO;
           IF AGE<40 THEN DO;
              H07060 = 1;
              H07061=.N;
```

```
            N18=5;
         END;
         ELSE IF AGE >= 40 THEN DO;
            H07060=1;
            H07061=.N;
            N18=6;
         END;
         ELSE IF AGE=. THEN N18=7;
      END;
   END;
  END;
  ELSE IF XSEXA=. THEN N18=8;



/* Note 19 - gender vs Pregnancy */


  IF XSEXA=1 THEN N19=1;          /* male     */
  ELSE IF XSEXA=2 THEN DO;        /* female   */
     IF H07063=1 THEN DO;         /* pregnant */
        IF H07064=1 THEN DO;
           N19=2;
           IF H07065=. THEN H07065 = .N;
           ELSE H07065=.C;
        END;
        ELSE IF H07064=2 AND H07065 IN (2) THEN DO;
           N19=3;
           H07065=.;
        END;
        ELSE IF H07064=2 AND H07065 IN (4,3,1,.) THEN DO;
           N19=4;
        END;
        ELSE IF H07064 IN (3,.) THEN N19=5;
     END;
     ELSE IF H07063=2 THEN DO;
        IF H07064=. THEN H07064 = .N;
        ELSE H07064=.C;
        N19=6;
     END;
     ELSE IF H07063=3 THEN DO;
        N19=7;
        IF H07064=. THEN H07064 = .N;
        ELSE H07064=.C;
        IF H07065=. THEN H07065=.N;
        ELSE H07065=.C;
     END;
     ELSE IF H07063 IN (.) THEN DO;
        IF H07064=1 THEN DO;
           N19=8;
           H07063=1;
           IF H07065=. THEN H07065 = .N;
           ELSE H07065=.C;
        END;
        ELSE IF H07064=2 AND H07065 IN (2) THEN DO;
           N19=9;
           H07063=1;
           H07065=.;
        END;
        ELSE IF H07064=2 AND H07065 IN (4,3,1) THEN DO;
           H07063=1;
           N19=10;
        END;
        ELSE IF H07064=3 THEN DO;
           H07063=1;
           N19=11;
        END;
        ELSE IF H07064=. THEN DO;
           N19=12;
        END;
     END;
  END;
  ELSE IF XSEXA=. AND H07063 IN (.) THEN N19=13;
```

```
  DROP AGE SEX;


NOSURVEY:

/* missing values */

  ARRAY MISS MISS_9 MISS_8 MISS_7 MISS_6 MISS_5 MISS_4 MISS_1 ;
  MISS_TOT=0;
  DO OVER MISS;
     MISS = 0;
  END;
  ARRAY MISSARAY &VARLIST2.;

  DO OVER MISSARAY;
     IF (MISSARAY EQ -9 ) THEN MISS_9 = MISS_9 + 1;
     ELSE IF (MISSARAY EQ -8) THEN MISS_8 = MISS_8 + 1;
     ELSE IF (MISSARAY EQ -7) THEN MISS_7 = MISS_7 + 1;
     ELSE IF (MISSARAY EQ -6) THEN MISS_6 = MISS_6 + 1;
     ELSE IF (MISSARAY EQ -5) THEN MISS_5 = MISS_5 + 1;
     ELSE IF (MISSARAY EQ -4) THEN MISS_4 = MISS_4 + 1;
     ELSE IF (MISSARAY EQ -1) THEN MISS_1 = MISS_1 + 1;
  END;
  DO OVER MISS;
     MISS_TOT=MISS_TOT + MISS;
  END;

*****************************************;

 OUTPUT;

RUN;


PROC FORMAT;
   VALUE GRID
     0='0'
     1-9999='>=1' ;
   VALUE $GRIDB
     1-5 = '1-5' ;
   VALUE $AGE
     018-039='<40'
     040-120='>=40';
   VALUE SCALE
     0-10='0-10';
   VALUE MARK
     1-6='Marked' ;
   VALUE MARKB
     2-7='Marked';

   VALUE MARKC
    1='1'
   2-HIGH='>1';

RUN;


proc contents data=out.cschm07q;
run;
```

F.2.D Q2FY2007\PROGRAMS\CODINGSCHEME\CSCHM07Q.FMT - INCLUDE FILE FOR CODING SCHEME FOR QUARTER 2 FY2007.

```
/*  Formats for original answers to survey questions,
     after variables have been recoded */

        FORMAT H07001   H07001_O YN.
               H07003   H07003_O MEDA.
               H07004   H07004_O MEDB.
               H07005   H07005_O MEDSUPP.
               H07006   H07006_O HPLAN1_.
               H07007   H07007_O HPTIME.

               H07008 H07008_O   H07010 H07010_O   H07012 H07012_O
               H07014 H07014_O   H07016 H07016_O   H07018 H07018_O
               H07021 H07021_O   H07026 H07026_O   H07028 H07028_O
                 YN.

               H07009   H07009_O RATE1_.
               H07011   H07011_O PROB1_.
               H07013   H07013_O PROB2_.
               H07015   H07015_O RATE2_.
               H07017   H07017_O OFTEN1_.
               H07019   H07019_O OFTEN2_.
               H07020   H07020_O TIME1_.
               H07022   H07022_O OFTEN3_.
               H07023   H07023_O TIME2_.
               H07024   H07024_O OFTEN4_.
               H07025   H07025_O OFTEN4_.

               H07027   H07027_O PROB3_.
               H07029   H07029_O PROB3a.

               H07030-H07036   H07030_O--H07036_O OFTEN5_.

               H07037   H07037_O RATE3_.

               H07038   H07038_O PLACE.

               H07039   H07039_O YNDNK.

               H07040--H07041  H07040_O--H07041_O OFTEN6_.

               H07042 H07042_O   H07044 H07044_O
               H07046 H07046_O   H07060 H07060_O
               H07067 H07067_O
                  YN.

               H07043   H07043_O PROB8_.
               H07045   H07045_O PROB9_.
               H07047   H07047_O PROB10_.
               H07048   H07048_O RATE4_.

               H07049   H07049_O TIME5_.
               H07050   H07050_O YNBP_.
               H07051   H07051_O TIME7_.
               H07052   H07052_O YNDNK.
               H07053   H07053_O TIME8_.
               H07054   H07054_O TIME9_.
               H07055   H07055_O OFTEN7_.
               H07056   H07056_O OFTEN7_.
               H07057   H07057_O OFTEN7_.
               H07058   H07058_O SEX.
               H07059   H07059_O TIME11_.
               H07061   H07061_O TIME12_.
               H07063   H07063_O YNPREG.
               H07064   H07064_O PREG1_.
               H07065   H07065_O PREG2_.
               H07066   H07066_O HEALTH.

               H07068F H07068FO
               H07068I H07068IO
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      H07069  H07069_O
        TIME14_.

      SREDA    SREDA_O  EDUC.
      H07070   H07070_O HISP.
      SRAGE    SRAGE_O  AGEGRP.

      S07G18  S07G18_O YN.
      S07G19  S07G19_O RSRV1_.
      S07G20  S07G20_O
      S07G24  S07G24_O RSRV2_.
      S07G21  S07G21_O RSRV3_.
      S07G22  S07G22_O RSRV4_.
      S07G23  S07G23_O RSRV5_.
      S07G25  S07G25_O RSRV6_.
      S07G26  S07G26_O RSRV7_.
      S07G27  S07G27_O RSRV8_.
      S07G28  S07G28_O RSRV9_.
      S07G30  S07G30_O RSRV10_.
      S07G31  S07G31_O RSRV11_.
      S07G32  S07G32_O
      S07G33  S07G33_O RSRV12_.
      S07G34  S07G34_O RSRV13_.
      S07G35  S07G35_O RSRV13_.
      S07G36  S07G36_O RSRV14_.
      S07G37  S07G37_O
      S07G39  S07G39_O RSRV15_.
      S07G38  S07G38_O RSRV16_.

      S07001 S07001_O  YNDNK.
      S07002 S07002_O  S07007 S07007_O  YN.
      S07003 S07003_O  TIER.
      S07004 S07004_O  OPENVAR_.
      S07005 S07005_O  TRSCVG.
      S07006 S07006_O  TRSBuy.


      MISS_1   MISS_4-MISS_9 MISS_TOT 4.
      e1 e2 e3 e4 e5 e6 e7 e8 e9 e10 e11 e12 e13 e14 e15 e16 e17
      e18 e19 e20 e21 e22 e23 e24 e25
         $e_.;


LABEL H07001_O='Are you the person listed on envelope'
      H07001  ='Are you the person listed on envelope'
      H07002AO='Health plan(s) covered: TRICARE Prime'
      H07002A ='Health plan(s) covered: TRICARE Prime'
      H07002CO='Health plan(s) covered: TRICARE Ext/Stnd'
      H07002C ='Health plan(s) covered: TRICARE Ext/Stnd'
      H07002NO='Health plan(s) covered: TRICARE Plus'
      H07002N ='Health plan(s) covered: TRICARE Plus'
      H07002OO='Health plan(s) covered: TRICARE For Life'
      H07002O ='Health plan(s) covered: TRICARE For Life'
      H07002PO='Health plan(s) covered: TRICARE Supplmntl Ins'
      H07002P ='Health plan(s) covered: TRICARE Supplmntl Ins'
      H07002QO='Health plan(s) covered: TRICARE Reserve Select'
      H07002Q ='Health plan(s) covered: TRICARE Reserve Select'
      H07002FO='Health plan(s) covered: MEDICARE'
      H07002F ='Health plan(s) covered: MEDICARE'
      H07002GO='Health plan(s) covered: FEHBP'
      H07002G ='Health plan(s) covered: FEHBP'
      H07002HO='Health plan(s) covered: Medicaid'
      H07002H ='Health plan(s) covered: Medicaid'
      H07002IO='Health plan(s) covered: Civilian HMO'
      H07002I ='Health plan(s) covered: Civilian HMO'
      H07002JO='Health plan(s) covered: Other civilian'
      H07002J ='Health plan(s) covered: Other civilian'
      H07002KO='Health plan(s) covered: USFHP'
      H07002K ='Health plan(s) covered: USFHP'
      H07002MO='Health plan(s) covered: Veterans'
      H07002M ='Health plan(s) covered: Veterans'
      H07002RO='Health plan(s) covered: Gov Hlth ins-other cntry'
      H07002R ='Health plan(s) covered: Gov Hlth ins-other cntry'
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H07002LO='Health plan(s) covered: Not sure'
H07002L ='Health plan(s) covered: Not sure'
H07003  ='Currently Covered Medicare Part A'
H07003_O='Currently Covered Medicare Part A'
H07004  ='Currently Covered Medicare Part B'
H07004_O='Currently Covered Medicare Part B'
H07005  ='Currently Covered Medicare Supplemental'
H07005_O='Currently Covered Medicare Supplemental'
H07006_O='Which health plan did you use most'
H07006  ='Which health plan did you use most'
H07007_O='Yrs in a row with health plan'
H07007  ='Yrs in a row with health plan'
H07008_O='Have one person think of as personal Dr'
H07008  ='Have one person think of as personal Dr'
H07009_O='Rating of your personal Dr or nurs'
H07009  ='Rating of your personal Dr or nurs'
H07010_O='Same prs Dr/nurs before joined hlth pln'
H07010  ='Same prs Dr/nurs before joined hlth pln'
H07011_O='Health plan: prblm to get Dr happy with'
H07011  ='Health plan: prblm to get Dr happy with'
H07012_O='In lst yr:you/Dr think you need spclst'
H07012  ='In lst yr:you/Dr think you need spclst'
H07013_O='In lst yr:how much prblm see spclst'
H07013  ='In lst yr:how much prblm see spclst'
H07014_O='In lst yr:did you see a specialist'
H07014  ='In lst yr:did you see a specialist'
H07015_O='Rating of specialist seen in lst yr'
H07015  ='Rating of specialist seen in lst yr'
H07016_O='In lst yr:call Dr for help/advice'
H07016  ='In lst yr:call Dr for help/advice'
H07017_O='In lst yr:when call how often get hlp nd'
H07017  ='In lst yr:when call how often get hlp nd'
H07018_O='In lst yr:ill/injry/cond care right away'
H07018  ='In lst yr:ill/injry/cond care right away'
H07019_O='In lst yr:get urgnt care as soon as wntd'
H07019  ='In lst yr:get urgnt care as soon as wntd'
H07020_O='In lst yr:wait btwn try get care,see prv'
H07020  ='In lst yr:wait btwn try get care,see prv'
H07021_O='In lst yr:make appts non-urgnt hlth care'
H07021  ='In lst yr:make appts non-urgnt hlth care'
H07022_O='In lst yr:non-urg hlth cre appt whn wntd'
H07022  ='In lst yr:non-urg hlth cre appt whn wntd'
H07023_O='In lst yr:days btwn appt & see prvder'
H07023  ='In lst yr:days btwn appt & see prvder'
H07024_O='In lst yr:goto emrgncy rm for own care'
H07024  ='In lst yr:goto emrgncy rm for own care'
H07025_O='In lst yr:goto Dr office/clinic for care'
H07025  ='In lst yr:goto Dr office/clinic for care'
H07026_O='In lst yr:think need care/tests/trtmnt'
H07026  ='In lst yr:think need care/tests/trtmnt'
H07027_O='In lst yr:prblm to get care thght ncssry'
H07027  ='In lst yr:prblm to get care thght ncssry'
H07028_O='In lst yr:need apprvl care/tests/trtmnt'
H07028  ='In lst yr:need apprvl care/tests/trtmnt'
H07029_O='In lst yr:prblm w/delays wait for apprv'
H07029  ='In lst yr:prblm w/delays wait for apprv'
H07030_O='In lst yr:wait within 15 min appt see Dr'
H07030  ='In lst yr:wait within 15 min appt see Dr'
H07031_O='In lst yr:how oftn treat w/crtsy/rspct'
H07031  ='In lst yr:how oftn treat w/crtsy/rspct'
H07032_O='In lst yr:how oftn staff helpful'
H07032  ='In lst yr:how oftn staff helpful'
H07033_O='In lst yr:how oftn Drs listen to you'
H07033  ='In lst yr:how oftn Drs listen to you'
H07034_O='In lst yr:how oftn Drs explain things'
H07034  ='In lst yr:how oftn Drs explain things'
H07035_O='In lst yr:how oftn Drs show respect'
H07035  ='In lst yr:how oftn Drs show respect'
H07036_O='In lst yr:how oftn Drs spend enough time'
H07036  ='In lst yr:how oftn Drs spend enough time'
H07037_O='Rating of all health care in lst yr'
H07037  ='Rating of all health care in lst yr'
H07038_O='In lst yr:fclty use most for Health care'
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H07038  ='In lst yr:fclty use most for Health care'
H07039_O='In lst yr:send in any claims'
H07039  ='In lst yr:send in any claims'
H07040_O='In lst yr:hlth pln handle in rsnble time'
H07040  ='In lst yr:hlth pln handle in rsnble time'
H07041_O='In lst yr:how oftn handle correctly'
H07041  ='In lst yr:how oftn handle correctly'
H07042_O='In lst yr:info in written materials'
H07042  ='In lst yr:info in written materials'
H07043_O='In lst yr:prblm to find/undrstnd mtrls'
H07043  ='In lst yr:prblm to find/undrstnd mtrls'
H07044_O='In lst yr:hlth plan customer srvc help'
H07044  ='In lst yr:hlth plan customer srvc help'
H07045_O='In lst yr:prblm get help from cstmr srvc'
H07045  ='In lst yr:prblm get help from cstmr srvc'
H07046_O='In lst yr:fill out paperwork'
H07046  ='In lst yr:fill out paperwork'
H07047_O='In lst yr:prblms with paperwork'
H07047  ='In lst yr:prblms with paperwork'
H07048  ='Rating of all experience with hlth plan'
H07048_O='Rating of all experience with hlth plan'
H07049_O='Blood pressure: when lst reading'
H07049  ='Blood pressure: when lst reading'
H07050_O='Blood pressure: know if too high or not'
H07050  ='Blood pressure: know if too high or not'
H07051_O='When did you lst have a flu shot'
H07051  ='When did you lst have a flu shot'
H07052  ='Smoked at least 100 cigarettes in life'
H07052_O='Smoked at least 100 cigarettes in life'
H07053  ='Smoke everyday, some days or not at all'
H07053_O='Smoke everyday, some days or not at all'
H07054_O='How long since you quit smoking'
H07054  ='How long since you quit smoking'
H07055_O='Lst yr: # visits advised to quit smoking'
H07055  ='Lst yr: # visits advised to quit smoking'
H07056  ='# visits recom medic assist quit smoking'
H07056_O='# visits recom medic assist quit smoking'
H07057  ='# vist discu meth/strag asst quit smokng'
H07057_O='# vist discu meth/strag asst quit smokng'
H07058_O='Are you male or female'
H07058  ='Are you male or female'
H07059_O='Lst have a Pap smear test'
H07059  ='Lst have a Pap smear test'
H07060_O='Are you under age 40'
H07060  ='Are you under age 40'
H07061_O='Lst time: breasts checked mammography'
H07061  ='Lst time: breasts checked mammography'
H07063_O='Been pregnant in lst yr or pregnant now'
H07063  ='Been pregnant in lst yr or pregnant now'
H07064_O='In what trimester is your pregnancy'
H07064  ='In what trimester is your pregnancy'
H07065_O='Trimester first received prenatal care'
H07065  ='Trimester first received prenatal care'
H07066_O='In gnrl, how would you rate ovrall hlth'
H07066  ='In gnrl, how would you rate ovrall hlth'
H07067_O='Impairment/Hlth prblm limit activities'
H07067  ='Impairment/Hlth prblm limit activities'

H07068FO='Height without shoes (feet)'
H07068F ='Height without shoes (feet)'
H07068IO='Height without shoes (inches)'
H07068I ='Height without shoes (inches)'
H07069_O='Weight without shoes'
H07069  ='Weight without shoes'

SREDA_O ='Highest grade completed'
SREDA   ='Highest grade completed'
H07070_O='Are you Spanish/Hispanic/Latino'
H07070  ='Are you Spanish/Hispanic/Latino'
H07070AO='Not Spanish/Hispanic/Latino'
H07070A ='Not Spanish/Hispanic/Latino'
H07070BO='Mexican, Mexican American, Chicano'
H07070B ='Mexican, Mexican American, Chicano'
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H07070CO='Puerto Rican'
H07070C ='Puerto Rican'
H07070DO='Cuban'
H07070D ='Cuban'
H07070EO='Other Spanish, Hispanic, or Latino'
H07070E ='Other Spanish, Hispanic, or Latino'
SRRACEAO='Race: White'
SRRACEA ='Race: White'
SRRACEBO='Race: Black or African American'
SRRACEB ='Race: Black or African American'
SRRACECO='Race: American Indian or Alaska Native'
SRRACEC ='Race: American Indian or Alaska Native'
SRRACEDO='Race: Asian'
SRRACED ='Race: Asian'
SRRACEEO='Race: Native Hawaiian/other Pacific Isl.'
SRRACEE ='Race: Native Hawaiian/other Pacific Isl.'
SRAGE_O ='What is your age now'
SRAGE   ='What is your age now'

S07G18  ='Self/Spouse/Parent rsrvst actv duty >30 cnscutv dys'
S07G18_O='Self/Spouse/Parent rsrvst actv duty >30 cnscutv dys'
S07G19  ='Resv actvatd-cntngncy oprtns- >30 cnscutv dys'
S07G19_O='Resv actvatd-cntngncy oprtns- >30 cnscutv dys'
S07G20  ='Operatn rcntly actvatd-cntngncy opratns'
S07G20_O='Operatn rcntly actvatd-cntngncy opratns'
S07G21  ='When activated for cntngncy opratn'
S07G21_O='When activated for cntngncy opratn'
S07G22  ='Time period of initial activation orders'
S07G22_O='Time period of initial activation orders'
S07G23  ='Sps/prnt resv actvatd-cntngncy oprtns- >30 cnscutv dys'
S07G23_O='Sps/prnt resv actvatd-cntngncy oprtns- >30 cnscutv dys'
S07G24  ='Operatn Sps/prnt rcntly actvatd-cntngncy opratns'
S07G24_O='Operatn Sps/prnt rcntly actvatd-cntngncy opratns'
S07G25  ='When Sps/prnt activated for cntngncy opratn'
S07G25_O='When Sps/prnt activated for cntngncy opratn'
S07G26  ='Time period of initial Sps/prnt activation orders'
S07G26_O='Time period of initial Sps/prnt activation orders'
S07G27  ='Cvln hlth ins:Bfr bcmng elgbl for TRICARE'
S07G27_O='Cvln hlth ins:Bfr bcmng elgbl for TRICARE'
S07G28  ='Current health care coverage'
S07G28_O='Current health care coverage'
S07G29A ='Dnt Use TRICARE:grtr choice of drs /w civ plan'
S07G29AO='Dnt Use TRICARE:grtr choice of drs /w civ plan'
S07G29B ='Dnt Use TRICARE:btr cstmr srvc /w civ plan'
S07G29BO='Dnt Use TRICARE:btr cstmr srvc /w civ plan'
S07G29C ='Dnt Use TRICARE:Prsnl dr not available'
S07G29CO='Dnt Use TRICARE:Prsnl dr not available'
S07G29D ='Dnt Use TRICARE:Benefits poor'
S07G29DO='Dnt Use TRICARE:Benefits poor'
S07G29E ='Dnt Use TRICARE:get care easier /w civ plan'
S07G29EO='Dnt Use TRICARE:get care easier /w civ plan'
S07G29F ='Dnt Use TRICARE:Cost less /w civ plan'
S07G29FO='Dnt Use TRICARE:Cost less /w civ plan'
S07G29G ='Dnt Use TRICARE:no mltry facilities near me'
S07G29GO='Dnt Use TRICARE:no mltry facilities near me'
S07G29H ='Dnt Use TRICARE:prefer civilian drs'
S07G29HO='Dnt Use TRICARE:prefer civilian drs'
S07G29I ='Dnt Use TRICARE:prefer civilian hospitals'
S07G29IO='Dnt Use TRICARE:prefer civilian hospitals'
S07G29J ='Dnt Use TRICARE:happy /w civ plan'
S07G29JO='Dnt Use TRICARE:happy /w civ plan'
S07G29K ='Dnt Use TRICARE:another reason'
S07G29KO='Dnt Use TRICARE:another reason'
S07G30  ='Self/plcy holder pay all/part cvlan hlth ins'
S07G30_O='Self/plcy holder pay all/part cvlan hlth ins'
S07G31  ='Prblm gttng info frm TRICARE benefits'
S07G31_O='Prblm gttng info frm TRICARE benefits'
S07G32  ='Is personal Dr a civilian'
S07G32_O='Is personal Dr a civilian'
S07G33  ='Personal Dr accpts TRICARE'
S07G33_O='Personal Dr accpts TRICARE'
S07G34  ='Snc TRICARE elgbl: difficult to see psrnl dr'
S07G34_O='Snc TRICARE elgbl: difficult to see psrnl dr'
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S07G35  ='Snc TRICARE elgbl: difficult to see spclst'
S07G35_O='Snc TRICARE elgbl: difficult to see spclst'
S07G36  ='Self/fam Rsrvst deactivated aftr 11/6/03'
S07G36_O='Self/fam Rsrvst deactivated aftr 11/6/03'
S07G37  ='TRICARE Elgbl bfr rsrvst rprtd to actv dty'
S07G37_O='TRICARE Elgbl bfr rsrvst rprtd to actv dty'
S07G38  ='Time eligible for this coverage'
S07G38_O='Time eligible for this coverage'
S07G39  ='TRICARE Elgbl aftr self/rsrvst deactivated'
S07G39_O='TRICARE Elgbl aftr self/rsrvst deactivated'
S07001  ='Elgbl to purchase TRICARE rsrv select(TRS)'
S07001_O='Elgbl to purchase TRICARE rsrv select(TRS)'
S07002  ='In pst yr: Covered by TRICARE rsrv select'
S07002_O='In pst yr: Covered by TRICARE rsrv select'
S07003  ='Tier of most recent TRS coverage'
S07003_O='Tier of most recent TRS coverage'
S07004  ='In pst yr: #mnths covered under TRS'
S07004_O='In pst yr: #mnths covered under TRS'
S07005  ='TRS cvrg: family or member-only'
S07005_O='TRS cvrg: family or member-only'
S07006  ='Reason for purchase of TRS cvrg'
S07006_O='Reason for purchase of TRS cvrg'
S07007  ='In pst yr: elect not to purchase TRS cvrg'
S07007_O='In pst yr: elect not to purchase TRS cvrg'
S07008A ='Rsn no cvrg: cvlian hlth insrnc affrdbl'
S07008AO='Rsn no cvrg: cvlian hlth insrnc affrdbl'
S07008B ='Rsn no cvrg: cvlian hlth better benefits'
S07008BO='Rsn no cvrg: cvlian hlth better benefits'
S07008C ='Rsn no cvrg: other TRICARE hlth avlbl'
S07008CO='Rsn no cvrg: other TRICARE hlth avlbl'
S07008D ='Rsn no cvrg: period of elgblty ended'
S07008DO='Rsn no cvrg: period of elgblty ended'
S07008E ='Rsn no cvrg: TRS not affordable'
S07008EO='Rsn no cvrg: TRS not affordable'
S07008F ='Rsn no cvrg: not pleased with TRICARE'
S07008FO='Rsn no cvrg: not pleased with TRICARE'
S07008G ="Rsn no cvrg: my dr doesn't accept TRS"
S07008GO="Rsn no cvrg: my dr doesn't accept TRS"
S07008H ='Rsn no cvrg: change in emplymnt status'
S07008HO='Rsn no cvrg: change in emplymnt status'
S07008I ="Rsn no cvrg: don't know"
S07008IO="Rsn no cvrg: don't know"


N1   = "Coding Scheme Note 1"
N1A1 = "Coding Scheme Note 1A1"
N1A2 = "Coding Scheme Note 1A2"
N1A3 = "Coding Scheme Note 1A3"
N2 = "Coding Scheme Note 2"
N3 = "Coding Scheme Note 3"
N4 = "Coding Scheme Note 4"
N5 = "Coding Scheme Note 5"
N6 = "Coding Scheme Note 6"
N7 = "Coding Scheme Note 7"
N8 = "Coding Scheme Note 8"
N9 = "Coding Scheme Note 9"
N10= "Coding Scheme Note 10"
N11= "Coding Scheme Note 11"
N12= "Coding Scheme Note 12"
N13 = "Coding Scheme Note 13"
N14 = "Coding Scheme Note 14"
N15A1 = "Coding Scheme Note 15A1"
N15A2 = "Coding Scheme Note 15A2"
N15A3 = "Coding Scheme Note 15A3"
N15A4 = "Coding Scheme Note 15A4"
N15A5 = "Coding Scheme Note 15A5"
N15A6 = "Coding Scheme Note 15A6"
N16   = "Coding Scheme Note 16"
N16A1 = "Coding Scheme Note 16A1"
N17A= "Coding Scheme Note 17A"
N17B= "Coding Scheme Note 17B"
N18 = "Coding Scheme Note 18"
N19 = "Coding Scheme Note 19"
```

```
  MISS_1 = "Count of: Violates Skip Pattern"
  MISS_4 = "Count of: Incomplete grid error"
  MISS_5 = "Count of: Scalable reponse of Don't know"
  MISS_6 = "Count of: Not applicable - valid skip"
  MISS_7 = "Count of: Out-of-range error"
  MISS_8 = "Count of: Multiple response error"
  MISS_9 = "Count of: No response - invalid skip"
  MISS_TOT = "Total number of missing responses"
  XSEXA = "Male or Female  - R"
;
```

F.2.E Q3FY2007\PROGRAMS\CODINGSCHEME\CSCHM07Q.SAS - IMPLEMENT CODING SCHEME AND CODING TABLES FOR QUARTER 3 FY2007.

```
*****************************************************************************;
*  Program:  Cschm07q.sas
*  Written:  06/04/2001
*   Author:  C. Rankin
*
*    Input:  MERGESYN.SD2 - Merged MPR Sampling, DEERS, and Synovate Response Data
*   Output:  CSCHM07Q.SD2 - Coding scheme file
*
* Modified:  9/20/2001 - Recodes removed (stored in recodes_old.sas)
*           10/31/2001 - Revised notes 16 and 17 (became notes 26 and 27)
*            3/22/2002 - Updated Variable names for Q1 2002 and added
*                        Include file RENAME.SAS to change the variable
*                        names from 01 to 02. Skipping 01 designation to make
*                        survey reflect year of fielding
*            5/09/2002 - Change to logic in TFL supplement
*            3/17/2003 - Updated Variables names for Q1 2003
*            4/11/2003 - Added note 19a to accomodate Q1 2003 error where
*                        an option on most of the questionnaires was omitted for
*                        H03062
*            5/27/2003 - Updated Variable names for Q2 2003
*            12/05/2003 - Updated Variable names for Q4 2003
*            3/25/2004 - Updated Variable names for Q1 2004
*            6/3/2004 - Updated Variable names for Q2 2004
*            8/23/2004 - Updated Variable names for Q3 2004
*            1/13/2005 - Updated Variable names for Q4 2004
*            4/13/2005 - Updated Variable names for Q1 2005
*            7/20/2005 - Updated Variable names for Q2 2005
*            10/14/2005 - Updated Variable names for Q3 2005
*            12/22/2005 - Updated Variable names for Q4 2005
*            3/20/2006 - Updated Variable names for Q2 FY 2006
*            12/11/2006 - Updated Variable names for Q1 FY 2007
*  Purpose:  Apply Coding Scheme Specifications to DoD Health Care Survey
*            Response Data, check for consistency in responses and skip
*            patterns
*  Include
*    files:  Cschm07q.fmt
*
*****************************************************************************;

OPTIONS PS=80 LS=120 NOCENTER COMPRESS=YES PAGENO=1 SOURCE SOURCE2;
*OPTIONS OBS=100;

LIBNAME LIBRARY v612 "..\..\DATA\AFINAL\FMTLIB";
LIBNAME IN      v612 "..\..\DATA\AFINAL";
LIBNAME OUT     v612 "..\..\DATA\AFINAL";

%LET INDATA=MERGESYN;
%LET OUTDATA=CSCHM07Q;
%LET PERIOD=April, 2006 to March, 2007;

/* Variable names in survey -- become recoded varibles */

%Let varlist1 =

 H07001  H07002A H07002C H07002F H07002G H07002H H07002I H07002J H07002K
 H07002L H07002M H07002N H07002O H07002P H07002Q H07002R H07003  H07004  H07005
 H07006  H07007
 S07001  S07002  S07003  S07004  S07005  S07006  S07007  S07008A S07008B
 S07008C S07008D S07008E S07008F S07008G S07008H S07008I
 H07008  H07009  H07010  H07011  H07012  H07013  H07014
 H07015  H07016  H07017  H07018  H07019  H07020  H07021  H07022  H07023
 H07024  H07025  H07026  H07027  H07028  H07029  H07030  H07031  H07032
 H07033  H07034  H07035  H07036  H07037  H07038
 S07B01  S07B02  S07B03  S07B04
 H07039  H07040  H07041
 H07042  H07043  H07044  H07045  H07046  H07047  H07048

 H07049  H07050
```

```
 S07Q01  S07Q02  S07Q03  S07Q04  S07Q05  S07Q06

 H07051  H07052  H07053  H07054  H07055  H07056  H07057  H07058
 S07Q07
 H07059
 H07060  H07061  H07063  H07064  H07065  H07066  H07067

 H07068F H07068I H07069

 H07070  H07070A H07070B H07070C H07070D H07070E
 SRRACEA SRRACEB SRRACEC SRRACED SRRACEE SRAGE SREDA
 ;

/*  _O variables are the original values from the survey response */

%Let varlist2 =
 H07001_O H07002AO H07002CO H07002FO H07002GO H07002HO H07002IO H07002JO H07002KO
 H07002LO H07002MO H07002NO H07002OO H07002PO H07002QO H07002RO H07003_O H07004_O
 H07005_O H07006_O H07007_O
 S07001_O S07002_O S07003_O S07004_O S07005_O S07006_O S07007_O S07008AO S07008BO
 S07008CO S07008DO S07008EO S07008FO S07008GO S07008HO S07008IO
 H07008_O H07009_O H07010_O H07011_O H07012_O H07013_O H07014_O
 H07015_O H07016_O H07017_O H07018_O H07019_O H07020_O H07021_O H07022_O H07023_O
 H07024_O H07025_O H07026_O H07027_O H07028_O H07029_O H07030_O H07031_O H07032_O
 H07033_O H07034_O H07035_O H07036_O H07037_O H07038_O

 S07B01_O S07B02_O S07B03_O S07B04_O

 H07039_O H07040_O H07041_O
 H07042_O H07043_O H07044_O H07045_O H07046_O H07047_O H07048_O

 H07049_O H07050_O

 S07Q01_O S07Q02_O S07Q03_O S07Q04_O S07Q05_O S07Q06_O

 H07051_O H07052_O H07053_O H07054_O H07055_O H07056_O H07057_O H07058_O
 S07Q07_O
 H07059_O
 H07060_O H07061_O H07063_O H07064_O H07065_O H07066_O H07067_O

 H07068FO H07068IO H07069_O

 H07070_O H07070AO H07070BO H07070CO H07070DO H07070EO
 SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO SRAGE_O SREDA_O
 ;

TITLE  "DoD 2007 Survey Form A -- &PERIOD";
TITLE2 "Apply Coding Scheme";



DATA MERGESYN;

  SET IN.MERGESYN(RENAME=(H07H69  = H07069CH
                          H07H68F = H07068F
                          H07H68FN= H07068FN
                          H07H68I = H07068I
                          H07H68IN= H07068IN
                          H07H69N = H07069N
                          ));


*******************************************************************;
* Code added by Jacqueline Agufa 09/15/2004 to fix name of race variable;
*******************************************************************;

  RENAME SRACEA = SRRACEA;
  RENAME SRACEB = SRRACEB;
  RENAME SRACEC = SRRACEC;
  RENAME SRACED = SRRACED;
  RENAME SRACEE = SRRACEE;
```

```
  **** update variables with both filled items and check boxes
  **** Per Eric Schone;


  IF H07068F LT 1      THEN H07068F=H07068FN;
  IF H07068I IN (-9,.) THEN H07068I=H07068IN;


  H07069= COMPRESS(H07069CH,' ')*1;

  DROP H07069CH;


  IF H07069=0   AND H07069N=-9     THEN H07069 =H07069N;
  IF H07069<100 AND H07069N NE -9  THEN H07069 =H07069N;


  *** Correct odd height and weights Per Eric Schone;

  IF H07068F < 2 OR
     H07068F > 8
  THEN H07068F= -7;

  IF 0 <= H07069 < 40 OR
     H07069 > 500
  THEN H07069= -7;


  /* JMA
  ****Multiple responses were given to this question so H07070 is being created
  ****from the multiple responses.;
  */


  IF H07070B=1 THEN H07070=2;
  ELSE IF H07070E=1 THEN H07070=5;
  ELSE IF H07070C=1 THEN H07070=3;
  ELSE IF H07070D=1 THEN H07070=4;
  ELSE IF H07070A=1 THEN H07070=1;

  IF S07004>12 THEN S07004=12;

RUN;


DATA OUT.CSCHM07Q;

  LENGTH &VARLIST1. &VARLIST2. 4. MPRID $8.;
  INFORMAT &VARLIST2. 4.;
  %INCLUDE "CSCHM07Q.FMT";


/* label and format statements for original variables */


   SET MERGESYN;



*************************************************************;
**** Recodes for invalid responses:***************************;
*************************************************************;


/* This is a version of the coding scheme and coding tables for the
   FY 2007 HCSDB Form A.
   The following tables outline the coding of screening questions (skip),
   and subsequent items to be answered (or not answered in a series
   following a skip question.) */

/* First set up new variables that capture the original values */
/* recode the initial numeric values to the SAS numeric values */
/* specified in the coding scheme                              */
```

```
  SEX=PNSEXCD;
  AGE=INPUT(DAGEQY,8.);

  ARRAY RECODE(*) &VARLIST1;
  ARRAY   ORIG(*) &VARLIST2;

  DO I = 1 to DIM(ORIG);
      ORIG(I) = RECODE(I);
      IF ORIG(I) < 0 THEN DO;
              IF ORIG(I)= -9 THEN RECODE(I)=.;
         ELSE IF ORIG(I)= -8 THEN RECODE(I)=.A;
         ELSE IF ORIG(I)= -7 THEN RECODE(I)=.O;
         ELSE IF ORIG(I)= -6 THEN RECODE(I)=.N;
         ELSE IF ORIG(I)= -5 THEN RECODE(I)=.D;
         ELSE IF ORIG(I)= -4 THEN RECODE(I)=.I;
         ELSE IF ORIG(I)= -1 THEN RECODE(I)=.C;
         ELSE RECODE(I)=RECODE(I);
      END;
  END;
  DROP I;



/* recode selected responses to be 1=marked, 2=unmarked */

  ARRAY   MARKED(*)
           H07002A H07002C H07002F H07002G H07002H H07002I H07002J H07002K
           H07002L H07002M H07002N H07002O H07002P H07002Q H07002R

           S07008A S07008B
           S07008C S07008D S07008E S07008F S07008G S07008H S07008I


           H07070A H07070B H07070C H07070D H07070E

           SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
               ;


  ARRAY INFORMAT(*)
           H07002AO H07002CO H07002FO H07002GO H07002HO H07002IO H07002JO
           H07002KO H07002LO H07002MO H07002NO H07002OO H07002PO H07002QO H07002RO

           S07008AO S07008BO
           S07008CO S07008DO S07008EO S07008FO S07008GO S07008HO S07008IO


           H07070AO H07070BO H07070CO H07070DO H07070EO

           SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO

              ;


  DO J=1 TO DIM(INFORMAT);
     IF INFORMAT(J) NOT IN (.,-9) THEN MARKED(J)=1;
     ELSE MARKED(J)=2;
  END;
  DROP J;

  FORMAT
           H07002A H07002C H07002F H07002G H07002H H07002I H07002J H07002K
           H07002L H07002M H07002N H07002O H07002P H07002Q H07002R

           S07008A S07008B
           S07008C S07008D S07008E S07008F S07008G S07008H S07008I


           H07070A H07070B H07070C H07070D H07070E

           SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
         MARKED.;
```

```
*********************************************************************;

/*  skip coding scheme for all surveys not returned  **/

  IF FLAG_FIN NE 1 THEN GOTO NOSURVEY;

/** Note 1 -- H07006, H07007 health plan usage  **/

  IF H07006 > 0 OR H07006 =.D THEN N1=1;
  ELSE IF H07006=.N  THEN DO;
     IF H07007 NOT=. THEN DO;
        N1=2;
        H07007=.C;
     END;
     ELSE DO;
        N1=3;
        H07007=.N;
     END;
  END;
  ELSE IF H07006=.   THEN N1=4;


/** Note 1A1 -- S07001, S07002-S07008I: Eligible for TRICARE Reserve Select **/

  ARRAY NOTE1A11 S07002-S07007;
  ARRAY NOTE1A12 S07008A--S07008I;

  N1A1NMISS=0;

  DO OVER NOTE1A11;
     IF NOTE1A11 NE . THEN N1A1NMISS+1;
  END;

  DO OVER NOTE1A12;
     IF NOTE1A12 NOT IN  (.,2)   THEN N1A1NMISS+1;
  END;


  IF S07001=2 THEN DO;
     N1A1=1;
     DO OVER NOTE1A11;
        IF NOTE1A11=. THEN NOTE1A11=.N;
        ELSE NOTE1A11=.C;
     END;
     DO OVER NOTE1A12;
        IF NOTE1A12 IN (.,2) THEN NOTE1A12=.N;
        ELSE NOTE1A12=.C;
     END;
  END;
  ELSE IF S07001 IN (1,.D,.) AND N1A1NMISS=0 THEN DO;
     S07001=2;
     N1A1=2;
     DO OVER NOTE1A11;
        NOTE1A11=.N;
     END;
     DO OVER NOTE1A12;
        NOTE1A12=.N;
     END;
  END;
  ELSE IF S07001 IN (1,.D,.) AND (N1A1NMISS GT 0) THEN DO;
     N1A1=3;
  END;

  DROP N1A1NMISS;


/** Note 1A2 -- S07002, S07003-S07008I: Covered by TRICARE Reserve Select **/

  ARRAY NOTE1A21 S07003-S07007;
  ARRAY NOTE1A22 S07008A--S07008I;
```

```
      N1A2NMISS=0;

      DO OVER NOTE1A21;
         IF NOTE1A21 NE . THEN N1A2NMISS+1;
      END;

      DO OVER NOTE1A22;
         IF NOTE1A22 NOT IN  (.,2)   THEN N1A2NMISS+1;
      END;


      IF S07002 IN (.N,.C) THEN N1A2=1;
      ELSE IF S07002=2 THEN DO;
         N1A2=2;
         DO OVER NOTE1A21;
            IF NOTE1A21=. THEN NOTE1A21=.N;
            ELSE NOTE1A21=.C;
         END;
         DO OVER NOTE1A22;
            IF NOTE1A22 IN (.,2) THEN NOTE1A22=.N;
            ELSE NOTE1A22=.C;
         END;
      END;
      ELSE IF S07002 IN (1,.) AND N1A2NMISS=0 THEN DO;
         S07002=2;
         N1A2=3;
         DO OVER NOTE1A21;
            NOTE1A21=.N;
         END;
         DO OVER NOTE1A22;
            NOTE1A22=.N;
         END;
      END;
      ELSE IF S07002 IN (1, .) AND (N1A2NMISS>0) THEN DO;
         N1A2=4;
      END;

      DROP N1A2NMISS;


    /** Note 1A3 -- S07007, S07008A-S07008I: Elect not to purchase or drpped TRICARE Reserve Select
**/

      ARRAY NOTE1A3 S07008A--S07008I;

      N1A3NMISS=0;

      DO OVER NOTE1A3;
         IF NOTE1A3 NOT IN  (.,2)   THEN N1A3NMISS+1;
      END;


      IF S07007 IN (.N,.C) THEN N1A3=1;
      ELSE IF S07007=2 THEN DO;
         N1A3=2;
         DO OVER NOTE1A3;
            IF NOTE1A3 IN (.,2) THEN NOTE1A3=.N;
            ELSE NOTE1A3=.C;
         END;
      END;
      ELSE IF S07007 IN (1,.) AND N1A3NMISS=0 THEN DO;
         S07007=2;
         N1A3=3;
         DO OVER NOTE1A3;
            NOTE1A3=.N;
         END;
      END;
      ELSE IF S07007 IN (1) AND (N1A3NMISS>0) THEN DO;
         N1A3=4;
      END;
      ELSE IF S07007 IN (.) AND (N1A3NMISS>0) THEN DO;
         N1A3=5;
         DO OVER NOTE1A3;
```

```
        NOTE1A3=.;
     END;
  END;

  DROP N1A3NMISS;


/** Note 2 -- H07008 H07009 H07010 H07011:  Personal doctor or nurse **/

  IF H07008 IN (1,.) AND H07009 = .N THEN DO;
     H07008 = 2;
     H07009 =.C;
     IF H07010=. THEN H07010=.N;
     ELSE H07010=.C;
     N2=1;
  END;
  ELSE IF H07008 IN (1) AND H07009 NE .N  THEN DO;
     IF H07010 IN (1) AND H07011 IN (1,2,3) THEN DO;
        H07011=.C;
        N2=2;
     END;
     ELSE IF H07010 IN (.) AND H07011 IN (1,2,3) THEN DO;
        H07010=2;
        N2=3;
     END;
     ELSE IF H07010 IN (1) AND H07011 IN (.) THEN DO;
        H07011=.N;
        N2=4;
     END;
     ELSE IF H07010 IN (2) THEN DO;
        N2=5;
     END;
     ELSE IF H07010 IN (.) AND H07011 IN (.) THEN DO;
        N2=6;
     END;
  END;
  ELSE IF H07008 IN (2,.) THEN DO;
     IF H07009 NOT IN (.N, .) AND H07010 IN (1) AND H07011 IN (1,2,3)
     THEN DO;
        H07008=1;
        H07011=.C;
        N2=7;
     END;
     ELSE IF H07009 NOT IN (.N, .) AND H07010 IN (.) AND H07011 IN (1,2,3)
     THEN DO;
        H07008=1;
        N2=8;
     END;
     ELSE IF H07009 NOT IN (.N, .) AND H07010 IN (.) AND H07011 IN (.)
     THEN DO;
        H07008=1;
        N2=9;
     END;
     ELSE IF H07008=2 AND H07009 IN (.) AND H07010 IN (1) AND H07011 IN (1,2,3)
     THEN DO;
        H07009=.N;
        H07010=.C;
        N2=10;
     END;
     ELSE IF H07008 = 2 AND H07009 IN (.N)
     THEN DO;
        H07009=.C;
        IF H07010=. THEN H07010=.N;
        ELSE H07010=.C;
        N2=11;
     END;
     ELSE IF H07010 IN (1)
     THEN DO;
        H07008=1;
        IF H07011=. THEN H07011=.N;
        ELSE H07011=.C;
        N2=12;
     END;
```

```
     ELSE IF H07010 IN (2)
     THEN DO;
        H07008=1;
        N2=13;
     END;
     ELSE IF H07008=2 AND H07009 In (.) AND H07010= . THEN DO;
        H07009=.N;
        H07010=.N;
        N2=14;
     END;
     ELSE IF H07008=. AND H07009=. AND H07010=. THEN DO;
        N2=15;
     END;
  END;



/** Note 3 -- H07012, H07013:  needed to see a specialist in last 12 months **/

  IF H07012=1 AND H07013 IN (1,2,3,.) THEN N3=1;
  ELSE IF H07012 IN (1,.) AND H07013=.N THEN DO;
     H07012=2;
     H07013=.C;
     N3=2;
  END;
  ELSE IF H07012 IN (2,.) AND H07013 IN (1,2,3) THEN DO;
     H07012=1;
     N3=3;
  END;
  ELSE IF H07012=2 AND H07013 IN (.,.N) THEN DO;
     IF H07013=. THEN H07013=.N;
     ELSE H07013=.C;
     N3=4;
  END;
  ELSE IF H07012=.  AND H07013=.  THEN N3=5;



/** Note 4 -- H07014, H07015: saw a specialist in last 12 months **/

  IF H07014=1 AND H07015 IN (0,1,2,3,4,5,6,7,8,9,10,.) THEN N4=1;
  ELSE IF H07014 IN (1,.) AND H07015=.N THEN DO;
     H07014=2;
     H07015=.C;
     N4=2;
  END;
  ELSE IF H07014 IN (2,.) AND H07015 IN (0,1,2,3,4,5,6,7,8,9,10) THEN DO;
     H07014=1;
     N4=3;
  END;
  ELSE IF H07014=2 AND H07015 IN (.,.N) THEN DO;
     IF H07015=. THEN H07015=.N;
     ELSE H07015=.C;
     N4=4;
  END;
  ELSE IF H07014=.  AND H07015=.  THEN N4=5;



/** Note 5 -- called a doctor's office:  H07016, H07017 **/

  IF H07016=1 AND H07017 IN (1,2,3,4,.) THEN N5=1;
  ELSE IF H07016 IN (1,.) AND H07017=.N THEN DO;
     H07016=2;
     H07017=.C;
     N5=2;
  END;
  ELSE IF H07016 IN (2,.) AND H07017 IN (1,2,3,4) THEN DO;
     H07016=1;
     N5=3;
  END;
  ELSE IF H07016=2 AND H07017 IN (.,.N) THEN DO;
```

```
      IF H07017=. THEN H07017=.N;
      ELSE H07017=.C;
      N5=4;
   END;
   ELSE IF H07016=.  AND H07017=.  THEN N5=5;


/** Note 6 -- H07018,H07019,H07020:  illness or injury **/

   ARRAY NOTE6 H07019 H07020;
   N6MARK=0;
   N6NMISS=0;
   N6NN=0;

   DO OVER NOTE6;
      IF NOTE6 NE . THEN N6NMISS+1;
      IF NOTE6 NOT IN (.N,.) THEN N6MARK+1;
      IF NOTE6 EQ .N THEN N6NN+1;
   END;


   IF H07018=1 AND N6NMISS=0 THEN DO;
        N6=1;
   END;
   ELSE IF H07018 IN (1,.) AND N6NMISS>0 AND N6MARK=0 THEN DO;
      H07018=2;
      N6=2;
      DO OVER NOTE6;
         IF NOTE6=. THEN NOTE6=.N;
         ELSE NOTE6=.C;
      END;
   END;
   ELSE IF H07018=1 AND N6MARK=1 AND N6NN=1 THEN  DO;
      DO OVER NOTE6;
         IF NOTE6=.N THEN NOTE6=.;
      END;
      N6=3;
   END;
   ELSE IF H07018=1 AND N6MARK>0 THEN DO;
      N6=4;
   END;
   ELSE IF H07018=2 AND N6MARK=1 AND N6NN=1  THEN  DO;
      H07019=.C;
      H07020=.C;
      N6=5;
   END;
   ELSE IF H07018 IN (2,.) AND N6MARK>0 THEN DO;
      H07018=1;
      N6=6;
      DO OVER NOTE6;
         IF NOTE6=.N THEN NOTE6=.;
      END;
   END;
   ELSE IF H07018=2 AND (N6NMISS=0 OR (N6NMISS>0 AND N6MARK=0)) THEN DO;
      N6=7;
      DO OVER NOTE6;
         IF NOTE6=. THEN NOTE6=.N;
         ELSE NOTE6=.C;
      END;
   END;
   ELSE IF H07018=.  AND N6NMISS=0 THEN N6=8;


   DROP N6NMISS N6MARK N6NN;


/** Note 7 -- H07021,H07022,H07023:  regular or routine healthcare **/

   ARRAY NOTE7 H07022 H07023;
   N7MARK=0;
   N7NMISS=0;
   N7NN=0;
```

```
  DO OVER NOTE7;
     IF NOTE7 NE . THEN N7NMISS+1;
     IF NOTE7 NOT IN (.N,.) THEN N7MARK+1;
     IF NOTE7 EQ .N THEN N7NN+1;
  END;

  IF H07021=1 AND N7NMISS=0 THEN DO;
       N7=1;
  END;
  ELSE IF H07021 IN (1,.) AND N7NMISS>0 AND N7MARK=0 THEN DO;
     H07021=2;
     N7=2;
     DO OVER NOTE7;
        IF NOTE7=. THEN NOTE7=.N;
        ELSE NOTE7=.C;
     END;
  END;
  ELSE IF H07021=1 AND N7MARK=1 AND N7NN=1 THEN  DO;
     DO OVER NOTE7;
        IF NOTE7=.N THEN NOTE7=.;
     END;
     N7=3;
  END;
  ELSE IF H07021=1 AND N7MARK>0 THEN DO;
     N7=4;
  END;
  ELSE IF H07021=2 AND N7MARK=1 AND N7NN=1  THEN  DO;
     H07022=.C;
     H07023=.C;
     N7=5;
  END;
  ELSE IF H07021 IN (2,.) AND N7MARK>0 THEN DO;
     H07021=1;
     N7=6;
     DO OVER NOTE7;
        IF NOTE7=.N THEN NOTE7=.;
     END;
  END;
  ELSE IF H07021=2 AND (N7NMISS=0 OR (N7NMISS>0 AND N7MARK=0)) THEN DO;
     N7=7;
     DO OVER NOTE7;
        IF NOTE7=. THEN NOTE7=.N;
        ELSE NOTE7=.C;
     END;
  END;
  ELSE IF H07021=.  AND N7NMISS=0 THEN N7=8;


  DROP N7NMISS N7MARK N7NN;



/** Note 8 -- H07025, H07026-H07037: doctor's office or clinic **/

  ARRAY NOTE8  H07026-H07037;

  N8MARK=0;
  N8NMISS=0;

  DO OVER NOTE8;
     IF NOTE8 NE . THEN N8NMISS+1;
     IF NOTE8 NOT IN  (., .N) THEN N8MARK+1;
  END;


  IF H07025=1 THEN DO;
     N8=1;
     DO OVER NOTE8;
        IF NOTE8=. THEN NOTE8=.N;
        ELSE NOTE8=.C;
     END;
  END;
  ELSE IF H07025 IN (2,3,4,5,6,7,.) AND N8NMISS>0 AND N8MARK=0 THEN DO;
```

```
     H07025=1;
     N8=2;
     DO OVER NOTE8;
        IF NOTE8=. THEN NOTE8=.N;
        ELSE NOTE8=.C;
     END;
  END;
  ELSE IF H07025 IN (2,3,4,5,6,7) AND (N8NMISS=0 OR N8MARK>0) THEN DO;
     DO OVER NOTE8;
        IF NOTE8=.N THEN NOTE8=.;
     END;
     N8=3;
  END;
  ELSE IF H07025=.  AND N8NMISS=0 THEN N8=4;
  ELSE IF H07025 IN (.) AND N8MARK>0 THEN DO;
     N8=5;
     DO OVER NOTE8;
        IF NOTE8=.N THEN NOTE8=.;
     END;
  END;

  DROP N8NMISS N8MARK;



/** Note 9 -- You or doctor believed you needed care, tests or treatment:
               H07026, H07027 **/


  IF H07026 IN (.N, .C) THEN N9=1;
  ELSE IF H07026=1 AND H07027 IN (1,2,3,.) THEN N9=2;
  ELSE IF H07026 IN (1,.) AND H07027=.N THEN DO;
     H07026=2;
     H07027=.C;
     N9=3;
  END;
  ELSE IF H07026 IN (2,.) AND H07027 IN (1,2,3) THEN DO;
     H07026=1;
     N9=4;
  END;
  ELSE IF H07026=2 AND H07027 IN (.,.N) THEN DO;
     IF H07027=. THEN H07027=.N;
     ELSE H07027=.C;
     N9=5;
  END;
  ELSE IF H07026=.  AND H07027=.  THEN N9=6;



/** Note 10 -- Needed approval from healthplan for care, tests or treatment:
               H07028, H07029 **/

  IF H07028 IN (.N, .C) THEN N10=1;
  ELSE IF H07028=1 AND H07029 IN (1,2,3,.) THEN N10=2;
  ELSE IF H07028 IN (1,.) AND H07029=.N THEN DO;
     H07028=2;
     H07029=.C;
     N10=3;
  END;
  ELSE IF H07028 IN (2,.) AND H07029 IN (1,2,3) THEN DO;
     H07028=1;
     N10=4;
  END;
  ELSE IF H07028=2 AND H07029 IN (.,.N) THEN DO;
     IF H07029=. THEN H07029=.N;
     ELSE H07029=.C;
     N10=5;
  END;
  ELSE IF H07028=.  AND H07029=.  THEN N10=6;


/** Note 10A1 -- S07B02-S07B04:  overall mental health  **/
```

```
  ARRAY NOTE10A1 S07B03 S07B04;
  N10A1NMISS=0;
  N10A1MARK=0;
  DO OVER NOTE10A1;
     IF NOTE10A1 NE . THEN N10A1NMISS+1;          /* check for all missing */
     IF NOTE10A1 NOT IN (.) THEN N10A1MARK+1;     /* not missing */
  END;

  IF S07B02=1 AND (N10A1NMISS=0 OR N10A1MARK>0) THEN N10A1=1;
  ELSE IF S07B02 IN (2,.) AND N10A1MARK>0 THEN DO;
     S07B02=1;
     N10A1=2;
  END;
  ELSE IF S07B02=2 AND N10A1NMISS=0 THEN DO;
     N10A1=3;
     DO OVER NOTE10A1;
        IF NOTE10A1=. THEN NOTE10A1=.N;
        ELSE NOTE10A1=.C;
     END;
  END;
  ELSE IF S07B02=. AND N10A1NMISS=0 THEN N10A1=4;

  DROP N10A1MARK N10A1NMISS;



/** Note 11 -- H07039, H07040-H07041: claims to health plan **/

   ARRAY NOTE11 H07040-H07041;
  N11MARK=0;
  N11NMISS=0;
  N11NDK=0;

  DO OVER NOTE11;
     IF NOTE11 NE . THEN N11NMISS+1;
     IF NOTE11 NOT IN (.N,.) THEN N11MARK+1;
     IF NOTE11 NOT IN (.,.D) THEN N11NDK+1;
  END;

  IF H07039=1 AND
     (N11NMISS=0 OR (N11MARK>0 and N11NDK>0) or (N11NMISS>0 AND N11NDK=0))
  THEN DO;
     N11=1;
     DO OVER NOTE11;
        IF NOTE11=.N THEN NOTE11=.;
     END;
  END;
  ELSE IF H07039 IN (1,.,.D) AND N11NMISS>0 AND N11MARK=0 THEN DO;
     N11=2;
     H07039=2;
     DO OVER NOTE11;
        IF NOTE11=. THEN NOTE11=.N;
        ELSE NOTE11=.C;
     END;
  END;
  ELSE IF H07039 IN (2,.,.D) AND
          ((N11MARK>0 AND N11NDK>0) OR (N11NMISS>0 AND N11NDK=0))
       THEN DO;
     H07039=1;
     N11=3;
     DO OVER NOTE11;
        IF NOTE11=.N THEN NOTE11=.;
     END;
  END;
  ELSE IF H07039 IN (2) AND (N11NMISS=0 OR (N11NMISS>0 AND N11MARK=0)) THEN DO;
     N11=4;
     DO OVER NOTE11;
        IF NOTE11=. THEN NOTE11=.N;
        ELSE NOTE11=.C;
     END;
  END;
  ELSE IF H07039 IN (.D) AND N11NMISS=0 THEN DO;
     N11=5;
```

```
         DO OVER NOTE11;
            NOTE11=.N;
         END;
      END;
      ELSE IF H07039 IN (.)  AND N11NMISS=0 THEN N11=6;

      DROP N11NMISS N11MARK N11NDK;




    /** NOTE12  -- H07042, H07043: **/

      IF H07042=1 AND H07043 IN (1,2,3,.) THEN N12=1;
      ELSE IF H07042 IN (1,.) AND H07043=.N THEN DO;
         H07042=2;
         H07043=.C;
         N12=2;
      END;
      ELSE IF H07042 IN (2,.) AND H07043 IN (1,2,3) THEN DO;     /* JMA per Daisy's suggestion
3/20/03  */
         H07042=1;
         N12=3;
      END;
      ELSE IF H07042=2 AND H07043 IN (.N,.) THEN DO;
         IF H07043=. THEN H07043=.N;
         ELSE H07043=.C;
         N12=4;
      END;
      ELSE IF H07042=. AND H07043=. THEN N12=5;


    /** NOTE13 -- H07044, H07045: health plan's customer service **/

      IF H07044=1 AND H07045 IN (1,2,3,.) THEN N13=1;
      ELSE IF H07044 IN (1,.) AND H07045=.N THEN DO;
         H07044=2;
         H07045=.C;
         N13=2;
      END;
      ELSE IF H07044 IN (2,.) AND H07045 IN (1,2,3) THEN DO;
         H07044=1;
         N13=3;
      END;
      ELSE IF H07044=2 AND H07045 IN (.N,.) THEN DO;
         IF H07045=. THEN H07045=.N;
         ELSE H07045=.C;
         N13=4;
      END;
      ELSE IF H07044=. AND H07045=. THEN N13=5;


    /** NOTE14  -- H07046, H07047: paperwork  **/

      IF H07046=1 AND H07047 IN (1,2,3,.) THEN N14=1;
      ELSE IF H07046 IN (1,.) AND H07047=.N THEN DO;
         H07046=2;
         H07047=.C;
         N14=2;
      END;
      ELSE IF H07046 IN (2,.) AND H07047 IN (1,2,3) THEN DO;
         H07046=1;
         N14=3;
      END;
      ELSE IF H07046=2 AND H07047 IN (.N,.)THEN DO;
         IF H07047=. THEN  H07047=.N;
         ELSE H07047=.C;
         N14=4;
      END;
      ELSE IF H07046=.  AND H07047=. THEN N14=5;


    /** NOTE15B1  -- S07Q01, S07Q02: Blood stool test   **/
```

```
  IF S07Q01=1 AND S07Q02 IN (1,2,3,4,.,.D) THEN N15B1=1;
  ELSE IF S07Q01 IN (1,.) AND S07Q02=.N THEN DO;
     S07Q01=2;
     S07Q02=.C;
     N15B1=2;
  END;
  ELSE IF S07Q01 IN (2,.D, .) AND S07Q02 IN (1,2,3,4) THEN DO;
     S07Q01=1;
     N15B1=3;
  END;
  ELSE IF S07Q01 IN (2, .D) AND S07Q02 IN (.N,.,.D) THEN DO;
     IF S07Q02=. THEN  S07Q02=.N;
     ELSE S07Q02=.C;
     N15B1=4;
  END;
  ELSE IF S07Q01=.  AND S07Q02 IN (., .D)  THEN N15B1=5;


/** Note 15B2 -- S07Q03, S07Q04-S07Q05: Sigmoidoscopy and colonoscopy **/

   ARRAY NOTE15B2 S07Q04-S07Q05;
  N15B2MARK=0;
  N15B2NMISS=0;
  N15B2NDK=0;

  DO OVER NOTE15B2;
     IF NOTE15B2 NE . THEN N15B2NMISS+1;
     IF NOTE15B2 NOT IN (.N,.) THEN N15B2MARK+1;
     IF NOTE15B2 NOT IN (.,.D) THEN N15B2NDK+1;
  END;

  IF S07Q03=1 AND
     (N15B2NMISS=0 OR (N15B2MARK>0 and N15B2NDK>0) or (N15B2NMISS>0 AND N15B2NDK=0))
  THEN DO;
     N15B2=1;
     DO OVER NOTE15B2;
        IF NOTE15B2=.N THEN NOTE15B2=.;
     END;
  END;
  ELSE IF S07Q03 IN (1,.,.D) AND N15B2NMISS>0 AND N15B2MARK=0 THEN DO;
     N15B2=2;
     S07Q03=2;
     DO OVER NOTE15B2;
        IF NOTE15B2=. THEN NOTE15B2=.N;
        ELSE NOTE15B2=.C;
     END;
  END;
  ELSE IF S07Q03 IN (2,.,.D) AND
          ((N15B2MARK>0 AND N15B2NDK>0) OR (N15B2NMISS>0 AND N15B2NDK=0))
       THEN DO;
     S07Q03=1;
     N15B2=3;
     DO OVER NOTE15B2;
        IF NOTE15B2=.N THEN NOTE15B2=.;
     END;
  END;
  ELSE IF S07Q03 IN (2) AND (N15B2NMISS=0 OR (N15B2NMISS>0 AND N15B2MARK=0)) THEN DO;
     N15B2=4;
     DO OVER NOTE15B2;
        IF NOTE15B2=. THEN NOTE15B2=.N;
        ELSE NOTE15B2=.C;
     END;
  END;
  ELSE IF S07Q03 IN (.D) AND N15B2NMISS=0 THEN DO;
     N15B2=5;
     DO OVER NOTE15B2;
        NOTE15B2=.N;
     END;
  END;
  ELSE IF S07Q03 IN (.)  AND N15B2NMISS=0 THEN N15B2=6;

  DROP N15B2NMISS N15B2MARK N15B2NDK;
```

```
/** Note 16 -- smoking:  H07052, H07053-H07057  **/

  ARRAY NOTE16 H07055 H07056 H07057;

  IF H07052=1 and H07053 IN (3,4) THEN DO;  /* still smoke */
     IF H07054 NE . THEN H07054=.C;
     ELSE H07054=.N;

     N16=1;
  END;
  ELSE IF H07052=1 AND H07053=2 THEN DO;         /* quit */
     /* JMA March 25 2004,
        Updated because H07056 and H07057 have been added to the
        skip pattern */
     IF H07054 IN (2,.D) THEN DO;               /* > 1 year ago */
        DO OVER NOTE16;
           IF NOTE16=. THEN NOTE16=.N;
           ELSE NOTE16=.C;
        END;
        N16=2;
     END;
     ELSE IF H07054 IN (3,.) THEN DO;          /* < 1 year ago */

        N16=3;

     END;
  END;
  ELSE IF H07052=1 AND H07053 IN (.D,.) THEN DO;  /* don't know */
     IF H07054=2 THEN DO;                        /* > 1 year ago */

        /* JMA March 25 2004,
        Updated because H07056 and H07057 have been added to the
        skip pattern */

        DO OVER NOTE16;
           IF NOTE16=. THEN NOTE16=.N;
           ELSE NOTE16=.C;
        END;
        H07053=2;
        N16=4;
     END;
     ELSE IF H07054=3 THEN DO;            /* < 1 year ago */
        H07053=2;
        N16=5;
     END;
     ELSE IF H07053 IN (.D) AND H07054 IN (.D,.) THEN DO;
        N16=6;
        IF H07054=. THEN H07054=.N;
        ELSE H07054=.C;
        DO OVER NOTE16;
           IF NOTE16=. THEN NOTE16=.N;
           ELSE NOTE16=.C;
        END;
     END;
     ELSE IF H07053 IN (.) AND H07054 IN (.D) THEN DO;
        N16=7;
        DO OVER NOTE16;
           IF NOTE16=. THEN NOTE16=.N;
           ELSE NOTE16=.C;
        END;
     END;
     ELSE IF H07053 IN (.) AND H07054 IN (.) THEN DO;
        N16=8;
     END;
  END;
  ELSE IF H07052 IN (2,.D,.) AND H07053 IN (3,4) THEN DO;
     H07052=1;

     IF H07054 NE . THEN H07054=.C;
     ELSE H07054=.N;
```

```
   N16=9;
END;
ELSE IF H07052 IN (2,.D) AND H07053 IN (2,.D, .) THEN DO; /*never smoke*/
   /* JMA March 25 2004,
      Updated because H07056 and H07057 have been added to the
      skip pattern */

   IF H07053 NE . THEN H07053 =.C;
   ELSE H07053=.N;

   IF H07054 NE . THEN H07054 =.C;
   ELSE H07054=.N;

   DO OVER NOTE16;
      IF NOTE16=. THEN NOTE16=.N;
      ELSE NOTE16=.C;
   END;

   N16=10;
END;
ELSE IF H07052 IN ( .) THEN DO;
   IF (H07053 IN (2) AND
       H07054 IN (.) AND
      (H07055 IN (2,3,4,5) OR H07056 IN (2,3,4,5) OR H07057 IN (2,3,4,5)))
   THEN DO;
      /* JMA March 25 2004,
         Updated because H07056 and H07057 have been added to the
         skip pattern */

      H07052=1;
      H07054=3;
      N16=11;
   END;
   ELSE IF H07053 IN (2,.) THEN DO; /*MRE/blank*/
      IF H07054 IN (2, .D) THEN DO;
          /* JMA March 25 2004,
          Updated because H07056 and H07057 have been added to the
          skip pattern */

          DO OVER NOTE16;
             IF NOTE16=. THEN NOTE16=.N;
             ELSE NOTE16=.C;
          END;
          N16=12;
      END;
      ELSE IF H07054 IN (3,.) THEN DO;
         IF (H07055 IN (2,3,4,5) OR H07056 IN (2,3,4,5) OR H07057 IN (2,3,4,5))
         THEN DO;
            H07052=1;
            N16=13;
         END;
         ELSE DO;

            N16=14;
         END;
      END;
   END;
   ELSE IF H07053=.D THEN DO; /*MRE/blank*/
      /* JMA March 25 2004,
         Updated because H07056 and H07057 have been added to the
         skip pattern */

      IF H07054 NE . THEN H07054 =.C;
      ELSE H07054=.N;

      DO OVER NOTE16;
         IF NOTE16=. THEN NOTE16=.N;
         ELSE NOTE16=.C;
      END;

      N16=15;
   END;
```

```
  END;


/** Note 16A1 -- advise from doctor on smoking:  H07055-H07057  **/

   IF H07055 EQ .N THEN DO;               /* jma Sep 19 2006 */
      IF H07056 IN (.,.N) THEN H07056 = .N;
      ELSE H07056=.C;
      IF H07057 IN (.,.N) THEN H07057 = .N;
      ELSE H07057=.C;
      N16A1=1;
   END;
   ELSE IF H07055 EQ 1 AND (H07056 =.N AND H07057=.N) THEN DO; /* jma May 10 2007 */
        H07056 = 1;
        H07057 = 1;
        N16A1=2;
   END;
   ELSE IF H07055 EQ 1 AND (H07056 =.N) THEN DO; /* jma May 10 2007 */
        H07056 = 1;
        N16A1=3;
   END;
   ELSE IF H07055 EQ 1 AND (H07057=.N) THEN DO; /* jma May 10 2007 */
        H07057 = 1;
        N16A1=4;
   END;
   ELSE IF H07055 IN (2,3,4,5,.) AND (H07056 =.N AND H07057= .N) THEN DO; /* jma May 10 2007 */
        H07056 = .;
        H07057 = .;
        N16A1=5;
   END;
   ELSE IF H07055 IN (2,3,4,5,.) AND (H07056 =.N) THEN DO; /* jma May 10 2007 */
        H07056 = .;
        N16A1=6;
   END;
   ELSE IF H07055 IN (2,3,4,5,.) AND (H07057= .N) THEN DO; /* jma May 10 2007 */
        H07057 = .;
        N16A1=7;
   END;
   ELSE IF H07055 GE 1 AND (H07056 > H07055 AND H07057 > H07055) THEN DO; /* jma May 10 2007 */
        H07056 = H07055;
        H07057 = H07055;
        N16A1=8;
   END;
   ELSE IF H07055 GE 1 AND (H07056 > H07055) THEN DO; /* jma May 10 2007 */
        H07056 = H07055;
        N16A1=9;
   END;
   ELSE IF H07055 GE 1 AND (H07057 > H07055) THEN DO; /* jma May 10 2007 */
        H07057 = H07055;
        N16A1=10;
   END;
   ELSE N16A1=11;


/** Note 17 - gender H07058, SEX, H07059--H07065,
              XSEXA */

/* 1/21/98 use SRSEX & responses to gender specific questions
   if there is discrepancy between SRSEX and SEX */
/* set imputed MALE, FMALE based on gender specific questions */


  ARRAY fmaleval H07059 H07060 H07061 H07063 H07064 H07065
                 ;

  IF S07Q07 > 0 THEN MALE=1;     /* prostate */
  ELSE MALE = 0;

  cntfmale=0;
  DO OVER fmaleval;           /* mammogram/pap smear/PREGNANT*/
     IF fmaleval>0 THEN cntfmale=cntfmale+1;
  END;
```

```
IF cntfmale>0 THEN FMALE=1;
ELSE FMALE = 0;


IF S07Q07 > 0 THEN MALE=1;     /* prostate */
ELSE MALE = 0;

cntfmale=0;
DO OVER fmaleval;           /* mammogram/pap smear/PREGNANT*/
   IF fmaleval>0 THEN cntfmale=cntfmale+1;
END;
IF cntfmale>0 THEN FMALE=1;
ELSE FMALE = 0;


IF H07058=. THEN DO;
   IF (SEX='F' AND MALE AND FMALE) THEN DO;
      N17A=1;
      XSEXA=2;
   END;
   ELSE IF (SEX='F' AND MALE=0 AND FMALE=0) THEN DO;
      N17A=2;
      XSEXA=2;
   END;
   ELSE IF (SEX='M' AND MALE AND FMALE) THEN DO;
      N17A=3;
      XSEXA=1;
   END;
   ELSE IF (SEX='M' AND MALE=0 AND FMALE=0) THEN DO;
      N17A=4;
      XSEXA=1;
   END;
   ELSE IF MALE AND NOT FMALE THEN DO;
      N17A=14;
      XSEXA=1;
   END;
   ELSE IF FMALE AND NOT MALE THEN DO;
      N17A=5;
      XSEXA=2;
   END;
   ELSE IF (SEX='Z' AND MALE AND FMALE) THEN DO;
      N17A=15;
      XSEXA=.;
   END;
   ELSE IF (SEX IN ('Z',' ') AND MALE=0 AND FMALE=0) THEN DO;
      N17A=6;
      XSEXA=.;
   END;
END;
ELSE IF (H07058=1) THEN DO;
   IF NOT FMALE THEN DO;
      N17A=8;
      XSEXA=1;
   END;
   ELSE IF NOT MALE AND FMALE THEN DO;
      IF SEX='F' THEN DO;
         N17A=9;
         XSEXA=2;
      END;
      ELSE DO;
         N17A=10;
         XSEXA=1;
      END;
   END;
   ELSE IF MALE AND FMALE THEN DO;
      N17A=16;
      XSEXA=1;
   END;
END;
ELSE IF (H07058=2) THEN DO;
   IF FMALE THEN DO;
     N17A=11;
     XSEXA=2;
```

```
     END;
     ELSE IF MALE AND NOT FMALE THEN DO;
        IF SEX='M' THEN DO;
          N17A=12;
          XSEXA=1;
        END;
        ELSE DO;
           N17A=13;
           XSEXA=2;
        END;
     END;
     ELSE IF MALE=0 AND FMALE=0 THEN DO;
        N17A=17;
        XSEXA=2;
     END;
  END;


/* Note 17A1 - gender vs prostate */

  IF XSEXA=1 THEN N17A1=1;    /* male    */
  ELSE IF XSEXA=2 THEN DO;   /* female  */
     IF S07Q07 NE . THEN DO;
        N17A1=2;
        S07Q07=.C;
     END;                    /*inconsistent resp */
     ELSE DO;
        N17A1=3;
        S07Q07=.N;
     END;                    /* valid skip   */
  END;
  ELSE IF XSEXA=. THEN DO;   /*  missing sex */
     N17A1=4;
     S07Q07=.;
  END;


/* Note 17b - gender vs mammogram/paps/pregnancy */
/*   REDEFINE FMALE TO LOOK ONLY AT MAMMOGRAM, PAP SMEAR ENTRIES and PREGNANCY */

  ARRAY NOTE17b H07059 H07060 H07061 H07063 H07064 H07065
                 ;

  cntfmale=0;
  DO OVER NOTE17b;           /* mammogram/pap smear/PREGNANT*/
     IF NOTE17b NE . THEN cntfmale=cntfmale+1;
  END;

  IF cntfmale>0 THEN FMALE=1;
  ELSE FMALE = 0;

  IF XSEXA=1 THEN DO;   /* male */
     IF FMALE=0 THEN DO;
        N17b=1;
        DO OVER NOTE17b;
           NOTE17b=.N;
        END;
     END;   /* valid skip */
     ELSE IF FMALE=1 THEN DO;
        N17b=2;
        DO OVER NOTE17b;
           IF NOTE17b=. THEN NOTE17b = .N;
           ELSE NOTE17b=.C;
        END;
     END;   /* inconsistent response */
  END;
  ELSE IF XSEXA=2 THEN  N17b=3; /* female */
  ELSE IF XSEXA=. THEN DO;      /*  missing sex  */
     N17b=4;
     DO OVER NOTE17b;
        NOTE17b=.;
     END;
  END;
```

```
  DROP FMALE MALE CNTFMALE;


/* Note 18 - breast exam for female 40 or over  */

  IF XSEXA=1 THEN DO;  /* male */
     IF  (H07060=.C OR H07060=.N) AND (H07061=.C OR H07061=.N)
     THEN N18 = 1;
  END;
  ELSE IF XSEXA=2 THEN DO;
     IF H07060=2 THEN N18=2;         /* female 40 or over */
     ELSE IF H07060=1 THEN DO;   /* female < 40 */
        IF H07061 NE . THEN H07061=.C;
        ELSE H07061=.N;
        N18=3;
     END;
     ELSE IF H07060=. THEN DO;
        IF H07061 NE . THEN DO;
           H07060=2;
           N18=4;
        END;
        ELSE IF H07061=.  THEN DO;
           IF AGE<40 THEN DO;
              H07060 = 1;
              H07061=.N;
              N18=5;
           END;
           ELSE IF AGE >= 40 THEN DO;
              H07060=1;
              H07061=.N;
              N18=6;
           END;
           ELSE IF AGE=. THEN N18=7;
        END;
     END;
  END;
  ELSE IF XSEXA=. THEN N18=8;



/* Note 19 - gender vs Pregnancy */


  IF XSEXA=1 THEN N19=1;          /* male     */
  ELSE IF XSEXA=2 THEN DO;        /* female   */
     IF H07063=1 THEN DO;         /* pregnant */
        IF H07064=1 THEN DO;
           N19=2;
           IF H07065=. THEN H07065 = .N;
           ELSE H07065=.C;
        END;
        ELSE IF H07064=2 AND H07065 IN (2) THEN DO;
           N19=3;
           H07065=.;
        END;
        ELSE IF H07064=2 AND H07065 IN (4,3,1,.) THEN DO;
           N19=4;
        END;
        ELSE IF H07064 IN (3,.) THEN N19=5;
     END;
     ELSE IF H07063=2 THEN DO;
        IF H07064=. THEN H07064 = .N;
        ELSE H07064=.C;
        N19=6;
     END;
     ELSE IF H07063=3 THEN DO;
        N19=7;
        IF H07064=. THEN H07064 = .N;
        ELSE H07064=.C;
        IF H07065=. THEN H07065=.N;
```

```
        ELSE H07065=.C;
     END;
     ELSE IF H07063 IN (.) THEN DO;
        IF H07064=1 THEN DO;
           N19=8;
           H07063=1;
           IF H07065=. THEN H07065 = .N;
           ELSE H07065=.C;
        END;
        ELSE IF H07064=2 AND H07065 IN (2) THEN DO;
           N19=9;
           H07063=1;
           H07065=.;
        END;
        ELSE IF H07064=2 AND H07065 IN (4,3,1) THEN DO;
           H07063=1;
           N19=10;
        END;
        ELSE IF H07064=3 THEN DO;
           H07063=1;
           N19=11;
        END;
        ELSE IF H07064=. THEN DO;
           N19=12;
        END;
     END;
  END;
  ELSE IF XSEXA=. AND H07063 IN (.) THEN N19=13;



  DROP AGE SEX;


NOSURVEY:

/* missing values */

  ARRAY MISS MISS_9 MISS_8 MISS_7 MISS_6 MISS_5 MISS_4 MISS_1 ;
  MISS_TOT=0;
  DO OVER MISS;
     MISS = 0;
  END;
  ARRAY MISSARAY &VARLIST2.;

  DO OVER MISSARAY;
     IF (MISSARAY EQ -9 ) THEN MISS_9 = MISS_9 + 1;
     ELSE IF (MISSARAY EQ -8) THEN MISS_8 = MISS_8 + 1;
     ELSE IF (MISSARAY EQ -7) THEN MISS_7 = MISS_7 + 1;
     ELSE IF (MISSARAY EQ -6) THEN MISS_6 = MISS_6 + 1;
     ELSE IF (MISSARAY EQ -5) THEN MISS_5 = MISS_5 + 1;
     ELSE IF (MISSARAY EQ -4) THEN MISS_4 = MISS_4 + 1;
     ELSE IF (MISSARAY EQ -1) THEN MISS_1 = MISS_1 + 1;
  END;
  DO OVER MISS;
     MISS_TOT=MISS_TOT + MISS;
  END;

*****************************************;

 OUTPUT;

RUN;


PROC FORMAT;
   VALUE GRID
     0='0'
     1-9999='>=1' ;
   VALUE $GRIDB
     1-5 = '1-5' ;
   VALUE $AGE
     018-039='<40'
```

```
     040-120='>=40';
   VALUE SCALE
     0-10='0-10';
   VALUE MARK
     1-6='Marked' ;
   VALUE MARKB
     2-7='Marked';

   VALUE MARKC
    1='1'
   2-HIGH='>1';

RUN;


proc contents data=out.cschm07q;
run;
```

F.2.F Q3FY2007\PROGRAMS\CODINGSCHEME\CSCHM07Q.FMT - INCLUDE FILE FOR CODING SCHEME FOR QUARTER 3 FY2007.

```
/*  Formats for original answers to survey questions,
     after variables have been recoded */

        FORMAT H07001   H07001_O YN.
               H07003   H07003_O MEDA.
               H07004   H07004_O MEDB.
               H07005   H07005_O MEDSUPP.
               H07006   H07006_O HPLAN1_.
               H07007   H07007_O HPTIME.

               H07008 H07008_O   H07010 H07010_O   H07012 H07012_O
               H07014 H07014_O   H07016 H07016_O   H07018 H07018_O
               H07021 H07021_O   H07026 H07026_O   H07028 H07028_O
                 YN.

               H07009   H07009_O RATE1_.
               H07011   H07011_O PROB1_.
               H07013   H07013_O PROB2_.
               H07015   H07015_O RATE2_.
               H07017   H07017_O OFTEN1_.
               H07019   H07019_O OFTEN2_.
               H07020   H07020_O TIME1_.
               H07022   H07022_O OFTEN3_.
               H07023   H07023_O TIME2_.
               H07024   H07024_O OFTEN4_.
               H07025   H07025_O OFTEN4_.

               H07027   H07027_O PROB3_.
               H07029   H07029_O PROB3a.

               H07030-H07036   H07030_O--H07036_O OFTEN5_.

               H07037   H07037_O RATE3_.

               H07038   H07038_O PLACE.

               S07B01 S07B01_O MNTLHLTH.
               S07B02 S07B02_O YN.
               S07B03 S07B03_O PROB1_.
               S07B04 S07B04_O RATE4_.

               H07039   H07039_O YNDNK.

               H07040--H07041  H07040_O--H07041_O OFTEN6_.

               H07042 H07042_O   H07044 H07044_O
               H07046 H07046_O   H07060 H07060_O
               H07067 H07067_O
                  YN.

               H07043   H07043_O PROB8_.
               H07045   H07045_O PROB9_.
               H07047   H07047_O PROB10_.
               H07048   H07048_O RATE4_.

               H07049   H07049_O TIME5_.
               H07050   H07050_O YNBP_.

               S07Q01 S07Q01_O YNdnk.
               S07Q02 S07Q02_O colon1_.
               S07Q03 S07Q03_O YNdnk.
               S07Q04 S07Q04_O colon2_.
               S07Q05 S07Q05_O colon3_.
               S07Q06 S07Q06_O YnDr.

               H07051   H07051_O TIME7_.
               H07052   H07052_O YNDNK.
               H07053   H07053_O TIME8_.
               H07054   H07054_O TIME9_.
```

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      H07055   H07055_O OFTEN7_.
      H07056   H07056_O OFTEN7_.
      H07057   H07057_O OFTEN7_.
      H07058   H07058_O SEX.

      S07Q07   S07Q07_O TIME10_.

      H07059   H07059_O TIME11_.
      H07061   H07061_O TIME12_.
      H07063   H07063_O YNPREG.
      H07064   H07064_O PREG1_.
      H07065   H07065_O PREG2_.
      H07066   H07066_O HEALTH.

      H07068F H07068FO
      H07068I H07068IO
      H07069  H07069_O
        TIME14_.

      SREDA    SREDA_O  EDUC.
      H07070   H07070_O HISP.
      SRAGE    SRAGE_O  AGEGRP.

      S07001 S07001_O  YNDNK.
      S07002 S07002_O  S07007 S07007_O  YN.
      S07003 S07003_O  TIER.
      S07004 S07004_O  OPENVAR_.
      S07005 S07005_O  TRSCVG.
      S07006 S07006_O  TRSBuy.


      MISS_1   MISS_4-MISS_9 MISS_TOT 4.
      e1 e2 e3 e4 e5 e6 e7 e8 e9 e10 e11 e12 e13 e14 e15 e16 e17
      e18 e19 e20 e21 e22 e23 e24 e25
         $e_.;


LABEL H07001_O='Are you the person listed on envelope'
      H07001  ='Are you the person listed on envelope'
      H07002AO='Health plan(s) covered: TRICARE Prime'
      H07002A ='Health plan(s) covered: TRICARE Prime'
      H07002CO='Health plan(s) covered: TRICARE Ext/Stnd'
      H07002C ='Health plan(s) covered: TRICARE Ext/Stnd'
      H07002NO='Health plan(s) covered: TRICARE Plus'
      H07002N ='Health plan(s) covered: TRICARE Plus'
      H07002OO='Health plan(s) covered: TRICARE For Life'
      H07002O ='Health plan(s) covered: TRICARE For Life'
      H07002PO='Health plan(s) covered: TRICARE Supplmntl Ins'
      H07002P ='Health plan(s) covered: TRICARE Supplmntl Ins'
      H07002QO='Health plan(s) covered: TRICARE Reserve Select'
      H07002Q ='Health plan(s) covered: TRICARE Reserve Select'
      H07002FO='Health plan(s) covered: MEDICARE'
      H07002F ='Health plan(s) covered: MEDICARE'
      H07002GO='Health plan(s) covered: FEHBP'
      H07002G ='Health plan(s) covered: FEHBP'
      H07002HO='Health plan(s) covered: Medicaid'
      H07002H ='Health plan(s) covered: Medicaid'
      H07002IO='Health plan(s) covered: Civilian HMO'
      H07002I ='Health plan(s) covered: Civilian HMO'
      H07002JO='Health plan(s) covered: Other civilian'
      H07002J ='Health plan(s) covered: Other civilian'
      H07002KO='Health plan(s) covered: USFHP'
      H07002K ='Health plan(s) covered: USFHP'
      H07002MO='Health plan(s) covered: Veterans'
      H07002M ='Health plan(s) covered: Veterans'
      H07002RO='Health plan(s) covered: Gov Hlth ins-other cntry'
      H07002R ='Health plan(s) covered: Gov Hlth ins-other cntry'
      H07002LO='Health plan(s) covered: Not sure'
      H07002L ='Health plan(s) covered: Not sure'
      H07003  ='Currently Covered Medicare Part A'
      H07003_O='Currently Covered Medicare Part A'
      H07004  ='Currently Covered Medicare Part B'
      H07004_O='Currently Covered Medicare Part B'
```

```
H07005  ='Currently Covered Medicare Supplemental'
H07005_O='Currently Covered Medicare Supplemental'
H07006_O='Which health plan did you use most'
H07006  ='Which health plan did you use most'
H07007_O='Yrs in a row with health plan'
H07007  ='Yrs in a row with health plan'
H07008_O='Have one person think of as personal Dr'
H07008  ='Have one person think of as personal Dr'
H07009_O='Rating of your personal Dr or nurs'
H07009  ='Rating of your personal Dr or nurs'
H07010_O='Same prs Dr/nurs before joined hlth pln'
H07010  ='Same prs Dr/nurs before joined hlth pln'
H07011_O='Health plan: prblm to get Dr happy with'
H07011  ='Health plan: prblm to get Dr happy with'
H07012_O='In lst yr:you/Dr think you need spclst'
H07012  ='In lst yr:you/Dr think you need spclst'
H07013_O='In lst yr:how much prblm see spclst'
H07013  ='In lst yr:how much prblm see spclst'
H07014_O='In lst yr:did you see a specialist'
H07014  ='In lst yr:did you see a specialist'
H07015_O='Rating of specialist seen in lst yr'
H07015  ='Rating of specialist seen in lst yr'
H07016_O='In lst yr:call Dr for help/advice'
H07016  ='In lst yr:call Dr for help/advice'
H07017_O='In lst yr:when call how often get hlp nd'
H07017  ='In lst yr:when call how often get hlp nd'
H07018_O='In lst yr:ill/injry/cond care right away'
H07018  ='In lst yr:ill/injry/cond care right away'
H07019_O='In lst yr:get urgnt care as soon as wntd'
H07019  ='In lst yr:get urgnt care as soon as wntd'
H07020_O='In lst yr:wait btwn try get care,see prv'
H07020  ='In lst yr:wait btwn try get care,see prv'
H07021_O='In lst yr:make appts non-urgnt hlth care'
H07021  ='In lst yr:make appts non-urgnt hlth care'
H07022_O='In lst yr:non-urg hlth cre appt whn wntd'
H07022  ='In lst yr:non-urg hlth cre appt whn wntd'
H07023_O='In lst yr:days btwn appt & see prvder'
H07023  ='In lst yr:days btwn appt & see prvder'
H07024_O='In lst yr:goto emrgncy rm for own care'
H07024  ='In lst yr:goto emrgncy rm for own care'
H07025_O='In lst yr:goto Dr office/clinic for care'
H07025  ='In lst yr:goto Dr office/clinic for care'
H07026_O='In lst yr:think need care/tests/trtmnt'
H07026  ='In lst yr:think need care/tests/trtmnt'
H07027_O='In lst yr:prblm to get care thght ncssry'
H07027  ='In lst yr:prblm to get care thght ncssry'
H07028_O='In lst yr:need apprvl care/tests/trtmnt'
H07028  ='In lst yr:need apprvl care/tests/trtmnt'
H07029_O='In lst yr:prblm w/delays wait for apprv'
H07029  ='In lst yr:prblm w/delays wait for apprv'
H07030_O='In lst yr:wait within 15 min appt see Dr'
H07030  ='In lst yr:wait within 15 min appt see Dr'
H07031_O='In lst yr:how oftn treat w/crtsy/rspct'
H07031  ='In lst yr:how oftn treat w/crtsy/rspct'
H07032_O='In lst yr:how oftn staff helpful'
H07032  ='In lst yr:how oftn staff helpful'
H07033_O='In lst yr:how oftn Drs listen to you'
H07033  ='In lst yr:how oftn Drs listen to you'
H07034_O='In lst yr:how oftn Drs explain things'
H07034  ='In lst yr:how oftn Drs explain things'
H07035_O='In lst yr:how oftn Drs show respect'
H07035  ='In lst yr:how oftn Drs show respect'
H07036_O='In lst yr:how oftn Drs spend enough time'
H07036  ='In lst yr:how oftn Drs spend enough time'
H07037_O='Rating of all health care in lst yr'
H07037  ='Rating of all health care in lst yr'
H07038_O='In lst yr:fclty use most for Health care'
H07038  ='In lst yr:fclty use most for Health care'
H07039_O='In lst yr:send in any claims'
H07039  ='In lst yr:send in any claims'
H07040_O='In lst yr:hlth pln handle in rsnble time'
H07040  ='In lst yr:hlth pln handle in rsnble time'
H07041_O='In lst yr:how oftn handle correctly'
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```
H07041  ='In lst yr:how oftn handle correctly'
H07042_O='In lst yr:info in written materials'
H07042  ='In lst yr:info in written materials'
H07043_O='In lst yr:prblm to find/undrstnd mtrls'
H07043  ='In lst yr:prblm to find/undrstnd mtrls'
H07044_O='In lst yr:hlth plan customer srvc help'
H07044  ='In lst yr:hlth plan customer srvc help'
H07045_O='In lst yr:prblm get help from cstmr srvc'
H07045  ='In lst yr:prblm get help from cstmr srvc'
H07046_O='In lst yr:fill out paperwork'
H07046  ='In lst yr:fill out paperwork'
H07047_O='In lst yr:prblms with paperwork'
H07047  ='In lst yr:prblms with paperwork'
H07048  ='Rating of all experience with hlth plan'
H07048_O='Rating of all experience with hlth plan'
H07049_O='Blood pressure: when lst reading'
H07049  ='Blood pressure: when lst reading'
H07050_O='Blood pressure: know if too high or not'
H07050  ='Blood pressure: know if too high or not'
H07051_O='When did you lst have a flu shot'
H07051  ='When did you lst have a flu shot'
H07052  ='Smoked at least 100 cigarettes in life'
H07052_O='Smoked at least 100 cigarettes in life'
H07053  ='Smoke everyday, some days or not at all'
H07053_O='Smoke everyday, some days or not at all'
H07054_O='How long since you quit smoking'
H07054  ='How long since you quit smoking'
H07055_O='Lst yr: # visits advised to quit smoking'
H07055  ='Lst yr: # visits advised to quit smoking'
H07056  ='# visits recom medic assist quit smoking'
H07056_O='# visits recom medic assist quit smoking'
H07057  ='# vist discu meth/strag asst quit smokng'
H07057_O='# vist discu meth/strag asst quit smokng'
H07058_O='Are you male or female'
H07058  ='Are you male or female'
H07059_O='Lst have a Pap smear test'
H07059  ='Lst have a Pap smear test'
H07060_O='Are you under age 40'
H07060  ='Are you under age 40'
H07061_O='Lst time: breasts checked mammography'
H07061  ='Lst time: breasts checked mammography'
H07063_O='Been pregnant in lst yr or pregnant now'
H07063  ='Been pregnant in lst yr or pregnant now'
H07064_O='In what trimester is your pregnancy'
H07064  ='In what trimester is your pregnancy'
H07065_O='Trimester first received prenatal care'
H07065  ='Trimester first received prenatal care'
H07066_O='In gnrl, how would you rate ovrall hlth'
H07066  ='In gnrl, how would you rate ovrall hlth'
H07067_O='Impairment/Hlth prblm limit activities'
H07067  ='Impairment/Hlth prblm limit activities'

H07068FO='Height without shoes (feet)'
H07068F ='Height without shoes (feet)'
H07068IO='Height without shoes (inches)'
H07068I ='Height without shoes (inches)'
H07069_O='Weight without shoes'
H07069  ='Weight without shoes'

SREDA_O ='Highest grade completed'
SREDA   ='Highest grade completed'
H07070_O='Are you Spanish/Hispanic/Latino'
H07070  ='Are you Spanish/Hispanic/Latino'
H07070AO='Not Spanish/Hispanic/Latino'
H07070A ='Not Spanish/Hispanic/Latino'
H07070BO='Mexican, Mexican American, Chicano'
H07070B ='Mexican, Mexican American, Chicano'
H07070CO='Puerto Rican'
H07070C ='Puerto Rican'
H07070DO='Cuban'
H07070D ='Cuban'
H07070EO='Other Spanish, Hispanic, or Latino'
H07070E ='Other Spanish, Hispanic, or Latino'
```

```
SRRACEAO='Race: White'
SRRACEA ='Race: White'
SRRACEBO='Race: Black or African American'
SRRACEB ='Race: Black or African American'
SRRACECO='Race: American Indian or Alaska Native'
SRRACEC ='Race: American Indian or Alaska Native'
SRRACEDO='Race: Asian'
SRRACED ='Race: Asian'
SRRACEEO='Race: Native Hawaiian/other Pacific Isl.'
SRRACEE ='Race: Native Hawaiian/other Pacific Isl.'
SRAGE_O ='What is your age now'
SRAGE   ='What is your age now'

S07001  ='Elgbl to purchase TRICARE rsrv select(TRS)'
S07001_O='Elgbl to purchase TRICARE rsrv select(TRS)'
S07002  ='In pst yr: Covered by TRICARE rsrv select'
S07002_O='In pst yr: Covered by TRICARE rsrv select'
S07003  ='Tier of most recent TRS coverage'
S07003_O='Tier of most recent TRS coverage'
S07004  ='In pst yr: #mnths covered under TRS'
S07004_O='In pst yr: #mnths covered under TRS'
S07005  ='TRS cvrg: family or member-only'
S07005_O='TRS cvrg: family or member-only'
S07006  ='Reason for purchase of TRS cvrg'
S07006_O='Reason for purchase of TRS cvrg'
S07007  ='In pst yr: elect not to purchase TRS cvrg'
S07007_O='In pst yr: elect not to purchase TRS cvrg'
S07008A ='Rsn no cvrg: cvlian hlth insrnc affrdbl'
S07008AO='Rsn no cvrg: cvlian hlth insrnc affrdbl'
S07008B ='Rsn no cvrg: cvlian hlth better benefits'
S07008BO='Rsn no cvrg: cvlian hlth better benefits'
S07008C ='Rsn no cvrg: other TRICARE hlth avlbl'
S07008CO='Rsn no cvrg: other TRICARE hlth avlbl'
S07008D ='Rsn no cvrg: period of elgblty ended'
S07008DO='Rsn no cvrg: period of elgblty ended'
S07008E ='Rsn no cvrg: TRS not affordable'
S07008EO='Rsn no cvrg: TRS not affordable'
S07008F ='Rsn no cvrg: not pleased with TRICARE'
S07008FO='Rsn no cvrg: not pleased with TRICARE'
S07008G ="Rsn no cvrg: my dr doesn't accept TRS"
S07008GO="Rsn no cvrg: my dr doesn't accept TRS"
S07008H ='Rsn no cvrg: change in emplymnt status'
S07008HO='Rsn no cvrg: change in emplymnt status'
S07008I ="Rsn no cvrg: don't know"
S07008IO="Rsn no cvrg: don't know"

S07B01_O='Self rate of overall mental/emotional health'
S07B01  ='Self rate of overall mental/emotional health'
S07B02_O='Lst yr: Needed treatmnt/cnslng-prsnl prob'
S07B02  ='Lst yr: Needed treatmnt/cnslng-prsnl prob'
S07B03_O='Lst yr: Prblm gttng needed treatmnt/cnslng'
S07B03  ='Lst yr: Prblm gttng needed treatmnt/cnslng'
S07B04_O='Lst yr: Rate of treatmnt/cnslng received'
S07B04  ='Lst yr: Rate of treatmnt/cnslng received'

S07Q01  ='Had blood stool test with home kit'
S07Q01_O='Had blood stool test with home kit'
S07Q02  ='Time since last bld stl tst /w home kit'
S07Q02_O='Time since last bld stl tst /w home kit'
S07Q03  ='Had sigmoidoscopy or colonoscopy exam'
S07Q03_O='Had sigmoidoscopy or colonoscopy exam'
S07Q04  ='Time since last sigmoidoscopy'
S07Q04_O='Time since last sigmoidoscopy'
S07Q05  ='Time since last colonoscopy'
S07Q05_O='Time since last colonoscopy'
S07Q06  ='Prsnl dr talk about colon cancer screening tests'
S07Q06_O='Prsnl dr talk about colon cancer screening tests'
S07Q07_O='Lst prostate disease exam or blood test'
S07Q07  ='Lst prostate disease exam or blood test'

N1   = "Coding Scheme Note 1"
N1A1 = "Coding Scheme Note 1A1"
N1A2 = "Coding Scheme Note 1A2"
```

```
  N1A3 = "Coding Scheme Note 1A3"
  N2 = "Coding Scheme Note 2"
  N3 = "Coding Scheme Note 3"
  N4 = "Coding Scheme Note 4"
  N5 = "Coding Scheme Note 5"
  N6 = "Coding Scheme Note 6"
  N7 = "Coding Scheme Note 7"
  N8 = "Coding Scheme Note 8"
  N9 = "Coding Scheme Note 9"
  N10= "Coding Scheme Note 10"
  N10A1= "Coding Scheme Note 10A1"
  N11= "Coding Scheme Note 11"
  N12= "Coding Scheme Note 12"
  N13 = "Coding Scheme Note 13"
  N14 = "Coding Scheme Note 14"
  N15B1 = "Coding Scheme Note 15B1"
  N15B2 = "Coding Scheme Note 15B2"
  N16   = "Coding Scheme Note 16"
  N16A1 = "Coding Scheme Note 16A1"
  N17A= "Coding Scheme Note 17A"
  N17A1= "Coding Scheme Note 17A1"
  N17B= "Coding Scheme Note 17B"
  N18 = "Coding Scheme Note 18"
  N19 = "Coding Scheme Note 19"



  MISS_1 = "Count of: Violates Skip Pattern"
  MISS_4 = "Count of: Incomplete grid error"
  MISS_5 = "Count of: Scalable reponse of Don't know"
  MISS_6 = "Count of: Not applicable - valid skip"
  MISS_7 = "Count of: Out-of-range error"
  MISS_8 = "Count of: Multiple response error"
  MISS_9 = "Count of: No response - invalid skip"
  MISS_TOT = "Total number of missing responses"
  XSEXA = "Male or Female  - R"
;
```

F.2.G Q4FY2007\PROGRAMS\CODINGSCHEME\CSCHM07Q.SAS - IMPLEMENT CODING SCHEME AND CODING TABLES FOR QUARTER 4 FY2007.

```
*****************************************************************************;
*  Program:  Cschm07q.sas
*  Written:  06/04/2001
*   Author:  C. Rankin
*
*    Input:  MERGESYN.SD2 - Merged MPR Sampling, DEERS, and Synovate Response Data
*   Output:  CSCHM07Q.SD2 - Coding scheme file
*
* Modified:  9/20/2001 - Recodes removed (stored in recodes_old.sas)
*           10/31/2001 - Revised notes 16 and 17 (became notes 26 and 27)
*            3/22/2002 - Updated Variable names for Q1 2002 and added
*                        Include file RENAME.SAS to change the variable
*                        names from 01 to 02. Skipping 01 designation to make
*                        survey reflect year of fielding
*            5/09/2002 - Change to logic in TFL supplement
*            3/17/2003 - Updated Variables names for Q1 2003
*            4/11/2003 - Added note 19a to accomodate Q1 2003 error where
*                        an option on most of the questionnaires was omitted for
*                        H03062
*            5/27/2003 - Updated Variable names for Q2 2003
*            12/05/2003 - Updated Variable names for Q4 2003
*            3/25/2004 - Updated Variable names for Q1 2004
*            6/3/2004 - Updated Variable names for Q2 2004
*            8/23/2004 - Updated Variable names for Q3 2004
*            1/13/2005 - Updated Variable names for Q4 2004
*            4/13/2005 - Updated Variable names for Q1 2005
*            7/20/2005 - Updated Variable names for Q2 2005
*            10/14/2005 - Updated Variable names for Q3 2005
*            12/22/2005 - Updated Variable names for Q4 2005
*            3/20/2006 - Updated Variable names for Q2 FY 2006
*            12/11/2006 - Updated Variable names for Q1 FY 2007
*  Purpose:  Apply Coding Scheme Specifications to DoD Health Care Survey
*            Response Data, check for consistency in responses and skip
*            patterns
*  Include
*    files:  Cschm07q.fmt
*
*****************************************************************************;

OPTIONS PS=80 LS=120 NOCENTER COMPRESS=YES PAGENO=1 SOURCE SOURCE2;
*OPTIONS OBS=100;

LIBNAME LIBRARY v612 "..\..\DATA\AFINAL\FMTLIB";
LIBNAME IN      v612 "..\..\DATA\AFINAL";
LIBNAME OUT     v612 "..\..\DATA\AFINAL";

%LET INDATA=MERGESYN;
%LET OUTDATA=CSCHM07Q;
%LET PERIOD=April, 2006 to March, 2007;

/* Variable names in survey -- become recoded varibles */

%Let varlist1 =

 H07001  H07002A H07002C H07002F H07002G H07002H H07002I H07002J H07002K
 H07002L H07002M H07002N H07002O H07002P H07002Q H07002R H07003  H07004  H07005
 H07006  H07007
 H07008  H07009  H07010  H07011  H07012  H07013  H07014
 H07015  H07016  H07017  H07018  H07019  H07020  H07021  H07022  H07023
 H07024  H07025  H07026  H07027  H07028  H07029  H07030  H07031  H07032
 H07033  H07034  H07035  H07036  H07037  H07038

 S07V01  S07V02  S07V05  S07V06  S07V07  S07V08  S07V09  S07V10  S07V13
 S07V15  S07V16  S07V17

 S07Y01  S07Y22  S07Y23  S07Y24  S07Y35
 S07Y36A S07Y36B S07Y36C S07Y36D S07Y36E S07Y36F S07Y36G S07Y36H S07Y36I
 S07Y37A S07Y37B S07Y37C S07Y37D S07Y37E S07Y37F S07Y37G S07Y37H S07Y37I
 S07Y37J S07Y37K S07Y37L S07Y37M S07Y37N
```

```
 H07039  H07040  H07041
 H07042  H07043  H07044  H07045  H07046  H07047  H07048

 H07049  H07050


 H07051  H07052  H07053  H07054  H07055  H07056  H07057  H07058
 H07059
 H07060  H07061  H07063  H07064  H07065  H07066  H07067

 H07068F H07068I H07069

 H07070  H07070A H07070B H07070C H07070D H07070E
 SRRACEA SRRACEB SRRACEC SRRACED SRRACEE SRAGE SREDA
 ;



/*  _O variables are the original values from the survey response */

%Let varlist2 =
 H07001_O H07002AO H07002CO H07002FO H07002GO H07002HO H07002IO H07002JO H07002KO
 H07002LO H07002MO H07002NO H07002OO H07002PO H07002QO H07002RO H07003_O H07004_O
 H07005_O H07006_O H07007_O
 H07008_O H07009_O H07010_O H07011_O H07012_O H07013_O H07014_O
 H07015_O H07016_O H07017_O H07018_O H07019_O H07020_O H07021_O H07022_O H07023_O
 H07024_O H07025_O H07026_O H07027_O H07028_O H07029_O H07030_O H07031_O H07032_O
 H07033_O H07034_O H07035_O H07036_O H07037_O H07038_O

 S07V01_O S07V02_O S07V05_O S07V06_O S07V07_O S07V08_O S07V09_O S07V10_O S07V13_O
 S07V15_O S07V16_O S07V17_O
 S07V11AO S07V11BO S07V11CO S07V11DO S07V11EO S07V11FO S07V11GO S07V11HO
 S07V12AO S07V12BO S07V12CO S07V12DO S07V12EO S07V12FO S07V12GO
 S07V14AO S07V14BO S07V14CO S07V14DO S07V14EO S07V14FO S07V14GO S07V14HO
 S07V18AO S07V18BO S07V18CO S07V18DO S07V18EO S07V18FO S07V18GO

 S07Y01_O S07Y22_O S07Y23_O S07Y24_O S07Y35_O
 S07Y36AO S07Y36BO S07Y36CO S07Y36DO S07Y36EO S07Y36FO S07Y36GO S07Y36HO S07Y36IO
 S07Y37AO S07Y37BO S07Y37CO S07Y37DO S07Y37EO S07Y37FO S07Y37GO S07Y37HO S07Y37IO
 S07Y37JO S07Y37KO S07Y37LO S07Y37MO S07Y37NO

 H07039_O H07040_O H07041_O
 H07042_O H07043_O H07044_O H07045_O H07046_O H07047_O H07048_O

 H07049_O H07050_O

 H07051_O H07052_O H07053_O H07054_O H07055_O H07056_O H07057_O H07058_O
 H07059_O
 H07060_O H07061_O H07063_O H07064_O H07065_O H07066_O H07067_O

 H07068FO H07068IO H07069_O

 H07070_O H07070AO H07070BO H07070CO H07070DO H07070EO
 SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO SRAGE_O SREDA_O
 ;

TITLE  "DoD 2007 Survey Form A -- &PERIOD";
TITLE2 "Apply Coding Scheme";



DATA MERGESYN;

  SET IN.MERGESYN(RENAME=(H07H69  = H07069CH
                          H07H68F = H07068F
                          H07H68FN= H07068FN
                          H07H68I = H07068I
                          H07H68IN= H07068IN
                          H07H69N = H07069N
                          ));
```

```
*******************************************************************;
* Code added by Jacqueline Agufa 09/15/2004 to fix name of race variable;
*******************************************************************;

  RENAME SRACEA = SRRACEA;
  RENAME SRACEB = SRRACEB;
  RENAME SRACEC = SRRACEC;
  RENAME SRACED = SRRACED;
  RENAME SRACEE = SRRACEE;


  **** update variables with both filled items and check boxes
  **** Per Eric Schone;


  IF H07068F LT 1      THEN H07068F=H07068FN;
  IF H07068I IN (-9,.) THEN H07068I=H07068IN;


  H07069= COMPRESS(H07069CH,' ')*1;

  DROP H07069CH;


  IF H07069=0   AND H07069N=-9     THEN H07069 =H07069N;
  IF H07069<100 AND H07069N NE -9  THEN H07069 =H07069N;


  *** Correct odd height and weights Per Eric Schone;

  IF H07068F < 2 OR
     H07068F > 8
  THEN H07068F= -7;

  IF 0 <= H07069 < 40 OR
     H07069 > 500
  THEN H07069= -7;


  /* JMA
  ****Multiple responses were given to this question so H07070 is being created
  ****from the multiple responses.;
  */


  IF H07070B=1 THEN H07070=2;
  ELSE IF H07070E=1 THEN H07070=5;
  ELSE IF H07070C=1 THEN H07070=3;
  ELSE IF H07070D=1 THEN H07070=4;
  ELSE IF H07070A=1 THEN H07070=1;

RUN;


DATA OUT.CSCHM07Q;

  LENGTH &VARLIST1. &VARLIST2. 4. MPRID $8.;
  INFORMAT &VARLIST2. 4.;
  %INCLUDE "CSCHM07Q.FMT";


/* label and format statements for original variables */


   SET MERGESYN;



*************************************************************;
**** Recodes for invalid responses:***************************;
*************************************************************;
```

```
/* This is a version of the coding scheme and coding tables for the
   FY 2007 HCSDB Form A.
   The following tables outline the coding of screening questions (skip),
   and subsequent items to be answered (or not answered in a series
   following a skip question.) */

/* First set up new variables that capture the original values */
/* recode the initial numeric values to the SAS numeric values */
/* specified in the coding scheme                              */

  SEX=PNSEXCD;
  AGE=INPUT(DAGEQY,8.);

  ARRAY RECODE(*) &VARLIST1;
  ARRAY   ORIG(*) &VARLIST2;

  DO I = 1 to DIM(ORIG);
      ORIG(I) = RECODE(I);
      IF ORIG(I) < 0 THEN DO;
              IF ORIG(I)= -9 THEN RECODE(I)=.;
         ELSE IF ORIG(I)= -8 THEN RECODE(I)=.A;
         ELSE IF ORIG(I)= -7 THEN RECODE(I)=.O;
         ELSE IF ORIG(I)= -6 THEN RECODE(I)=.N;
         ELSE IF ORIG(I)= -5 THEN RECODE(I)=.D;
         ELSE IF ORIG(I)= -4 THEN RECODE(I)=.I;
         ELSE IF ORIG(I)= -1 THEN RECODE(I)=.C;
         ELSE RECODE(I)=RECODE(I);
      END;
  END;
  DROP I;



/* recode selected responses to be 1=marked, 2=unmarked */

  ARRAY   MARKED(*)
           H07002A H07002C H07002F H07002G H07002H H07002I H07002J H07002K
           H07002L H07002M H07002N H07002O H07002P H07002Q H07002R

           S07V11A S07V11B S07V11C S07V11D S07V11E S07V11F S07V11G S07V11H
           S07V12A S07V12B S07V12C S07V12D S07V12E S07V12F S07V12G
           S07V14A S07V14B S07V14C S07V14D S07V14E S07V14F S07V14G S07V14H
           S07V18A S07V18B S07V18C S07V18D S07V18E S07V18F S07V18G

           S07Y36A S07Y36B S07Y36C S07Y36D S07Y36E S07Y36F S07Y36G S07Y36H S07Y36I
           S07Y37A S07Y37B S07Y37C S07Y37D S07Y37E S07Y37F S07Y37G S07Y37H S07Y37I
           S07Y37J S07Y37K S07Y37L S07Y37M S07Y37N

           H07070A H07070B H07070C H07070D H07070E

           SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
               ;


  ARRAY INFORMAT(*)
           H07002AO H07002CO H07002FO H07002GO H07002HO H07002IO H07002JO
           H07002KO H07002LO H07002MO H07002NO H07002OO H07002PO H07002QO H07002RO

           S07V11AO S07V11BO S07V11CO S07V11DO S07V11EO S07V11FO S07V11GO S07V11HO
           S07V12AO S07V12BO S07V12CO S07V12DO S07V12EO S07V12FO S07V12GO
           S07V14AO S07V14BO S07V14CO S07V14DO S07V14EO S07V14FO S07V14GO S07V14HO
           S07V18AO S07V18BO S07V18CO S07V18DO S07V18EO S07V18FO S07V18GO

           S07Y36AO S07Y36BO S07Y36CO S07Y36DO S07Y36EO S07Y36FO S07Y36GO S07Y36HO S07Y36IO
           S07Y37AO S07Y37BO S07Y37CO S07Y37DO S07Y37EO S07Y37FO S07Y37GO S07Y37HO S07Y37IO
           S07Y37JO S07Y37KO S07Y37LO S07Y37MO S07Y37NO

           H07070AO H07070BO H07070CO H07070DO H07070EO

           SRRACEAO SRRACEBO SRRACECO SRRACEDO SRRACEEO

              ;
```

```
  DO J=1 TO DIM(INFORMAT);
     IF INFORMAT(J) NOT IN (.,-9) THEN MARKED(J)=1;
     ELSE MARKED(J)=2;
  END;
  DROP J;

  FORMAT
           H07002A H07002C H07002F H07002G H07002H H07002I H07002J H07002K
           H07002L H07002M H07002N H07002O H07002P H07002Q H07002R

           S07V11A S07V11B S07V11C S07V11D S07V11E S07V11F S07V11G S07V11H
           S07V12A S07V12B S07V12C S07V12D S07V12E S07V12F S07V12G
           S07V14A S07V14B S07V14C S07V14D S07V14E S07V14F S07V14G S07V14H
           S07V18A S07V18B S07V18C S07V18D S07V18E S07V18F S07V18G

           S07Y36A S07Y36B S07Y36C S07Y36D S07Y36E S07Y36F S07Y36G S07Y36H S07Y36I
           S07Y37A S07Y37B S07Y37C S07Y37D S07Y37E S07Y37F S07Y37G S07Y37H S07Y37I
           S07Y37J S07Y37K S07Y37L S07Y37M S07Y37N

           H07070A H07070B H07070C H07070D H07070E

           SRRACEA SRRACEB SRRACEC SRRACED SRRACEE
         MARKED.;


*********************************************************************;

/*  skip coding scheme for all surveys not returned  **/

  IF FLAG_FIN NE 1 THEN GOTO NOSURVEY;

/** Note 1 -- H07006, H07007 health plan usage  **/

  IF H07006 > 0 OR H07006 =.D THEN N1=1;
  ELSE IF H07006=.N  THEN DO;
     IF H07007 NOT=. THEN DO;
        N1=2;
        H07007=.C;
     END;
     ELSE DO;
        N1=3;
        H07007=.N;
     END;
  END;
  ELSE IF H07006=.   THEN N1=4;


/** Note 2 -- H07008 H07009 H07010 H07011:  Personal doctor or nurse **/

  IF H07008 IN (1,.) AND H07009 = .N THEN DO;
     H07008 = 2;
     H07009 =.C;
     IF H07010=. THEN H07010=.N;
     ELSE H07010=.C;
     N2=1;
  END;
  ELSE IF H07008 IN (1) AND H07009 NE .N  THEN DO;
     IF H07010 IN (1) AND H07011 IN (1,2,3) THEN DO;
        H07011=.C;
        N2=2;
     END;
     ELSE IF H07010 IN (.) AND H07011 IN (1,2,3) THEN DO;
        H07010=2;
        N2=3;
     END;
     ELSE IF H07010 IN (1) AND H07011 IN (.) THEN DO;
        H07011=.N;
        N2=4;
     END;
     ELSE IF H07010 IN (2) THEN DO;
        N2=5;
     END;
```

```
      ELSE IF H07010 IN (.) AND H07011 IN (.) THEN DO;
         N2=6;
      END;
   END;
   ELSE IF H07008 IN (2,.) THEN DO;
      IF H07009 NOT IN (.N, .) AND H07010 IN (1) AND H07011 IN (1,2,3)
      THEN DO;
         H07008=1;
         H07011=.C;
         N2=7;
      END;
      ELSE IF H07009 NOT IN (.N, .) AND H07010 IN (.) AND H07011 IN (1,2,3)
      THEN DO;
         H07008=1;
         N2=8;
      END;
      ELSE IF H07009 NOT IN (.N, .) AND H07010 IN (.) AND H07011 IN (.)
      THEN DO;
         H07008=1;
         N2=9;
      END;
      ELSE IF H07008=2 AND H07009 IN (.) AND H07010 IN (1) AND H07011 IN (1,2,3)
      THEN DO;
         H07009=.N;
         H07010=.C;
         N2=10;
      END;
      ELSE IF H07008 = 2 AND H07009 IN (.N)
      THEN DO;
         H07009=.C;
         IF H07010=. THEN H07010=.N;
         ELSE H07010=.C;
         N2=11;
      END;
      ELSE IF H07010 IN (1)
      THEN DO;
         H07008=1;
         IF H07011=. THEN H07011=.N;
         ELSE H07011=.C;
         N2=12;
      END;
      ELSE IF H07010 IN (2)
      THEN DO;
         H07008=1;
         N2=13;
      END;
      ELSE IF H07008=2 AND H07009 In (.) AND H07010= . THEN DO;
         H07009=.N;
         H07010=.N;
         N2=14;
      END;
      ELSE IF H07008=. AND H07009=. AND H07010=. THEN DO;
         N2=15;
      END;
   END;


/** Note 3 -- H07012, H07013:  needed to see a specialist in last 12 months **/

   IF H07012=1 AND H07013 IN (1,2,3,.) THEN N3=1;
   ELSE IF H07012 IN (1,.) AND H07013=.N THEN DO;
      H07012=2;
      H07013=.C;
      N3=2;
   END;
   ELSE IF H07012 IN (2,.) AND H07013 IN (1,2,3) THEN DO;
      H07012=1;
      N3=3;
   END;
   ELSE IF H07012=2 AND H07013 IN (.,.N) THEN DO;
      IF H07013=. THEN H07013=.N;
      ELSE H07013=.C;
```

```
     N3=4;
  END;
  ELSE IF H07012=.  AND H07013=.  THEN N3=5;


/** Note 4 -- H07014, H07015: saw a specialist in last 12 months **/

  IF H07014=1 AND H07015 IN (0,1,2,3,4,5,6,7,8,9,10,.) THEN N4=1;
  ELSE IF H07014 IN (1,.) AND H07015=.N THEN DO;
     H07014=2;
     H07015=.C;
     N4=2;
  END;
  ELSE IF H07014 IN (2,.) AND H07015 IN (0,1,2,3,4,5,6,7,8,9,10) THEN DO;
     H07014=1;
     N4=3;
  END;
  ELSE IF H07014=2 AND H07015 IN (.,.N) THEN DO;
     IF H07015=. THEN H07015=.N;
     ELSE H07015=.C;
     N4=4;
  END;
  ELSE IF H07014=.  AND H07015=.  THEN N4=5;



/** Note 5 -- called a doctor's office:  H07016, H07017 **/

  IF H07016=1 AND H07017 IN (1,2,3,4,.) THEN N5=1;
  ELSE IF H07016 IN (1,.) AND H07017=.N THEN DO;
     H07016=2;
     H07017=.C;
     N5=2;
  END;
  ELSE IF H07016 IN (2,.) AND H07017 IN (1,2,3,4) THEN DO;
     H07016=1;
     N5=3;
  END;
  ELSE IF H07016=2 AND H07017 IN (.,.N) THEN DO;
     IF H07017=. THEN H07017=.N;
     ELSE H07017=.C;
     N5=4;
  END;
  ELSE IF H07016=.  AND H07017=.  THEN N5=5;


/** Note 6 -- H07018,H07019,H07020:  illness or injury **/

  ARRAY NOTE6 H07019 H07020;
  N6MARK=0;
  N6NMISS=0;
  N6NN=0;

  DO OVER NOTE6;
     IF NOTE6 NE . THEN N6NMISS+1;
     IF NOTE6 NOT IN (.N,.) THEN N6MARK+1;
     IF NOTE6 EQ .N THEN N6NN+1;
  END;


  IF H07018=1 AND N6NMISS=0 THEN DO;
       N6=1;
  END;
  ELSE IF H07018 IN (1,.) AND N6NMISS>0 AND N6MARK=0 THEN DO;
     H07018=2;
     N6=2;
     DO OVER NOTE6;
        IF NOTE6=. THEN NOTE6=.N;
        ELSE NOTE6=.C;
     END;
  END;
```

```
  ELSE IF H07018=1 AND N6MARK=1 AND N6NN=1 THEN  DO;
     DO OVER NOTE6;
        IF NOTE6=.N THEN NOTE6=.;
     END;
     N6=3;
  END;
  ELSE IF H07018=1 AND N6MARK>0 THEN DO;
     N6=4;
  END;
  ELSE IF H07018=2 AND N6MARK=1 AND N6NN=1  THEN  DO;
     H07019=.C;
     H07020=.C;
     N6=5;
  END;
  ELSE IF H07018 IN (2,.) AND N6MARK>0 THEN DO;
     H07018=1;
     N6=6;
     DO OVER NOTE6;
        IF NOTE6=.N THEN NOTE6=.;
     END;
  END;
  ELSE IF H07018=2 AND (N6NMISS=0 OR (N6NMISS>0 AND N6MARK=0)) THEN DO;
     N6=7;
     DO OVER NOTE6;
        IF NOTE6=. THEN NOTE6=.N;
        ELSE NOTE6=.C;
     END;
  END;
  ELSE IF H07018=.  AND N6NMISS=0 THEN N6=8;


  DROP N6NMISS N6MARK N6NN;


/** Note 7 -- H07021,H07022,H07023:  regular or routine healthcare **/

  ARRAY NOTE7 H07022 H07023;
  N7MARK=0;
  N7NMISS=0;
  N7NN=0;

  DO OVER NOTE7;
     IF NOTE7 NE . THEN N7NMISS+1;
     IF NOTE7 NOT IN (.N,.) THEN N7MARK+1;
     IF NOTE7 EQ .N THEN N7NN+1;
  END;

  IF H07021=1 AND N7NMISS=0 THEN DO;
       N7=1;
  END;
  ELSE IF H07021 IN (1,.) AND N7NMISS>0 AND N7MARK=0 THEN DO;
     H07021=2;
     N7=2;
     DO OVER NOTE7;
        IF NOTE7=. THEN NOTE7=.N;
        ELSE NOTE7=.C;
     END;
  END;
  ELSE IF H07021=1 AND N7MARK=1 AND N7NN=1 THEN  DO;
     DO OVER NOTE7;
        IF NOTE7=.N THEN NOTE7=.;
     END;
     N7=3;
  END;
  ELSE IF H07021=1 AND N7MARK>0 THEN DO;
     N7=4;
  END;
  ELSE IF H07021=2 AND N7MARK=1 AND N7NN=1  THEN  DO;
     H07022=.C;
     H07023=.C;
     N7=5;
  END;
  ELSE IF H07021 IN (2,.) AND N7MARK>0 THEN DO;
```

```
      H07021=1;
      N7=6;
      DO OVER NOTE7;
         IF NOTE7=.N THEN NOTE7=.;
      END;
   END;
   ELSE IF H07021=2 AND (N7NMISS=0 OR (N7NMISS>0 AND N7MARK=0)) THEN DO;
      N7=7;
      DO OVER NOTE7;
         IF NOTE7=. THEN NOTE7=.N;
         ELSE NOTE7=.C;
      END;
   END;
   ELSE IF H07021=.  AND N7NMISS=0 THEN N7=8;


   DROP N7NMISS N7MARK N7NN;



/** Note 8 -- H07025, H07026-H07037: doctor's office or clinic **/

   ARRAY NOTE8  H07026-H07037;

   N8MARK=0;
   N8NMISS=0;

   DO OVER NOTE8;
      IF NOTE8 NE . THEN N8NMISS+1;
      IF NOTE8 NOT IN  (., .N) THEN N8MARK+1;
   END;


   IF H07025=1 THEN DO;
      N8=1;
      DO OVER NOTE8;
         IF NOTE8=. THEN NOTE8=.N;
         ELSE NOTE8=.C;
      END;
   END;
   ELSE IF H07025 IN (2,3,4,5,6,7,.) AND N8NMISS>0 AND N8MARK=0 THEN DO;
      H07025=1;
      N8=2;
      DO OVER NOTE8;
         IF NOTE8=. THEN NOTE8=.N;
         ELSE NOTE8=.C;
      END;
   END;
   ELSE IF H07025 IN (2,3,4,5,6,7) AND (N8NMISS=0 OR N8MARK>0) THEN DO;
      DO OVER NOTE8;
         IF NOTE8=.N THEN NOTE8=.;
      END;
      N8=3;
   END;
   ELSE IF H07025=.  AND N8NMISS=0 THEN N8=4;
   ELSE IF H07025 IN (.) AND N8MARK>0 THEN DO;
      N8=5;
      DO OVER NOTE8;
         IF NOTE8=.N THEN NOTE8=.;
      END;
   END;

   DROP N8NMISS N8MARK;



/** Note 9 -- You or doctor believed you needed care, tests or treatment:
               H07026, H07027 **/


   IF H07026 IN (.N, .C) THEN N9=1;
   ELSE IF H07026=1 AND H07027 IN (1,2,3,.) THEN N9=2;
   ELSE IF H07026 IN (1,.) AND H07027=.N THEN DO;
```

```
      H07026=2;
      H07027=.C;
      N9=3;
   END;
   ELSE IF H07026 IN (2,.) AND H07027 IN (1,2,3) THEN DO;
      H07026=1;
      N9=4;
   END;
   ELSE IF H07026=2 AND H07027 IN (.,.N) THEN DO;
      IF H07027=. THEN H07027=.N;
      ELSE H07027=.C;
      N9=5;
   END;
   ELSE IF H07026=.  AND H07027=.  THEN N9=6;



/** Note 10 -- Needed approval from healthplan for care, tests or treatment:
               H07028, H07029 **/

   IF H07028 IN (.N, .C) THEN N10=1;
   ELSE IF H07028=1 AND H07029 IN (1,2,3,.) THEN N10=2;
   ELSE IF H07028 IN (1,.) AND H07029=.N THEN DO;
      H07028=2;
      H07029=.C;
      N10=3;
   END;
   ELSE IF H07028 IN (2,.) AND H07029 IN (1,2,3) THEN DO;
      H07028=1;
      N10=4;
   END;
   ELSE IF H07028=2 AND H07029 IN (.,.N) THEN DO;
      IF H07029=. THEN H07029=.N;
      ELSE H07029=.C;
      N10=5;
   END;
   ELSE IF H07028=.  AND H07029=.  THEN N10=6;



/** Note 10B1 -- S07V01, S07V02 S07V05-S07V18G: health care received from TRICARE civilian
network **/

   ARRAY NOTE10B11 S07V02 S07V05-S07V10 S07V13 S07V15-S07V17;
   ARRAY NOTE10B12 S07V11A--S07V12G S07V14A--S07V14H S07V18A--S07V18G;
   N10B1MARK=0;
   N10B1NMISS=0;

   DO OVER NOTE10B11;
      IF NOTE10B11 NE . THEN N10B1NMISS+1;
      IF NOTE10B11 NOT IN (.N,.) THEN N10B1MARK+1;
   END;

   DO OVER NOTE10B12;
      IF NOTE10B12 NOT IN (.,2) THEN N10B1NMISS+1;
      IF NOTE10B12 NOT IN (.N,.,2) THEN N10B1MARK+1;
   END;

   IF S07V01 IN (1,2,3,4) AND (N10B1NMISS=0 OR N10B1MARK>0) THEN N10B1=1;
   ELSE IF S07V01 IN (1,2,3,.) AND N10B1NMISS>0 AND N10B1MARK=0 THEN DO;
      N10B1=2;
      S07V01=.N;
      DO OVER NOTE10B11;
         IF NOTE10B11=. THEN NOTE10B11=.N;
         ELSE NOTE10B11=.C;
      END;
      DO OVER NOTE10B12;
         IF NOTE10B12 IN (.,2) THEN NOTE10B12=.N;
         ELSE NOTE10B12=.C;
      END;
   END;
   ELSE IF S07V01=4 AND N10B1NMISS>0 AND N10B1MARK=0  THEN DO;
      N10B1=3;
```

```
  END;
  ELSE IF S07V01=.N
  THEN DO;
     N10B1=4;
     DO OVER NOTE10B11;
        IF NOTE10B11=. THEN NOTE10B11=.N;
        ELSE NOTE10B11=.C;
     END;
     DO OVER NOTE10B12;
        IF NOTE10B12 IN (.,2) THEN NOTE10B12=.N;
        ELSE NOTE10B12=.C;
     END;
  END;
  ELSE IF S07V01=.  THEN N10B1=5;

  DROP N10B1NMISS N10B1MARK;


/** Note 10B2 -- S07V06, S07V11A-S07V11H: Problems finding a doctor
                                          from civilian network **/

  ARRAY NOTE10B2  S07V11A--S07V11H;

  N10B2NMISS=0;

  DO OVER NOTE10B2;
     IF NOTE10B2 NOT IN (.,2) THEN N10B2NMISS+1;
  END;


  IF S07V06 IN (.N, .C) AND S07V11A IN (.N, .C) AND
  S07V11B IN (.N, .C) AND S07V11C IN (.N, .C) AND
  S07V11D IN (.N, .C) AND S07V11E IN (.N, .C) AND
  S07V11F IN (.N, .C) AND S07V11G IN (.N, .C) AND
  S07V11H IN (.N, .C)
  THEN N10B2=1;
  ELSE IF S07V06 IN (3,.N) THEN DO;
     N10B2=2;
     DO OVER NOTE10B2;
        IF NOTE10B2 IN (.,2) THEN NOTE10B2=.N;
        ELSE NOTE10B2=.C;
     END;
  END;
  ELSE IF S07V06 IN (1,2) THEN DO;
     N10B2=3;
  END;
  ELSE IF S07V06=.  AND N10B2NMISS > 0 THEN DO;
      N10B2=4;
  END;
  ELSE IF S07V06=. THEN DO;
      N10B2=5;
      DO OVER NOTE10B2;
        IF NOTE10B2 NE . THEN NOTE10B2=.;
      END;
  END;

  DROP N10B2NMISS;


/** Note 10B3 -- S07V07, S07V12A-S07V12G: Problems finding a specialist
                                           from civilian network **/

  ARRAY NOTE10B3  S07V12A--S07V12G;

  N10B3NMISS=0;

  DO OVER NOTE10B3;
     IF NOTE10B3 NOT IN (.,2) THEN N10B3NMISS+1;
  END;


  IF S07V07 IN (.N, .C) AND S07V12A IN (.N, .C) AND
  S07V12B IN (.N, .C) AND S07V12C IN (.N, .C) AND
```

```
  S07V12D IN (.N, .C) AND S07V12E IN (.N, .C) AND
  S07V12F IN (.N, .C) AND S07V12G IN (.N, .C)
  THEN N10B3=1;
  ELSE IF S07V07 IN (3,.N) THEN DO;
     N10B3=2;
     DO OVER NOTE10B3;
        IF NOTE10B3 IN (.,2) THEN NOTE10B3=.N;
        ELSE NOTE10B3=.C;
     END;
  END;
  ELSE IF S07V07 IN (1,2) THEN DO;
     N10B3=3;
  END;
  ELSE IF S07V07=.  AND N10B3NMISS > 0 THEN DO;
      N10B3=4;
  END;
  ELSE IF S07V07=. THEN DO;
      N10B3=5;
      DO OVER NOTE10B3;
        IF NOTE10B3 NE . THEN NOTE10B3=.;
      END;
  END;

  DROP N10B3NMISS;



/** Note 10B4 -- S07V08 S07V09-S07V10, S07V13-S07V18G
                : health care received from civilian providers
                  that are not a part of TRICARE
                  civilian network **/

  ARRAY NOTE10B4A S07V09 S07V10 S07V13 S07V15-S07V17 ;
  ARRAY NOTE10B4B S07V14A--S07V14H S07V18A--S07V18G ;

  IF S07V08 IN (.C, .N) THEN N10B4=1;
  ELSE IF S07V08 IN (1,., .D) THEN N10B4=2;
  ELSE IF S07V08=2
  THEN DO;
     N10B4=3;
     DO OVER NOTE10B4A;
        IF NOTE10B4A=. THEN NOTE10B4A=.N;
        ELSE NOTE10B4A=.C;
     END;
     DO OVER NOTE10B4B;
        IF NOTE10B4B IN (.,2) THEN NOTE10B4B=.N;
        ELSE NOTE10B4B=.C;
     END;
  END;


/** Note 10B5 -- S07V13, S07V14A-S07V14H: Problems finding a personal Dr
                                          who accepts TRICARE **/

  ARRAY NOTE10B5  S07V14A--S07V14H;

  N10B5NMISS=0;

  DO OVER NOTE10B5;
     IF NOTE10B5 NOT IN (.,2) THEN N10B5NMISS+1;
  END;


  IF S07V13 IN (.N, .C) AND S07V14A IN (.N, .C) AND
  S07V14B IN (.N, .C) AND S07V14C IN (.N, .C) AND
  S07V14D IN (.N, .C) AND S07V14E IN (.N, .C) AND
  S07V14F IN (.N, .C) AND S07V14G IN (.N, .C) AND
  S07V14H IN (.N, .C)
  THEN N10B5=1;
  ELSE IF S07V13 IN (3,.N) THEN DO;
     N10B5=2;
     DO OVER NOTE10B5;
        IF NOTE10B5 IN (.,2) THEN NOTE10B5=.N;
```

```
        ELSE NOTE10B5=.C;
     END;
  END;
  ELSE IF S07V13 IN (1,2) THEN DO;
     N10B5=3;
  END;
  ELSE IF S07V13=.  AND N10B5NMISS > 0 THEN DO;
      N10B5=4;
  END;
  ELSE IF S07V13=. THEN DO;
      N10B5=5;
      DO OVER NOTE10B5;
        IF NOTE10B5 NE . THEN NOTE10B5=.;
      END;
  END;

  DROP N10B5NMISS;


/** Note 10B6 -- S07V15, S07V16, S07V17, S07V18A-S07V18G
                       : Problems making an appointment
                         with a civilian specialist
                         who is not part of TRICARE's network **/

  ARRAY NOTE10B6A  S07V16 S07V17;
  ARRAY NOTE10B6B  S07V18A--S07V18G;

  N10B6NMISS=0;

  DO OVER NOTE10B6A;
     IF NOTE10B6A NOT IN (.) THEN N10B6NMISS+1;
  END;

  DO OVER NOTE10B6B;
     IF NOTE10B6B NOT IN (.,2) THEN N10B6NMISS+1;
  END;


  IF S07V15 IN (.N, .C)
  THEN N10B6=1;
  ELSE IF S07V15 IN (1) THEN DO;
     N10B6=3;
  END;
  ELSE IF S07V15 IN (2, .D) THEN DO;
     N10B6=2;
     DO OVER NOTE10B6A;
        IF NOTE10B6A IN (.) THEN NOTE10B6A=.N;
        ELSE NOTE10B6A=.C;
     END;
     DO OVER NOTE10B6B;
        IF NOTE10B6B IN (.,2) THEN NOTE10B6B=.N;
        ELSE NOTE10B6B=.C;
     END;
  END;
  ELSE IF S07V15=.  AND N10B6NMISS > 0 THEN DO;
      N10B6=4;
      S07V15=1;
  END;
  ELSE IF S07V15=. THEN DO;
      N10B6=5;
      DO OVER NOTE10B6A;
        IF NOTE10B6A NE . THEN NOTE10B6A=.;
      END;
      DO OVER NOTE10B6B;
        IF NOTE10B6B NE . THEN NOTE10B6B=.;
      END;
  END;

  DROP N10B6NMISS;



/** Note 10B7 -- S07V17, S07V18A-S07V18G: Non-network civilian specialist **/
```

```
  ARRAY NOTE10B7  S07V18A--S07V18G;

  N10B7NMISS=0;

  DO OVER NOTE10B7;
     IF NOTE10B7 NOT IN (.,2) THEN N10B7NMISS+1;
  END;


  IF S07V17 IN (.N, .C) AND S07V18A IN (.N, .C) AND
  S07V18B IN (.N, .C) AND S07V18C IN (.N, .C) AND
  S07V18D IN (.N, .C) AND S07V18E IN (.N, .C) AND
  S07V18F IN (.N, .C) AND S07V18G IN (.N, .C)
  THEN N10B7=1;
  ELSE IF S07V17 IN (3) THEN DO;
     N10B7=2;
     DO OVER NOTE10B7;
        IF NOTE10B7 IN (.,2) THEN NOTE10B7=.N;
        ELSE NOTE10B7=.C;
     END;
  END;
  ELSE IF S07V17 IN (1,2) THEN DO;
     N10B7=3;
  END;
  ELSE IF S07V17=.  AND N10B7NMISS > 0 THEN DO;
      N10B7=4;
  END;
  ELSE IF S07V17=. THEN DO;
      N10B7=5;
      DO OVER NOTE10B7;
        IF NOTE10B7 NE . THEN NOTE10B7=.;
      END;
  END;

  DROP N10B7NMISS;


/** Note 10C1 -- S07Y01, S07Y36A-S07Y36I
                        S07Y37A-S07Y37N S07Y35 S07Y22 S07Y23 S07Y24
                : prescription medicine **/

  ARRAY NOTE10C11  S07Y35 S07Y22 S07Y23 S07Y24;

  ARRAY NOTE10C12  S07Y36A--S07Y36I S07Y37A--S07Y37N;

  N10C1MARK=0;
  N10C1NMISS=0;

  DO OVER NOTE10C11;
     IF NOTE10C11 NE . THEN N10C1NMISS+1;
     IF NOTE10C11 NOT IN  (., .N, .D) THEN N10C1MARK+1;
  END;

  DO OVER NOTE10C12;
     IF NOTE10C12 NOT IN (.,2) THEN N10C1NMISS+1;
     IF NOTE10C12 NOT IN  (., .N, 2) THEN N10C1MARK+1;
  END;

  IF S07Y01=2 THEN DO;
     N10C1=1;
     DO OVER NOTE10C11;
        IF NOTE10C11=. THEN NOTE10C11=.N;
        ELSE NOTE10C11=.C;
     END;
     DO OVER NOTE10C12;
        IF NOTE10C12 IN (.,2) THEN NOTE10C12=.N;
        ELSE NOTE10C12=.C;
     END;
  END;
  ELSE IF S07Y01 IN (1,.) AND N10C1NMISS>0 AND N10C1MARK=0 THEN DO;
     S07Y01=2;
     N10C1=2;
```

```
      DO OVER NOTE10C11;
         IF NOTE10C11=. THEN NOTE10C11=.N;
         ELSE NOTE10C11=.C;
      END;
      DO OVER NOTE10C12;
         IF NOTE10C12 IN (.,2) THEN NOTE10C12=.N;
         ELSE NOTE10C12=.C;
      END;
   END;
   ELSE IF S07Y01 IN (1) AND (N10C1NMISS=0 OR N10C1MARK>0) THEN DO;
      N10C1=3;
   END;
   ELSE IF S07Y01=.  AND N10C1NMISS > 0 THEN DO;
       N10C1=4;
   END;
   ELSE IF S07Y01=. THEN DO;
       N10C1=5;
       DO OVER NOTE10C11;
          IF NOTE10C11 NE . THEN NOTE10C11=.;
       END;
       DO OVER NOTE10C12;
          IF NOTE10C12 NE . THEN NOTE10C12=.;
       END;
   END;

   DROP N10C1NMISS N10C1MARK;


/** Note 10C2 -- S07Y35, S07Y37A-S07Y37N
                : Used TRICARE mail order pharmacy
 **/
   ARRAY NOTE10C2 S07Y37A--S07Y37N;
   ARRAY NOTE10C21 S07Y22-S07Y24;

   N10C2MARK=0;
   N10C2NMISS=0;


   DO OVER NOTE10C2;
      IF NOTE10C2 NOT IN (., 2) THEN N10C2NMISS+1;
      IF NOTE10C2 NOT IN  (., .N, 2) THEN N10C2MARK+1;
   END;


   IF S07Y35 In (.N, .C)
   THEN N10C2=1;
   ELSE IF S07Y35=2 THEN DO;
      N10C2=2;
      DO OVER NOTE10C21;
         IF NOTE10C21 IN (.) THEN NOTE10C21=.N;
         ELSE NOTE10C21=.C;
      END;
   END;
   ELSE IF S07Y35=1 THEN DO;
      N10C2=3;
      DO OVER NOTE10C2;
         IF NOTE10C2 IN (.,2) THEN NOTE10C2=.N;
         ELSE NOTE10C2=.C;
      END;
      IF S07Y22 IN (.N) THEN S07Y22=.;
   END;
   ELSE IF S07Y35=.   THEN DO;
      N10C2=4;
      DO OVER NOTE10C21;
         IF NOTE10C21 IN (.N) THEN NOTE10C21=.;
      END;
   END;

   DROP N10C2NMISS N10C2MARK;



/** Note 10C3 -- S07Y23, S07Y24
```

```
                : Used Express Scripts website
 **/

  IF S07Y23 In (.N, .C) AND S07Y24 In (.N, .C)
  THEN N10C3=1;
  ELSE IF S07Y23=1 AND S07Y24 IN (1,2,3,.) THEN N10C3=2;
  ELSE IF S07Y23 IN (1,.) AND S07Y24=.N THEN DO;
     S07Y23=2;
     S07Y24=.C;
     N10C3=3;
  END;
  ELSE IF S07Y23 IN (2,.) AND S07Y24 IN (1,2,3) THEN DO;
     S07Y23=1;
     N10C3=4;
  END;
  ELSE IF S07Y23=2 AND S07Y24 IN (.,.N) THEN DO;
     IF S07Y24=. THEN S07Y24=.N;
     ELSE S07Y24=.C;
     N10C3=5;
  END;
  ELSE IF S07Y23=.  AND S07Y24=.  THEN N10C3=6;


/** Note 11 -- H07039, H07040-H07041: claims to health plan **/

   ARRAY NOTE11 H07040-H07041;
  N11MARK=0;
  N11NMISS=0;
  N11NDK=0;

  DO OVER NOTE11;
     IF NOTE11 NE . THEN N11NMISS+1;
     IF NOTE11 NOT IN (.N,.) THEN N11MARK+1;
     IF NOTE11 NOT IN (.,.D) THEN N11NDK+1;
  END;

  IF H07039=1 AND
     (N11NMISS=0 OR (N11MARK>0 and N11NDK>0) or (N11NMISS>0 AND N11NDK=0))
  THEN DO;
     N11=1;
     DO OVER NOTE11;
        IF NOTE11=.N THEN NOTE11=.;
     END;
  END;
  ELSE IF H07039 IN (1,.,.D) AND N11NMISS>0 AND N11MARK=0 THEN DO;
     N11=2;
     H07039=2;
     DO OVER NOTE11;
        IF NOTE11=. THEN NOTE11=.N;
        ELSE NOTE11=.C;
     END;
  END;
  ELSE IF H07039 IN (2,.,.D) AND
           ((N11MARK>0 AND N11NDK>0) OR (N11NMISS>0 AND N11NDK=0))
       THEN DO;
     H07039=1;
     N11=3;
     DO OVER NOTE11;
        IF NOTE11=.N THEN NOTE11=.;
     END;
  END;
  ELSE IF H07039 IN (2) AND (N11NMISS=0 OR (N11NMISS>0 AND N11MARK=0)) THEN DO;
     N11=4;
     DO OVER NOTE11;
        IF NOTE11=. THEN NOTE11=.N;
        ELSE NOTE11=.C;
     END;
  END;
  ELSE IF H07039 IN (.D) AND N11NMISS=0 THEN DO;
     N11=5;
     DO OVER NOTE11;
        NOTE11=.N;
     END;
```

```
      END;
      ELSE IF H07039 IN (.)  AND N11NMISS=0 THEN N11=6;

      DROP N11NMISS N11MARK N11NDK;



    /** NOTE12  -- H07042, H07043: **/

      IF H07042=1 AND H07043 IN (1,2,3,.) THEN N12=1;
      ELSE IF H07042 IN (1,.) AND H07043=.N THEN DO;
         H07042=2;
         H07043=.C;
         N12=2;
      END;
      ELSE IF H07042 IN (2,.) AND H07043 IN (1,2,3) THEN DO;     /* JMA per Daisy's suggestion
3/20/03  */
         H07042=1;
         N12=3;
      END;
      ELSE IF H07042=2 AND H07043 IN (.N,.) THEN DO;
         IF H07043=. THEN H07043=.N;
         ELSE H07043=.C;
         N12=4;
      END;
      ELSE IF H07042=. AND H07043=. THEN N12=5;


    /** NOTE13 -- H07044, H07045: health plan's customer service **/

      IF H07044=1 AND H07045 IN (1,2,3,.) THEN N13=1;
      ELSE IF H07044 IN (1,.) AND H07045=.N THEN DO;
         H07044=2;
         H07045=.C;
         N13=2;
      END;
      ELSE IF H07044 IN (2,.) AND H07045 IN (1,2,3) THEN DO;
         H07044=1;
         N13=3;
      END;
      ELSE IF H07044=2 AND H07045 IN (.N,.) THEN DO;
         IF H07045=. THEN H07045=.N;
         ELSE H07045=.C;
         N13=4;
      END;
      ELSE IF H07044=. AND H07045=. THEN N13=5;


    /** NOTE14  -- H07046, H07047: paperwork  **/

      IF H07046=1 AND H07047 IN (1,2,3,.) THEN N14=1;
      ELSE IF H07046 IN (1,.) AND H07047=.N THEN DO;
         H07046=2;
         H07047=.C;
         N14=2;
      END;
      ELSE IF H07046 IN (2,.) AND H07047 IN (1,2,3) THEN DO;
         H07046=1;
         N14=3;
      END;
      ELSE IF H07046=2 AND H07047 IN (.N,.)THEN DO;
         IF H07047=. THEN  H07047=.N;
         ELSE H07047=.C;
         N14=4;
      END;
      ELSE IF H07046=.  AND H07047=. THEN N14=5;


    /** Note 16 -- smoking:  H07052, H07053-H07057  **/

      ARRAY NOTE16 H07055 H07056 H07057;
```

```
IF H07052=1 and H07053 IN (3,4) THEN DO;  /* still smoke */
   IF H07054 NE . THEN H07054=.C;
   ELSE H07054=.N;

   N16=1;
END;
ELSE IF H07052=1 AND H07053=2 THEN DO;         /* quit */
   /* JMA March 25 2004,
      Updated because H07056 and H07057 have been added to the
      skip pattern */
   IF H07054 IN (2,.D) THEN DO;               /* > 1 year ago */
      DO OVER NOTE16;
         IF NOTE16=. THEN NOTE16=.N;
         ELSE NOTE16=.C;
      END;
      N16=2;
   END;
   ELSE IF H07054 IN (3,.) THEN DO;          /* < 1 year ago */

      N16=3;

   END;
END;
ELSE IF H07052=1 AND H07053 IN (.D,.) THEN DO;  /* don't know */
   IF H07054=2 THEN DO;                        /* > 1 year ago */

      /* JMA March 25 2004,
      Updated because H07056 and H07057 have been added to the
      skip pattern */

      DO OVER NOTE16;
         IF NOTE16=. THEN NOTE16=.N;
         ELSE NOTE16=.C;
      END;
      H07053=2;
      N16=4;
   END;
   ELSE IF H07054=3 THEN DO;            /* < 1 year ago */
      H07053=2;
      N16=5;
   END;
   ELSE IF H07053 IN (.D) AND H07054 IN (.D,.) THEN DO;
      N16=6;
      IF H07054=. THEN H07054=.N;
      ELSE H07054=.C;
      DO OVER NOTE16;
         IF NOTE16=. THEN NOTE16=.N;
         ELSE NOTE16=.C;
      END;
   END;
   ELSE IF H07053 IN (.) AND H07054 IN (.D) THEN DO;
      N16=7;
      DO OVER NOTE16;
         IF NOTE16=. THEN NOTE16=.N;
         ELSE NOTE16=.C;
      END;
   END;
   ELSE IF H07053 IN (.) AND H07054 IN (.) THEN DO;
      N16=8;
   END;
END;
ELSE IF H07052 IN (2,.D,.) AND H07053 IN (3,4) THEN DO;
   H07052=1;

   IF H07054 NE . THEN H07054=.C;
   ELSE H07054=.N;


   N16=9;
END;
ELSE IF H07052 IN (2,.D) AND H07053 IN (2,.D, .) THEN DO; /*never smoke*/
   /* JMA March 25 2004,
      Updated because H07056 and H07057 have been added to the
```

```
      skip pattern */

   IF H07053 NE . THEN H07053 =.C;
   ELSE H07053=.N;

   IF H07054 NE . THEN H07054 =.C;
   ELSE H07054=.N;

   DO OVER NOTE16;
      IF NOTE16=. THEN NOTE16=.N;
      ELSE NOTE16=.C;
   END;

   N16=10;
 END;
 ELSE IF H07052 IN ( .) THEN DO;
   IF (H07053 IN (2) AND
       H07054 IN (.) AND
      (H07055 IN (2,3,4,5) OR H07056 IN (2,3,4,5) OR H07057 IN (2,3,4,5)))
   THEN DO;
      /* JMA March 25 2004,
         Updated because H07056 and H07057 have been added to the
         skip pattern */

      H07052=1;
      H07054=3;
      N16=11;
   END;
   ELSE IF H07053 IN (2,.) THEN DO; /*MRE/blank*/
      IF H07054 IN (2, .D) THEN DO;
          /* JMA March 25 2004,
          Updated because H07056 and H07057 have been added to the
          skip pattern */

          DO OVER NOTE16;
             IF NOTE16=. THEN NOTE16=.N;
             ELSE NOTE16=.C;
          END;
          N16=12;
      END;
      ELSE IF H07054 IN (3,.) THEN DO;
         IF (H07055 IN (2,3,4,5) OR H07056 IN (2,3,4,5) OR H07057 IN (2,3,4,5))
         THEN DO;
            H07052=1;
            N16=13;
         END;
         ELSE DO;

            N16=14;
         END;
      END;
   END;
   ELSE IF H07053=.D THEN DO; /*MRE/blank*/
      /* JMA March 25 2004,
         Updated because H07056 and H07057 have been added to the
         skip pattern */

      IF H07054 NE . THEN H07054 =.C;
      ELSE H07054=.N;

      DO OVER NOTE16;
         IF NOTE16=. THEN NOTE16=.N;
         ELSE NOTE16=.C;
      END;

      N16=15;
   END;
 END;


/** Note 16A1 -- advise from doctor on smoking:  H07055-H07057  **/

  IF H07055 EQ .N THEN DO;               /* jma Sep 19 2006 */
```

```
      IF H07056 IN (.,.N) THEN H07056 = .N;
      ELSE H07056=.C;
      IF H07057 IN (.,.N) THEN H07057 = .N;
      ELSE H07057=.C;
      N16A1=1;
   END;
   ELSE IF H07055 EQ 1 AND (H07056 =.N AND H07057=.N) THEN DO; /* jma May 10 2007 */
        H07056 = 1;
        H07057 = 1;
        N16A1=2;
   END;
   ELSE IF H07055 EQ 1 AND (H07056 =.N) THEN DO; /* jma May 10 2007 */
        H07056 = 1;
        N16A1=3;
   END;
   ELSE IF H07055 EQ 1 AND (H07057=.N) THEN DO; /* jma May 10 2007 */
        H07057 = 1;
        N16A1=4;
   END;
   ELSE IF H07055 IN (2,3,4,5,.) AND (H07056 =.N AND H07057= .N) THEN DO; /* jma May 10 2007 */
        H07056 = .;
        H07057 = .;
        N16A1=5;
   END;
   ELSE IF H07055 IN (2,3,4,5,.) AND (H07056 =.N) THEN DO; /* jma May 10 2007 */
        H07056 = .;
        N16A1=6;
   END;
   ELSE IF H07055 IN (2,3,4,5,.) AND (H07057= .N) THEN DO; /* jma May 10 2007 */
        H07057 = .;
        N16A1=7;
   END;
   ELSE IF H07055 GE 1 AND (H07056 > H07055 AND H07057 > H07055) THEN DO; /* jma May 10 2007 */
        H07056 = H07055;
        H07057 = H07055;
        N16A1=8;
   END;
   ELSE IF H07055 GE 1 AND (H07056 > H07055) THEN DO; /* jma May 10 2007 */
        H07056 = H07055;
        N16A1=9;
   END;
   ELSE IF H07055 GE 1 AND (H07057 > H07055) THEN DO; /* jma May 10 2007 */
        H07057 = H07055;
        N16A1=10;
   END;
   ELSE N16A1=11;


/** Note 17 - gender H07058, SEX, H07059--H07065,
              XSEXA */

/* 1/21/98 use SRSEX & responses to gender specific questions
   if there is discrepancy between SRSEX and SEX */
/* set imputed MALE, FMALE based on gender specific questions */


  ARRAY fmaleval H07059 H07060 H07061 H07063 H07064 H07065
                 ;

  cntfmale=0;
  DO OVER fmaleval;           /* mammogram/pap smear/PREGNANT*/
     IF fmaleval>0 THEN cntfmale=cntfmale+1;
  END;

  IF cntfmale>0 THEN FMALE=1;
  ELSE FMALE = 0;


  IF H07058=. THEN DO;
     IF (SEX='F' AND FMALE) THEN DO;
        N17a=1;
        XSEXA=2;
     END;
```

```
      ELSE IF (SEX='F' AND FMALE=0) THEN DO;
         N17a=2;
         XSEXA=2;
      END;
      ELSE IF (SEX='M' AND FMALE) THEN DO;
         N17a=3;
         XSEXA=1;
      END;
      ELSE IF (SEX='M' AND FMALE=0) THEN DO;
         N17a=4;
         XSEXA=1;
      END;
      ELSE IF ((SEX IN ('Z',' ') AND FMALE)) THEN DO;
         N17a=5;
         XSEXA=2;
      END;
      ELSE IF (SEX='Z' AND FMALE=0) THEN DO;
         N17a=6;
         XSEXA=.;
      END;
      ELSE IF (SEX=' ' AND FMALE=0) THEN DO;
         N17a=7;
         XSEXA=.;
      END;
   END;
   ELSE IF (H07058=1) THEN DO;
      IF FMALE=0 THEN DO;
         N17a=8;
         XSEXA=1;
      END;
      ELSE IF FMALE THEN DO;
         IF SEX='F' THEN DO;
            N17a=9;
            XSEXA=2;
         END;
         ELSE DO;
            N17a=10;
            XSEXA=1;
         END;
      END;
   END;
   ELSE IF (H07058=2) THEN DO;
      IF FMALE THEN DO;
        N17a=11;
        XSEXA=2;
      END;
      ELSE IF FMALE=0 THEN DO;
         IF SEX='M' THEN DO;
           N17a=12;
           XSEXA=1;
         END;
         ELSE DO;
            N17a=13;
            XSEXA=2;
         END;
      END;
   END;


/* Note 17b - gender vs mammogram/paps/pregnancy */
/*   REDEFINE FMALE TO LOOK ONLY AT MAMMOGRAM, PAP SMEAR ENTRIES and PREGNANCY */

   ARRAY NOTE17b H07059 H07060 H07061 H07063 H07064 H07065
                  ;

   cntfmale=0;
   DO OVER NOTE17b;           /* mammogram/pap smear/PREGNANT*/
      IF NOTE17b NE . THEN cntfmale=cntfmale+1;
   END;

   IF cntfmale>0 THEN FMALE=1;
   ELSE FMALE = 0;
```

```
  IF XSEXA=1 THEN DO;   /* male */
     IF FMALE=0 THEN DO;
        N17b=1;
        DO OVER NOTE17b;
           NOTE17b=.N;
        END;
     END;   /* valid skip */
     ELSE IF FMALE=1 THEN DO;
        N17b=2;
        DO OVER NOTE17b;
           IF NOTE17b=. THEN NOTE17b = .N;
           ELSE NOTE17b=.C;
        END;
     END;   /* inconsistent response */
  END;
  ELSE IF XSEXA=2 THEN  N17b=3; /* female */
  ELSE IF XSEXA=. THEN DO;      /*  missing sex  */
     N17b=4;
     DO OVER NOTE17b;
        NOTE17b=.;
     END;
  END;


  DROP FMALE CNTFMALE;


/* Note 18 - breast exam for female 40 or over  */

  IF XSEXA=1 THEN DO;  /* male */
     IF  (H07060=.C OR H07060=.N) AND (H07061=.C OR H07061=.N)
     THEN N18 = 1;
  END;
  ELSE IF XSEXA=2 THEN DO;
     IF H07060=2 THEN N18=2;         /* female 40 or over */
     ELSE IF H07060=1 THEN DO;   /* female < 40 */
        IF H07061 NE . THEN H07061=.C;
        ELSE H07061=.N;
        N18=3;
     END;
     ELSE IF H07060=. THEN DO;
        IF H07061 NE . THEN DO;
           H07060=2;
           N18=4;
        END;
        ELSE IF H07061=.  THEN DO;
           IF AGE<40 THEN DO;
              H07060 = 1;
              H07061=.N;
              N18=5;
           END;
           ELSE IF AGE >= 40 THEN DO;
              H07060=1;
              H07061=.N;
              N18=6;
           END;
           ELSE IF AGE=. THEN N18=7;
        END;
     END;
  END;
  ELSE IF XSEXA=. THEN N18=8;



/* Note 19 - gender vs Pregnancy */


  IF XSEXA=1 THEN N19=1;          /* male     */
  ELSE IF XSEXA=2 THEN DO;        /* female   */
     IF H07063=1 THEN DO;         /* pregnant */
        IF H07064=1 THEN DO;
           N19=2;
           IF H07065=. THEN H07065 = .N;
```

```
            ELSE H07065=.C;
         END;
         ELSE IF H07064=2 AND H07065 IN (2) THEN DO;
            N19=3;
            H07065=.;
         END;
         ELSE IF H07064=2 AND H07065 IN (4,3,1,.) THEN DO;
            N19=4;
         END;
         ELSE IF H07064 IN (3,.) THEN N19=5;
      END;
      ELSE IF H07063=2 THEN DO;
         IF H07064=. THEN H07064 = .N;
         ELSE H07064=.C;
         N19=6;
      END;
      ELSE IF H07063=3 THEN DO;
         N19=7;
         IF H07064=. THEN H07064 = .N;
         ELSE H07064=.C;
         IF H07065=. THEN H07065=.N;
         ELSE H07065=.C;
      END;
      ELSE IF H07063 IN (.) THEN DO;
         IF H07064=1 THEN DO;
            N19=8;
            H07063=1;
            IF H07065=. THEN H07065 = .N;
            ELSE H07065=.C;
         END;
         ELSE IF H07064=2 AND H07065 IN (2) THEN DO;
            N19=9;
            H07063=1;
            H07065=.;
         END;
         ELSE IF H07064=2 AND H07065 IN (4,3,1) THEN DO;
            H07063=1;
            N19=10;
         END;
         ELSE IF H07064=3 THEN DO;
            H07063=1;
            N19=11;
         END;
         ELSE IF H07064=. THEN DO;
            N19=12;
         END;
      END;
   END;
   ELSE IF XSEXA=. AND H07063 IN (.) THEN N19=13;



   DROP AGE SEX;


NOSURVEY:

/* missing values */

   ARRAY MISS MISS_9 MISS_8 MISS_7 MISS_6 MISS_5 MISS_4 MISS_1 ;
   MISS_TOT=0;
   DO OVER MISS;
      MISS = 0;
   END;
   ARRAY MISSARAY &VARLIST2.;

   DO OVER MISSARAY;
      IF (MISSARAY EQ -9 ) THEN MISS_9 = MISS_9 + 1;
      ELSE IF (MISSARAY EQ -8) THEN MISS_8 = MISS_8 + 1;
      ELSE IF (MISSARAY EQ -7) THEN MISS_7 = MISS_7 + 1;
      ELSE IF (MISSARAY EQ -6) THEN MISS_6 = MISS_6 + 1;
      ELSE IF (MISSARAY EQ -5) THEN MISS_5 = MISS_5 + 1;
      ELSE IF (MISSARAY EQ -4) THEN MISS_4 = MISS_4 + 1;
```

```
     ELSE IF (MISSARAY EQ -1) THEN MISS_1 = MISS_1 + 1;
  END;
  DO OVER MISS;
     MISS_TOT=MISS_TOT + MISS;
  END;

*****************************************;

 OUTPUT;

RUN;


PROC FORMAT;
   VALUE GRID
     0='0'
     1-9999='>=1' ;
   VALUE $GRIDB
     1-5 = '1-5' ;
   VALUE $AGE
     018-039='<40'
     040-120='>=40';
   VALUE SCALE
     0-10='0-10';
   VALUE MARK
     1-6='Marked' ;
   VALUE MARKB
     2-7='Marked';

   VALUE MARKC
    1='1'
   2-HIGH='>1';

RUN;


proc contents data=out.cschm07q;
run;
```

F.2.H Q4FY2007\PROGRAMS\CODINGSCHEME\CSCHM07Q.FMT - INCLUDE FILE FOR CODING SCHEME FOR QUARTER 4 FY2007.

```
/*  Formats for original answers to survey questions,
     after variables have been recoded */

        FORMAT H07001   H07001_O YN.
               H07003   H07003_O MEDA.
               H07004   H07004_O MEDB.
               H07005   H07005_O MEDSUPP.
               H07006   H07006_O HPLAN1_.
               H07007   H07007_O HPTIME.

               H07008 H07008_O   H07010 H07010_O   H07012 H07012_O
               H07014 H07014_O   H07016 H07016_O   H07018 H07018_O
               H07021 H07021_O   H07026 H07026_O   H07028 H07028_O
                 YN.

               H07009   H07009_O RATE1_.
               H07011   H07011_O PROB1_.
               H07013   H07013_O PROB2_.
               H07015   H07015_O RATE2_.
               H07017   H07017_O OFTEN1_.
               H07019   H07019_O OFTEN2_.
               H07020   H07020_O TIME1_.
               H07022   H07022_O OFTEN3_.
               H07023   H07023_O TIME2_.
               H07024   H07024_O OFTEN4_.
               H07025   H07025_O OFTEN4_.

               H07027   H07027_O PROB3_.
               H07029   H07029_O PROB3a.

               H07030-H07036   H07030_O--H07036_O OFTEN5_.

               H07037   H07037_O RATE3_.

               H07038   H07038_O PLACE.

               S07V01 S07V01_O HLTHCARE.
               S07V02 S07V02_O PROB4_.
               S07V05 S07V05_O YNnet.
               S07V06 S07V06_O PROB6_.
               S07V07 S07V07_O PROB7_.
               S07V08 S07V08_O YNdnk.
               S07V09 S07V09_O YNtri.
               S07V10 S07V10_O PROB1_.
               S07V13 S07V13_O PROB16_.
               S07V15 S07V15_O YNdnk.
               S07V16 S07V16_O nncspl.
               S07V17 S07V17_O PROB1_.

               S07Y01  S07Y01_O
               S07Y35  S07Y35_O
               S07Y23  S07Y23_O
                  YN.


               S07Y22  S07Y22_O  PRSCRP6_.
               S07Y24  S07Y24_O  PRSCRP7_.

               H07039   H07039_O YNDNK.

               H07040--H07041  H07040_O--H07041_O OFTEN6_.

               H07042 H07042_O   H07044 H07044_O
               H07046 H07046_O   H07060 H07060_O
               H07067 H07067_O
                  YN.

               H07043   H07043_O PROB8_.
               H07045   H07045_O PROB9_.
```

```
      H07047   H07047_O PROB10_.
      H07048   H07048_O RATE4_.

      H07049   H07049_O TIME5_.
      H07050   H07050_O YNBP_.

      H07051   H07051_O TIME7_.
      H07052   H07052_O YNDNK.
      H07053   H07053_O TIME8_.
      H07054   H07054_O TIME9_.
      H07055   H07055_O OFTEN7_.
      H07056   H07056_O OFTEN7_.
      H07057   H07057_O OFTEN7_.
      H07058   H07058_O SEX.
      H07059   H07059_O TIME11_.
      H07061   H07061_O TIME12_.
      H07063   H07063_O YNPREG.
      H07064   H07064_O PREG1_.
      H07065   H07065_O PREG2_.
      H07066   H07066_O HEALTH.

      H07068F H07068FO
      H07068I H07068IO
      H07069  H07069_O
        TIME14_.

      SREDA    SREDA_O  EDUC.
      H07070   H07070_O HISP.
      SRAGE    SRAGE_O  AGEGRP.



      MISS_1   MISS_4-MISS_9 MISS_TOT 4.
      e1 e2 e3 e4 e5 e6 e7 e8 e9 e10 e11 e12 e13 e14 e15 e16 e17
      e18 e19 e20 e21 e22 e23 e24 e25 e26
         $e_.;


LABEL H07001_O='Are you the person listed on envelope'
      H07001  ='Are you the person listed on envelope'
      H07002AO='Health plan(s) covered: TRICARE Prime'
      H07002A ='Health plan(s) covered: TRICARE Prime'
      H07002CO='Health plan(s) covered: TRICARE Ext/Stnd'
      H07002C ='Health plan(s) covered: TRICARE Ext/Stnd'
      H07002NO='Health plan(s) covered: TRICARE Plus'
      H07002N ='Health plan(s) covered: TRICARE Plus'
      H07002OO='Health plan(s) covered: TRICARE For Life'
      H07002O ='Health plan(s) covered: TRICARE For Life'
      H07002PO='Health plan(s) covered: TRICARE Supplmntl Ins'
      H07002P ='Health plan(s) covered: TRICARE Supplmntl Ins'
      H07002QO='Health plan(s) covered: TRICARE Reserve Select'
      H07002Q ='Health plan(s) covered: TRICARE Reserve Select'
      H07002FO='Health plan(s) covered: MEDICARE'
      H07002F ='Health plan(s) covered: MEDICARE'
      H07002GO='Health plan(s) covered: FEHBP'
      H07002G ='Health plan(s) covered: FEHBP'
      H07002HO='Health plan(s) covered: Medicaid'
      H07002H ='Health plan(s) covered: Medicaid'
      H07002IO='Health plan(s) covered: Civilian HMO'
      H07002I ='Health plan(s) covered: Civilian HMO'
      H07002JO='Health plan(s) covered: Other civilian'
      H07002J ='Health plan(s) covered: Other civilian'
      H07002KO='Health plan(s) covered: USFHP'
      H07002K ='Health plan(s) covered: USFHP'
      H07002MO='Health plan(s) covered: Veterans'
      H07002M ='Health plan(s) covered: Veterans'
      H07002RO='Health plan(s) covered: Gov Hlth ins-other cntry'
      H07002R ='Health plan(s) covered: Gov Hlth ins-other cntry'
      H07002LO='Health plan(s) covered: Not sure'
      H07002L ='Health plan(s) covered: Not sure'
      H07003  ='Currently Covered Medicare Part A'
      H07003_O='Currently Covered Medicare Part A'
      H07004  ='Currently Covered Medicare Part B'
```

```
H07004_O='Currently Covered Medicare Part B'
H07005  ='Currently Covered Medicare Supplemental'
H07005_O='Currently Covered Medicare Supplemental'
H07006_O='Which health plan did you use most'
H07006  ='Which health plan did you use most'
H07007_O='Yrs in a row with health plan'
H07007  ='Yrs in a row with health plan'
H07008_O='Have one person think of as personal Dr'
H07008  ='Have one person think of as personal Dr'
H07009_O='Rating of your personal Dr or nurs'
H07009  ='Rating of your personal Dr or nurs'
H07010_O='Same prs Dr/nurs before joined hlth pln'
H07010  ='Same prs Dr/nurs before joined hlth pln'
H07011_O='Health plan: prblm to get Dr happy with'
H07011  ='Health plan: prblm to get Dr happy with'
H07012_O='In lst yr:you/Dr think you need spclst'
H07012  ='In lst yr:you/Dr think you need spclst'
H07013_O='In lst yr:how much prblm see spclst'
H07013  ='In lst yr:how much prblm see spclst'
H07014_O='In lst yr:did you see a specialist'
H07014  ='In lst yr:did you see a specialist'
H07015_O='Rating of specialist seen in lst yr'
H07015  ='Rating of specialist seen in lst yr'
H07016_O='In lst yr:call Dr for help/advice'
H07016  ='In lst yr:call Dr for help/advice'
H07017_O='In lst yr:when call how often get hlp nd'
H07017  ='In lst yr:when call how often get hlp nd'
H07018_O='In lst yr:ill/injry/cond care right away'
H07018  ='In lst yr:ill/injry/cond care right away'
H07019_O='In lst yr:get urgnt care as soon as wntd'
H07019  ='In lst yr:get urgnt care as soon as wntd'
H07020_O='In lst yr:wait btwn try get care,see prv'
H07020  ='In lst yr:wait btwn try get care,see prv'
H07021_O='In lst yr:make appts non-urgnt hlth care'
H07021  ='In lst yr:make appts non-urgnt hlth care'
H07022_O='In lst yr:non-urg hlth cre appt whn wntd'
H07022  ='In lst yr:non-urg hlth cre appt whn wntd'
H07023_O='In lst yr:days btwn appt & see prvder'
H07023  ='In lst yr:days btwn appt & see prvder'
H07024_O='In lst yr:goto emrgncy rm for own care'
H07024  ='In lst yr:goto emrgncy rm for own care'
H07025_O='In lst yr:goto Dr office/clinic for care'
H07025  ='In lst yr:goto Dr office/clinic for care'
H07026_O='In lst yr:think need care/tests/trtmnt'
H07026  ='In lst yr:think need care/tests/trtmnt'
H07027_O='In lst yr:prblm to get care thght ncssry'
H07027  ='In lst yr:prblm to get care thght ncssry'
H07028_O='In lst yr:need apprvl care/tests/trtmnt'
H07028  ='In lst yr:need apprvl care/tests/trtmnt'
H07029_O='In lst yr:prblm w/delays wait for apprv'
H07029  ='In lst yr:prblm w/delays wait for apprv'
H07030_O='In lst yr:wait within 15 min appt see Dr'
H07030  ='In lst yr:wait within 15 min appt see Dr'
H07031_O='In lst yr:how oftn treat w/crtsy/rspct'
H07031  ='In lst yr:how oftn treat w/crtsy/rspct'
H07032_O='In lst yr:how oftn staff helpful'
H07032  ='In lst yr:how oftn staff helpful'
H07033_O='In lst yr:how oftn Drs listen to you'
H07033  ='In lst yr:how oftn Drs listen to you'
H07034_O='In lst yr:how oftn Drs explain things'
H07034  ='In lst yr:how oftn Drs explain things'
H07035_O='In lst yr:how oftn Drs show respect'
H07035  ='In lst yr:how oftn Drs show respect'
H07036_O='In lst yr:how oftn Drs spend enough time'
H07036  ='In lst yr:how oftn Drs spend enough time'
H07037_O='Rating of all health care in lst yr'
H07037  ='Rating of all health care in lst yr'
H07038_O='In lst yr:fclty use most for Health care'
H07038  ='In lst yr:fclty use most for Health care'
H07039_O='In lst yr:send in any claims'
H07039  ='In lst yr:send in any claims'
H07040_O='In lst yr:hlth pln handle in rsnble time'
H07040  ='In lst yr:hlth pln handle in rsnble time'
```

```
H07041_O='In lst yr:how oftn handle correctly'
H07041  ='In lst yr:how oftn handle correctly'
H07042_O='In lst yr:info in written materials'
H07042  ='In lst yr:info in written materials'
H07043_O='In lst yr:prblm to find/undrstnd mtrls'
H07043  ='In lst yr:prblm to find/undrstnd mtrls'
H07044_O='In lst yr:hlth plan customer srvc help'
H07044  ='In lst yr:hlth plan customer srvc help'
H07045_O='In lst yr:prblm get help from cstmr srvc'
H07045  ='In lst yr:prblm get help from cstmr srvc'
H07046_O='In lst yr:fill out paperwork'
H07046  ='In lst yr:fill out paperwork'
H07047_O='In lst yr:prblms with paperwork'
H07047  ='In lst yr:prblms with paperwork'
H07048  ='Rating of all experience with hlth plan'
H07048_O='Rating of all experience with hlth plan'
H07049_O='Blood pressure: when lst reading'
H07049  ='Blood pressure: when lst reading'
H07050_O='Blood pressure: know if too high or not'
H07050  ='Blood pressure: know if too high or not'
H07051_O='When did you lst have a flu shot'
H07051  ='When did you lst have a flu shot'
H07052  ='Smoked at least 100 cigarettes in life'
H07052_O='Smoked at least 100 cigarettes in life'
H07053  ='Smoke everyday, some days or not at all'
H07053_O='Smoke everyday, some days or not at all'
H07054_O='How long since you quit smoking'
H07054  ='How long since you quit smoking'
H07055_O='Lst yr: # visits advised to quit smoking'
H07055  ='Lst yr: # visits advised to quit smoking'
H07056  ='# visits recom medic assist quit smoking'
H07056_O='# visits recom medic assist quit smoking'
H07057  ='# vist discu meth/strag asst quit smokng'
H07057_O='# vist discu meth/strag asst quit smokng'
H07058_O='Are you male or female'
H07058  ='Are you male or female'
H07059_O='Lst have a Pap smear test'
H07059  ='Lst have a Pap smear test'
H07060_O='Are you under age 40'
H07060  ='Are you under age 40'
H07061_O='Lst time: breasts checked mammography'
H07061  ='Lst time: breasts checked mammography'
H07063_O='Been pregnant in lst yr or pregnant now'
H07063  ='Been pregnant in lst yr or pregnant now'
H07064_O='In what trimester is your pregnancy'
H07064  ='In what trimester is your pregnancy'
H07065_O='Trimester first received prenatal care'
H07065  ='Trimester first received prenatal care'
H07066_O='In gnrl, how would you rate ovrall hlth'
H07066  ='In gnrl, how would you rate ovrall hlth'
H07067_O='Impairment/Hlth prblm limit activities'
H07067  ='Impairment/Hlth prblm limit activities'

H07068FO='Height without shoes (feet)'
H07068F ='Height without shoes (feet)'
H07068IO='Height without shoes (inches)'
H07068I ='Height without shoes (inches)'
H07069_O='Weight without shoes'
H07069  ='Weight without shoes'

SREDA_O ='Highest grade completed'
SREDA   ='Highest grade completed'
H07070_O='Are you Spanish/Hispanic/Latino'
H07070  ='Are you Spanish/Hispanic/Latino'
H07070AO='Not Spanish/Hispanic/Latino'
H07070A ='Not Spanish/Hispanic/Latino'
H07070BO='Mexican, Mexican American, Chicano'
H07070B ='Mexican, Mexican American, Chicano'
H07070CO='Puerto Rican'
H07070C ='Puerto Rican'
H07070DO='Cuban'
H07070D ='Cuban'
H07070EO='Other Spanish, Hispanic, or Latino'
```

```
H07070E ='Other Spanish, Hispanic, or Latino'
SRRACEAO='Race: White'
SRRACEA ='Race: White'
SRRACEBO='Race: Black or African American'
SRRACEB ='Race: Black or African American'
SRRACECO='Race: American Indian or Alaska Native'
SRRACEC ='Race: American Indian or Alaska Native'
SRRACEDO='Race: Asian'
SRRACED ='Race: Asian'
SRRACEEO='Race: Native Hawaiian/other Pacific Isl.'
SRRACEE ='Race: Native Hawaiian/other Pacific Isl.'
SRAGE_O ='What is your age now'
SRAGE   ='What is your age now'

S07V01  ='In lst yr:hlthcr frm TRICARE cvln ntwrk'
S07V01_O='In lst yr:hlthcr frm TRICARE cvln ntwrk'
S07V02  ='In lst yr:prblm get wanted care frm TCN'
S07V02_O='In lst yr:prblm get wanted care frm TCN'
S07V05  ='In lst yr:Learn wntd Physician left TCN'
S07V05_O='In lst yr:Learn wntd Physician left TCN'
S07V06  ='In lst yr:prblm fndng cnvnient TCN dr'
S07V06_O='In lst yr:prblm fndng cnvnient TCN dr'
S07V07  ='In lst yr:prblm fndng spclst in cvln ntwrk'
S07V07_O='In lst yr:prblm fndng spclst in cvln ntwrk'
S07V08  ='In lst yr:tried make appt with dr not in TCN'
S07V08_O='In lst yr:tried make appt with dr not in TCN'
S07V09  ='In lst yr:dr not seeing old/new TRICARE ptnts'
S07V09_O='In lst yr:dr not seeing old/new TRICARE ptnts'
S07V10  ='In lst yr:prblm finding dr accptng TRICARE'
S07V10_O='In lst yr:prblm finding dr accptng TRICARE'

S07V11A ='Prblm fndng civ ntwrk prsnl Dr:Travel dist'
S07V11AO='Prblm fndng civ ntwrk prsnl Dr:Travel dist'
S07V11B ='Prblm fndng civ ntwrk prsnl Dr:Communicating /w Dr'
S07V11BO='Prblm fndng civ ntwrk prsnl Dr:Communicating /w Dr'
S07V11C ='Prblm fndng civ ntwrk prsnl Dr:No new patients'
S07V11CO='Prblm fndng civ ntwrk prsnl Dr:No new patients'
S07V11D ='Prblm fndng civ ntwrk prsnl Dr:Speciality unavailable'
S07V11DO='Prblm fndng civ ntwrk prsnl Dr:Speciality unavailable'
S07V11E ="Prblm fndng civ ntwrk prsnl Dr:Don't like Drs"
S07V11EO="Prblm fndng civ ntwrk prsnl Dr:Don't like Drs"
S07V11F ='Prblm fndng civ ntwrk prsnl Dr:Appt wait too long'
S07V11FO='Prblm fndng civ ntwrk prsnl Dr:Appt wait too long'
S07V11G ='Prblm fndng civ ntwrk prsnl Dr:Dr info unavailable'
S07V11GO='Prblm fndng civ ntwrk prsnl Dr:Dr info unavailable'
S07V11H ='Prblm fndng civ ntwrk prsnl Dr:Other'
S07V11HO='Prblm fndng civ ntwrk prsnl Dr:Other'

S07V12A ='Prblm fndng civ ntwrk spclst:Travel dist'
S07V12AO='Prblm fndng civ ntwrk spclst:Travel dist'
S07V12B ='Prblm fndng civ ntwrk spclst:Communicating /w Dr'
S07V12BO='Prblm fndng civ ntwrk spclst:Communicating /w Dr'
S07V12C ='Prblm fndng civ ntwrk spclst:No new patients'
S07V12CO='Prblm fndng civ ntwrk spclst:No new patients'
S07V12D ="Prblm fndng civ ntwrk spclst:Don't like Drs"
S07V12DO="Prblm fndng civ ntwrk spclst:Don't like Drs"
S07V12E ='Prblm fndng civ ntwrk spclst:Appt wait too long'
S07V12EO='Prblm fndng civ ntwrk spclst:Appt wait too long'
S07V12F ='Prblm fndng civ ntwrk spclst:Dr info unavailable'
S07V12FO='Prblm fndng civ ntwrk spclst:Dr info unavailable'
S07V12G ='Prblm fndng civ ntwrk spclst:Other'
S07V12GO='Prblm fndng civ ntwrk spclst:Other'

S07V13  ='Prblm fndng civ prsnl dr/nrs accepts TRICARE'
S07V13_O='Prblm fndng civ prsnl dr/nrs accepts TRICARE'

S07V14A ='Prblm fndng prsnl dr accepts TRICARE:Travel dist'
S07V14AO='Prblm fndng prsnl dr accepts TRICARE:Travel dist'
S07V14B ='Prblm fndng prsnl dr accepts TRICARE:Communicating /w Dr'
S07V14BO='Prblm fndng prsnl dr accepts TRICARE:Communicating /w Dr'
S07V14C ='Prblm fndng prsnl dr accepts TRICARE:Not accept TRICARE fees'
S07V14CO='Prblm fndng prsnl dr accepts TRICARE:Not accept TRICARE fees'
S07V14D ='Prblm fndng prsnl dr accepts TRICARE:Speciality unavailable'
```

```
S07V14DO='Prblm fndng prsnl dr accepts TRICARE:Speciality unavailable'
S07V14E ="Prblm fndng prsnl dr accepts TRICARE:Don't like Drs"
S07V14EO="Prblm fndng prsnl dr accepts TRICARE:Don't like Drs"
S07V14F ='Prblm fndng prsnl dr accepts TRICARE:Appt wait too long'
S07V14FO='Prblm fndng prsnl dr accepts TRICARE:Appt wait too long'
S07V14G ='Prblm fndng prsnl dr accepts TRICARE:Dr info unavailable'
S07V14GO='Prblm fndng prsnl dr accepts TRICARE:Dr info unavailable'
S07V14H ='Prblm fndng prsnl dr accepts TRICARE:Other'
S07V14HO='Prblm fndng prsnl dr accepts TRICARE:Other'

S07V15  ='Tried make appt /w NON-TRICARE civ spclst'
S07V15_O='Tried make appt /w NON-TRICARE civ spclst'
S07V16  ='Speciality of non-network civ spclst'
S07V16_O='Speciality of non-network civ spclst'
S07V17  ='Prblm making appt /w nn civ spclst'
S07V17_O='Prblm making appt /w nn civ spclst'

S07V18A ='Prblm fndng nn civ spclst:Travel dist'
S07V18AO='Prblm fndng nn civ spclst:Travel dist'
S07V18B ='Prblm fndng nn civ spclst:Communicating /w Dr'
S07V18BO='Prblm fndng nn civ spclst:Communicating /w Dr'
S07V18C ='Prblm fndng nn civ spclst:Not accept TRICARE fees'
S07V18CO='Prblm fndng nn civ spclst:Not accept TRICARE fees'
S07V18D ="Prblm fndng nn civ spclst:Don't like Drs"
S07V18DO="Prblm fndng nn civ spclst:Don't like Drs"
S07V18E ='Prblm fndng nn civ spclst:Appt wait too long'
S07V18EO='Prblm fndng nn civ spclst:Appt wait too long'
S07V18F ='Prblm fndng nn civ spclst:Dr info unavailable'
S07V18FO='Prblm fndng nn civ spclst:Dr info unavailable'
S07V18G ='Prblm fndng nn civ spclst:Other'
S07V18GO='Prblm fndng nn civ spclst:Other'


S07Y01_O='In lst 90 days:have flld TRICARE prscrptn'
S07Y01  ='In lst 90 days:have flld TRICARE prscrptn'
S07Y22_O='In lst 90 dys:TMO flld prscrp within 14dys'
S07Y22  ='In lst 90 dys:TMO flld prscrp within 14dys'
S07Y23_O='In lst 90 dys:refills, Express Scripts web'
S07Y23  ='In lst 90 dys:refills, Express Scripts web'
S07Y24_O='In lst 90 dys:prblm refil, Express Scripts'
S07Y24  ='In lst 90 dys:prblm refil, Express Scripts'


S07Y35_O='Lst 90 days:used TRICARE mail order phrmcy'
S07Y35  ='Lst 90 days:used TRICARE mail order phrmcy'

S07Y36AO='TMOP info from:TRICARE website'
S07Y36A ='TMOP info from:TRICARE website'
S07Y36BO='TMOP info from:Internet not TRICARE website'
S07Y36B ='TMOP info from:Internet not TRICARE website'
S07Y36CO='TMOP info from:Mailings'
S07Y36C ='TMOP info from:Mailings'
S07Y36DO='TMOP info from:MTF pharmacy'
S07Y36D ='TMOP info from:MTF pharmacy'
S07Y36EO='TMOP info from:Military publications/periodicals'
S07Y36E ='TMOP info from:Military publications/periodicals'
S07Y36FO='TMOP info from:Friend/Friends'
S07Y36F ='TMOP info from:Friend/Friends'
S07Y36GO='TMOP info from:Another source'
S07Y36G ='TMOP info from:Another source'
S07Y36HO='TMOP info from:None in last 12 months'
S07Y36H ='TMOP info from:None in last 12 months'
S07Y36IO='TMOP info from:Nothing known about TMOP'
S07Y36I ='TMOP info from:Nothing known about TMOP'

S07Y37AO="Did not use TMOP:didn't know I could"
S07Y37A ="Did not use TMOP:didn't know I could"
S07Y37BO="Did not use TMOP:didn't know how"
S07Y37B ="Did not use TMOP:didn't know how"
S07Y37CO='Did not use TMOP:costs too much'
S07Y37C ='Did not use TMOP:costs too much'
S07Y37DO='Did not use TMOP:uncmfrtbl gtng drugs by mail'
S07Y37D ='Did not use TMOP:uncmfrtbl gtng drugs by mail'
```

```
  S07Y37EO='Did not use TMOP:med unavlbl-mail ordr phrmcy'
  S07Y37E ='Did not use TMOP:med unavlbl-mail ordr phrmcy'
  S07Y37FO='Did not use TMOP:difficult to use'
  S07Y37F ='Did not use TMOP:difficult to use'
  S07Y37GO='Did not use TMOP:civ phrmcy convenient'
  S07Y37G ='Did not use TMOP:civ phrmcy convenient'
  S07Y37HO='Did not use TMOP:civ prscrptn flld correctly'
  S07Y37H ='Did not use TMOP:civ prscrptn flld correctly'
  S07Y37IO='Did not use TMOP:civ phrmcy info better'
  S07Y37I ='Did not use TMOP:civ phrmcy info better'
  S07Y37JO='Did not use TMOP:MTF pharmacy convenient'
  S07Y37J ='Did not use TMOP:MTF pharmacy convenient'
  S07Y37KO='Did not use TMOP:MTF prscrptn flld correctly'
  S07Y37K ='Did not use TMOP:MTF prscrptn flld correctly'
  S07Y37LO='Did not use TMOP:MTF pharmacy info better'
  S07Y37L ='Did not use TMOP:MTF pharmacy info better'
  S07Y37MO='Did not use TMOP:Need prscrptn flld immediately'
  S07Y37M ='Did not use TMOP:Need prscrptn flld immediately'
  S07Y37NO='Did not use TMOP:Other reasons'
  S07Y37N ='Did not use TMOP:Other reasons'

  N1 = "Coding Scheme Note 1"
  N2 = "Coding Scheme Note 2"
  N3 = "Coding Scheme Note 3"
  N4 = "Coding Scheme Note 4"
  N5 = "Coding Scheme Note 5"
  N6 = "Coding Scheme Note 6"
  N7 = "Coding Scheme Note 7"
  N8 = "Coding Scheme Note 8"
  N9 = "Coding Scheme Note 9"
  N10= "Coding Scheme Note 10"
  N10B1= "Coding Scheme Note 10B1"
  N10B2= "Coding Scheme Note 10B2"
  N10B3= "Coding Scheme Note 10B3"
  N10B4= "Coding Scheme Note 10B4"
  N10B5= "Coding Scheme Note 10B5"
  N10B6= "Coding Scheme Note 10B6"
  N10B7= "Coding Scheme Note 10B7"
  N10C1= "Coding Scheme Note 10C1"
  N10C2= "Coding Scheme Note 10C2"
  N10C3= "Coding Scheme Note 10C3"
  N11= "Coding Scheme Note 11"
  N12= "Coding Scheme Note 12"
  N13 = "Coding Scheme Note 13"
  N14 = "Coding Scheme Note 14"
  N16   = "Coding Scheme Note 16"
  N16A1 = "Coding Scheme Note 16A1"
  N17A= "Coding Scheme Note 17A"
  N17B= "Coding Scheme Note 17B"
  N18 = "Coding Scheme Note 18"
  N19 = "Coding Scheme Note 19"



  MISS_1 = "Count of: Violates Skip Pattern"
  MISS_4 = "Count of: Incomplete grid error"
  MISS_5 = "Count of: Scalable reponse of Don't know"
  MISS_6 = "Count of: Not applicable - valid skip"
  MISS_7 = "Count of: Out-of-range error"
  MISS_8 = "Count of: Multiple response error"
  MISS_9 = "Count of: No response - invalid skip"
  MISS_TOT = "Total number of missing responses"
  XSEXA = "Male or Female  - R"
;
```

F.3 Q4FY2007\PROGRAMS\WEIGHTING\SELECTQ.SAS - CREATE RECORD SELECTION FLAG FOR RECORD SELECTION.

```
***************************************************************************
*
* PROGRAM:  SELECTQ.SAS
* TASK:     QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (6077-300)
* PURPOSE:  ASSIGN FINAL STATUS FOR RECORD SELECTION PURPOSES.
* WRITTEN:  12/14/2000 BY KEITH RATHBUN
*
* MODIFIED: 1) 03/21/2002 BY KEITH RATHBUN, Updated for the 2002 survey.
*              Added FLAG_FIN = 23,24 for FNSTATUS = 20.
*           2) 03/22/2004 BY KEITH RATHBUN, Updated for the 2004 survey.
*           3) 09/23/2004 BY KEITH RATHBUN, Added code to assign flag_fin
*              for ineligibles (determined by STI) at time of address update
*              prior to fielding using the adult_deceased.sd2 file.
*           4) 04/15/2005 BY JACQUELINE AGUFA, Updated for the 2005 survey.
*           5) 03/16/2006 BY JACQUELINE AGUFA, Updated for the 2006 survey.
*           6) 12/15/2006 BY JACQUELINE AGUFA, Updated for the 2007 survey.
*
* INPUTS:   1) CSCHM07Q.SD2 - 2007 Quarterly DOD Health Survey Data
*
* OUTPUTS:  1) SELECTQ.SD2 - 2007 Quarterly DOD Health Survey Data w/FNSTATUS
*
***************************************************************************
*;
LIBNAME IN      V612 "..\..\DATA\AFINAL";
LIBNAME OUT     V612 "..\..\DATA\AFINAL";
LIBNAME LIBRARY V612 "..\..\DATA\AFINAL\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

PROC SORT DATA=IN.CSCHM07Q OUT=TEMPA1; BY MPRID; RUN;

DATA TEMPA2 OUT.DUPSA;
   SET TEMPA1;
   BY MPRID;
   /*********************************************************************/
   /** KEY VARIABLES (Total=27)                                        **/
   /*********************************************************************/
   ARRAY KEYVAR H07006 H07008 H07009 H07010 H07011 H07012
                H07014 H07015 H07016 H07017 H07018 H07019 H07021 H07024
                H07025 H07027 H07030 H07037 H07038 H07042 H07044 H07046
                H07048 H07066 SREDA  H07070
                 ;

   ARRAY RACE(5) SRRACEA SRRACEB SRRACEC SRRACED SRRACEE;

   FLAGRACE = 0; DROP FLAGRACE;
   DO I = 1 TO DIM(RACE);
      IF RACE(I) EQ 1 THEN FLAGRACE = 1;
   END;

   KEYCOUNT = 0;
   DO I = 1 TO DIM(KEYVAR); DROP I;
      IF KEYVAR(I) NOT IN (.,.A,.O,.I,.B) THEN KEYCOUNT = KEYCOUNT + 1;
   END;
   KEYCOUNT = KEYCOUNT + FLAGRACE;

   /*********************************************************************/
   /** SET FLAG FOR DUPLICATES                                         **/
   /*********************************************************************/
   LENGTH DUPFLAG $3;
   DUPFLAG = 'NO';
   IF NOT (FIRST.MPRID AND LAST.MPRID) THEN DUPFLAG = 'YES';

   /*********************************************************************/
   /** DETERMINE FNSTATUS                                              **/
   /*********************************************************************/
   FNSTATUS = 0;
   IF FLAG_FIN = 1 THEN DO;
      ************************************************************
```

```
      **** APPLY THE COMPLETE QUESTIONNAIRE RULE (50% OF KEY   ****
      **** VARIABLES).                                         ****
      ************************************************************;
      IF KEYCOUNT GT 13 THEN FNSTATUS = 11;
      ELSE FNSTATUS = 12;
   END;
   ELSE IF FLAG_FIN IN(3,6,8,10,11,14,16,21,23,24) THEN DO;
      FNSTATUS = 20;
   END;
   ELSE IF FLAG_FIN IN(2,4,5,7,12,13,15) THEN DO;
      FNSTATUS = 31;
   END;
   ELSE IF FLAG_FIN IN (25,26) THEN DO;
      FNSTATUS = 32;
   END;
   ELSE IF FLAG_FIN IN(9,17,18,19,20,22) THEN DO;
      IF FLAG_FIN IN (18,19,20) THEN DO;
         FNSTATUS = 42;
      END;
      ELSE DO;
         FNSTATUS = 41;
      END;
   END;

   IF DUPFLAG = 'YES' THEN OUTPUT OUT.DUPSA;
   ELSE OUTPUT TEMPA2;

RUN;

***********************************************************************
* Select the "most complete" questionaire from duplicates and
* SET it back into the non-duplicates file. For now assume the lowest
* FNSTATUS Value is the "most complete".
***********************************************************************
;
PROC SORT DATA=OUT.DUPSA;
BY MPRID FNSTATUS;
RUN;

DATA DEDUPED;
   SET OUT.DUPSA;
   BY MPRID FNSTATUS;
   IF FIRST.MPRID; *KEEP only the first - most complete questionaire;
RUN;

DATA OUT.SELECTQ;
   SET TEMPA2 DEDUPED;
   LABEL FNSTATUS = "Final Status"
         DUPFLAG  = "Multiple Response Indicator"
         STRATUM  = "Sampling STRATUM"
         KEYCOUNT = "# Key Questions Answered (Out of 27)"
        ;
RUN;

TITLE1 "Quarterly DOD Health Survey FNSTATUS assignment (6077-300)";
TITLE2 "Program Name: SELECTQ.SAS By Keith Rathbun";
TITLE3 "Program Output: SELECTQ.SD2";

PROC CONTENTS DATA=OUT.SELECTQ; RUN;

PROC FREQ DATA=OUT.SELECTQ;
TABLES FNSTATUS KEYCOUNT FLAG_FIN
       FNSTATUS*KEYCOUNT*FLAG_FIN
   /MISSING LIST;
RUN;
```

F.4.A Q4FY2007\PROGRAMS\CONSTRUCT\CONVARQ.SAS - CONSTRUCT VARIABLES FOR ANALYSIS.

```
*******************************************************************************
* PROGRAM:   CONVARQ.SAS
* WRITTEN:   2/3/99 BY KELLY WHITE
* UPDATED:   2/29/2000 BY NATALIE JUSTH
* UPDATED:   11/16/2000 BY JOAN JAMES
* UPDATED FOR QUARTERLY 2001:  1/22/2001 BY NATALIE JUSTH
* UPDATED FOR QUARTER 2 2001:  6/5/2001 BY NATALIE JUSTH
*                              UPDATES NOTED WITH NJ_Q2
* UPDATED FOR QUARTER 3 2001:  8/20/2001 BY NATALIE JUSTH
* UPDATED FOR QUARTER 4 2001: 12/11/2001 BY NATALIE JUSTH, REMOVED KENRINTN
*            AND CHANGE DAGEQY TO FIELDAGE.
* UPDATED FOR QUARTER 1 2002:  4/01/2002 BY JACLYN WONG, REMOVED KMEDIGAP, KCOST_2
* UPDATED FOR QUARTER 2 2002:  6/19/2002 BY JACLYN WONG, REMOVED KPRSCPTN
* UPDATED FOR QUARTER 3 2002:  9/25/2002 BY JACLYN WONG
* UPDATED FOR QUARTER 1 2003:  BEGUN 3/13/2003 BY NATALIE JUSTH
* UPDATED FOR QUARTER 3 2003:  BEGUN 8/29/2003 BY NATALIE JUSTH
* UPDATED FOR QUARTER 4 2003:  12/18/2003 BY NATALIE JUSTH
* UPDATED FOR QUARTER 1 2004:  1/29/2004 BY LUCY LU
* UPDATED FOR QUARTER 2 2004:  6/10/2004 BY LUCY LU
* UPDATED FOR QUARTER 3 2004:  9/13/2004 BY LUCY LU
* Added Code to include Consvar0.sas: 9/28/2004 BY JACQUELINE AGUFA
* Added Code to calculate XBMI: 10/18/2004 BY JACQUELINE AGUFA
* UPDATED FOR QUARTER 4 2004:  2/1/2005 BY LUCY LU
* ADDED code to get updated CACSMPL from REPWT.sd2: 2/17/2005 BY JACQUELINE AGUFA
* UPDATED FOR QUATER 1 2005:   5/6/2005 BY LUCY LU. ADD VARIABLE HP_NORM
* UPDATED FOR QUATER 3 2005:   11/3/2005 BY JACQUELINE AGUFA. ADD VARIABLE HP_OBESE
* UPDATED FOR QUARTER 2 FY 2006:  3/29/2006 BY LUCY LU
* UPDATED FOR QUARTER 3 FY 2006:  7/7/2006 BY LUCY LU. ADD XOCONUS VARIABLE
* UPDATED FOR QUARTER 1 FY 2007:  1/12/2007 BY J AGUFA.
* UPDATED FOR QUARTER 2 FY 2007:  3/26/2007 BY J AGUFA. Modified XENRLLMT, XENR_PCM, XENR_RSV,
& XBNFGRP
*                                with TRICARE Reserve Select(Enbgsmpl=11)
*
* PURPOSE:   TO CREATE INDEPENDENT VARIABLES: XENRLLMT, XENR_PCM, XINS_COV,
*            XBNFGRP, XBENCAT, XINS_RSV, XENR_RSV
*            TO CREATE DEPENDENT VARIABLES: KDISENRL, KBGPRB1,
*            KBGPRB2, KMILOFFC, KCIVOFFC, KMILOPQY, KCIVOPQY, HP_PRNTL, HP_MAMOG,
*            HP_MAM50, HP_PAP, HP_BP, HP_FLU, HP_PROS, KCIVINS, KPRSCPTN, HP_GP,
*            HP_CHOL, HP_BRST, HP_SMOKE, KBRSTCR, HP_SMOKH, HP_CESS, HP_OBESE,
*
*            TO CREATE OUTCATCH, RECODE LEGDDSCD
* INPUT:     ..\..\DATA\AFINAL\SELECTQ.SD2
* OUTPUT:    ..\..\DATA\AFINAL\CONVARQ.SD2
*
* INCLUDES: 1) CONSVAR0.SAS - Construct XREGION, XTNEXREG and CONUS based on CACSMPL.
*           2) Construct_cacsmpl.SAS
*******************************************************************************;

LIBNAME IN   V612 '..\..\DATA\AFINAL';
LIBNAME INv8      '..\..\DATA\AFINAL';
LIBNAME LIBRARY V612 '..\..\DATA\AFINAL\FMTLIB';


OPTIONS PS=78 LS=256 ERRORS=2 NOCENTER ;

***Create cacsmpl;
%INCLUDE "Construct_cacsmpl.SAS"/SOURCE2;          *JMA 1/4/07;

TITLE1 'FY 2007 Quarter 3 Health Care Survey of DoD Beneficiaries Study - Adult Form A';
TITLE2 'CREATE CONSTRUCTED & OUTCOME MEASURE VARIABLES';

PROC SORT DATA=IN.SELECTQ OUT=SELECTQ; BY MPRID; RUN;
PROC SORT DATA=INv8.CONSTRUCT_CACSMPL OUT=CACSMPL; BY MPRID; RUN;

DATA IN.CONVARQ(KEEP=XENRLLMT XENR_PCM XINS_COV /*XQENROLL*/
                     XREGION XTNEXREG CONUS
                     ENBGSMPL XBNFGRP XOCONUS SERVAREA
                     /*KDISENRL*/ KMILOFFC KCIVOFFC KBGPRB1 KBGPRB2
                     KMILOPQY KCIVOPQY HP_PRNTL HP_MAMOG HP_MAM50 HP_PAP HP_BP HP_FLU
                     /*HP_PROS*/
```

```
                    MPRID KCIVINS /*HP_GP HP_CHOL HP_BRST*/ HP_SMOKE /*KPRSCPTN KBRSTCR */
                    OUTCATCH LEGDDSCD HP_SMOKH /*HP_CESS*/ HP_CESH /*HP_NORM*/ HP_OBESE
                    XBMI XBMICAT CACSMPL XBENCAT XENR_RSV XINS_RSV)
        CONVARQ;
   MERGE SELECTQ(IN=in1)
         CACSMPL(IN=in2 RENAME=(CACSMPL=XCACSMPL));       *JMA 1/4/07;

   BY MPRID;

   IF IN1;


   ************************************************************************
   * Construct XREGION, XTNEXREG and CONUS.
   ************************************************************************;

/*CHANGE CACSMPL TO BE NUMERIC*/
   CACSMPL = INPUT(XCACSMPL,8.);             *LLU 2/9/05;
   DROP XCACSMPL;

   %INCLUDE "CONSVAR0.SAS"/SOURCE2;          *LLU 2/9/05;

   LENGTH XREGION  3.
          XTNEXREG 3.
          CONUS    3.
          XBMI     8.
          XBMICAT  3.
          XOCONUS  3.
          XBENCAT  3.
          XINS_RSV 3.
          XENR_RSV 3.;



LABEL
   XENRLLMT    =  "Enrollment in TRICARE Prime"
   XENR_PCM    =  "Enrollment by PCM type"
   XINS_COV    =  "Insurance Coverage"
   /*XQENROLL    =  "Enrllmnt accordng to questionre rspnse"*/
   XBNFGRP     =  "Constructed Beneficiary Group"
  /*KDISENRL    =  "Intention to disenroll      " */
   KMILOFFC    =  "Office wait of more than 15 min-Mil"
   KCIVOFFC    =  "Office wait of more than 15 min-Civ"
   KBGPRB1     =  "Big problem getting referrals to spclst"
   KBGPRB2     =  "Big problem getting necessary care"
   KMILOPQY    =  "Outpat. visits-use Military fclty most"
   KCIVOPQY    =  "Outpat. visits-use Civilian fclty most"
   HP_PRNTL    =  "Prgnt in lst yr, receivd cre 1st trimstr"
   HP_MAMOG    =  "Women 40>=, mammography in pst 2 yrs"
   HP_MAM50    =  "Women 50>=, mammography in pst 2 yrs"
   HP_PAP      =  "All women, Pap smear in last 3 yrs"
   HP_BP       =  "Bld prsre chck in last 2 yrs,know rslts"
   HP_FLU      =  "65 and older, flu shot in last 12 mnths"
   HP_SMOKE    =  "Advised to quit smoking in last 12 mnths"
   KCIVINS     =  "Beneficiary coverd by civilian insurance"
/*   KBRSTCR     =  "Women 40>= ever had mammogram" */
   /*KPRSCPTN    =  "6 or > civ prscrptns filled by mil phmcy"*/
   /*HP_PROS     =  "Men 50>=, prostrate exam in lst 12 mnths"*/
   /*HP_GP       =  "General physical exam in last 12 mnths"*/
   /*HP_CHOL     =  "Cholesterol screening in last 5 yrs"*/
   /*HP_BRST     =  "Women >=40, breast exam in last 12 mnths"*/
   OUTCATCH    =  "Out of catchment area indicator"
   HP_SMOKH    =  "Smoker under HEDIS definition"
   /*HP_CESS     =  "Had smoking cessation counseling"*/
   HP_CESH     = "Had smoking cessation counseling - HEDIS"
   XREGION     = "XREGION - Region"
   XTNEXREG    = "TNEX Region"
   CONUS       = "CONUS - CONUS/OCONUS Indicator"
   XBMI        = "Body Mass Index"
   XBMICAT     = "Body Mass Index Category"
/*   HP_NORM     = "1=(normal BMI), 2=(abnormal BMI)" */
   HP_OBESE    = "Obese/Morbidly obese"
   XOCONUS     = "Overseas Europe/Pacific/Latin Indicator"
```

```
      XBENCAT     = "Beneficiary Category"
      XINS_RSV    = "Insurance Coverage - Reservist"
      XENR_RSV    = "Enrollment by PCM type - Reservist"
      ;



   FORMAT
      XENRLLMT       ENROLL.
      XENR_PCM       PCM.
      XINS_COV       INSURE.
      /*XQENROLL       PCM.*/
      XBNFGRP        XBGC_S.
      /*KDISENRL       HAYNN.*/
      KMILOFFC       HAYNN.
      KCIVOFFC       HAYNN.
      KBGPRB1        HAYNN.
      KBGPRB2        HAYNN.
      KMILOPQY       HAGRID.
      KCIVOPQY       HAGRID.
      /*KPRSCPTN       HAYNN.*/
      HP_PRNTL       PRNTL.
      HP_MAMOG       HAYNN.
      HP_MAM50       HAYNN.
   /*   HP_NORM        HAYNN. */
      HP_OBESE       HAYNN.
      HP_PAP         HAYNN.
      HP_BP          HAYNN2_.
      HP_FLU         HAYNN.
      /*HP_PROS        HAYNN.*/
      /*HP_GP          HAYNN.*/
      /*HP_CHOL        HAYNN.*/
      HP_SMOKE       HAYNN.
      /*HP_BRST        HAYNN.*/
      KCIVINS        HAYNN2_.
   /*   KBRSTCR        HAYNN. */
      OUTCATCH       OCATCH.
      LEGDDSCD       $DDSFMT.
      HP_SMOKH       SMOKE.
   /*   HP_CESS        SMOKE. */
      HP_CESH        SMOKE.
      ENBGSMPL       $ENBGS.
      XREGION        CREG.
      XTNEXREG       TNEX.
      CONUS          CONUSMHS.
      XBMICAT        XBMICAT.
      XOCONUS        XOCONUS.
      XBENCAT        XBENCAT.
      XINS_RSV       XINSRSV.
      XENR_RSV       XENRRSV.
      ;



   /* CREATE INDEPENDENT VARIABLES */

   /* XENRLLMT--ENROLLMENT STATUS */
   IF ENBGSMPL ^= "b" THEN DO;
   IF 18 <= INPUT(FIELDAGE,8.) < 65 THEN DO;
      IF INPUT(ENBGSMPL,8.) = 1 THEN XENRLLMT = 1;                    /*   Active duty (<65) */
      ELSE IF INPUT(ENBGSMPL,8.) IN (2, 3, 5, 6) THEN XENRLLMT = 2;    /*    Non-active duty
enrolled (<65)*/
      ELSE IF INPUT(ENBGSMPL,8.) IN (4, 7,11) THEN XENRLLMT = 3;      /*   Not Enrolled (<65)*/
   END;
   ELSE IF INPUT(FIELDAGE,8.)  > = 65 THEN DO;
      IF INPUT(ENBGSMPL,8.) = 10 THEN XENRLLMT = 4;                   /*   Not Enrolled (65+)*/
      IF INPUT(ENBGSMPL,8.) IN (8,9) THEN XENRLLMT = 5;              /*   Enrolled (65+)    */
   END;

   /* XENR_PCM--ENROLLMENT BY PCM TYPE */
   IF 18 <= INPUT(FIELDAGE,8.) < 65 THEN DO;
      IF INPUT(ENBGSMPL,8.) = 1 THEN XENR_PCM = 1;                        /*    Active duty (<65)
*/
```

```
       ELSE IF INPUT(ENBGSMPL,8.) IN (3, 6) THEN XENR_PCM = 2;       /*   Enrolled (<65) - mil PCM
*/
       ELSE IF INPUT(ENBGSMPL,8.) IN (2, 5) THEN XENR_PCM = 3;       /*   Enrolled (<65) - civ PCM
*/
       ELSE IF INPUT(ENBGSMPL,8.) IN (4, 7,11) THEN XENR_PCM = 4;     /*    Not Enrolled (<65)
*/
    END;
     ELSE IF INPUT(FIELDAGE,8.) > = 65 THEN DO;
        IF INPUT(ENBGSMPL,8.) = 10 THEN XENR_PCM = 5;            /*  Not Enrolled (65+)       */
        IF INPUT(ENBGSMPL,8.) = 9 THEN XENR_PCM = 6;             /*  Enrolled (65+)-mil PCM   */
        IF INPUT(ENBGSMPL,8.) = 8 THEN XENR_PCM = 7;               /*  Enrolled (65+)-civ PCM   */
/*NJ_Q2*/
     END;
    END;

    /* XINS_COV--INSURANCE COVERAGE */
    IF XENRLLMT = 1 THEN XINS_COV =1;                                  /* Prime <65-Active Duty */
      ELSE IF 18 <= INPUT(FIELDAGE,8.)  < 65 AND H07006 IN (1) THEN XINS_COV = 2; /* Prime <65-Non-
active Duty */
      ELSE IF H07006 = 3 THEN XINS_COV = 3;                           /* Standard/Extra */
      ELSE IF H07006 = 11 THEN XINS_COV = 7;                            /* Plus and Medicare */
      ELSE IF H07006 = 4 THEN XINS_COV = 4;                             /* Medicare*/
      ELSE IF H07006 IN (5,6, 7, 8, 9, 13) THEN XINS_COV = 5;             /* Other civilian health
insurance*/
      ELSE IF H07006 = 10 THEN XINS_COV = 8;                            /* Veterans Administration
(VA) */
      ELSE IF H07006 = 12 THEN XINS_COV = 9;                             /* TRICARE Reserve Select
*/
      ELSE IF (INPUT(FIELDAGE,8.)>= 65 AND XENRLLMT = 5 and H07006 = 1) THEN XINS_COV = 6;    /*
Prime, >= 65 */
      ELSE IF H07003=1 AND H07004=1 AND H07006 NE .N THEN XINS_COV = 4;                   /* NEW Q2
Medicare/Medicaid */


    /* XBNFGRP-Beneficiary Group that excludes those 65 and over-Active Duty
              and Family Members of Active Duty */
    IF ENBGSMPL ^="b" THEN DO;
    IF INPUT(FIELDAGE,8.)  >= 65 AND INPUT(ENBGSMPL,8.) IN (1, 2, 3, 4) THEN XBNFGRP = .;
       ELSE IF INPUT(ENBGSMPL,8.) = 1 THEN XBNFGRP = 1;                                   /* Active
Duty <65 */
       ELSE IF INPUT(ENBGSMPL,8.) IN (2, 3, 4) THEN XBNFGRP = 2;                          /* Family
of Active <65 */
       ELSE IF INPUT(ENBGSMPL,8.) IN (5, 6, 7) THEN XBNFGRP = 3;                                 /*
Ret/Surv/Fam <65 */
       ELSE IF INPUT(ENBGSMPL,8.) IN (8, 9, 10) THEN XBNFGRP = 4;                                /*
Ret/Surv/Fam 65+ */
       ELSE IF INPUT(ENBGSMPL,8.) IN (11)       THEN XBNFGRP = .;
    END;

    /* CREATE DEPENDENT VARIABLES */

    /* KDISENRL--INTENTION TO DISNEROLL */
    /*IF H07049  IN (4, 5) THEN KDISENRL = 1;  */                 /* Yes */
    /*   ELSE IF H07049  IN (1, 2, 3, .D) THEN KDISENRL = 2;*/    /* No  */

    /* KMILOFFC--OFFICE WAIT OF MORE THAN 15 MINUTES AT MILITARY FACILITES
       KCIVOFFC--OFFICE WAIT OF MORE THAN 15 MINUTES AT CIVILIAN FACILITES */
    IF H07038  = 1 THEN DO;                                     /* Military */
       IF H07030  IN (1,2) THEN KMILOFFC = 1;                   /* Yes */
       ELSE IF H07030  IN (3,4) THEN KMILOFFC = 2;              /* No  */
    END;
       ELSE IF H07038 IN (2, 3, 4) THEN DO;                     /* Civilian */
          IF H07030 IN (1,2) THEN KCIVOFFC = 1;                 /* Yes */
          ELSE IF H07030  IN (3,4) THEN KCIVOFFC = 2;           /* No */
       END;

    /* KBGPRB1--BIG PROBLEM GETTING REFERRALS TO SPECIALISTS */
    IF H07013 = 1 THEN KBGPRB1 = 1;                              /* YES */
       ELSE IF H07013 IN (2,3) THEN KBGPRB1 = 2;                 /* NO  */

    /* KBGPRB2--BIG PROBLEM GETTING NECESSARY CARE */
    IF H07027 = 1 THEN KBGPRB2 = 1;                             /* YES */
        ELSE IF H07027 IN (2,3) THEN KBGPRB2 = 2;               /* NO  */
```

```
    /* KMILOPQY--OUTPATIENT VISITS TO MILITARY FACILITY
       KCIVOPQY--OUTPATIENT VISITS TO CIVILIAN FACILITY */
    IF H07038 = 1 THEN DO;
       KMILOPQY=H07025;
       KCIVOPQY=1;
    END;
    ELSE IF H07038 IN  (2, 3, 4) THEN DO;
       KCIVOPQY=H07025;
       KMILOPQY=1;
    END;
    ELSE IF H07038 = 5 THEN DO;
       KMILOPQY=1;
       KCIVOPQY=1;
    END;

    /* KPRSCPTN--6 OR MORE CIVILIAN PRESCRIPTIONS FILLED BY MILITARY PHARMACY */
    /* H04037 NOT IN Q3 2003 QUESTIONNAIRE */
    /*IF H04037 IN (3,4,5) THEN KPRSCPTN = 1;*/        /* YES */
    /*   ELSE IF H04037 IN (1,2) THEN KPRSCPTN = 2; */    /* NO  */

    /* HP_PRNTL--IF PREGNANT LAST YEAR, RECEIVED PRENATAL CARE IN 1ST TRIMESTER */
    IF H07063 IN (1,2) THEN DO;                                          /*   Pregnant in last 12
months   */
       IF H07065 = 4 THEN HP_PRNTL = 1;                              /*   Yes   */
          ELSE IF (H07064 = 1 AND H07065 = 1) THEN HP_PRNTL = .;    /* <3 months pregnant now */
          ELSE IF H07065 IN (1,2,3) THEN HP_PRNTL = 2;               /*   No */
    END;

    /* HP_MAMOG--FOR WOMEN AGE 40 AND OVER, HAD MAMMOGRAM W/IN PAST 2 YEARS */
    IF XSEXA = 2 AND INPUT(FIELDAGE,8.)  >= 40 THEN DO;
       IF H07061 IN (5, 4) THEN HP_MAMOG = 1;            /* Yes */
       ELSE IF H07061 IN (1, 2, 3) THEN HP_MAMOG = 2;    /* No */
    END;

    /* HP_MAM50--FOR WOMEN AGE 50 AND OVER, HAD MAMMOGRAM W/IN PAST 2 YEARS */
    IF XSEXA = 2 AND INPUT(FIELDAGE,8.)  >= 50 THEN DO;
       IF H07061 IN (5, 4) THEN HP_MAM50 = 1;            /* Yes */
       ELSE IF H07061 IN (1, 2, 3) THEN HP_MAM50 = 2;    /* No */
    END;

    /* HP_PAP--FOR ALL WOMEN, HAD PAP SMEAR IN LAST 3 YEARS */
    IF XSEXA = 2 THEN DO;
       IF H07059 IN (4, 5) THEN HP_PAP = 1;               /* Yes */
       ELSE IF H07059 IN (1, 2, 3) THEN HP_PAP = 2;       /* No  */
    END;

    /* HP_BP--HAD BLOOD PRESSURE SCREENING IN LAST 2 YEARS AND KNOW RESULT */
    IF H07049 IN (2,3) AND H07050 IN (1,2) THEN HP_BP = 1;   /* Yes     */
       ELSE IF H07049 = 1 THEN HP_BP = 2;                    /* No      */
       ELSE IF H07049 < 0 OR H07050 < 0 THEN HP_BP = .;      /* Unknown */
       ELSE HP_BP = 2;                                       /* No      */

    /* HP_FLU--FOR PERSON AGE 65 OR OVER, HAD FLU SHOT IN LAST 12 MONTHS */
    IF INPUT(FIELDAGE,8.) >= 65 THEN DO;
       IF H07051 = 4 THEN HP_FLU = 1;                     /*   Yes */
       ELSE IF H07051 IN (1, 2, 3) THEN HP_FLU = 2;       /*   No  */
    END;

    /* HP_PROS--FOR MEN AGE 50 AND OVER, HAD PROSTRATE EXAM W/IN PAST 12 MONTHS */
    /* NOT IN Q1 2005*//*
    IF XSEXA = 1 AND INPUT(FIELDAGE,8.)  >= 50 THEN DO;
       IF H04067 = 5 THEN HP_PROS = 1;                      * Yes;
       ELSE IF H04067 IN (1, 2, 3, 4) THEN HP_PROS = 2;     * No;
    END; */

    /* HP_GP--EXCEPT WHEN SICK OR PREGNANT, GENERAL PHYSICAL EXAM W/IN PAST 12 MONTHS */
    /* REMOVED Q2 2003 BECAUSE H04054 NOT ON QUESTIONNAIRE */
    /*IF H04054 = 5 THEN HP_GP = 1;*/                       /*   Yes    */
    /*   ELSE IF H04054 IN (1, 2, 3, 4) THEN HP_GP = 2;*/    /*   No     */

    /* HP_CHOL--HAD CHOLESTEROL SCREENING IN PAST 5 YEARS */
    /* NOT IN Q1 2005*/
```

```
     /*IF H04058 IN (3, 4, 5) THEN HP_CHOL = 1;             *Yes;
        ELSE IF H04058 IN (1, 2) THEN HP_CHOL = 2;          *No;
     */

     /* HP_SMOKE--ADVISED TO QUIT SMOKING IN PAST 12 MONTHS */
     IF H07055 IN (2, 3, 4, 5) THEN HP_SMOKE = 1;         /*   Yes   */
        ELSE IF H07055 = 1 THEN HP_SMOKE = 2;             /*   No    */

     /* HP_BRST--BREAST EXAM IN PAST 12 MONTHS */
     /* NOT IN Q1 2005*/
     /*IF XSEXA=2 AND INPUT(FIELDAGE,8.) >= 40 THEN DO;
        IF H04071 = 5 THEN HP_BRST = 1;                      *Yes;
        ELSE IF H04071 IN (1, 2, 3, 4) THEN HP_BRST = 2;     *No;
     END;*/

     /* KCIVINS--IS BENEFICIARY COVERED BY PRIVATE CIVILIAN INSURANCE */
     IF H07002G=1 OR H07002I=1 OR H07002J=1 THEN KCIVINS=1;           /* YES  */  /*NJ_Q2*/
        ELSE KCIVINS=2;                                               /* NO   */

     /* KBRSTCR--WOMEN 40>=, EVER HAD MAMMOGRAM & EVER HAD BREAST EXAM */
     /*BREAST EXAM IS NOT IN Q1 2005*/
     IF XSEXA = 2 AND INPUT(FIELDAGE,8.)  >= 40 THEN DO;
        IF (H07061 IN (5, 4, 3, 2) /*AND H04071 IN (5, 4, 3, 2)*/) THEN KBRSTCR = 1;   /* Yes */
        ELSE IF (H07061 = 1 /*OR H04071=1*/)  THEN KBRSTCR = 2;                        /* No */
     END;

     /* Add code for smoking and smoking cessation counseling according to the HEDIS */
     /* definition.  Smoking variable is HP_SMOKH and smoking cessation counseling   */
     /* is HP_CESS.                                                                   */
     IF H07052 IN (1,2) THEN DO;
        IF H07052=1 AND (H07053=3 OR H07053=4 OR (H07053=2 AND H07054=3)) THEN HP_SMOKH=1;        /*
Yes */
        ELSE IF H07052=2 OR H07053 > 0 THEN HP_SMOKH=2;                                           /*
No  */
     END;
     /* Mar 8th 2005, JMA Replace HP_CESS with HP_CESH */
     /*
     IF HP_SMOKH=1 AND H07025>1 AND H07055>0 THEN DO;
        IF H07055>1 THEN HP_CESS=1;                          * Yes *;
        ELSE HP_CESS=2;                                      * No  *;
     END;
     */

     if hp_smokh=1 & H07055>0 then do;
        if H07055>1 then hp_cesh=1;  /* Yes */
        else hp_cesh=2;              /* No */
     end;

     /* OUTCATCH -- OUT OF CATCHMENT AREA */
     IF 9900 < CACSMPL < 9999 THEN OUTCATCH=1;     /* Out of catchment area */
        ELSE IF CACSMPL = 9999 THEN OUTCATCH=.;
        ELSE OUTCATCH=0;                           /* Catchment area        */

     ***********************************************************************************
     * Collapse/Recode the DEERS dependent suffix for each possible range of values
     ***********************************************************************************;
     IF      "01" LE LEGDDSCD LE "19" THEN LEGDDSCD = "01"; * 01-19 = 'Dependent Child';
     ELSE IF "30" LE LEGDDSCD LE "39" THEN LEGDDSCD = "30"; * 30-39 = 'Spouse of Sponsor';
     ELSE IF "40" LE LEGDDSCD LE "44" THEN LEGDDSCD = "40"; * 40-44 = 'Mother of Sponsor';
     ELSE IF "45" LE LEGDDSCD LE "49" THEN LEGDDSCD = "45"; * 45-49 = 'Father of Sponsor';
     ELSE IF "50" LE LEGDDSCD LE "54" THEN LEGDDSCD = "50"; * 50-54 = 'Mother in law of Sponsor';
     ELSE IF "55" LE LEGDDSCD LE "59" THEN LEGDDSCD = "55"; * 55-59 = 'Father in law of Sponsor';
     ELSE IF "60" LE LEGDDSCD LE "69" THEN LEGDDSCD = "60"; * 60-69 = 'Chidren where # > 19';


     ********************************************************************************
     * Calculate XBMI- Body Mass Index and XBMICAT- Body Mass Index Category
     * BMI=Weight(in pounds)*703 divide by Height(in inch)*Height(in inch)
     ********************************************************************************;


      IF H07068F IN (.A,.O,.I,.B) THEN TSRHGTF=.; ELSE TSRHGTF=H07068F;
      IF H07068I IN (.A,.O,.I,.B) THEN TSRHGTI=.; ELSE TSRHGTI=H07068I;
```

```
 IF H07069  IN (.A,.O,.I,.B) THEN TSRWGT =.; ELSE TSRWGT =H07069;

 IF TSRHGTF IN (.) OR
    TSRWGT  IN (.) THEN XBMI=.;
 ELSE DO;
    XBMI = ROUND((TSRWGT*703)/
                 (SUM(TSRHGTF*12,TSRHGTI)*SUM(TSRHGTF*12,TSRHGTI)), .1);
 END;

IF XBMI >= 100 THEN XBMI=.;


* FORMAT XBMI 5.1;

 DROP TSRHGTF TSRHGTI TSRWGT;

/* JMA Dec 28 2006 changed to have same category as Healthy People 2010 where
   there is no sex distinction */
    IF XBMI = .         THEN XBMICAT=.;
    ELSE IF XBMI < 18.5 THEN XBMICAT=1;  *Underweight;
    ELSE IF XBMI < 25   THEN XBMICAT=2;  *Normal Weight;
    ELSE IF XBMI < 30   THEN XBMICAT=3;  *Overweight;
    ELSE IF XBMI < 40   THEN XBMICAT=4;  *Obese;
    ELSE                     XBMICAT=5;  *Morbidly Obese;

/*ADD HP_NORM VARIABLE. LLU 5/6/2005*/

/*
IF XBMICAT=. THEN HP_NORM=.;
ELSE IF XBMICAT=2 THEN HP_NORM=1;     *NORMAL BMI;
ELSE HP_NORM=2;                       *ABNORMAL BMI;
*/

/*ADD HP_OBESE VARIABLE. JMA 11/3/2005*/

IF XBMICAT=. THEN HP_OBESE=.;
ELSE IF XBMICAT IN (4,5) THEN HP_OBESE=1;    *OBESE ;
ELSE HP_OBESE=2;                             *NOT OBESE;



/*ADD XBENCAT JMA 1/22/2007 */
/*
Tricare Reserve Select and the increasing presence of inactive reservists and their dependents
in our data.
In order to accomodate them, we will need to create additional variables.
*/

IF DBENCAT='ACT' THEN XBENCAT=1;      *Active duty;
ELSE IF DBENCAT='DA'  THEN XBENCAT=2; *Active Duty family member;
ELSE IF DBENCAT='GRD' THEN XBENCAT=3; *Active reservist;
ELSE IF DBENCAT='DGR' THEN XBENCAT=4; *Dependent of Reservist;
ELSE IF DBENCAT='IGR' THEN XBENCAT=5; *Inactive Reservist";
ELSE IF DBENCAT='IDG' THEN XBENCAT=6; *Dependent of Inactive Guard";
ELSE IF DBENCAT IN ('RET','DR','DS') THEN DO;
    IF 18 <= INPUT(FIELDAGE,8.) < 65 THEN XBENCAT=7;   *Retired or Dependent of Retiree <65;
    ELSE IF INPUT(FIELDAGE,8.)  > = 65 THEN XBENCAT=8; *Retired or Dependent of Retiree >=65;
END;

/*ADD XINS_RSV, XENR_RSV. JMA 1/22/2007 */
/*

We also need to redefine xins_cov, call it xins_rsv,
which is the same as xins_cov but where
reservists are separated from other active duty - xins_cov will =1 if active duty,
but not active reservist or inactive reservist.

Similarly we need xenr_rsv which is xenr_pcm but reservists will not be treated as active duty
ie xenr_pcm=1 if active duty but not reservist.  We also need to define another category
for xins_rsv, xins_rsv=9 for tricare reserve select -we also need to account for the value
covered by insurance of another country - that should be classified as civilian insurance.
Use h07007 for this.
```

```
    These new variables will be used in the beneficiary reports -
    we will not start reporting on tricare reserve select separately until later in the year -
    for now we will include it in std/extra
    */

    /* XINS_RSV--INSURANCE COVERAGE DISTINGUISHING RESERVISTS FROM ACTIVE DUTY*/
      IF XENRLLMT = 1 THEN DO;
         IF XBENCAT IN (1) THEN XINS_RSV =1;                              /* Prime <65-Active Duty
(Non reservists) */
         ELSE IF XBENCAT IN (3,5) THEN XINS_RSV=10;                       /* Prime <65-Active Duty
(Reservists) */
      END;
      ELSE IF 18 <= INPUT(FIELDAGE,8.)  < 65 AND H07006 IN (1) THEN XINS_RSV = 2; /* Prime <65-Non-
active Duty */
      ELSE IF H07006 =3 THEN XINS_RSV = 3;                             /* Standard/Extra */
      ELSE IF H07006 = 11 THEN XINS_RSV = 7;                           /* Plus and Medicare */
      ELSE IF H07006 = 4 THEN XINS_RSV = 4;                            /* Medicare*/
      ELSE IF H07006 IN (5,6, 7, 8, 9, 13) THEN XINS_RSV = 5;            /* Other civilian health
insurance*/
      ELSE IF H07006 = 10 THEN XINS_RSV = 8;                           /* Veterans Administration
(VA) */
      ELSE IF H07006 = 12 THEN XINS_RSV = 9;                           /* TRICARE Reserve Select
*/
      ELSE IF (INPUT(FIELDAGE,8.)>= 65 AND XENRLLMT = 5 and H07006 = 1) THEN XINS_RSV = 6;    /*
Prime, >= 65 */
      ELSE IF H07003=1 AND H07004=1 AND H07006 NE .N THEN XINS_RSV = 4;                        /*
Medicare/Medicaid */

    /* XENR_RSV--ENROLLMENT DISTINGUISHING RESERVISTS FROM ACTIVE DUTY */
    IF 18 <= INPUT(FIELDAGE,8.) < 65 THEN DO;
       IF INPUT(ENBGSMPL,8.) = 1 THEN DO;
          IF XBENCAT IN (1) THEN XENR_RSV = 1;                        /*   Active duty (<65) Non
reservists */
          ELSE IF XBENCAT IN (3,5) THEN XENR_RSV = 8;                    /*    Active duty (<65)
Reservists */
       END;
       ELSE IF INPUT(ENBGSMPL,8.) IN (3, 6) THEN XENR_RSV = 2;       /*   Enrolled (<65) - mil PCM
*/
       ELSE IF INPUT(ENBGSMPL,8.) IN (2, 5) THEN XENR_RSV = 3;       /*   Enrolled (<65) - civ PCM
*/
       ELSE IF INPUT(ENBGSMPL,8.) IN (4, 7,11) THEN XENR_RSV = 4;     /*    Not Enrolled (<65)
*/
    END;
    ELSE IF INPUT(FIELDAGE,8.) > = 65 THEN DO;
        IF INPUT(ENBGSMPL,8.) = 10 THEN XENR_RSV = 5;               /*  Not Enrolled (65+)       */
        IF INPUT(ENBGSMPL,8.) = 9 THEN XENR_RSV = 6;                /*  Enrolled (65+)-mil PCM   */
        IF INPUT(ENBGSMPL,8.) = 8 THEN XENR_RSV = 7;                /*  Enrolled (65+)-civ PCM   */
    END;


    RUN;

    DATA CONVARQ2;
       SET CONVARQ;
       WHERE FNSTATUS=11;
    RUN;


    /* CHECK RECONSTRUCTED 2007 VARIABLES */
    PROC FREQ DATA=CONVARQ2;
     TABLES XENRLLMT XENR_PCM XINS_COV XBENCAT XENR_RSV XINS_RSV /*XQENROLL*/ XREGION XTNEXREG
            XBMICAT ENBGSMPL XBNFGRP
           /* KDISENRL*/ KMILOFFC KCIVOFFC KBGPRB1 KBGPRB2
            KMILOPQY KCIVOPQY HP_PRNTL HP_MAMOG HP_MAM50 HP_PAP HP_BP HP_FLU KBRSTCR
            /*HP_PROS*HP_GP HP_CHOL*/ HP_SMOKE /*HP_BRST*/ KCIVINS /*KPRSCPTN*/ OUTCATCH LEGDDSCD
            HP_SMOKH  /*HP_CESS*/ HP_CESH  XBMI HP_OBESE XOCONUS
            / MISSING LIST;
     TITLE3 'ONE WAY FREQUENCIES ON 2007 RECONSTRUCTED VARIABLES';
     RUN;

    /* CROSSTABS TO CHECK RECONSTRUCTION OF 2007 VARIABLES */
    /* COLLAPSE AGE FOR CROSSTABS */
       PROC FORMAT;
```

```
    VALUE $AGE
            "018" -< "065" = "LESS THAN 65"
            "065" -< "120" = "65 OR OLDER"
            "O"      = "Out of range err"
            " "      = "Missing/unknown" ;
  RUN;



  PROC FREQ DATA=CONVARQ2;
   TABLES
          FIELDAGE*ENBGSMPL*XENRLLMT
          FIELDAGE*ENBGSMPL*XENR_PCM
          FIELDAGE*XENRLLMT*H07006*H07003*H07004*XINS_COV
          DBENCAT*XBENCAT
          FIELDAGE*ENBGSMPL*XENR_RSV*XENR_PCM
          FIELDAGE*XENRLLMT*H07006*H07003*H07004*XINS_COV*XINS_RSV
          XTNEXREG*XREGION*CACSMPL
          XREGION*CONUS
          FIELDAGE*ENBGSMPL*XBNFGRP
         /* H07049*KDISENRL*/
          H07038*H07030*KMILOFFC*KCIVOFFC
          H07013*KBGPRB1
          H07027*KBGPRB2
          H07038*H07025*KMILOPQY
          H07038*H07025*KCIVOPQY
          /*H04037*KPRSCPTN*/
          H07063*H07064*H07065*HP_PRNTL
          XSEXA*H07059*HP_PAP
          H07049*H07050*HP_BP
          FIELDAGE*H07051*HP_FLU
          /*H04054*HP_GP*/
          /*H04058*HP_CHOL*/
          H07055*HP_SMOKE
          H07002I*H07002J*H07002G*KCIVINS
          OUTCATCH*CACSMPL
          H07052*H07053*H07054*HP_SMOKH
          /*HP_SMOKH*H07025*H07055*HP_CESS*/
          HP_SMOKH*H07055*HP_CESH
          H07068F*H07068I*H07069*XBMI
          XBMICAT*HP_OBESE
          XREGION*XOCONUS*CONUS
          / MISSING LIST;
          FORMAT XSEXA HASEX. FIELDAGE $AGE.
                 XBMICAT XBMICAT.
                        ;
    TITLE3 'CROSSTABS ON NEW VARIABLES';
           RUN;

  PROC FREQ DATA=CONVARQ2;
     tables XTNEXREG*XREGION*CACSMPL
          / MISSING LIST;
  run;

/* COLLAPSE FOR MAMMOGRAPHY, BREAST CANCER, AND PROSTRATE XTABS*/
  PROC FORMAT;
    VALUE $AGE2_
            "018" - "049" = "LESS THAN 50"
            "050" -< "120" = "50 OR OLDER"
            "O"      = "Out of range err"
            " "      = "Missing/unknown" ;

    VALUE $AGE3_
            "018" - "039" = "LESS THAN 40"
            "040" -< "120" = "40 OR OLDER"
            "O"      = "Out of range err"
            " "      = "Missing/unknown" ;
            RUN ;


        PROC FREQ DATA=CONVARQ2;
            TABLES XSEXA*FIELDAGE*H07061*HP_MAM50
                  /* XSEXA*FIELDAGE*H07067*HP_PROS */
```

```
                /MISSING LIST;
                FORMAT FIELDAGE $AGE2_. XSEXA HASEX.;
      RUN;

      PROC FREQ DATA=CONVARQ2;
          TABLES XSEXA*FIELDAGE*H07061*HP_MAMOG
                /*XSEXA*FIELDAGE*H07063*H04071*KBRSTCR*/
                /*FIELDAGE*XSEXA*H07071*HP_BRST*/
                /MISSING LIST;
                FORMAT FIELDAGE $AGE3_. XSEXA HASEX.;
      RUN;

PROC CONTENTS DATA=IN.CONVARQ;
RUN;
```

F.4.B Q4FY2007\PROGRAMS\CONSTRUCT\CONSTRUCT_CACSMPL.SAS - INCLUDE FILE FOR CONVARQ.SAS.

```
*************************************************************************
*** Project: 2007 Health Care Survey of DoD Beneficiaries - Adult
*** Purpose: Create cacsmpl for the reporting purpose for adult survey
***
*** Program: F:\Q1FY2007\Programs\construct\construct_cacsmpl.sas
***
*** Inputs:  extract.sd2: Extracted DoD data set
***          TMA.sd2:     DMIS information
***          frame_cacsmpl.inc:   Include file
***
*** Outputs: construct_cacsmpl.sd2 - the adult frame with cacsmpl in
***
*** Note: 01/03/2007 by Haixia Xu
***       This program is copied from q4fy2006 sampling,
***         and modified for q1fy2007 to create the cacampl to be used for reporting, not for
sampling purpose
***
*************************************************************************;

*** Set up options. ***;
options ls=132 ps=79 compress=yes nocenter;* mprint mlogic symbolgen;

*** Set up the input and output paths. ***;
libname ext   v6  "G:\Q4FY2007\"; /* extract.sd2 */
libname inv6 v6  "..\..\Data\AFinal"; /* TMA.sd2 */
libname out      "..\..\Data\AFinal"; /*construct_cacsmpl.sd7*/

*** Set up the titles. ***;
title1 'Program: Construct_cacsmpl.SAS';
title2 'Construct cacsmpl for reporting';

data frame;
set ext.extract;
run;

title4 'Freq of PRRECFLG in the frame';
proc freq data=frame;
tables PRRECFLG/ missing list;
run;

*******************************************************************************
* Added q2 2003, Don and Keith created a template to be used each quarter;
* The code below and the include file construct cacsmpl
* and collapse historically small catchment areas;
*******************************************************************************;
data TMA (keep = geocell d_par d_fac d_instal d_health d_dmis servaff);
   set inv6.TMA;
   ***Extract the facility service code variable(servaff) starting with the November 2004TMA
spreadsheet in Q1,2005;
   rename facilit1=d_fac installa=d_instal dmis_fac=d_dmis facility=servaff ;
   length d_par $4.;
   d_par = DMIS_PAR;
   length geocell $4.;
   geocell = DMIS_ID;
   length d_health $2.;
   d_health = HEALTH_S;
run;

title4 "Freq of servaff, d_fac in TMA spreadsheet";
proc freq data=TMA;
tables servaff d_fac/missing list;
run;

%include "construct_cacsmpl.inc" ;

data out.construct_cacsmpl;
  set t_framea(keep=mprid cacsmpl);
run;

title4 'Freq of cacsmpl';
```

```
proc freq data=out.construct_cacsmpl;
tables cacsmpl/missing list;
run;

title4 'Information for the Frame';
proc contents data = out.construct_cacsmpl;
run;

*************** The End *****************;
```

F.4.C Q4FY2007\PROGRAMS\CONSTRUCT\CONSVAR0.SAS - INCLUDE FILE FOR CONVARQ.SAS.

```
*************************************************************************
*  PROGRAM:  CONSVAR0.SAS
*  TASK:     1999 DOD HEALTH CARE SURVEY ANALYSIS (8676-100)
*  PURPOSE:  Create XREGION and CONUS
*
*  WRITTEN:  February 11, 2000
*  MODIFIED: 1) February 23, 2000 By Keith Rathbun.  Converted into an include
*               file.  Updated code accordingly.
*            2) February 26, 2001 By Keith Rathbun.  Added recode for CACSMPL
*               weighting purposes.
*            3) September 13, 2004 By Keith Rathbun. Added 6223 to XREGION=1.
*            4) September 15, 2004 By Keith Rathbun. Recoded XREGION=0 to missing.
*            5) September 28, 2004 By Jacqueline Agufa-Maloba. Created XTNEXREG.
*            6) February 9, 2005 by Lucy Lu. Fix catchment and xreg.
*            7) March 16,2005 by Jacqueline Agufa-Maloba.  Update XREGION for
*               cases where CACSMPL=9901,9902,9903,9904. XREGION had a value of
*               17,18 or 19 and will be changed to values from the dataset
*               region_map01.sas7bdat
*            8) May 22, 2005 By Jacqueline Agufa.  Added 0405 to XREGION=3 and
*               0231, 0407,  6215 to XREGION=9.
*            9) July 6, 2006 by Lucy Lu. Add XOCONUS (region 13,14,15) for Q3 FY2006
*            10) February 6, 2007 by Jacqueline Agufa. Moved the code to create SERVAREA from
*                MERGESYN.sas to here.
*
*    NOTES:  1) This file needs to be included in the CONVARQ.SAS program.
*
*************************************************************************
* Assign XREGION using CACSMPL
*************************************************************************;
IF      CACSMPL IN (0035, 0036, 0037, 0066, 0067,
                    0068, 0069, 0081, 0086, 0100,
                    0123, 0306, 0310, 0321, 0326,
                    0330, 0385, 0413, 6201, 6223) THEN XREGION= 1;
ELSE IF CACSMPL IN (0089, 0090, 0091, 0092, 0120,
                    0121, 0122, 0124, 0335, 0378, 0387, 0432,
                    0433, 0508, 7143, 7286, 7294) THEN XREGION= 2;
ELSE IF CACSMPL IN (0039, 0041, 0045, 0046, 0047,
                    0048, 0049, 0050, 0051, 0101,
                    0103, 0104, 0105, 0337, 0356,
                    0405, 0422, 0511            ) THEN XREGION= 3;
ELSE IF CACSMPL IN (0001, 0002, 0003, 0004, 0038,
                    0042, 0043, 0073, 0074, 0107,
                    0297, 7139            ) THEN XREGION= 4;
ELSE IF CACSMPL IN (0055, 0056, 0060, 0061, 0095,
                    9905                        ) THEN XREGION= 5;
ELSE IF CACSMPL IN (0013, 0062, 0064, 0096, 0097,
                    0098, 0109, 0110, 0112, 0113,
                    0114, 0117, 0118, 0338, 0363,
                    0364, 0365, 0366, 1587, 1592, 7236, 9906       ) THEN XREGION= 6;
ELSE IF CACSMPL IN (0008, 0009, 0010, 0079, 0083,
                    0084, 0085, 0108, 9907       ) THEN XREGION= 7;
ELSE IF CACSMPL IN (0031, 0032, 0033, 0053, 0057,
                    0058, 0059, 0075, 0076, 0077,
                    0078, 0093, 0094, 0106, 0119,
                    0129, 0252, 7200, 7293, 9908             ) THEN XREGION= 8;
ELSE IF CACSMPL IN (0018, 0019, 0024, 0026, 0029, 0030,
                    0131, 0213, 0231, 0248, 0407, 5205,
                    6215, 9909  ) THEN XREGION= 9;
ELSE IF CACSMPL IN (0014, 0015, 0028, 0235, 0250,
                    9910                        ) THEN XREGION=10;
ELSE IF CACSMPL IN (0125, 0126, 0127, 0128, 0395, 1646,
                    9911                        ) THEN XREGION=11;
ELSE IF CACSMPL IN (0052, 0280, 0287, 0534, 7043, 9912 ) THEN XREGION=12;
ELSE IF CACSMPL IN (0606, 0607, 0609, 0617, 0618,
                    0623, 0624, 0629, 0633, 0635,
                    0653, 0805, 0806, 0808, 0814,
                    8931, 8982, 9913            ) THEN XREGION=13;
ELSE IF CACSMPL IN (0610, 0612, 0620, 0621, 0622,
                    0637, 0638, 0639, 0640, 0802,
                    0804, 0853, 0862, 9914       ) THEN XREGION=14;
```

```
ELSE IF CACSMPL IN (0449, 0613, 0615, 0616, 9915 ) THEN XREGION=15;
ELSE IF CACSMPL IN (0005, 0006, 0203, 9916       ) THEN XREGION=16;
ELSE IF CACSMPL = 9999                              THEN XREGION= .;

*IF CACSMPL IN (9901,9902,9903,9904) THEN XREGION=D_HEALTH+0;  *JMA 2/17/2005;

/* JMA 5/18/2005 These values were gotten from UpdateXregion.lst
   We needed to update the missing XREGION for cases where CACSMPL IN
   9901,9902,9903,9904
   -per Eric Schone
   -FOR Q1 2005
*/

IF CACSMPL IN (9901,9902,9903,9904) THEN DO;
   IF D_HEALTH NOT IN ('00','17','18','19') THEN DO;
      XREGION=INPUT(D_HEALTH,8.)+0;
   END;
   ELSE DO;
      IF  DCATCH IN ('0037', '0067', '0123', '0781', '0907',
                     '0908', '0920', '0921', '0922', '0930',
                     '0931', '0933', '0939', '0940', '0946',
                     '0995')
      THEN XREGION=1;
      ELSE IF DCATCH IN ('0124', '0934', '0996')
           THEN XREGION=2;
      ELSE IF DCATCH IN ('0039', '0048', '0105', '0911', '0941',
                         '0987')
           THEN XREGION=3;
      ELSE IF DCATCH IN ('0003', '0787', '0901', '0925', '0943',
                         '0988', '0989')
           THEN XREGION=4;
      ELSE IF DCATCH IN ('0055', '0056', '0061', '0782', '0783',
                         '0789', '0914', '0915', '0918', '0923',
                         '0936', '0950')
           THEN XREGION=5;
      ELSE IF DCATCH IN ('0113', '0904', '0937', '0990', '0993')
           THEN XREGION=6;
      ELSE IF DCATCH IN ('0785', '0929', '0932')
           THEN XREGION=7;
      ELSE IF DCATCH IN ('0078', '0784', '0788', '0906', '0917',
                         '0924', '0927', '0928', '0935', '0942',
                         '0945', '0951', '0974')
           THEN XREGION=8;
      ELSE IF DCATCH IN ('0029', '0786', '0986')
           THEN XREGION=9;
      ELSE IF DCATCH IN ('0014', '0985')
           THEN XREGION=10;
      ELSE IF DCATCH IN ('0125', '0938', '0948', '0973')
           THEN XREGION=11;
      ELSE IF DCATCH IN ('0912')
           THEN XREGION=12;
      ELSE IF DCATCH IN ('0957', '0958', '0960', '0964', '0966',
                         '0967', '0976', '0977', '0979',
                         '0982')
           THEN XREGION=13;
      ELSE IF DCATCH IN ('0006', '0052', '0640', '0961', '0963',
                         '0965', '0978', '0983')
           THEN XREGION=14;
      ELSE IF DCATCH IN ('0075', '0120', '0615', '0622','0953',
                         '0970', '0971', '0972', '0975')
           THEN XREGION=15;
      ELSE IF DCATCH IN ('0902')
           THEN XREGION=16;
/*      ELSE IF DCATCH IN ('0999') AND DHSRGN IN ('13','14','15')
           THEN XREGION=DHSRGN+0;
*/
   END;
END;


IF D_PAR = '0902' THEN XREGION=16;
IF XREGION = 0 THEN XREGION = .;
```

```
*************************************************************************
* Assign indicator of CONUS based on XREGION.  CONUS stands for
* Continental United States it but includes both Alaska and Hawaii.
*************************************************************************;
IF      XREGION IN (1,2,3,4,5,6,7,8,9,10,11,12,16) THEN CONUS=1;
ELSE IF XREGION IN (13,14,15)                      THEN CONUS=0;
ELSE IF XREGION = .                                THEN CONUS=.;

************************************************************************
* Assign XTNEXREG using XREGION
************************************************************************;
IF XREGION IN (1,2,5) THEN XTNEXREG=1;
ELSE IF XREGION IN (3,4,6) THEN XTNEXREG=2;
ELSE IF XREGION IN (7,8,9,10,11,12,16) THEN XTNEXREG=3;
ELSE IF XREGION IN (13,14,15) THEN XTNEXREG=4;


*********************************************************************
* CREATE XOCONUS FOR  europe, pacific, latin america
* Lucy Lu 7/6/06
*********************************************************************;

IF      XREGION=13 THEN XOCONUS=1;
ELSE IF XREGION=14 THEN XOCONUS=2;
ELSE IF XREGION=15 THEN XOCONUS=3;

   ************************************************************************
   * Construct SERVAREA.
   ************************************************************************;
   IF ENBGSMPL IN ('04','07','10') THEN DO;
      SELECT(CACSMPL);
         WHEN ('0024','0029')               SERVAREA='01';
         WHEN ('0032','0033')               SERVAREA='02';
         WHEN ('0037','0066','0067','0123') SERVAREA='03';
         WHEN ('0038','0042')               SERVAREA='04';
         WHEN ('0049','0103','0104')        SERVAREA='05';
         WHEN ('0091','0092')               SERVAREA='06';
         WHEN ('0098','0113')               SERVAREA='07';
         WHEN ('0101','0105')               SERVAREA='08';
         WHEN ('0109','0117')               SERVAREA='09';
         WHEN ('0120','0121','0124')        SERVAREA='10';
         WHEN ('0125','0126','0127')        SERVAREA='11';
         OTHERWISE SERVAREA=' ';
      END;
   END;
```

F.5.A Q4FY2007\PROGRAMS\CONSTRUCT\MERGEQ.SAS - MERGE CONSTRUCTED VARIABLES ONTO DATA FILE.

```
*******************************************************************************
* PROGRAM:   MERGEQ.SAS
* WRITTEN:   1/28/00 BY KELLY WHITE
* MODIFIED:  3/1/00 BY NATALIE JUSTH
* MODIFIED:  11/16/00 BY JOAN JAMES
* MODIFIED:  1/30/01 BY NATALIE JUSTH
* MODIFIED:  6/6/01 BY NATALIE JUSTH FOR Q2 UPDATES
* MODIFIED:  8/20/01 BY NATALIE JUSTH FOR Q3 UPDATES
* MODIFIED: 12/13/01 BY NATALIE JUSTH FOR Q4 UPDATES
* MODIFIED: 2/11/02 By Daniele Beahm to delete H00077 variable and reassign format for
*           S00S01 variable
* MODIFIED: 4/11/02 By JACLYN WONG FOR Q1 UPDATES
* MODIFIED: 6/21/02 by JACLYN WONG FOR Q2 UPDATES
* MODIFIED: 7/1/2002 By Daniele Beahm to delete SF8 variables not used for Q2 2002
* MODIFIED: 10/16/2002 By Daniele Beahm to delete Q2 2002 Supplemental vars that were on the
*           Q3 2002 data file from NRC.
* MODIFIED: 01/02/2003 By Keith Rathbun: Added ONTIME variable to support the annual
*           version of the database (trickle indicator).  This ONTIME variable is
*           only applicable to the annual file and thus should be deleted for the
*           quarterly version of this program.
* MODIFIED: 3/24/02 by JACLYN WONG FOR Q1 2003 UPDATES.  Added HP_SMOKH, HP_CESS, and KPRSCPTN
* MODIFIED: 8/29/03 by NATALIE JUSTH FOR Q3 2003 UPDATES
* MODIFIED: 12/19/03 by NATALIE JUSTH FOR Q4 2003 UPDATES
* MODIFIED: 3/29/04 BY LUCY LU FOR Q1 2004 UPDATES
* MODIFIED: 6/10/04 BY LUCY LU FOR Q2 2004 UPDATES
* MODIFIED: 9/13/04 BY LUCY LU FOR Q3 2004 UPDATES
* MODIFIED: 11/10/04 BY LUC LU, DROP VARIABLE STIELIG.
* MODIFIED: 2/1/05 BY LUCY LU FOR Q4 2004 UPDATES
* MODIFIED: 2/17/2005 BY JACQUELINE AGUFA. Added code to get updated CACSMPL from
*           REPWT.sd2
* MODIFIED: 5/3/05 BY LUCY LU FOR Q1 2005 UPDATES.
* MODIFIED: 10/24/05 BY LUCY LU FOR Q3 2005 UPDATES.
* MODIFIED: 11/1/05 BY J AGUFA. Dropped E1-E19
* MODIFIED: 12/21/05 BY LUCY LU FOR Q4 2005
* MODIFIED: 03/29/06 BY LUCY LU FOR Q2 FY 2006
* MODIFIED: 07/07/06 BY LUCY LU FOR q3 FY 2006
* MODIFIED: 10/07/06 BY LUCY LU FOR q4 FY 2006
* MODIFIED: 1/2/07 BY J AGUFA FOR q1 FY 2007
* MODIFIED: 3/29/07 BY J AGUFA FOR q2 FY 2007
* MODIFIED: 7/05/07 BY J AGUFA FOR q3 FY 2007
*
* PURPOSE:   TO MERGE FINAL FILES TOGETHER AND REORDER BY VARIABLE TYPE
*            To reorder variables within the record use a
*             LENGTH statement before the SET statement.
*             Make sure that MPRID is the first variable in the
*             record followed by:
*                           1)  other sampling variables
*                           2)  DEERS variables
*                           3)  Post-stratification vars
*                           4)  questionnaire responses
*                           5)  DRC variables
*                           6)  recoded questionnaire responses
*                           3)  coding scheme flags
*                           8)  constructed variables
*                           9)  weights  (NOT AVAILABLE FOR PRELIMINARY DATA)
* INPUT:     ..\..\DATA\AFINAL\SELECTQ.SD2
* INPUT:     ..\..\DATA\AFINAL\CONVARQ.SD2
* INPUT:     ..\..\DATA\AFINAL\CONVARSF.SD2
* OUTPUT:    ..\..\DATA\AFINAL\MERGEQ.SD2
* INCLUDE:   SERVAFF.SAS
             TO MERGE ON VARIABLE SERVAFF
*******************************************************************************
*;
LIBNAME IN1     V612 '..\..\DATA\AFINAL';
LIBNAME OUT     V612 '..\..\DATA\AFINAL';
LIBNAME LIBRARY V612 '..\..\DATA\AFINAL\FMTLIB';

OPTIONS PS=78 LS=124 ERRORS=2 COMPRESS=YES ; *MPRINT;

%INCLUDE SERVAFF/SOURCE2;        *LLU 2/9/05;
```

```
PROC SORT DATA=IN1.SELECTQ OUT=SELECTQ;
   BY MPRID;
RUN;


PROC SORT DATA=IN1.CONVARQ OUT=CONVARQ;
   BY MPRID;
RUN;


PROC SORT DATA=IN1.SERVAFF OUT=SERVAFF;
   BY MPRID;
RUN;

PROC FREQ DATA=SERVAFF;
   TABLES SERVAFF;
RUN;


DATA MERGEQ (DROP =
H07001_O
H07002AO
H07002CO
H07002FO
H07002GO
H07002HO
H07002IO
H07002JO
H07002KO
H07002LO
H07002MO
H07002NO
H07002OO
H07002PO
H07002QO
H07002RO
H07003_O
H07004_O
H07005_O
H07006_O
H07007_O
H07008_O
H07009_O
H07010_O
H07011_O
H07012_O
H07013_O
H07014_O
H07015_O
H07016_O
H07017_O
H07018_O
H07019_O
H07020_O
H07021_O
H07022_O
H07023_O
H07024_O
H07025_O
H07026_O
H07027_O
H07028_O
H07029_O
H07030_O
H07031_O
H07032_O
H07033_O
H07034_O
H07035_O
H07036_O
H07037_O
H07038_O
```

H07039_O
H07040_O
H07041_O
H07042_O
H07043_O
H07044_O
H07045_O
H07046_O
H07047_O
H07048_O
H07049_O
H07050_O
H07051_O
H07052_O
H07053_O
H07054_O
H07055_O
H07056_O
H07057_O
H07058_O
H07059_O
H07060_O
H07061_O
H07063_O
H07064_O
H07065_O
H07066_O
H07067_O
H07068FO
H07068IO
H07069_O

H07068FN
H07068IN
H07069N

H07070_O
H07070AO
H07070BO
H07070CO
H07070DO
H07070EO

S07V01_O
S07V02_O
S07V05_O
S07V06_O
S07V07_O
S07V08_O
S07V09_O
S07V10_O
S07V11AO
S07V11BO
S07V11CO
S07V11DO
S07V11EO
S07V11FO
S07V11GO
S07V11HO
S07V12AO
S07V12BO
S07V12CO
S07V12DO
S07V12EO
S07V12FO
S07V12GO
S07V13_O
S07V14AO
S07V14BO
S07V14CO
S07V14DO
S07V14EO

```
S07V14FO
S07V14GO
S07V14HO
S07V15_O
S07V16_O
S07V17_O
S07V18AO
S07V18BO
S07V18CO
S07V18DO
S07V18EO
S07V18FO
S07V18GO
S07Y01_O
S07Y22_O
S07Y23_O
S07Y24_O
S07Y35_O
S07Y36AO
S07Y36BO
S07Y36CO
S07Y36DO
S07Y36EO
S07Y36FO
S07Y36GO
S07Y36HO
S07Y36IO
S07Y37AO
S07Y37BO
S07Y37CO
S07Y37DO
S07Y37EO
S07Y37FO
S07Y37GO
S07Y37HO
S07Y37IO
S07Y37JO
S07Y37KO
S07Y37LO
S07Y37MO
S07Y37NO

SREDA_O
SRRACEAO
SRRACEBO
SRRACECO
SRRACEDO
SRRACEEO
SRAGE_O

PRRECFLG

D_DMIS
DMIS
R_MTF
GROUP
GRP_GEO
E1-E27

BROCHURE
LEGDDSCD
);


   MERGE SELECTQ(in=hcsdb rename=(flag_fin=dummy))
         CONVARQ
         SERVAFF(DROP=PCM DCATCH);
   BY MPRID;
   if hcsdb;

/*MAKE FLAG_FIN IN Q3 CHARACTER*/
   FLAG_FIN=PUT(DUMMY,5.);              /*LLU 2/9/05*/
   DROP DUMMY;
```

```
FORMAT
   SERVAFF  $SERVAFF.
   ENBGSMPL $ENBGS.
   CACSMPL  CAC.
   DBENCAT  $BENCAT.
   DMEDELG  $MEDELG.
   DSPONSVC $SPONSVC.
   FLAG_FIN $FINAL.
   FNSTATUS FNSTATS.
   MBRRELCD $MBRREL.
   MEDTYPE  $MEDTYP.
   MRTLSTAT $MSTATUS.
   PATCAT   $AGGBCAT.
   MISS_1   HAMISS.
   MISS_4   HAMISS.
   MISS_5   HAMISS.
   MISS_6   HAMISS.
   MISS_7   HAMISS.
   MISS_8   HAMISS.
   MISS_9   HAMISS.
   MISS_TOT HAMISS.
   PCM      $PCM.
   PNLCATCD $PNLCAT.
   PNSEXCD  $SEXCD.
   RACEETHN $RACECD.
   SEXSMPL  SEX.
   SVCSMPL  SVCSMPL.
   XSEXA    HASEX.
   SERVAREA $SRVAREA.
   MPCSMPL  MPCSMPL.
   D_HEALTH $DHEALTH.
   TNEXREG  $TNEXREG.
   D_FAC    $DFAC.
   MSM      $MSM.
   XBMICAT  XBMICAT.
   ENRID    $ENRID.
   WEB      WEB.
   XOCONUS  XOCONUS.
   ACV      $ACV2_.

   XSERVAFF XSERVAFF.

   PNTYPCD  $PNTYPCD.

   MPRID    $8.         /*Remove extra format space ($43) provided by NRC*/
;

LABEL
   ENBGSMPL = "Enrollment by beneficiary category"
   SERVAFF  = "Service Affiliation"
   MPCSMPL  = "MPCSMPL - Military Personnel Category"
   FLAG_FIN = "Final Despisition"
   CACSMPL  = "Catchment Area"
   WEB      = "Web survey indicator"
   D_PAR    = "DMIS Parent ID"
   D_Health = "Health Service Region"
   TNEXREG  = "TNEX Region"
   MSM      = 'Multiple Service Market Areas'
   MIQCNTL  = 'Synovate ID'
   XSERVAFF = "Service Affiliation"
   SERVAREA = 'Service Area'
   ;

RUN;

PROC CONTENTS DATA=MERGEQ;
RUN;


DATA OUT.MERGEQ;
```

```
LENGTH

  MPRID       $ 8         /* ID                */
  SVCSMPL       8         /* sampling variable */
  SEXSMPL       8         /* sampling variable */
  STRATUM     $ 7         /* sampling variable */
  CACSMPL       8         /* sampling variable */
  ENBGSMPL    $ 2         /* sampling variable */
  MPCSMPL       8         /* sampling variable */
  NHFF          8         /* sampling variable */
  SERVAREA    $ 2         /* sampling variable */
  QUARTER     $ 8         /* sampling variable */
  PRN           8         /* sampling variable */
  DCATCH      $ 4         /* sampling variable */
  ENRID       $ 4         /* sampling variable */
  DMIS_ID     $ 9         /* sampling variable */
  MSM         $ 2         /* sampling variable */
  D_FAC       $ 9         /* sampling variable */
  D_PAR       $ 4         /* sampling variable */
  D_HEALTH    $ 2         /* sampling variable */
  TNEXREG     $ 1         /* sampling variable */
  SERVAFF     $ 1         /* sampling variable */
  BWT           8         /* sampling variable */


  MRTLSTAT    $ 1         /* DEERS variable    */
  RACEETHN    $ 1         /* DEERS variable    */
  PNSEXCD     $ 1         /* DEERS variable    */
/*  LEGDDSCD    $ 2   */      /* DEERS variable    */
  DAGEQY      $ 3         /* DEERS variable    */
  FIELDAGE    $ 3         /* DEERS variable    */
  PCM         $ 3         /* DEERS variable    */
  ACV         $ 1         /* DEERS variable    */
  DBENCAT     $ 3         /* DEERS variable    */
  DMEDELG     $ 1         /* DEERS variable    */
  DSPONSVC    $ 1         /* DEERS variable    */
  MBRRELCD    $ 1         /* DEERS variable    */
  MEDTYPE     $ 1         /* DEERS variable    */
  PATCAT      $ 7         /* DEERS variable    */
  PNTYPCD     $ 1         /* DEERS variable    */
  PNLCATCD    $ 1         /* DEERS variable    */


  H07001        4         /* questionnaire     */
  H07002A       4         /* questionnaire     */
  H07002C       4         /* questionnaire     */
  H07002F       4         /* questionnaire     */
  H07002G       4         /* questionnaire     */
  H07002H       4         /* questionnaire     */
  H07002I       4         /* questionnaire     */
  H07002J       4         /* questionnaire     */
  H07002K       4         /* questionnaire     */
  H07002L       4         /* questionnaire     */
  H07002M       4         /* questionnaire     */
  H07002N       4         /* questionnaire     */
  H07002O       4         /* questionnaire     */
  H07002P       4         /* questionnaire     */
  H07002Q       4         /* questionnaire     */
  H07002R       4         /* questionnaire     */
  H07003        4         /* questionnaire     */
  H07004        4         /* questionnaire     */
  H07005        4         /* questionnaire     */
  H07006        4         /* questionnaire     */
  H07007        4         /* questionnaire     */
  H07008        4         /* questionnaire     */
  H07009        4         /* questionnaire     */
  H07010        4         /* questionnaire     */
  H07011        4         /* questionnaire     */
  H07012        4         /* questionnaire     */
  H07013        4         /* questionnaire     */
  H07014        4         /* questionnaire     */
  H07015        4         /* questionnaire     */
  H07016        4         /* questionnaire     */
```

```
H07017        4         /* questionnaire     */
H07018        4         /* questionnaire     */
H07019        4         /* questionnaire     */
H07020        4         /* questionnaire     */
H07021        4         /* questionnaire     */
H07022        4         /* questionnaire     */
H07023        4         /* questionnaire     */
H07024        4         /* questionnaire     */
H07025        4         /* questionnaire     */
H07026        4         /* questionnaire     */
H07027        4         /* questionnaire     */
H07028        4         /* questionnaire     */
H07029        4         /* questionnaire     */
H07030        4         /* questionnaire     */
H07031        4         /* questionnaire     */
H07032        4         /* questionnaire     */
H07033        4         /* questionnaire     */
H07034        4         /* questionnaire     */
H07035        4         /* questionnaire     */
H07036        4         /* questionnaire     */
H07037        4         /* questionnaire     */
H07038        4         /* questionnaire     */
H07039        4         /* questionnaire     */
H07040        4         /* questionnaire     */
H07041        4         /* questionnaire     */
H07042        4         /* questionnaire     */
H07043        4         /* questionnaire     */
H07044        4         /* questionnaire     */
H07045        4         /* questionnaire     */
H07046        4         /* questionnaire     */
H07047        4         /* questionnaire     */
H07048        4         /* questionnaire     */
H07049        4         /* questionnaire     */
H07050        4         /* questionnaire     */
H07051        4         /* questionnaire     */
H07052        4         /* questionnaire     */
H07053        4         /* questionnaire     */
H07054        4         /* questionnaire     */
H07055        4         /* questionnaire     */
H07056        4         /* questionnaire     */
H07057        4         /* questionnaire     */
H07058        4         /* questionnaire     */
H07059        4         /* questionnaire     */
H07060        4         /* questionnaire     */
H07061        4         /* questionnaire     */

H07063        4         /* questionnaire     */
H07064        4         /* questionnaire     */
H07065        4         /* questionnaire     */
H07066        4         /* questionnaire     */
H07067        4         /* questionnaire     */
H07068F       4         /* questionnaire     */
H07068I       4         /* questionnaire     */
H07069        4         /* questionnaire     */
H07070        4         /* questionnaire     */
H07070A       4         /* questionnaire     */
H07070B       4         /* questionnaire     */
H07070C       4         /* questionnaire     */
H07070D       4         /* questionnaire     */
H07070E       4         /* questionnaire     */

SREDA         4         /* questionnaire     */
SRRACEA       4         /* questionnaire     */
SRRACEB       4         /* questionnaire     */
SRRACEC       4         /* questionnaire     */
SRRACED       4         /* questionnaire     */
SRRACEE       4         /* questionnaire     */
SRAGE         4         /* questionnaire     */


S07V01        4         /* supplemental      */
S07V02        4         /* supplemental      */
S07V05        4         /* supplemental      */
```

```
S07V06        4         /* supplemental      */
S07V07        4         /* supplemental      */
S07V08        4         /* supplemental      */
S07V09        4         /* supplemental      */
S07V10        4         /* supplemental      */
S07V13        4         /* supplemental      */
S07V15        4         /* supplemental      */
S07V16        4         /* supplemental      */
S07V17        4         /* supplemental      */
S07V11A       4         /* supplemental      */
S07V11B       4         /* supplemental      */
S07V11C       4         /* supplemental      */
S07V11D       4         /* supplemental      */
S07V11E       4         /* supplemental      */
S07V11F       4         /* supplemental      */
S07V11G       4         /* supplemental      */
S07V11H       4         /* supplemental      */
S07V12A       4         /* supplemental      */
S07V12B       4         /* supplemental      */
S07V12C       4         /* supplemental      */
S07V12D       4         /* supplemental      */
S07V12E       4         /* supplemental      */
S07V12F       4         /* supplemental      */
S07V12G       4         /* supplemental      */
S07V14A       4         /* supplemental      */
S07V14B       4         /* supplemental      */
S07V14C       4         /* supplemental      */
S07V14D       4         /* supplemental      */
S07V14E       4         /* supplemental      */
S07V14F       4         /* supplemental      */
S07V14G       4         /* supplemental      */
S07V14H       4         /* supplemental      */
S07V18A       4         /* supplemental      */
S07V18B       4         /* supplemental      */
S07V18C       4         /* supplemental      */
S07V18D       4         /* supplemental      */
S07V18E       4         /* supplemental      */
S07V18F       4         /* supplemental      */
S07V18G       4         /* supplemental      */
S07Y01        4         /* supplemental      */
S07Y22        4         /* supplemental      */
S07Y23        4         /* supplemental      */
S07Y24        4         /* supplemental      */
S07Y35        4         /* supplemental      */
S07Y36A       4         /* supplemental      */
S07Y36B       4         /* supplemental      */
S07Y36C       4         /* supplemental      */
S07Y36D       4         /* supplemental      */
S07Y36E       4         /* supplemental      */
S07Y36F       4         /* supplemental      */
S07Y36G       4         /* supplemental      */
S07Y36H       4         /* supplemental      */
S07Y36I       4         /* supplemental      */
S07Y37A       4         /* supplemental      */
S07Y37B       4         /* supplemental      */
S07Y37C       4         /* supplemental      */
S07Y37D       4         /* supplemental      */
S07Y37E       4         /* supplemental      */
S07Y37F       4         /* supplemental      */
S07Y37G       4         /* supplemental      */
S07Y37H       4         /* supplemental      */
S07Y37I       4         /* supplemental      */
S07Y37J       4         /* supplemental      */
S07Y37K       4         /* supplemental      */
S07Y37L       4         /* supplemental      */
S07Y37M       4         /* supplemental      */
S07Y37N       4         /* supplemental      */


ONTIME      $ 3         /* Survey fielding variable */
FLAG_FIN    $ 5         /* Survey fielding variable */
DUPFLAG     $ 3         /* Survey fielding variable */
FNSTATUS      8         /* Survey fielding variable */
```

```
        KEYCOUNT      8         /* Survey fielding variable */
        WEB           8         /* Survey fielding variable */
        MIQCNTL    $ 12         /* Survey fielding variable */

        N1            8         /* CS flag variable     */
        N2            8         /* CS flag variable     */
        N3            8         /* CS flag variable     */
        N4            8         /* CS flag variable     */
        N5            8         /* CS flag variable     */
        N6            8         /* CS flag variable     */
        N7            8         /* CS flag variable     */
        N8            8         /* CS flag variable     */
        N9            8         /* CS flag variable     */
        N10           8         /* CS flag variable     */
        N10B1         8         /* CS flag variable     */
        N10B2         8         /* CS flag variable     */
        N10B3         8         /* CS flag variable     */
        N10B4         8         /* CS flag variable     */
        N10B5         8         /* CS flag variable     */
        N10B6         8         /* CS flag variable     */
        N10B7         8         /* CS flag variable     */
        N10C1         8         /* CS flag variable     */
        N10C2         8         /* CS flag variable     */
        N10C3         8         /* CS flag variable     */
        N11           8         /* CS flag variable     */
        N12           8         /* CS flag variable     */
        N13           8         /* CS flag variable     */
        N14           8         /* CS flag variable     */
        N16           8         /* CS flag variable     */
        N16A1         8         /* CS flag variable     */
        N17A          8         /* CS flag variable     */
        N17B          8         /* CS flag variable     */
        N18           8         /* CS flag variable     */
        N19           8         /* CS flag variable     */


        MISS_1        8         /* CS Count             */
        MISS_4        8         /* CS Count             */
        MISS_5        8         /* CS Count             */
        MISS_6        8         /* CS Count             */
        MISS_7        8         /* CS Count             */
        MISS_8        8         /* CS Count             */
        MISS_9        8         /* CS Count             */
        MISS_TOT      8         /* CS Count             */

        XENRLLMT      8         /* constructed       */
        XENR_PCM      8         /* constructed       */
        XINS_COV      8         /* constructed       */
        XBENCAT       8         /* constructed       */
        XENR_RSV      8         /* constructed       */
        XINS_RSV      8         /* constructed       */
        XREGION       3         /* constructed       */
        XTNEXREG      3         /* constructed       */
        CONUS         3         /* constructed       */
        XOCONUS       3         /* constructed       */
        OUTCATCH      8         /* constructed       */
        XSEXA         8         /* constructed       */
        XBMI          8         /* constructed       */
        XBMICAT       3         /* constructed       */
        XBNFGRP       8         /* constructed       */
        XSERVAFF      3         /* constructed       */
/*        KDISENRL      8 */        /* constructed       */
        KMILOFFC      8         /* constructed       */
        KCIVOFFC      8         /* constructed       */
        KBGPRB1       8         /* constructed       */
        KBGPRB2       8         /* constructed       */
        KMILOPQY      8         /* constructed       */
        KCIVOPQY      8         /* constructed       */
        KCIVINS       8         /* constructed       */
/*        KPRSCPTN      8 */        /* constructed       */
/*        KBRSTCR       8 */        /* constructed       */
        HP_PRNTL      8         /* constructed       */
        HP_MAMOG      8         /* constructed       */
```

```
       HP_MAM50      8         /* constructed       */
       HP_PAP        8         /* constructed       */
       HP_BP         8         /* constructed       */
       HP_FLU        8         /* constructed       */
/*       HP_NORM       8 */        /* constructed       */
       HP_OBESE      8         /* constructed       */

       HP_SMOKE      8         /* constructed       */
       HP_SMOKH      8         /* constructed       */
/*       HP_CESS       8 */        /* constructed       */
       HP_CESH       8         /* constructed       */
/*     SF8PF         8  */     /* constructed       */
/*     SF8RP         8  */     /* constructed       */
/*     SF8BP         8  */     /* constructed       */
/*     SF8GH         8  */     /* constructed       */
/*     SF8VT         8  */     /* constructed       */
/*     SF8SF         8  */     /* constructed       */
/*     SF8RE         8  */     /* constructed       */
/*     SF8MH         8  */     /* constructed       */
/*     PCS_8         8  */     /* constructed       */
/*     MCS_8         8  */     /* constructed       */
/*     KMID_H        8  */     /* constructed       */
/*     KMID_MH       8  */     /* constructed       */


      ;

     SET MERGEQ;

     RUN;

PROC CONTENTS DATA=OUT.MERGEQ POSITION;
   title  "HCSDB for Q3 FY 2007, ordered by variable type";
   RUN;

PROC FREQ DATA=OUT.MERGEQ;
TABLE PCM ACV CACSMPL/MISSPRINT;
RUN;
```

F.5.B Q4FY2007\PROGRAMS\CONSTRUCT\SERVAFF.SAS - MERGE SERVAFF VARIABLE TO QUARTERLY DATA FILE.

```
/*****************************************************************************/
/* PROJECT: 8687-100 (DOD QUARTERLY 2001)                                    */
/* AUTHOR:  NATALIE JUSTH                                                    */
/* DATE:    APRIL 24, 2001                                                   */
/* UPDATED: JUNE 5, 2001 FOR QUARTER 2                                       */
/* UPDATED: AUGUST 20, 2001 FOR QUARTER 3                                    */
/* UPDATED: DECEMBER 13, 2001 FOR QUARTER 4                                  */
/* UPDATED: JANUARY 23, 2002 FOR MOVE TO DOD COMPUTER                        */
/* UPDATED: FEBUARY 1, 2005 FOR Q4, 2004                                     */
/*                                                                           */
/* PURPOSE: MERGE VARIABLE SERVAFF TO QUARTERLY DATASET                      */
/* INPUT:   ...\DATA\AFINAL\S200204.SD2                                      */
/*          ...\DATA\AFINAL\SAMPLA02.SD2                                     */
/* OUTPUT:  ...\DATA\AFINAL\SERVAFF.SD2                                      */
/*****************************************************************************/

LIBNAME  INr      "G:\Q4FY2007\"; /*Restricted folder*/
LIBNAME DATA V612 '..\..\DATA\AFINAL';


/* Create new DMIS merge variable              */
/* First use ENRID, then ULOCDMIS, then DCATCH */

DATA SAMPLA02(KEEP=DMIS_ID ENRID MSM MPRID PCM DCATCH);
   SET INr.SAMPLA02(Rename=(PCM=oPCM));
   LENGTH DMIS_ID $9;
   DMIS_ID=ENRID;
   IF DMIS_ID=' ' THEN DO;
      IF ULOCDMIS NE ' ' THEN DMIS_ID=ULOCDMIS;
      ELSE DMIS_ID=DCATCH;
   END;

   /*******************************************************************
      llu 10/287/05.  Reconstruct PCM since it is wrong in the Q3
      2005 sample
    *******************************************************************/

  LENGTH PCM $3.;

  IF ACV in ('Z', ' ') THEN PCM = ' ';
     ELSE IF ('6900' < DMIS_ID <= '6919' OR
        '7900' < DMIS_ID <= '7919' OR
        '8000' < DMIS_ID < '8090' OR
        '0190' <= DMIS_ID <= '0199')
   THEN PCM='CIV';
   ELSE PCM='MTF';

   ************************************************************************
   * Construct MSM.
   ************************************************************************;



   IF PCM = 'MTF' THEN DO;
      SELECT(DMIS_ID);
         WHEN ('0037', '0066', '0067', '0068', '0069',
               '0123', '0256', '0306', '0309', '0385', '0413') MSM='01';
         WHEN ('0120', '0121', '0124')                          MSM='02';
         WHEN ('0089', '0335')                                  MSM='03';
         WHEN ('0103', '0356')                                  MSM='04';
         WHEN ('0101', '0105')                                  MSM='05';
         WHEN ('0297', '0316', '0436', '0654', '1990', '0073') MSM='06';
         WHEN ('0109', '0117', '0363', '0366')                  MSM='07';
         WHEN ('0032', '0033', '0252', '7200')                  MSM='08';
         WHEN ('0024', '0029')                                  MSM='09';
         WHEN ('0125', '0126', '0127', '0395', '7138')          MSM='10';
         WHEN ('0052', '0280', '0287')                          MSM='11';
         WHEN ('0204', '0006')                                  MSM='12';
         WHEN ('0005', '0203')                                  MSM='13';
         OTHERWISE MSM='  ';
```

```
      END;
   END;
   ELSE DO;
      SELECT(DCATCH);
         WHEN ('0037', '0066', '0067', '0068', '0069',
               '0123', '0256', '0306', '0309', '0385', '0413') MSM='01';
         WHEN ('0120', '0121', '0124')                          MSM='02';
         WHEN ('0089', '0335')                                  MSM='03';
         WHEN ('0103', '0356')                                  MSM='04';
         WHEN ('0101', '0105')                                  MSM='05';
         WHEN ('0297', '0316', '0436', '0654', '1990', '0073') MSM='06';
         WHEN ('0109', '0117', '0363', '0366')                  MSM='07';
         WHEN ('0032', '0033', '0252', '7200')                  MSM='08';
         WHEN ('0024', '0029')                                  MSM='09';
         WHEN ('0125', '0126', '0127', '0395', '7138')          MSM='10';
         WHEN ('0052', '0280', '0287')                          MSM='11';
         WHEN ('0204', '0006')                                  MSM='12';
         WHEN ('0005', '0203')                                  MSM='13';
         OTHERWISE MSM='  ';
      END;
   END;

RUN;

PROC PRINT DATA=SAMPLA02(OBS=50);
RUN;

PROC SORT DATA=SAMPLA02;
   BY DMIS_ID;
RUN;

PROC SORT DATA=DATA.TMA(KEEP=DMIS_ID FACILITY) OUT=TMA;   /*LLU 5/11/05*/
   BY DMIS_ID;
RUN;

DATA DATA.SERVAFF;
   MERGE SAMPLA02(IN=IN1)
         TMA(RENAME=(FACILITY=SERVAFF));
   BY DMIS_ID;

   /* JMA 5/22/2006 Created numeric version of servaff */

   LENGTH  XSERVAFF 3;

   IF SERVAFF='A' THEN XSERVAFF=1; *Army;
   IF SERVAFF='F' THEN XSERVAFF=2; *Air Force;
   IF SERVAFF='N' THEN XSERVAFF=3; *Navy;

   /***Coast Guard, Administrative, Support Contractor, USTF, Noncatchment,
    Other, Not available, Missing/unknown
    *** will collapsed to other per Eric Shone ***/

   IF SERVAFF IN ('C' 'J' 'M' 'T' 'S' 'O' 'X' ' ') THEN XSERVAFF=4; *Other;

   IF IN1;
RUN;


PROC PRINT DATA=DATA.SERVAFF(OBS=200);
RUN;

PROC CONTENTS DATA=DATA.SERVAFF; RUN;


 * check missing MSM;
proc freq DATA=DATA.SERVAFF;
TABLES  PCM*ENRID*DCATCH*DMIS_ID/LIST MISSPRINT;
RUN;
```

F.6 Q4FY2007\PROGRAMS\WEIGHTING\NEWWEIGHTS\SMPLA1A2.SAS - CONSTRUCT THE CATEGORICAL VARIABLES TO BE USED IN THE ANSWERTREE AND THE MODELING - RUN QUARTERLY.

```
*************************************************************************
*** Program: F:\Q4FY2007\Programs\Weighting\NewWeights\smplA1A2.sas
*** Purpose: Construct the variables to be used in the model
***
*** Inputs:  extract.sd2: 2007 q4FY extract file
***          selectq.sd2: 2007 q4FY sample file with the response variables
***
*** Outputs: smplA1A2.sas7bdat
***          smplA1.sas7bdat: Dataset to be used to calculate the unknown eligibility factor A1
***          smplA2.sas7bdat: Dataset to be used to calculate the nonresponse adjustment A2
***          conusA1.sas7bdat, oconusA1.sas7bdat, conusA2.sas7bdat, oconusA2.sas7bdat
*** Note:    1)Modified for q1fy2007 weighting on 12/18/2006:
***            a) Two more variables are added in CHAID tree analysis to capture the new sample
design in q1fy2007
***            b) Uncollapse PCM to differentiate CIV and MTF.
***          2)Haixia Xu 03/28/2007 for q3fy2007 weighting
*** Written: Haixia Xu 12/18/2006 for q1fy2007 weighting
*************************************************************************;

options ls=132 ps=79 nocenter formdlim='~';

%let quarter=Q4FY2007;

libname in   v6  "G:\&quarter."; /* extract.sd2 */
libname in_t v6  "L:\&quarter.\Data\afinal"; /* selectq.sd2 */
libname out  v8  "L:\&quarter.\Data\afinal";

title1 'Program: smplA1A2.SAS';
title2 'Purpose: Construct the variables';

*************************************************************************
Merge the selectq with extract to get the variable PGCD
*************************************************************************;
options compress=no;

data extract;
set in.extract(keep=MPRID PGCD);
run;

proc freq data=in_t.selectq;
tables enbgsmpl/missing list;
run;

data selectq;
set in_t.selectq(keep=BWT COM_GEO D_HEALTH D_FAC dageqy ENBGSMPL FNSTATUS MPCSMPL
                      MPRID  PATCAT  PCM  PNLCATCD  PNSEXCD  SERVAFF  SEXSMPL  STRATUM  SVCSMPL  WEB
TNEXREG group) ;
format _all_;
run;

proc sort data=extract;
by MPRID;
run;

proc sort data=selectq;
by MPRID;
run;

data smpl only1 only2 problem;
merge extract(in=A) selectq(in=B);
by MPRID;
if A and B then output smpl;
else if A and NOT B then output only1;
else if B and NOT A then output only2;
else output problem;
run;

*************************************************************************
Construct the new variables
```

```
*****************************************************************************;

data smpl;
set smpl;

***age***;
age=input(dageqy, 3.);

*Define the age group with 5 categories, which will be used in CHAID;
length AGE_grp5 $1;
if age <= 24 then AGE_grp5 = '1';
else if 24 < age <= 34 then AGE_grp5 = '2';
else if 34 < age <= 44 then AGE_grp5 = '3';
else if 44 < age <= 64 then AGE_grp5 = '4';
else if age > 64 then AGE_grp5 = '5';
if age=. then AGE_grp5='4';

***PATCAT***;
***Define PATCAT this way so it won't be associated with the age ***;
length PATC_grp $7;
if PATCAT ='UNKNOWN' then do;
  if ENBGSMPL in ('01') then PATC_grp='ACTDTY';
  else if ENBGSMPL in ('02', '03', '04') then PATC_grp='DEPACT';
  else if ENBGSMPL in ('05', '06', '07', '10') then PATC_grp='NADD';
end;
else if PATCAT in ('NADD<65','NADD65+') then PATC_grp = 'NADD';
else PATC_grp = PATCAT;

***PCM***;
length PCM_grp $3;
if PCM =' ' then PCM_grp='NON';
else if PCM in ('CIV', 'MTF') then PCM_grp = PCM;

***PNLCATCD***;
length PNLC_grp $8;
if PNLCATCD in ('N','V') then PNLC_grp='Grd/Resv';
else PNLC_grp= 'Other';

***RANKPAY***;
length RankPay $3;
if MPCSMPL=1 then do;
  if PGCD in (' ', '00', '99','WW') then RankPay = 'E01';
  else    RankPay = 'E'||PGCD;
  end;
else if MPCSMPL=2 then do;
  if PGCD in (' ', '00', '99' ) then RankPay = 'O01';
  else    RankPay = 'O'||PGCD;
  end;
else if MPCSMPL=3 then do;
  if PGCD in (' ', '00', '99') then RankPay = 'W01';
  else    RankPay = 'W'||PGCD;
  end;

length RANK_grp $15;
if RankPay in ('E01', 'E02', 'E03', 'E04') then RANK_grp = 'E1234';
else if RankPay in ('E05', 'E06', 'E07', 'E08', 'E09', 'E10', 'E11','E12','E13','E14','E15')
then RANK_grp = 'E56789101112';
else if Rankpay in ('W01', 'W02', 'W03', 'O01', 'O02', 'O03') then RANK_grp = 'W123O123';
else if RankPay in ('W04', 'W05', 'O04', 'O05', 'O06', 'O07', 'O08', 'O09', 'O10') then
RANK_grp = 'W45O45678910';

***sex***;
*Put the missing sex with male;
length SEX_grp $1;
if SEXSMPL in (1, 3) then SEX_grp ='1';
else if SEXSMPL=2 then SEX_grp='2';

***service***;
/*
*Put coastal guard with other unknown together since these 2 groups are too small;
length SVC_grp $16;
if SVCSMPL = 1 then SVC_grp='Army';
else if SVCSMPL = 2 then SVC_grp='Navy';
```

```
     else if SVCSMPL = 3 then SVC_grp='Marine';
     else if SVCSMPL = 4 then SVC_grp='Air Force';
     else if SVCSMPL in (5,6) then SVC_grp='CstGrd/Otr/Unkwn';
     */
     length SVC_grp $16;
     if SVCSMPL = 1 then SVC_grp='Army';
     else if SVCSMPL in (2,3,5,6) then SVC_grp='N/M/C/O/U';
     else if SVCSMPL = 4 then SVC_grp='Air Force';


     ***facility TNEX region***;
     length TNEX_grp $1;
     if d_health in ('00', '13', '14', '15') then TNEX_grp='O';
     else if d_health in ('17', '01','05') then TNEX_grp='N';
     else if d_health in ('18','04') then TNEX_grp='S';
     else if d_health in ('19','08','11') then TNEX_grp='W';
     *Correct the TNEX regions for com_geo 0047, 9001, 9002, 9003, 9004:
     All the cases in the same com_geo should be in the same TNEX region, which is the region of the
com_geo;
     if COM_GEO = '0047' then TNEX_grp='S';
     else if COM_GEO = '9001' then TNEX_grp='N';
     else if COM_GEO = '9002' then TNEX_grp='S';
     else if COM_GEO = '9003' then TNEX_grp='W';
     else if COM_GEO = '9004' then TNEX_grp='O';

     ***CONUS region***;
     length conus $1;
     if TNEX_grp ='O' then conus='0';
     else if TNEX_grp in ('N', 'S', 'W') then conus='1';

     ***Catchment areaindicator***;
     /*THE CODE BELOW IS FROM Q4FY2006 SAMPLIN GPROGRAM FRAME.INC
            if d_fac='NONCAT' or d_fac='TGRO' or d_fac="TPR" then do;
               if d_health in ('01','02','05','17') then com_geo='9901';
                  else if d_health in ('03','04','06','18') then com_geo='9902';
                  else if d_health in ('07','08','09','10','11','12','19') then com_geo='9903';
                  else if d_health in ('00','13','14','15') then com_geo='9904';
           end;
     */

     /* The way to define in_catch prior to the new design in q1fy2007
     length in_catch $1;
     if cacsmpl in ('9901', '9902', '9903', '9904') then in_catch='0';
     else in_catch ='1';
     */

     length in_catch $1;
     if d_fac='NONCAT' or d_fac='TGRO' or d_fac="TPR"  then in_catch='0';
     else in_catch ='1';

     /*Define two variables to identify the TRICARE Reserve Select and TRICARE Plus*/
     if group='4' then TRICPLUS=1;
     else TRICPLUS=2;

     if group='0' then TRS=1;
     else TRS=2;

     label in_catch='In-catchment area indicator'
           TRICPLUS='TRICARE PLUS indicator'
          TRS='TRICARE Reserve Select indicator';
     run;


     title3 'Checking the coding above';
     proc freq data=smpl;
     tables AGE_grp5  AGE_grp5*AGE*dageqy
            PATC_grp PATC_grp*PATCAT*ENBGSMPL
            PCM_grp  PCM_grp*PCM
            PNLC_grp PNLC_grp*PNLCATCD
            RANKPAY*MPCSMPL*PGCD
            RANK_grp RANK_grp*RANKPAY
            SEX_grp  SEX_grp*SEXSMPL*PNSEXCD
           SVC_grp  SVC_grp*SVCSMPL
```

```
       TNEX_grp TNEX_grp*d_health
       CONUS CONUS*TNEX_grp
       in_catch in_catch*d_fac
       TRICPLUS*group
       TRS*group
      com_geo*TNEX_grp
/missing list;
run;

title3 'Check the small stratum for conus';
proc freq data=smpl(where=(conus='1')) noprint;
tables stratum/missing list out=out1;
run;

proc print data=out1(where=(count<20));run;

title3 'Check the small stratum for oconus';
proc freq data=smpl(where=(conus='0')) noprint;
tables stratum/missing list out=out2;
run;

proc print data=out2(where=(count<20));run;

******************************************************************************
Output the data sets
******************************************************************************;
options compress=yes;

data OUT.smplA1A2 OUT.smplA1 OUT.smplA2 OUT.conusA1 OUT.oconusA1 OUT.conusA2 OUT.oconusA2;
set smpl(drop=DAGEQY PNSEXCD MPCSMPL PGCD );

if fnstatus in (11, 12, 20, 31, 32, 41, 42) then output OUT.smplA1A2;

if fnstatus in (11, 12, 20, 31, 41, 42) then do;
  if fnstatus in (11, 12, 20, 31) then eligkwn=1; else eligkwn=0;
  label eligkwn = 'Eligibility known indicator';
  output OUT.smplA1;

  if conus='1' then output OUT.conusA1;
  else if conus='0' then output OUT.oconusA1;
end;

if fnstatus in (11, 12, 20) then do;
  if fnstatus = 11 then complete = 1; else complete =0;
  label complete = 'Eligible respondent/complete indicator';
  output OUT.smplA2;

  if conus='1' then output OUT.conusA2;
  else if conus='0' then output OUT.oconusA2;

end;

run;

options compress=no;
title3 'Freq of conus*fnstatus for 50,000 beneficiaries';
proc freq data=OUT.smplA1A2;
tables conus*fnstatus/ missing list;
run;

title3 'Freq of fnstatus*eligkwn for 50,000 benes except fnstatus=32';
proc freq data=OUT.smplA1;
tables conus*fnstatus*eligkwn/ missing list;
run;

title3 'Freq of fnstatus*complete for fnstatus=11,12,20';
proc freq data=OUT.smplA2;
tables conus*fnstatus*complete/ missing list;
run;

****************** The End *********************;
```

F.7.A Q4FY2007\PROGRAMS\WEIGHTING\NEWWEIGHTS\ANSWERTREE\CONUS_A1_LEVEL3_AGEGRP5.ATS - ANSWERTREE - CONUS A1.

```
Document Version 1.1
Begin Project
Open Data_Source "GET
  FILE='L:\Q4FY2007\Programs\Weighting\NewWeights\AnswerTree\conusA1.sav'.
" "conus_A1_level3_ageGRP5"

Begin Tree "conus_A1_level3_ageGRP5"
Method Chaid
Nominal Variable "ELIGKWN"
Nominal Variable "AGE_grp5"
Nominal Variable "PATC_grp"
Nominal Variable "PCM_grp"
Nominal Variable "PNLC_grp"
Nominal Variable "RANK_grp"
Nominal Variable "SEX_grp"
Nominal Variable "SVC_grp"
Nominal Variable "TNEX_grp"
Nominal Variable "IN_CATCH"
Nominal Variable "TRICPLUS"
Nominal Variable "TRS"
Target "ELIGKWN"
Predictors "AGE_grp5" "PATC_grp" "PCM_grp" "PNLC_grp"
           "RANK_grp" "SEX_grp" "SVC_grp"  "TNEX_grp" "IN_CATCH" "TRICPLUS" "TRS"
Maximum Competitors 5
Maximum Categories 25
Minimum Impurity_Change 0.0001
Minimum_Cases Parent 100
Minimum_Cases Child 50
Minimum_Percent Parent 0
Minimum_Percent Child 0
Maximum Depth 3
Alpha Split 0.050000000000000003
Alpha Merge 0.050000000000000003
Alpha Merge_Split 0.025000000000000001
Allow Splitting_Of_Merged 0
Use Bonferroni_Adjustment 1
Convergence Epsilon 0.001
Convergence Maximum_Iterations 100
Chi_Square Pearson

Format Gain Cumulative Statistics 1 Target Category 1 Sort Descending
Define Revenues CVPair(0 ,0 ) CVPair(1 ,1 )
Define Expenses CVPair(0 ,0 ) CVPair(1 ,0 )


Create Root_Node
Grow tree

'Format the rules that you want to export
 Format Rules Decision_Rules For_Assigning_Values
'Export the output as HTML files
 ExportHTML Tree "conus_A1_level3_ageGRP5_tree.htm"
'ExportHTML Gain "conus_A1_level3_ageGRP5_gain.htm"
 ExportHTML Summary "conus_A1_level3_ageGRP5_summmary.htm"
'ExportHTML Risk "conus_A1_level3_ageGRP5_risk.htm"
'ExportHTML Rules "conus_A1_level3_ageGRP5_rule.htm"
'Export Model "conus_A1_level3_ageGRP5_model.xml"

End Tree


End Project
```

F.7.B Q4FY2007\PROGRAMS\WEIGHTING\NEWWEIGHTS\ANSWERTREE\OCONUS_A1_LEVEL3_AGEGRP5.ATS - ANSWERTREE - OCONUS A1.

```
Document Version 1.1
Begin Project
Open Data_Source "GET
  FILE='L:\Q4FY2007\Programs\Weighting\NewWeights\AnswerTree\oconusA1.sav'.
" "oconus_A1_level3_ageGRP5"

Begin Tree "oconus_A1_level3_ageGRP5"
Method Chaid
Nominal Variable "ELIGKWN"
Nominal Variable "AGE_grp5"
Nominal Variable "PATC_grp"
Nominal Variable "PCM_grp"
Nominal Variable "PNLC_grp"
Nominal Variable "RANK_grp"
Nominal Variable "SEX_grp"
Nominal Variable "SVC_grp"
Nominal Variable "IN_CATCH"
Nominal Variable "TRICPLUS"
Nominal Variable "TRS"
Target "ELIGKWN"
Predictors "AGE_grp5" "PATC_grp" "PCM_grp" "PNLC_grp"
           "RANK_grp" "SEX_grp" "SVC_grp"  "IN_CATCH" "TRICPLUS" "TRS"
Maximum Competitors 5
Maximum Categories 25
Minimum Impurity_Change 0.0001
Minimum_Cases Parent 100
Minimum_Cases Child 50
Minimum_Percent Parent 0
Minimum_Percent Child 0
Maximum Depth 3
Alpha Split 0.050000000000000003
Alpha Merge 0.050000000000000003
Alpha Merge_Split 0.025000000000000001
Allow Splitting_Of_Merged 0
Use Bonferroni_Adjustment 1
Convergence Epsilon 0.001
Convergence Maximum_Iterations 100
Chi_Square Pearson

Format Gain Cumulative Statistics 1 Target Category 1 Sort Descending
Define Revenues CVPair(0 ,0 ) CVPair(1 ,1 )
Define Expenses CVPair(0 ,0 ) CVPair(1 ,0 )


Create Root_Node
Grow tree

'Format the rules that you want to export
 Format Rules Decision_Rules For_Assigning_Values
'Export the output as HTML files
 ExportHTML Tree "oconus_A1_level3_ageGRP5_tree.htm"
'ExportHTML Gain "oconus_A1_level3_ageGRP5_gain.htm"
 ExportHTML Summary "oconus_A1_level3_ageGRP5_summmary.htm"
'ExportHTML Risk "oconus_A1_level3_ageGRP5_risk.htm"
'ExportHTML Rules "oconus_A1_level3_ageGRP5_rule.htm"
'Export Model "oconus_A1_level3_ageGRP5_model.xml"

End Tree


End Project
```

F.7.C Q4FY2007\PROGRAMS\WEIGHTING\NEWWEIGHTS\ANSWERTREE\CONUS_A2_LEVEL3_AGEGRP5.ATS - ANSWERTREE - CONUS A2.

```
Document Version 1.1
Begin Project
Open Data_Source "GET
  FILE='L:\Q4FY2007\Programs\Weighting\NewWeights\AnswerTree\conusA2.sav'.
" "conus_A2_level3_ageGRP5"

Begin Tree "conus_A2_level3_ageGRP5"
Method Chaid
Nominal Variable "complete"
Nominal Variable "AGE_grp5"
Nominal Variable "PATC_grp"
Nominal Variable "PCM_grp"
Nominal Variable "PNLC_grp"
Nominal Variable "RANK_grp"
Nominal Variable "SEX_grp"
Nominal Variable "SVC_grp"
Nominal Variable "TNEX_grp"
Nominal Variable "IN_CATCH"
Nominal Variable "TRICPLUS"
Nominal Variable "TRS"
Target "complete"
Predictors "AGE_grp5" "PATC_grp" "PCM_grp" "PNLC_grp"
           "RANK_grp" "SEX_grp" "SVC_grp"  "TNEX_grp" "IN_CATCH" "TRICPLUS" "TRS"
Maximum Competitors 5
Maximum Categories 25
Minimum Impurity_Change 0.0001
Minimum_Cases Parent 100
Minimum_Cases Child 50
Minimum_Percent Parent 0
Minimum_Percent Child 0
Maximum Depth 3
Alpha Split 0.050000000000000003
Alpha Merge 0.050000000000000003
Alpha Merge_Split 0.025000000000000001
Allow Splitting_Of_Merged 0
Use Bonferroni_Adjustment 1
Convergence Epsilon 0.001
Convergence Maximum_Iterations 100
Chi_Square Pearson

Format Gain Cumulative Statistics 1 Target Category 1 Sort Descending
Define Revenues CVPair(0 ,0 ) CVPair(1 ,1 )
Define Expenses CVPair(0 ,0 ) CVPair(1 ,0 )


Create Root_Node
Grow tree

'Format the rules that you want to export
 Format Rules Decision_Rules For_Assigning_Values
'Export the output as HTML files
 ExportHTML Tree "conus_A2_level3_ageGRP5_tree.htm"
'ExportHTML Gain "conus_A2_level3_ageGRP5_gain.htm"
 ExportHTML Summary "conus_A2_level3_ageGRP5_summmary.htm"
'ExportHTML Risk "conus_A2_level3_ageGRP5_risk.htm"
'ExportHTML Rules "conus_A2_level3_ageGRP5_rule.htm"
'Export Model "conus_A2_level3_ageGRP5_model.xml"

End Tree


End Project
```

F.7.D Q4FY2007\PROGRAMS\WEIGHTING\NEWWEIGHTS\ANSWERTREE\OCONUS_A2_LEVEL3_AGEGRP5.ATS - ANSWERTREE - OCONUS A2.

```
Document Version 1.1
Begin Project
Open Data_Source "GET
  FILE='L:\Q4FY2007\Programs\Weighting\NewWeights\AnswerTree\oconusA2.sav'.
" "oconus_A2_level3_ageGRP5"

Begin Tree "oconus_A2_level3_ageGRP5"
Method Chaid
Nominal Variable "complete"
Nominal Variable "AGE_grp5"
Nominal Variable "PATC_grp"
Nominal Variable "PCM_grp"
Nominal Variable "PNLC_grp"
Nominal Variable "RANK_grp"
Nominal Variable "SEX_grp"
Nominal Variable "SVC_grp"
Nominal Variable "IN_CATCH"
Nominal Variable "TRICPLUS"
Nominal Variable "TRS"
Target "complete"
Predictors "AGE_grp5" "PATC_grp" "PCM_grp" "PNLC_grp"
           "RANK_grp" "SEX_grp" "SVC_grp"  "TNEX_grp" "IN_CATCH" "TRICPLUS" "TRS"
Maximum Competitors 5
Maximum Categories 25
Minimum Impurity_Change 0.0001
Minimum_Cases Parent 100
Minimum_Cases Child 50
Minimum_Percent Parent 0
Minimum_Percent Child 0
Maximum Depth 3
Alpha Split 0.050000000000000003
Alpha Merge 0.050000000000000003
Alpha Merge_Split 0.025000000000000001
Allow Splitting_Of_Merged 0
Use Bonferroni_Adjustment 1
Convergence Epsilon 0.001
Convergence Maximum_Iterations 100
Chi_Square Pearson

Format Gain Cumulative Statistics 1 Target Category 1 Sort Descending
Define Revenues CVPair(0 ,0 ) CVPair(1 ,1 )
Define Expenses CVPair(0 ,0 ) CVPair(1 ,0 )


Create Root_Node
Grow tree

'Format the rules that you want to export
 Format Rules Decision_Rules For_Assigning_Values
'Export the output as HTML files
 ExportHTML Tree "oconus_A2_level3_ageGRP5_tree.htm"
'ExportHTML Gain "oconus_A2_level3_ageGRP5_gain.htm"
 ExportHTML Summary "oconus_A2_level3_ageGRP5_summmary.htm"
'ExportHTML Risk "oconus_A2_level3_ageGRP5_risk.htm"
'ExportHTML Rules "oconus_A2_level3_ageGRP5_rule.htm"
'Export Model "oconus_A2_level3_ageGRP5_model.xml"

End Tree


End Project
```

F.8 Q4FY2007\PROGRAMS\WEIGHTING\NEWWEIGHTS\LOGMDA1.SAS - DO THE 1ST STAGE UNKNOWN ELIGIBILITY ADJUSTMENT MODELING - INTERACTIONS IN THE MODEL ARE DETERMINED BASED ON THE TREES0 - RUN QUARTERLY.

```
    ************************************************************************************************
    *** Program: F:\Q4FY2007\Programs\Weighting\NewWeights\logmdA1.sas
    *** Purpose: Use the SUDAAN model to predict the response propensity score for the unknown
eligibility adjustment step
    *** Inputs:  conusA1.sas7bdat, oconusA1.sas7bdat, smplA1A2.sas7bdat
    *** Outputs: logmdA1.sas7bdat
    ***
    *** Written: 1)Haixia Xu 12/27/20064fy2007 weighting
    ************************************************************************************************
****;

    options ls=132 ps=79 compress=yes nocenter formdlim='~';

    %let quarter=Q4FY2007;

    libname in   v8  "L:\&quarter.\Data\afinal"; /* conusA1.sas7bdat, oconusA1.sas7bdat */
    libname out  v8  "L:\&quarter.\Data\afinal"; /* logmdA1.sas7bdat */

    proc format;
    value FMT_TNEX 1 = '1-North'
                   2 = '2-South'
                   3 = '3-West'
                   4 = '4-Other';
    value FMT_AGE  1 = '<=24'
                   2 = '(24,34]'
                   3 = '(34,44]'
                   4 = '(44,64]'
                   5 = ' >=65';
    value FMT_PATC 1 = '1-ACTDTY'
                   2 = '2-DEPACT'
                   3 = '3-NADD';
    value FMT_PCM  1 = '1-Nonenrollee'
                   2 = '2-CIV Enrollee'
                   3 = '3-MTF Enrollee';
    value FMT_PNLC 1 = '1-Other'
                   2 = '2-Grd/Resv';
    value FMT_RANK 1 = '1-E1234'
                   2 = '2-E56789101112'
                   3 = '3-W123O123'
                   4 = '4-W45O45678910';
    value FMT_RK   1 = '1-E1_12'
                    2 = '2-W1_5O1_10';
    value FMT_SEX  1 = '1-Male'
                   2 = '2-Female';
    value FMT_SVC  1 = '1-Army'
                   2 = '2-Air Force'
                   3 = '3-N/M/C/O/U';
    value FMT_INCT 1 = '1-Not in Catch'
                   2 = '2-In catch';
    value FMT_PLUS 1 = '1- TRICARE PLUS'
                   2 = '2- Not TRICARE PLUS';
    value FMT_TRS 1 = '1- TRICARE Reserve Select'
                  2 = '2- Not TRICARE Reserve Select';
    run;

    title1 'Program: logmdA1.sas';
    title2 'Purpose: Predict the response probability for the unknown eligibility adjustment';

    *=================================================================================================
====
    Create the dummy variables to be used in the SUDAAN model
    =================================================================================================
===;

    title3 'Check to see what kind of values mprid and stratum have';
    proc freq data=in.smplA1(obs=20);
    tables MPRID stratum/missing list;
```

```
run;

data logmdA1;
set in.conusA1 in.oconusA1;

*Convert MPRID and stratum into numerical values since SUDAAN takes only numerical values;
length MPRID_c9 $9 stratum1 $8 ;
MPRID_c9='1'||MPRID;
MPRID_nm = input (MPRID_c9, 9.);

stratum1='1'||stratum;
STRAT_nm = input (stratum1, 8.);

****************************
Convert all the categorical variables into numeric variables
*****************************;
if TNEX_grp='N' then TNEX_num=1;
else if TNEX_grp='S' then TNEX_num=2;
else if TNEX_grp='W' then TNEX_num=3;
else if TNEX_grp='O' then TNEX_num=4;

AGE_num5=input(AGE_grp5, 1.);

if PATC_grp= 'ACTDTY' then PATC_num=1;
else if PATC_grp= 'DEPACT' then PATC_num=2;
else if PATC_grp = 'NADD'  then PATC_num=3;

if PCM_grp='NON' then PCM_num=1;
else if PCM_grp='CIV' then PCM_num=2;
else if PCM_grp='MTF' then PCM_num=3;

if PNLC_grp ='Other' then PNLC_num=1;
else if PNLC_grp= 'Grd/Resv' then PNLC_num=2;

if RANK_grp='E1234' then RANK_num=1;
else if RANK_grp= 'E56789101112' then RANK_num=2 ;
else if RANK_grp = 'W123O123' then RANK_num= 3;
else if RANK_grp = 'W45O45678910' then RANK_num=4;

if SEX_grp='1' then SEX_num=1;
else if SEX_grp= '2' then SEX_num = 2;

if SVC_grp='Army' then SVC_num=1;
else if SVC_grp='Air Force' then SVC_num=2;
else if SVC_grp='N/M/C/O/U' then SVC_num=3;


if IN_CATCH='0' then INCAT_num=1;
else if IN_CATCH='1' then INCAT_num=2;

run;

title3 'Freq of MPRID_nm*mprid strat_nm*stratum';
proc freq data=logmdA1(obs=50);
tables MPRID_nm*mprid strat_nm*stratum/ missing list;
run;

title3 'Check the construction of the numeric variables';
proc freq data=logmdA1;
tables TNEX_num*TNEX_grp
       AGE_num5*AGE_grp5
       PATC_num*PATC_grp
       PCM_num*PCM_grp
       PNLC_num*PNLC_grp
       RANK_num*RANK_grp
       SEX_num*SEX_grp
       SVC_num*SVC_grp
      INCAT_num*IN_CATCH
/missing list;
run;

data conus oconus;
set logmdA1;
```

```
    if conus='1' then output conus;
    else if conus='0' then output oconus;
    run;

    *==========================================================================================
====
    Start the modeling for conus.
    In the full model, all the variables put in the answer tree are used as main effects, and
    the interactions are picked based on the answer tree for conus A1 for the current quarter
    ==========================================================================================
===;

    /*The interactions below are determined based on conus A1 tree for the current quarter*/
    title3 'Check the zero cell count for CONUS before modeling';
    proc freq data=conus;
    tables
    AGE_grp5*RANK_grp*SEX_grp*eligkwn
    AGE_grp5*RANK_grp*PATC_grp*eligkwn
    AGE_grp5*SEX_grp*PATC_grp*eligkwn
    AGE_grp5*RANK_grp*PNLC_grp*eligkwn

    AGE_grp5*RANK_grp*eligkwn
    AGE_grp5*SEX_grp*eligkwn
    RANK_grp*SEX_grp*eligkwn
    AGE_grp5*PATC_grp*eligkwn
    RANK_grp*PATC_grp*eligkwn
    SEX_grp*PATC_grp*eligkwn
    AGE_grp5*PNLC_grp*eligkwn
    PNLC_grp*RANK_grp*eligkwn
    /*
    AGE_grp5*RANK_grp*SEX_grp*eligkwn
    AGE_grp5*RANK_grp*PATC_grp*eligkwn
    AGE_grp5*RANK_grp*IN_CATCH*eligkwn
    AGE_grp5*PATC_grp*PCM_grp*eligkwn
    AGE_grp5*SEX_grp*TRICPLUS*eligkwn

    AGE_grp5*RANK_grp*eligkwn
    AGE_grp5*SEX_grp*eligkwn
    RANK_grp*SEX_grp*eligkwn
    AGE_grp5*PATC_grp*eligkwn
    RANK_grp*PATC_grp*eligkwn
    AGE_grp5*IN_CATCH*eligkwn
    RANK_grp*IN_CATCH*eligkwn
    AGE_grp5*PCM_grp*eligkwn
    PCM_grp*PATC_grp*eligkwn
    AGE_grp5*TRICPLUS*eligkwn
    SEX_grp*TRICPLUS*eligkwn
    */
    /missing list sparse;
    run;

    **************
    After checking the freqs above for the cells with zero count, we decided to do the following:
    1. Move cases into a different group to avoid the zero cell count
    2. Use NADD as reference group for PATC_grp
    *************;

    data conus;
    set conus;

    age_grp5_old=age_grp5;
    rank_grp_old=rank_grp;


    if age_grp5='2' and rank_grp='W45O45678910' and patc_grp='NADD' then do;
      rank_grp='W123O123';
      rank_num=3;
      flag1=1;
    end;

    if age_grp5='5' and rank_grp='W123O123' and patc_grp='DEPACT' then do;
      age_grp5='4';
      age_num5=4;
```

```
  flag2=1;
end;

if age_grp5='5' and rank_grp='E56789101112' and pnlc_grp='Grd/Resv' then do;
  age_grp5='4';
  age_num5=4;
  flag4=1;
end;

if age_grp5='5' and patc_grp in ('DEPACT') then do;
  age_grp5='4';
  age_num5=4;
  flag3=1;
end;
run;

title3 'Check the coding above for regrouping';
proc freq data=conus;
tables age_grp5*rank_grp*patc_grp*flag1*rank_grp_old
       age_grp5*rank_grp*patc_grp*flag2*age_grp5_old
       age_grp5*patc_grp*pcm_grp*flag3*age_grp5_old
       age_grp5*rank_grp*pnlc_grp*flag4*age_grp5_old
       age_grp5*age_num5
       rank_grp*rank_num

       /missing list;
run;

title3 'Check the zero cell count again';
proc freq data=conus;
tables
AGE_grp5*RANK_grp*SEX_grp*eligkwn
AGE_grp5*RANK_grp*PATC_grp*eligkwn
AGE_grp5*SEX_grp*PATC_grp*eligkwn
AGE_grp5*RANK_grp*PNLC_grp*eligkwn
/missing list sparse;
run;

data conus ;
set conus (drop=rank_grp_old age_grp5_old flag1-flag4);
run;

%macro Uni_Mdl_Chk_SAS(indat,var,refl);
title3 "Univariate logistic model checking in SAS for &var.";
proc logistic data=&indat. descending;
CLASS &var. (ref=&refl.)/param=ref descending;
model eligkwn=&var./Lackfit rsquare;
run;
%mend Uni_Mdl_Chk_SAS;
/*
%Uni_Mdl_Chk_SAS(conus,TNEX_grp,'N');           *df=2,(TypeIII)p=0.0358,hl=1.0000;
%Uni_Mdl_Chk_SAS(conus,AGE_grp5,'1');           *df=4,p<0.0001,hl=1.0000;
%Uni_Mdl_Chk_SAS(conus,PATC_grp,'NADD'); *df=2,p<0.0001,hl=.9999;
%Uni_Mdl_Chk_SAS(conus,PCM_grp,'NON');          *df=2,p<0.0001,hl=0.9917;
%Uni_Mdl_Chk_SAS(conus,PNLC_grp,'Other');       *df=1,p<0.0001,hl=.;
%Uni_Mdl_Chk_SAS(conus,RANK_grp,'E1234');       *df=3,p<0.0001,hl=1.0000;
%Uni_Mdl_Chk_SAS(conus,SEX_grp,'1');            *df=1,p<0.0001,hl=.;
%Uni_Mdl_Chk_SAS(conus,SVC_grp,'Army');         *df=2,p<0.0001,hl=0.9994;
%Uni_Mdl_Chk_SAS(conus,IN_CATCH,'0');           *df=1,p<0.0001,hl=.;
%Uni_Mdl_Chk_SAS(conus,TRICPLUS,'2');           *df=1,p<0.0001,hl=.;
%Uni_Mdl_Chk_SAS(conus,TRS,'2');            *df=1,p=0.0003,hl=.;
*/

%macro modelselect_conus(method= );
title3 "SAS Logistic for CONUS - &method.";
proc logistic data=conus descending;
CLASS
TNEX_grp (ref='N')
AGE_grp5 (ref='1')
PATC_grp (ref='NADD')
PCM_grp  (ref='NON')
PNLC_grp (ref='Other')
RANK_grp (ref='E1234')
```

```
     SEX_grp  (ref='1')
     SVC_grp  (ref='Army')
     IN_CATCH (ref='0')
     TRICPLUS (ref='2')
     TRS      (ref='2')/param=ref descending;
     MODEL  eligkwn =
     TNEX_grp
     AGE_grp5
     PATC_grp
     PCM_grp
     PNLC_grp
     RANK_grp
     SEX_grp
     SVC_grp
     IN_CATCH
     TRICPLUS
     TRS

     AGE_grp5*RANK_grp*SEX_grp
     AGE_grp5*RANK_grp*PATC_grp
     AGE_grp5*SEX_grp*PATC_grp
     AGE_grp5*RANK_grp*PNLC_grp

     AGE_grp5*RANK_grp
     AGE_grp5*SEX_grp
     RANK_grp*SEX_grp
     AGE_grp5*PATC_grp
     RANK_grp*PATC_grp
     SEX_grp*PATC_grp
     AGE_grp5*PNLC_grp
     PNLC_grp*RANK_grp

     /Lackfit rsquare /*details*/ hierarchy=single selection=&method. slentry=0.15 slstay=0.20;
     OUTPUT OUT=out_conus PREDICTED=predicted;
     run;
     %mend modelselect_conus;

     %modelselect_conus(method=backward); /*H-L=0.0184*/

     ******************
     Check the SUDAAN fit for the the model above
     ******************;
     proc sort data=conus;
     by STRAT_nm;
     run;

     %macro Uni_Mdl_Chk_SUD(indat,var,lev,refl,frm);
     title3 "Univariate logistic model checking in SUDAAN for &var.";
     proc rlogist data=&indat design=STRWR filetype=SAS;
     NEST STRAT_nm/missunit;
     weight bwt;
     SUBGROUP &var. ;
     LEVELS     &lev.;
     REFLEVEL &var.=&refl.;
     MODEL  eligkwn =&var. ;
     idvar MPRID_nm;
     print beta sebeta t_beta p_beta
     HLCHISQ   HLCHIDF   HLCHIP   HLWALDF   HLWALDDF   HLWALDP   HLSATF   HLSATDF   HLSATP   DF   WALDCHI
WALDCHP/betafmt=f7.3 sebetafmt=f7.3 WALDCHIFMT=F8.2;
     rformat &var. &frm.;
     run;
     %mend Uni_Mdl_Chk_SUD;

     /*
     %Uni_Mdl_Chk_SUD(conus,TNEX_num,3,1,FMT_TNEX.);         *df=2,p=0.0006,hl_chi=1.0000;
     %Uni_Mdl_Chk_SUD(conus,AGE_num5,5,1,FMT_AGE.);          *df=4,p=0.0000,hl_chi=1.0000;
     %Uni_Mdl_Chk_SUD(conus,PATC_num,3,3,FMT_PATC.);         *df=2,p=0.0000,hl_chi=1.0000;
     %Uni_Mdl_Chk_SUD(conus,PCM_num,3,1,FMT_PCM.);           *df=2,p=0.0000,hl_chi=1.0000;
     %Uni_Mdl_Chk_SUD(conus,PNLC_num,2,1,FMT_PNLC.);         *df=1,p=0.0000,hl_chi=1.0000;
     %Uni_Mdl_Chk_SUD(conus,RANK_num,4,1,FMT_RANK.);         *df=3,p=0.0000,hl_chi=1.0000;
     %Uni_Mdl_Chk_SUD(conus,SEX_num,2,1,FMT_SEX.);           *df=1,p=0.0000,hl_chi=1.0000;
     %Uni_Mdl_Chk_SUD(conus,SVC_num,3,1,FMT_SVC.);           *df=2,p=0.0000,hl_chi=1.0000;
     %Uni_Mdl_Chk_SUD(conus,INCAT_num,2,1,FMT_INCT.);        *df=1,p=0.0000,hl_chi=1.0000;
```

```
    %Uni_Mdl_Chk_SUD(conus,TRICPLUS,2,2,FMT_PLUS.);     *df=1,p=0.0000,hl_chi=1.0000;
    %Uni_Mdl_Chk_SUD(conus,TRS,2,2,FMT_TRS.);           *df=1,p=0.0000,hl_chi=1.0000;
    */

    /*
Summary of Stepwise Selection

                                                    Summary of Stepwise Selection

                                    Effect                                                          Number
Score          Wald
        Step    Entered                     Removed                        DF           In     Chi-
Square    Chi-Square    Pr > ChiSq

           1     AGE_grp5                                                    4             1
6062.6782                     <.0001
           2     PATC_grp                                                    2             2
419.8947                     <.0001
           3     RANK_grp                                                    3             3
387.7721                     <.0001
           4     AGE_grp5*RANK_grp                                          12             4
109.8436                     <.0001
           5     SVC_grp                                                     2             5
55.7672                     <.0001
           6     AGE_grp5*PATC_grp                                           6             6
67.5644                     <.0001
           7     TRS                                                         1             7
49.8210                     <.0001
           8     PCM_grp                                                     2             8
63.0923                     <.0001
           9     SEX_grp                                                     1             9
32.2347                     <.0001
          10     PATC_grp*SEX_grp                                            2            10
70.3461                     <.0001
          11     in_catch                                                    1            11
31.8627                     <.0001
          12     RANK_grp*SEX_grp                                            3            12
20.4669                     0.0001
          13     AGE_grp5*SEX_grp                                            4            13
21.3019                     0.0003


    THESE ARE RESULTS OF BACKWARD SELECTION TO GET MORE VARIABLES

                   Type 3 Analysis of Effects

                                          Wald
    Effect                     DF    Chi-Square    Pr > ChiSq

    AGE_grp5                    4       31.4666        <.0001
    PATC_grp                    2        0.6238        0.7321
    PCM_grp                     2       75.3590        <.0001
    PNLC_grp                    1        7.5545        0.0060
    RANK_grp                    3        4.3556        0.2255
    SEX_grp                     1        9.1172        0.0025
    SVC_grp                     2       60.2465        <.0001
    in_catch                    1       28.5994        <.0001
    TRS                         1       65.0344        <.0001
    AGE_gr*PATC_g*RANK_g       18       61.0707        <.0001
    AGE_gr*PATC_g*SEX_gr        6        9.5688        0.1440
    AGE_gr*PNLC_g*RANK_g        9       15.0815        0.0887
    AGE_grp5*RANK_grp          11        7.9213        0.7203
    AGE_grp5*SEX_grp            4       20.7835        0.0003
    RANK_grp*SEX_grp            3        9.8510        0.0199
    AGE_grp5*PATC_grp           6        9.7862        0.1340
    PATC_grp*RANK_grp           5        5.9949        0.3067
    PATC_grp*SEX_grp            2        5.7305        0.0570
    AGE_grp5*PNLC_grp           3       10.7779        0.0130
    PNLC_grp*RANK_grp           3        9.5288        0.0230

    */
    title3 "The final model from SAS stepwise";
```

```
     proc rlogist data=conus design=STRWR filetype=SAS;
     NEST STRAT_nm ;
     weight bwt;
     SUBGROUP AGE_num5 PATC_num PCM_num PNLC_num RANK_num SEX_num SVC_num INCAT_num TNEX_num TRS;
     LEVELS      5        3        3      2         4        2       3       2          3      2;
     REFLEVEL AGE_num5=1 PATC_num=3 PCM_num=1 PNLC_num=1 RANK_num=1 SEX_num=1 SVC_num=1 INCAT_num=1
TNEX_num=1 TRS=2 ;
     MODEL  eligkwn =

     AGE_num5
     PATC_num
     RANK_num
     SVC_num
     TRS
     PCM_num
     SEX_num
     incat_num
     PNLC_num
     AGE_num5*RANK_num
     AGE_num5*SEX_num
     RANK_num*SEX_num
     AGE_num5*PATC_num
     PATC_num*RANK_num
     PATC_num*SEX_num
     AGE_num5*PNLC_num
     PNLC_num*RANK_num

     /*AGE_num5*PATC_num*RANK_num */ /*removed for singularity*/
     AGE_num5*PATC_num*SEX_num
     /*AGE_num5*PNLC_num*RANK_num */ /*removed for singularity*/

     ;
     idvar MPRID_nm;
     print beta sebeta t_beta p_beta
     HLCHISQ  HLCHIDF  HLCHIP  HLWALDF  HLWALDDF  HLWALDP  HLSATF  HLSATDF  HLSATP  DF  WALDCHI
WALDCHP/betafmt=f7.3 sebetafmt=f7.3 WALDCHIFMT=F8.2;
     output expected observed nest idvar /filename =pred_c filetype=sas replace;
     rformat AGE_num5 FMT_AGE.;
     rformat PATC_num FMT_PATC.;
     rformat PCM_num  FMT_PCM.;
     rformat RANK_num FMT_RANK.;
     rformat SEX_num  FMT_SEX.;
     rformat SVC_num  FMT_SVC.;
     rformat INCAT_num FMT_INCT.;
     rformat TNEX_num FMT_TNEX.;
     rformat trs FMT_TRS.;
     ;
     run; /*hl=0.81*/


     title3 "The final model from SAS stepwise - with insignificant term TNEX_num and 3-way
interaction removed";
     proc rlogist data=conus design=STRWR filetype=SAS;
     NEST STRAT_nm ;
     weight bwt;
     SUBGROUP AGE_num5 PATC_num PCM_num PNLC_num RANK_num SEX_num SVC_num INCAT_num /*TNEX_num*/
TRS;
     LEVELS      5        3        3      2         4        2       3       2          /*3*/
2;
     REFLEVEL AGE_num5=1 PATC_num=3 PCM_num=1 PNLC_num=1 RANK_num=1 SEX_num=1 SVC_num=1 INCAT_num=1
/*TNEX_num=1*/ TRS=2 ;
     MODEL  eligkwn =
     AGE_num5
     PATC_num
     RANK_num
     SVC_num
     TRS
     PCM_num
     SEX_num
     incat_num
     PNLC_num
     AGE_num5*RANK_num
     AGE_num5*SEX_num
```

```
     RANK_num*SEX_num
     AGE_num5*PATC_num
     PATC_num*RANK_num
     PATC_num*SEX_num
     /*AGE_num5*PNLC_num */ /*1st removed p=.34*/
     PNLC_num*RANK_num

     /*AGE_num5*PATC_num*RANK_num */ /*removed for singularity*/
     /*AGE_num5*PATC_num*SEX_num */ /*2nd removed p=.32
     /*AGE_num5*PNLC_num*RANK_num */ /*removed for singularity*/
     ;
     idvar MPRID_nm;
     print beta sebeta t_beta p_beta
     HLCHISQ  HLCHIDF  HLCHIP  HLWALDF  HLWALDDF  HLWALDP  HLSATF  HLSATDF  HLSATP  DF  WALDCHI
WALDCHP/betafmt=f7.3 sebetafmt=f7.3 WALDCHIFMT=F8.2;
     output expected observed nest idvar /filename =pred_c filetype=sas replace;
     rformat AGE_num5 FMT_AGE.;
     rformat PATC_num FMT_PATC.;
     rformat PCM_num  FMT_PCM.;
     rformat RANK_num FMT_RANK.;
     rformat SEX_num  FMT_SEX.;
     rformat SVC_num  FMT_SVC.;
     rformat INCAT_num FMT_INCT.;
     rformat TNEX_num FMT_TNEX.;
     rformat trs FMT_TRS.;
     ;
     run; /*hl=0.03, no warning*/
     title3 "The final model from SAS stepwise";
     proc rlogist data=conus design=STRWR filetype=SAS;
     NEST STRAT_nm ;
     weight bwt;
     SUBGROUP AGE_num5 PATC_num PCM_num PNLC_num RANK_num SEX_num SVC_num INCAT_num TNEX_num TRS;
     LEVELS      5        3        3      2         4        2       3       2          3      2;
     REFLEVEL AGE_num5=1 PATC_num=3 PCM_num=1 PNLC_num=1 RANK_num=1 SEX_num=1 SVC_num=1 INCAT_num=1
TNEX_num=1 TRS=2 ;
     MODEL  eligkwn =

     AGE_num5
     PATC_num
     RANK_num
     SVC_num
     TRS
     PCM_num
     SEX_num
     incat_num
     PNLC_num
     AGE_num5*RANK_num
     AGE_num5*SEX_num
     RANK_num*SEX_num
     AGE_num5*PATC_num
     PATC_num*RANK_num
     PATC_num*SEX_num
     AGE_num5*PNLC_num
     PNLC_num*RANK_num

     /*AGE_num5*PATC_num*RANK_num */ /*removed for singularity*/
     AGE_num5*PATC_num*SEX_num
     /*AGE_num5*PNLC_num*RANK_num */ /*removed for singularity*/

     ;
     idvar MPRID_nm;
     print beta sebeta t_beta p_beta
     HLCHISQ  HLCHIDF  HLCHIP  HLWALDF  HLWALDDF  HLWALDP  HLSATF  HLSATDF  HLSATP  DF  WALDCHI
WALDCHP/betafmt=f7.3 sebetafmt=f7.3 WALDCHIFMT=F8.2;
     output expected observed nest idvar /filename =pred_c filetype=sas replace;
     rformat AGE_num5 FMT_AGE.;
     rformat PATC_num FMT_PATC.;
     rformat PCM_num  FMT_PCM.;
     rformat RANK_num FMT_RANK.;
     rformat SEX_num  FMT_SEX.;
     rformat SVC_num  FMT_SVC.;
     rformat INCAT_num FMT_INCT.;
     rformat TNEX_num FMT_TNEX.;
```

```
    rformat trs FMT_TRS.;
    ;
    run; /*hl=0.81*/
    title3 "SAS Logistic for CONUS for the model above";
    proc logistic data=conus descending;
    CLASS
    AGE_grp5 (ref='1')
    PATC_grp (ref='NADD')
    PCM_grp  (ref='NON')
    PNLC_grp (ref='Other')
    RANK_grp (ref='E1234')
    SEX_grp  (ref='1')
    SVC_grp  (ref='Army')
    IN_CATCH (ref='0')
    TRS      (ref='2')/param=ref descending;
    MODEL  eligkwn =
    AGE_grp5
    PATC_grp
    RANK_grp
    SVC_grp
    TRS
    PCM_grp
    SEX_grp
    IN_CATCH
    PNLC_grp
    AGE_grp5*RANK_grp
    AGE_grp5*SEX_grp
    RANK_grp*SEX_grp
    AGE_grp5*PATC_grp
    PATC_grp*RANK_grp
    PATC_grp*SEX_grp
    AGE_grp5*PNLC_grp
    PNLC_grp*RANK_grp

    /*AGE_grp5*PATC_grp*RANK_grp */ /*removed for singularity*/
    AGE_grp5*PATC_grp*SEX_grp
    /*AGE_grp5*PNLC_grp*RANK_grp */ /*removed for singularity*/
    /Lackfit rsquare;
    run; /*hl=0.119 */

    *==========================================================================================
====
    Start the modeling for OCONUS
    In the full model, all the variables put in the answer tree are used as main effects, and
    the interactions are picked based on the tree for Oconus A1 for the current quarter
    ==========================================================================================
===;

    /*The interactions below are determined based on the oconus A1 tree for the current quarter*/
    title3 'Check the zero cell count for OCONUS before modeling';
    proc freq data=oconus;
    tables
    AGE_grp5*PCM_grp*SEX_grp*eligkwn
    AGE_grp5*PCM_grp*PATC_grp*eligkwn
    AGE_grp5*RANK_grp*SEX_grp*eligkwn
    AGE_grp5*PATC_grp*SEX_grp*eligkwn

    AGE_grp5*PCM_grp*eligkwn
    AGE_grp5*SEX_grp*eligkwn
    PCM_grp*SEX_grp*eligkwn
    PCM_grp*PATC_grp*eligkwn
    AGE_grp5*PATC_grp*eligkwn
    AGE_grp5*RANK_grp*eligkwn
    RANK_grp*SEX_grp*eligkwn
    PATC_grp*SEX_grp*eligkwn

    /missing list sparse;
    run;


    /*Based on the crosstabs above, since there are kind of many cases with zero cell count
problem, we collapse rank as follows:
    E1234->E56789101112,  W123O123->W45O45678910*/
```

```
data oconus;
set oconus;
rank_grp_old=rank_grp;

if rank_grp in ('E1234', 'E56789101112') then rank_grp='E1_12';
else if rank_grp in ('W123O123', 'W45O45678910') then rank_grp='W1_5O1_10';

if RANK_grp='E1_12' then RANK_num=1;
else if RANK_grp= 'W1_5O1_10' then RANK_num=2 ;
run;


title3 'Check the collapsements for rank';
proc freq data=oconus;
tables rank_grp_old*rank_grp rank_grp*rank_num/missing list;
run;

data oconus;
   set oconus(drop=rank_grp_old);
run;

title3 'Check the zero cell count for OCONUS before modeling';
proc freq data=oconus;
tables
AGE_grp5*PCM_grp*SEX_grp*eligkwn
AGE_grp5*PCM_grp*PATC_grp*eligkwn
AGE_grp5*RANK_grp*SEX_grp*eligkwn
AGE_grp5*PATC_grp*SEX_grp*eligkwn

AGE_grp5*PCM_grp*eligkwn
AGE_grp5*SEX_grp*eligkwn
PCM_grp*SEX_grp*eligkwn
PCM_grp*PATC_grp*eligkwn
AGE_grp5*PATC_grp*eligkwn
AGE_grp5*RANK_grp*eligkwn
RANK_grp*SEX_grp*eligkwn
PATC_grp*SEX_grp*eligkwn
/missing list sparse;
run;

/* Put the cases with the zell cell count to other groups*/
data oconus;
set oconus;

age_grp5_old=age_grp5;
PCM_grp_old=PCM_grp;

if AGE_grp5='1' and PCM_grp='CIV' and PATC_grp='ACTDTY' then do;
PCM_grp='MTF';
PCM_num=3;
flag1=1;
end;

/*
if AGE_grp5='5' and pcm_grp='MTF' and RANK_grp='E1_12' then do;
  AGE_grp5='4';
  AGE_num5=4;
  flag1=1;
  end;
else if AGE_grp5 ='5' and PCM_grp='NON' and RANK_grp='W1_5O1_10' then do;
  AGE_grp5='4';
  AGE_num5=4;
  flag2=1;
  end;
else if AGE_grp5 ='5' and PCM_grp='NON' and PNLC_grp='Grd/Resv' then do;
  AGE_grp5='4';
  AGE_num5=4;
  flag3=1;
  end;
*/
else if AGE_grp5 ='5' and PATC_grp in ('ACTDTY','DEPACT') then do;
  AGE_grp5='4';
```

```
  AGE_num5=4;
  flag4=1;
  end;

run;

title3 'Check the regrouping';
proc freq data=oconus;
tables
AGE_grp5*PCM_grp*SEX_grp*eligkwn
AGE_grp5*PCM_grp*PATC_grp*eligkwn
AGE_grp5*RANK_grp*SEX_grp*eligkwn
AGE_grp5*PATC_grp*SEX_grp*eligkwn

      age_grp5*age_num5
       pcm_grp*pcm_num
       age_grp5*patc_grp*pcm_grp*flag1*pcm_grp_old
       /*age_grp5*pcm_grp*rank_grp*flag1*flag2*age_grp5_old
       age_grp5*pcm_grp*pnlc_grp*flag3*age_grp5_old*/
       age_grp5*patc_grp*flag4*age_grp5_old
/missing list;
run;

title3 'Check to see if we still have zero cell counts probelms ';
proc freq data=oconus;
tables
AGE_grp5*PCM_grp*SEX_grp*eligkwn
AGE_grp5*PCM_grp*PATC_grp*eligkwn
AGE_grp5*RANK_grp*SEX_grp*eligkwn
AGE_grp5*PATC_grp*SEX_grp*eligkwn
/missing list sparse;
run;

data oconus ;
set oconus(drop=age_grp5_old flag1 flag4 );
run;

/*
%Uni_Mdl_Chk_SAS(oconus,AGE_grp5,'1');          *df=4,p<0.0001,hl=1.0000;
%Uni_Mdl_Chk_SAS(oconus,PATC_grp,'NADD');       *df=2,p<0.0001,hl=.9999;
%Uni_Mdl_Chk_SAS(oconus,PCM_grp,'NON');         *df=2,p<0.0001,hl=1.0000;
%Uni_Mdl_Chk_SAS(oconus,PNLC_grp,'Other');      *df=1,p=0.0006,hl=.;
%Uni_Mdl_Chk_SAS(oconus,RANK_grp,'E1_12');      *df=1,p<0.0001,hl=.;
%Uni_Mdl_Chk_SAS(oconus,SEX_grp,'1');           *df=1,p<0.0001,hl=.;
%Uni_Mdl_Chk_SAS(oconus,SVC_grp,'Army');    *df=2,p=0.0005,hl=0.9998;
%Uni_Mdl_Chk_SAS(oconus,IN_CATCH,'0');          *df=1,p<0.0001,hl=.;
%Uni_Mdl_Chk_SAS(conus,TRICPLUS,'2');           *df=1,p<0.0001,hl=.;
%Uni_Mdl_Chk_SAS(conus,TRS,'2');             *df=1,p=0.0003,hl=.;
*/

/*The interactions below are determined based on the oconus A1 tree for the current quarter*/
%macro modelselect_oconus(method=);
title3 "SAS Logistic for OCONUS - &method.";
proc logistic data=oconus descending;
CLASS
AGE_grp5 (ref='1')
PATC_grp (ref='NADD')
PCM_grp  (ref='NON')
PNLC_grp (ref='Other')
RANK_grp (ref='E1_12')
SEX_grp  (ref='1')
SVC_grp  (ref='Army')
IN_CATCH (ref='0')
TRICPLUS (ref='2')
TRS      (ref='2')/param=ref descending;
MODEL  eligkwn =
AGE_grp5
PATC_grp
PCM_grp
PNLC_grp
RANK_grp
SEX_grp
SVC_grp
```

```
IN_CATCH
TRICPLUS
TRS

AGE_grp5*PCM_grp*SEX_grp
AGE_grp5*PCM_grp*PATC_grp
AGE_grp5*RANK_grp*SEX_grp
AGE_grp5*PATC_grp*SEX_grp

AGE_grp5*PCM_grp
AGE_grp5*SEX_grp
PCM_grp*SEX_grp
PCM_grp*PATC_grp
AGE_grp5*PATC_grp
AGE_grp5*RANK_grp
RANK_grp*SEX_grp
PATC_grp*SEX_grp

/Lackfit rsquare /*details*/ hierarchy=single selection=&method. slentry=0.15 slstay=0.20;
OUTPUT OUT=out_oconus PREDICTED=predicted;
run;
%mend modelselect_oconus;

%modelselect_oconus(method=backward); /*hl=0.9943*/

******************
Check the SUDAAN fit for the the model above
******************;
proc sort data=oconus;
by strat_nm;run;

/*
%Uni_Mdl_Chk_SUD(oconus,AGE_num5,5,1,FMT_AGE.);         *df=4,p=0.0000,hl_chi=1.0000;
%Uni_Mdl_Chk_SUD(oconus,PATC_num,3,3,FMT_PATC.);        *df=2,p=0.0000,hl_chi=1.0000;
%Uni_Mdl_Chk_SUD(oconus,PCM_num,3,1,FMT_PCM.);          *df=2,p=0.0000,hl_chi=1.0000;
%Uni_Mdl_Chk_SUD(oconus,PNLC_num,2,1,FMT_PNLC.);        *df=1,p=0.0001,hl_chi=1.0000;
%Uni_Mdl_Chk_SUD(oconus,RANK_num,2,1,FMT_RANK.);        *df=1,p=0.0000,hl_chi=1.0000;
%Uni_Mdl_Chk_SUD(oconus,SEX_num,2,1,FMT_SEX.);          *df=1,p=0.0011,hl_chi=1.0000;
%Uni_Mdl_Chk_SUD(oconus,SVC_num,3,1,FMT_SVC.);          *df=2,p=0.0275,hl_chi=1.0000;
%Uni_Mdl_Chk_SUD(oconus,INCAT_num,2,1,FMT_INCT.);       *df=1,p=0.0000,hl_chi=1.0000;
%Uni_Mdl_Chk_SUD(oconus,TRICPLUS,2,2,FMT_PLUS.);    *df=1,p=0.3841,hl_chi=1.0000;
%Uni_Mdl_Chk_SUD(oconus,TRS,2,2,FMT_TRS.);          *df=1,p=0.1572,hl_chi=1.0000;
*/

/*
                                                    Summary of Stepwise Selection

                                    Effect                                                          Number
Score          Wald
        Step    Entered                     Removed                        DF           In     Chi-
Square    Chi-Square    Pr > ChiSq

           1     AGE_grp5                                                    4             1
864.9138                      <.0001
           2     PCM_grp                                                     2             2
68.1806                      <.0001
           3     PATC_grp                                                    2             3
38.3696                      <.0001
           4     RANK_grp                                                    1             4
33.0814                      <.0001
           5     TRS                                                         1             5
27.0935                      <.0001
           6     SVC_grp                                                     2             6
25.0812                      <.0001
           7     SEX_grp                                                     1             7
12.0576                      0.0005
           8     AGE_grp5*RANK_grp                                           4             8
17.1512                      0.0018
           9     AGE_grp5*PATC_grp                                           6             9
17.2148                      0.0085
          10     TRICPLUS                                                    1            10
6.0731                      0.0137
```

```
          11                                    TRICPLUS                          1             9
0.0029        0.9572


    BACKWARD SELECTION TO GET MORE VARIABLES

                  Type 3 Analysis of Effects

                                          Wald
    Effect                     DF    Chi-Square    Pr > ChiSq

    AGE_grp5                    4        9.4850        0.0501
    PATC_grp                    2       18.4606        <.0001
    PCM_grp                     2        1.3938        0.4981
    RANK_grp                    1        5.0757        0.0243
    SEX_grp                     1        1.7144        0.1904
    SVC_grp                     2       23.5004        <.0001
    in_catch                    1        3.9950        0.0456
    TRS                         1       23.0430        <.0001
    AGE_gr*PATC_g*PCM_gr       12       21.8826        0.0389
    AGE_gr*RANK_g*SEX_gr        4       12.9376        0.0116
    AGE_gr*PATC_g*SEX_gr        6        9.4755        0.1485
    AGE_grp5*PCM_grp            7        3.4996        0.8353
    AGE_grp5*SEX_grp            4        3.7864        0.4357
    PCM_grp*SEX_grp             2       12.5617        0.0019
    PATC_grp*PCM_grp            3        1.6429        0.6497
    AGE_grp5*PATC_grp           6        7.1436        0.3078
    AGE_grp5*RANK_grp           4        2.5658        0.6329
    RANK_grp*SEX_grp            1        0.9746        0.3235
    PATC_grp*SEX_grp            2        6.4231        0.0403



    */


    title3 "The final model from SAS stepwise ";
    proc rlogist data=oconus design=STRWR filetype=SAS;
    NEST STRAT_nm ;
    weight bwt;
    SUBGROUP AGE_num5 PATC_num PCM_num PNLC_num  RANK_num SVC_num TRICPLUS  TRS;
    LEVELS      5         3         3      2         2         3          2       2;
    REFLEVEL AGE_num5=1 PATC_num=3 PCM_num=1 PNLC_num=1 RANK_num=1 SVC_num=1 TRICPLUS=2 TRS=2 ;
    MODEL  eligkwn =
    AGE_num5
    PATC_num
    PCM_num
    RANK_num
    SEX_num
    SVC_num
    INCAT_num
    TRS

    AGE_num5*PATC_num*SEX_num
    AGE_num5*PATC_num*PCM_num
    AGE_num5*RANK_num*SEX_num

    AGE_num5*PCM_num
    AGE_num5*SEX_num
    PCM_num*SEX_num
    PATC_num*PCM_num
    AGE_num5*PATC_num
    AGE_num5*RANK_num
    RANK_num*SEX_num
    PATC_num*SEX_num

    ;
    idvar MPRID_nm;
    print beta sebeta t_beta p_beta
    HLCHISQ  HLCHIDF  HLCHIP  HLWALDF  HLWALDDF  HLWALDP  HLSATF  HLSATDF  HLSATP  DF  WALDCHI
WALDCHP/betafmt=f7.3 sebetafmt=f7.3 WALDCHIFMT=F8.2;
    output expected observed nest idvar /filename =pred_o filetype=sas replace;
    rformat AGE_num5 FMT_AGE.;
```

```
rformat PATC_num FMT_PATC.;
rformat PCM_num  FMT_PCM.;
rformat PNLC_num  FMT_PNLC.;
rformat RANK_num FMT_RK.;
rformat SVC_num  FMT_SVC.;
rformat INCAT_num FMT_INCT.;
rformat trs FMT_TRS.;
run; /*no warning, h-l=0.3403 */

title3 "The final model from SAS stepwise";
/*everything is singular - model is useless */
proc rlogist data=oconus design=STRWR filetype=SAS;
NEST STRAT_nm ;
weight bwt;
SUBGROUP AGE_num5 PATC_num PCM_num PNLC_num  RANK_num SVC_num TRICPLUS  TRS;
LEVELS      5        3        3      2        2        3          2       2;
REFLEVEL AGE_num5=1 PATC_num=3 PCM_num=1 PNLC_num=1 RANK_num=1 SVC_num=1 TRICPLUS=2 TRS=2 ;
MODEL  eligkwn =
AGE_num5
PATC_num
PCM_num
RANK_num
SEX_num
SVC_num
/*INCAT_num */ /*4th removed p=.23 */
TRS

/*AGE_num5*PATC_num*SEX_num */ /*removed for singularity*/
/*AGE_num5*PATC_num*PCM_num */ /*removed for singularity*/
/*AGE_num5*RANK_num*SEX_num */ /*removed for singularity*/

/*AGE_num5*PCM_num */ /*removed for singularity */
/*AGE_num5*SEX_num */ /*2nd removed p=.75*/
PCM_num*SEX_num
PATC_num*PCM_num
AGE_num5*PATC_num
AGE_num5*RANK_num
/*RANK_num*SEX_num */ /*first removed p=.88*/
/*PATC_num*SEX_num */ /*3rd removed p=.63*/
;
idvar MPRID_nm;
print beta sebeta t_beta p_beta
HLCHISQ  HLCHIDF  HLCHIP  HLWALDF  HLWALDDF  HLWALDP  HLSATF  HLSATDF  HLSATP  DF  WALDCHI
WALDCHP/betafmt=f7.3 sebetafmt=f7.3 WALDCHIFMT=F8.2;
output expected observed nest idvar /filename =pred_o filetype=sas replace;
rformat AGE_num5 FMT_AGE.;
rformat PATC_num FMT_PATC.;
rformat PCM_num  FMT_PCM.;
rformat PNLC_num  FMT_PNLC.;
rformat RANK_num FMT_RK.;
rformat SVC_num  FMT_SVC.;
rformat INCAT_num FMT_INCT.;
rformat trs FMT_TRS.;
run; /*no warning, h-l=0.73 */

title3 "SAS Logistic for OCONUS";
proc logistic data=oconus descending;
CLASS
AGE_grp5 (ref='1')
PATC_grp (ref='NADD')
PCM_grp  (ref='NON')
PNLC_grp (ref='Other')
RANK_grp (ref='E1_12')
SVC_grp  (ref='Army')
SEX_grp  (ref='1')
TRS      (ref='2')/param=ref descending;
MODEL  eligkwn =
AGE_grp5
PATC_grp
PCM_grp
RANK_grp
SEX_grp
SVC_grp
```

```
    TRS



    PCM_grp*SEX_grp
    PATC_grp*PCM_grp
    AGE_grp5*PATC_grp
    AGE_grp5*RANK_grp

    /Lackfit rsquare;
    run;



    *==========================================================================================
====
    Compute the unknown eligibility adjustment factor A1
    ==========================================================================================
===;

    data pred;
    set pred_c pred_o;
    run;

    proc sort data=pred;
    by mprid_nm;
    run;

    proc sort data=logmdA1;
    by mprid_nm;
    run;

    data logmdA1 only1 only2 problem;
    merge logmdA1(in=A) pred(in=B);
    by mprid_nm;
    if A and B then output logmdA1;
    else if A and NOT B then output only1;
    else if B and NOT A then output only2;
    else output problem;
    run;

    data out.logmdA1;
    set logmdA1(rename=(expected=PscoreA1) drop=MPRID_c9 stratum1);
    label TNEX_grp="Facility's TNEX region"
          PscoreA1="Propensity score for unknown eligibility adjustment";
    run;

    title3 "Contents of OUT.logmdA1";
    title4;
    proc contents data=OUT.logmdA1;
    run;

    ******************** The End ************************;
```

F.9 Q4FY2007\PROGRAMS\WEIGHTING\NEWWEIGHTS\ADJWT1.SAS - FORM THE WEIGHTING CLASSES FROM THE PROPENSITY SCORES THEN CALCULATE THE UNKNOWN ELIGIBILITY ADJUSTED WEIGHT - RUN QUARTERLY.

```
    ************************************************************************************************
****
    *** Program: L:\Q3FY2007\Programs\Weighting\NewWeights\adjwt1.sas
    ***  Purpose: .Create the weighting class cells based on the propensity from the unknown
eligibility modelling
    ***          .Calculate the unknown eligibility adjusted weight
    *** Inputs:  logmdA1.sas7bdat, framea.sd2
    *** Outputs: adjwt1.sas7bdat
    ***
    *** Note: 1)Haixia Xu 12/27/2006
    ***       2)H. Xu on 3/29/2007 for q3fy2007 weighting
    ************************************************************************************************
****;

    options ls=132 ps=79 compress=yes nocenter FORMCHAR='|-++++++++++' formdlim='~';

    %let quarter=Q4FY2007;

    libname in   v8  "L:\&quarter.\Data\afinal"; /* logmdA1.sas7bdat */
    libname in_f v6  "L:\&quarter.\Data\afinal";  /* framea.sd2 */
    libname out  v8  "L:\&quarter.\Data\afinal"; /* adjwt1.sas7bdat */

    title1 'Program: adjwt1.sas';
    title2 'Purpose: Calculate the unknown eligibility adjusted weight';

    title3 'Contents of logmdA1';
    proc contents data=in.logmdA1;
    run;

    ***Calculate the denciles within conus region;
    %macro univ_conus(inputdata=, step=, region=, var=, cellvar=, outputdata=);

    title3 "Univariate of &var. for conus=&region.";
    proc sort data=&inputdata.;by eligkwn;run;
    proc univariate data=&inputdata. plots;
    var &var.;
    where conus="&region.";
    by eligkwn;
    run;

    proc univariate data=&inputdata. noprint;
    var &var.;
    where conus="&region.";
    output out=out pctlpts =10 20 30 40 50 60 70 80 90 pctlpre=cutoff;
    run;

    title3 "Dencile points for conus=&region.";
    proc print data=out;
    var cutoff10 cutoff20 cutoff30 cutoff40 cutoff50
        cutoff60 cutoff70 cutoff80 cutoff90;
    run;

    data temp;
    set &inputdata.;
    M=1;
    where conus="&region.";
    run;

    data out;
    set out;
    M=1;
    run;

    data &outputdata.;
    merge temp out;
    by M;
    run;

    data &outputdata.;
```

```
     set &outputdata.;
     length &cellvar. $4;
     if &var.<=cutoff10 then &cellvar. = "&step.&region.01";  **10th percentile or less;
     else  if  &var.<=cutoff20  then  &cellvar.   =  "&step.&region.02";   **between  10th  and  20th
percentile;
     else  if  &var.<=cutoff30   then  &cellvar.  =  "&step.&region.03";   **between  20th  and  30th
percentile;
     else  if  &var.<=cutoff40   then  &cellvar.  =  "&step.&region.04";   **between  30th  and  40th
percentile;
     else  if  &var.<=cutoff50   then  &cellvar.  =  "&step.&region.05";   **between  40th  and  50th
percentile;
     else  if  &var.<=cutoff60   then  &cellvar.  =  "&step.&region.06";   **between  50th  and  60th
percentile;
     else  if  &var.<=cutoff70   then  &cellvar.  =  "&step.&region.07";   **between  60th  and  70th
percentile;
     else  if  &var.<=cutoff80   then  &cellvar.  =  "&step.&region.08";   **between  70th  and  80th
percentile;
     else  if  &var.<=cutoff90   then  &cellvar.  =  "&step.&region.09";   **between  80th  and  90th
percentile;
     else if &var. >cutoff90  then &cellvar. = "&step.&region.10";  **greater than 90th percentile;
     run;

     data &outputdata.;
     set &outputdata.;
     drop cutoff10 cutoff20 cutoff30 cutoff40 cutoff50
          cutoff60 cutoff70 cutoff80 cutoff90 M;
     run;

     title3 "Freq of &cellvar.*&var. for conus=&region.";
     proc freq data=&outputdata.;
     tables &cellvar. &cellvar.*&var. /missing list;
     run;

     title3 "Univariate of &var. for conus=&region. by &cellvar.";
     proc sort data=&outputdata.;by  &cellvar. eligkwn;run;
     proc univariate data=&outputdata. plots;
     var &var.;
     where conus="&region.";
     by &cellvar. eligkwn;
     run;

     %mend univ_conus;

     ***Calculate the 20th percentiles within oconus region;
     %macro univ_oconus(inputdata=, step=, region=, var=, cellvar=, outputdata=);

     title3 "Univariate of &var. for conus=&region.";
     proc sort data=&inputdata.;by eligkwn;run;
     proc univariate data=&inputdata. plots;
     var &var.;
     where conus="&region.";
     by eligkwn;
     run;

     proc univariate data=&inputdata. noprint;
     var &var.;
     where conus="&region.";
     output out=out pctlpts =20 40 60 80  pctlpre=cutoff;
     run;

     title3 "Dencile points for conus=&region.";
     proc print data=out;
     var cutoff20 cutoff40 cutoff60 cutoff80 ;
     run;

     data temp;
     set &inputdata.;
     M=1;
     where conus="&region.";
     run;

     data out;
     set out;
```

```
     M=1;
     run;

     data &outputdata.;
     merge temp out;
     by M;
     run;

     data &outputdata.;
     set &outputdata.;
     length &cellvar. $4;
     if &var.<=cutoff20 then &cellvar. = "&step.&region.01";  **20th percentile or less;
     else  if  &var.<=cutoff40  then  &cellvar.   =  "&step.&region.02";   **between  20th  and  40th
percentile;
     else  if  &var.<=cutoff60   then  &cellvar.  =  "&step.&region.03";   **between  40th  and  60th
percentile;
     else  if  &var.<=cutoff80   then  &cellvar.  =  "&step.&region.04";   **between  60th  and  80th
percentile;
     else if &var. >cutoff80  then &cellvar. = "&step.&region.05";  **greater than 80th percentile;
     run;

     data &outputdata.;
     set &outputdata.;
     drop cutoff20 cutoff40 cutoff60 cutoff80 M;
     run;

     title3 "Freq of &cellvar.*&var. for conus=&region.";
     proc freq data=&outputdata.;
     tables &cellvar. &cellvar.*&var. /missing list;
     run;

     title3 "Univariate of &var. for conus=&region. by &cellvar.";
     proc sort data=&outputdata.;by  &cellvar. eligkwn;run;
     proc univariate data=&outputdata. plots;
     var &var.;
     where conus="&region.";
     by &cellvar. eligkwn;
     run;
     %mend univ_oconus;

     ******************************************************************************
     Compute the dencile of PscoreA1 within conus/oconus region
     ******************************************************************************;
     %univ_conus(inputdata=in.logmdA1,   step=1,   region=1,      var=PscoreA1,   cellvar=Pcell_A1,
outputdata=A1conus);
     %univ_oconus(inputdata=in.logmdA1,    step=1,    region=0,    var=PscoreA1,    cellvar=Pcell_A1,
outputdata=A1oconus);

     ***combine conus/oconus together;
     data merged;
     set A1conus A1oconus;
     /*
     if Pcell_A1='1001' then Pcell_A1='1002';
     if Pcell_A1='1101' then Pcell_A1='1102';
     */
     run;

     ***************************************************************************
     * Start to calculate the adjusted weight using the weighting class method
     ***************************************************************************;

     %MACRO PROCESS(DOMAIN1, INPT);

       *** Initial Information. ***;

        title3 'FRAMEA.SD2 Count';

        proc freq data=in_f.framea;
        table enbgsmpl  / list missing;
        run;

        title3 'Weighted Counts Using BWT as the Weight - excluding fnstatus=32';
```

```
   proc freq data=&inpt.;
   table enbgsmpl fnstatus / list missing;
   weight bwt;
   run;

   title3 'Sample Counts - excluding fnstatus=32 ';

   proc freq data=&inpt.;
   table enbgsmpl fnstatus web*fnstatus/ list missing;
   run;

PROC SORT DATA=&inpt.;
BY &DOMAIN1.;
RUN;

*************************************************************************
* Calculate adjustment factor A1 for each cell.
* This is the Eligibility Determination adjustment.
*************************************************************************;
Data  cellsa1 (keep=sumbwt sumg1-sumg3 A1 cellcnt cntg1-cntg3 &domain1. )
      mpridsa1 (keep=mprid fnstatus bwt &domain1. com_geo enbgsmpl)
    ;
   SET &INPT.;
   BY &DOMAIN1.;

   IF FIRST.&DOMAIN1. THEN DO;
      CELLCNT = 0;
      cntg1   = 0;
      cntg2   = 0;
      cntg3   = 0;
      SUMBWT  = 0.0;
      SUMG1   = 0.0;
      SUMG2   = 0.0;
      SUMG3   = 0.0;
      A1 = 0.0;
   END;
   CELLCNT + 1;

   ****************************************************
   * Accumulate total weight sum
   ****************************************************;

   SUMBWT + BWT;

   ****************************************************
   * Accumulate group 1 weight sum
   ****************************************************;

   IF FNSTATUS IN (11,12) THEN
      do;
         SUMG1 + BWT;
         cntg1 + 1;
      end;

   ****************************************************
   * Accumulate group 2 weight sum
   ****************************************************;

   ELSE IF FNSTATUS in (20,31) THEN
      do;
         SUMG2 + BWT;
         cntg2 + 1;
      end;

   ****************************************************
   * Accumulate group 3 weight sum
   ****************************************************;

   ELSE IF FNSTATUS in (41,42) THEN
      do;
         SUMG3 + BWT;
         cntg3 + 1;
      end;
```

```
   RETAIN SUMBWT SUMG1-SUMG3 A1 CELLCNT cntg1-cntg3 MPRID;

   IF LAST.&DOMAIN1. THEN DO;
      A1 = SUMBWT/(SUMG1 + SUMG2);
      OUTPUT CELLSA1;
   END;

   OUTPUT MPRIDSA1;

RUN;


title3 'Check for CELLSA1 Data Set';

proc print data=cellsa1;
var &domain1. cntg1-cntg3 cellcnt sumg1-sumg3 sumbwt a1;
sum cellcnt cntg1 cntg2 cntg3 sumbwt sumg1 sumg2 sumg3;
run;

proc print data=cellsa1;
where ( a1> 7 ) or ( cntg1 + cntg2 < 15 );
var &domain1. cntg1-cntg3 cellcnt sumg1-sumg3 sumbwt a1;
sum cellcnt cntg1 cntg2 cntg3 sumbwt sumg1 sumg2 sumg3;
run;

proc univariate data=cellsa1 normal ;
var a1;
run;

proc sort data=mpridsa1;
by &domain1.;
run;

proc sort data=cellsa1;
by &domain1.;
run;

data adj_one;
merge mpridsa1 cellsa1;
by &domain1.;
if fnstatus in (11,12,20,31) then adj1 = a1;
   else adj1 = 0;
adjwt1 = adj1 * bwt;
run;

title3 'Checks for ADJ_ONE Data Set';

proc freq data=adj_one;
table &domain1.*fnstatus*adj1/ list missing;
run;

proc freq data=adj_one;
tables adjwt1*&domain1.*bwt/missing list;
where adjwt1 ~=0;
run;
/*
proc freq data=adj_one;
tables &domain1.*stratum*bwt/missing list;
where adjwt1 ~=0;
run;
*/

title3 " Checking the individuals with the largest adjwt";
proc sort data=adj_one out=sorted;
by descending adjwt1;
run;

proc print data=sorted (obs=200);
var &domain1. fnstatus BWT a1 adj1 adjwt1 ;
run;

proc means data=adj_one n sum NOPRINT;
```

```
class fnstatus;
var adjwt1;
output out=print sum=sum;
run;

Proc print data=print;
sum _freq_ sum;
where _type_=1;
run;

proc means data=adj_one n sum NOPRINT;
class enbgsmpl;
var adjwt1;
output out=print sum=sum;
run;

Proc print data=print;
sum _freq_ sum;
where _type_=1;
run;

*****************************************************************************
* Sort the original data
*****************************************************************************;

PROC SORT DATA=&INPT.;
BY MPRID;
RUN;

*****************************************************************************
* Sort the ADJ_ONE data set
*****************************************************************************;

PROC SORT DATA=adj_one;
BY MPRID;
RUN;

*****************************************************************************
* Append the adjusted weight variable (adjwt1)
*****************************************************************************;
DATA out.adjwt1;
   MERGE adj_one(in=A) &INPT.(in=B);
   BY MPRID;
   if A and B;
RUN;

title3 'Sum of Adjwt By Final Status';

proc means data=out.adjwt1 n sum NOPRINT;
class fnstatus;
var adjwt1;
output out=print sum=sum;
run;

Proc print data=print noobs;
sum _freq_ sum;
where _type_=1;
run;

title3 "Propensity Score Weighting Method - Individual Level Adjwt";
proc univariate data=out.adjwt1 normal ;
where fnstatus=11;
var adjwt1;
run;

/*Beneficiary's tnexreg*/
proc sort data=out.adjwt1;
by tnexreg;
run;

title3 "Distribution of weights by tnexreg";
proc means data=out.adjwt1 noprint ;
where fnstatus=11;
```

```
var adjwt1;
by tnexreg;
output out=out_tnex(drop=_type_ _freq_) n=n mean=mean std=stddev min=min max=max ;
run;

proc print data=out_tnex;
sum  n;
run;

/*Facility's tnexreg*/
proc sort data=out.adjwt1;
by TNEX_grp;
run;

title3 "Distribution of weights by Facility's TNEX region: TNEX_grp";
proc means data=out.adjwt1 noprint ;
where fnstatus=11;
var adjwt1;
by TNEX_grp;
output out=out_tnex(drop=_type_ _freq_) n=n mean=mean std=stddev min=min max=max ;
run;

proc print data=out_tnex;
sum  n;
run;

*************************************************************************
* Calculate final weight based on user-specified parameters.
*************************************************************************;
%MEND PROCESS;
%PROCESS(Pcell_A1, merged);
RUN;
```

F.10 Q4FY2007\PROGRAMS\WEIGHTING\NEWWEIGHTS\ADJWT2.SAS - FORM THE WEIGHTING CLASSES BASED ON THE ANSWER TREES THEN CALCULATE THE NONRESPONSE ADJUSTED WEIGHT - RUN QUARTERLY.

```
    ************************************************************************************************
****
    *** Program: L:\Q3FY2007\Programs\Weighting\NewWegihts\adjwt2.sas
    *** Purpose: Calculate the final adjusted weight
    *** Inputs:  smplA2.sas7bdat, adjwt1.sas7bdat
    *** Outputs: adjwt2.sas7bdat
    ***
    *** Note:    1)Haixia Xu 12/27/2006
    ***          2)H. Xu on 03/29/2007 for q2fy2007 weighitng
    ************************************************************************************************
****;

    options ls=132 ps=79 compress=yes nocenter FORMCHAR='|-++++++++++' formdlim='~';

    %let quarter=Q4FY2007;

    libname in   v8  "L:\&quarter.\Data\afinal"; /* smplA2.sas7bdat, adjwt1.sas7bdat */
    libname out  v8  "L:\&quarter.\Data\afinal"; /* adjwt2.sas7bdat */

    title1 'Program: adjwt2.sas';
    title2 'Purpose: Calculate the nonresponse adjusted weight';

    ***************************************************************************
    Merge smplA2 with adjwt1 to get the variable adjwt1
    ***************************************************************************;
    proc sort data=in.smplA2 out=smplA2;
    by MPRID;
    run;

    proc sort data=in.adjwt1(keep=MPRID adj1 adjwt1)
    out=adjwt1;
    by MPRID;
    run;

    data merged only1 only2 problem;
    merge smplA2(in=A) adjwt1(in=B);
    by MPRID;
    if A and B then output merged;
    else if A and NOT B then output only1;
    else if B and NOT A then output only2;
    else output problem;
    run;

    ***************************************************************************
    Since there is not much going on in 2nd stage, we decided not to do the modeling,
    and instead to create the weight cells based on the A2 tree for the current quarter.
    Pcell_A2=adjustment stage||region||cell index.
    adjustment stage: 1-unknown eligbility adjustment stage, 2 - nonresponse adjustment stage
    region: 1 - conus, 0-oconus
    cell index: 01- #of terminal nodes
    ***************************************************************************;
    data merged;
    set merged;
    length Pcell_A2 $4;
    if conus='1' then do;
      if AGE_grp5 in ('2','3') and SEX_grp in ('2') then Pcell_A2='2101';
      else if AGE_grp5 in ('2','3') and SEX_grp in ('1') then Pcell_A2='2102';
      else if AGE_grp5 in ('4','5') and PATC_grp in ('DEPACT','ACTDTY') then Pcell_A2='2103';
      else if AGE_grp5 in ('4','5') and PATC_grp in ('NADD') then Pcell_A2='2104';
      else if AGE_grp5='1' and SEX_grp='2' and RANK_grp in ('W45O45678910','W123O123','E1234') then
Pcell_A2='2105';
      else if AGE_grp5='1' and SEX_grp='2' and RANK_grp in ('E56789101112') then Pcell_A2='2106';
      else if AGE_grp5='1' and SEX_grp='1' then Pcell_A2='2107';
    end;
    else if conus='0' then do;
      if PNLC_grp in ('Other') then Pcell_A2='2001';
      else if PNLC_grp in ('Grd/Resv') then Pcell_A2='2002';
    end;
    run;
```

```
title3 'Check the construction of weighting classes';
proc freq data=merged;
tables conus*Pcell_A2/missing list;
run;

proc freq data=merged;
where conus='1';
tables conus*pcell_a2*age_grp5*patc_grp*RANK_grp*SEX_grp
        /missing list;
run;

proc freq data=merged;
where conus='0';
tables conus*pcell_a2*pnlc_grp/missing list;
run;


* Calculate nonresponse adjusted weight based on user-specified domains.
*************************************************************************;
%MACRO PROCESS(DOMAIN2, INPT);

title3 "Freq of fnstatus in &inpt.";
proc freq data=&inpt.;
tables fnstatus/missing list;
run;

proc sort data=&inpt.;
BY &domain2.;
run;

DATA CELLSA2 (KEEP= &domain2. NUMER DENOM numercnt denomcnt A2);
   set &inpt. ;
   BY &domain2.;

   IF FIRST.&domain2. THEN DO;
      A2 = 0.0;
      NUMER = 0.0;
      DENOM = 0.0;
      numercnt = 0;
      denomcnt = 0;
   END;


   RETAIN NUMER DENOM A2 numercnt denomcnt;

   IF FNSTATUS IN (11,12,20) THEN
      do;
         NUMER + adjwt1;
         numercnt + 1;
      end;

   IF FNSTATUS = 11 THEN
      do;
         DENOM + adjwt1;
         denomcnt + 1;
      end;

   IF LAST.&domain2. THEN DO;
      A2 = NUMER/DENOM;
      OUTPUT CELLSA2;
   END;

RUN;

title3 'Check for CELLSA2 Data Set';

proc print data=cellsa2;
var &domain2. numercnt denomcnt numer denom a2;
sum numer denom numercnt denomcnt;
run;

proc print data=cellsa2;
```

```
where ( a2 > 7 ) or ( denomcnt < 15 );
var &domain2. numercnt denomcnt numer denom a2;
sum numer denom numercnt denomcnt;
run;

proc univariate data=cellsa2 normal ;
var a2;
run;

proc sort data=cellsa2;
by &domain2.;
run;

data adjwt2;
merge &inpt. cellsa2;
by &domain2.;
if fnstatus = 11 then adj2 = a2;
   else adj2 = 0;
adjwt2 = adj2 * adjwt1;
label adjwt2 = 'Nonrsponse adjusted weight';
KEEP MPRID fnstatus enbgsmpl adj1 adj2 adjwt1 &domain2. a2 adjwt2 ;
run;

title3 'Check for ADJWT2 Data Set';

proc freq data=adjwt2;
table &domain2.*fnstatus*adj2 / list missing;
run;

proc means data=adjwt2 n sum NOPRINT;
class fnstatus;
var adjwt2;
output out=print sum=sum;
run;

Proc print data=print noobs;
sum _freq_ sum;
where _type_=1;
run;

proc means data=adjwt2 n sum NOPRINT;
class enbgsmpl;
var adjwt2;
output out=print sum=sum;
run;

Proc print data=print noobs;
sum _freq_ sum;
where _type_=1;
run;

data out.adjwt2;
set adjwt2;
run;

%MEND PROCESS;

%PROCESS(Pcell_A2, merged);

title3 "Contents of adjwt2";
proc contents data=out.adjwt2;
run;

********* The End ************;
```

F.11 Q4FY2007\PROGRAMS\WEIGHTING\NEWWEIGHTS\ADJWTP.SAS - ASSIGN THE FINAL ADJUSTED WEIGHT FOR EVERYBODY IN THE SAMPLE FILE - RUN QUARTERLY.

```
    ************************************************************************************
****
    *** Program: F:\Q3FY2007\Programs\Weighting\NewWeights\adjwtp.sas
    *** Purpose: assign the final adjusted weight for everybody in the sample
    *** Inputs:  adjwt1.sas7bdat adjwt2.sas7bdat, selectq.sas7bdat, framea.sd2
    *** Outputs: adjwtp.sas7bdat
    ***
    *** Note: 1)Haixia Xu 12/27/2006
    ***       2)H. Xu on 03/29/2007 for q3fy2007 weighting
    ************************************************************************************
****;

    options ls=132 ps=79 compress=yes nocenter FORMCHAR='|-++++++++++' formdlim='~';

    %let quarter=Q4FY2007;

    libname in   v8    "L:\&quarter.\Data\afinal";   /* adjwt1.sas7bdat, adjwt2.sas7bdat*/
    libname inv6   v6  "L:\&quarter.\Data\afinal"; /* selectq.sd2 */
    libname in_f   v6  "L:\&quarter.\Data\afinal"; /* framea.sd2 */
    libname out  v8    "L:\&quarter.\Data\afinal";   /* adjwtp.sas7bdat */

    title1 'Program: adjwtp.sas';
    title2 'Purpose: Calculate the final adjusted weight';

    ************************************************************************
    * Sort the original data selectq.sd2
    ************************************************************************;

    data selectq;
    set inv6.selectq
    (keep=BWT com_geo D_HEALTH dageqy ENBGSMPL FNSTATUS MPCSMPL
         MPRID PATCAT PCM PNLCATCD PNSEXCD SERVAFF SEXSMPL STRATUM SVCSMPL WEB TNEXREG);
    format _all_;
    run;

    PROC SORT DATA=selectq;
    BY MPRID;
    RUN;

    ************************************************************************
    * Sort the ADJWT1, ADJWT2, data set
    ************************************************************************;
    PROC SORT DATA=in.adjwt1(keep=mprid pcell_a1 a1 adj1 adjwt1) out=adjwt1;
    BY MPRID;
    RUN;

    PROC SORT DATA=in.adjwt2(keep=mprid pcell_a2 a2 adj2 adjwt2) out=adjwt2;
    BY MPRID;
    RUN;

    PROC SORT DATA=in.smplA1A2(keep=mprid conus tnex_grp) out=smplA1A2;
    BY MPRID;
    RUN;

    ************************************************************************
    * Append final weight variable (adjwt)
    ************************************************************************;
    DATA out.adjwtp;
       MERGE selectq adjwt1 adjwt2 smplA1A2;
       BY MPRID;
    *Assign a1, adj1, adjwt1 for fnstatus=32;
       if fnstatus = 32 then do;
         a1=1;
         adj1=1;
        adjwt1 = bwt*adj1;
       end;
    *Assign a2, adj2, adjwt2 for fnstatus in (31, 32, 41, 42);
       if fnstatus in (31, 32, 41, 42) then do;
         if fnstatus in (31, 32) then do;
```

```
      a2=1;
      adj2=1;
    end;
    else if fnstatus in (41, 42) then do;
      a2=0;
      adj2=0;
    end;
    adjwt2=adj2*adjwt1;
   end;

adjwt = adjwt2;

RUN;

title3 'Sum of Adjwt By Final Status';

proc means data=out.adjwtp n sum NOPRINT;
class fnstatus;
var adjwt;
output out=print sum=sum;
run;

Proc print data=print noobs;
sum _freq_ sum;
where _type_=1;
run;

title3 'Frame counts By enbgsmpl';
proc freq data=in_f.framea;
tables enbgsmpl/missing list;
run;

title3 'Sum of Adjwt By enbgsmpl';
proc means data=out.adjwtp n sum NOPRINT;
class enbgsmpl;
var adjwt;
output out=print sum=sum;
run;

Proc print data=print noobs;
sum _freq_ sum;
where _type_=1;
run;

title3 'Selectq.sd2 using BWT as the weight';
data selectq;
set inv6.selectq;
format _all_;
run;

proc means data=selectq n sum NOPRINT;
class fnstatus;
var bwt;
output out=print sum=sum;
run;

Proc print data=print noobs;
sum _freq_ sum;
where _type_=1;
run;

proc means data=selectq  n sum NOPRINT;
class enbgsmpl;
var bwt;
output out=print sum=sum;
run;

Proc print data=print noobs;
sum _freq_ sum;
where _type_=1;
run;

title3 'Checks for Adjwt Dataset';
```

```
proc sort data=out.adjwtp out=chk;
by pcell_a1 pcell_a2 fnstatus;
run;

data sub_chk;
set chk(keep = com_geo stratum pcell_a1 pcell_a2 fnstatus bwt adj1 adj2 adjwt);
by pcell_a1 pcell_a2 fnstatus;
prodadjs = adj1 * adj2;
retain cellcnt sumadjwt;
if first.fnstatus then
   do;
      cellcnt = 1;
      sumadjwt = adjwt;
   end;
   else
      do;
         cellcnt = cellcnt +1;
         sumadjwt = sumadjwt + adjwt;
      end;
if last.fnstatus then output sub_chk;
run;

proc print data=sub_chk noobs;
var pcell_a1 pcell_a2 fnstatus bwt adj1 adj2 prodadjs adjwt cellcnt sumadjwt;
sum cellcnt sumadjwt;
run;

proc freq data=sub_chk noprint;
tables prodadjs/missing list out=prodadjs;
run;

proc univariate data=prodadjs normal ;
var prodadjs;
run;

title3 "Individual Level Adjwt";
proc univariate data=out.adjwtp normal ;
where fnstatus=11;
var adjwt;
run;

title3 " Checking the individuals with the largest adjwt";
proc sort data=out.adjwtp out=sorted;
by descending adjwt;
run;

data sorted;
set sorted;
prodadjs=a1*a2;
run;

proc print data=sorted (obs=200);
var stratum pcell_a1 pcell_a2 BWT fnstatus a1 adj1 adjwt1 a2 adj2 adjwt prodadjs;
run;

data OUT.adjwtp;
set OUT.adjwtp;
drop a1 a2 ;
run;

*tnexreg;
proc sort data=out.adjwtp;
by tnexreg;
run;

title3 "Distribution of weights by tnexreg";
proc means data=out.adjwtp noprint ;
where fnstatus=11;
var adjwt;
by tnexreg;
output out=out_tnex(drop=_type_ _freq_) n=n mean=mean std=stddev min=min max=max ;
run;
```

```
proc print data=out_tnex;
sum  n;
run;

title3 "Contents of OUT.adjwtp";
proc contents data=out.adjwtp;
run;


************ The End **************;
```

F.12.A Q4FY2007\PROGRAMS\WEIGHTING\NEWWEIGHTS\POSTWT.SAS - POSTSTRATIFY THE WEIGHTS - RUN QUARTERLY.

```
*****************************************************************************
*** Project: 2007 Health Care Survey of DoD Beneficiaries - Adult
*** Purpose: Do the poststratification
***
*** Program: L:\Q3FY2007\Programs\weighting\NewWeights\postwt.sas
***
*** Inputs:  framea.sd2: the frame file
***          adjwtp.sas7bdat - weighted survey data
***
*** Outputs: postwt.sas7bdat: final weight data after poststratification
*** Written: 1) Haixia Xu on 12/27/2006
*** Note:     1)Do the poststratification to force weighted counts to population counts in
certain domain.
***          2)H. Xu on 03/29/2007 for q3fy2007 weighitng
***
*****************************************************************************;

*** Set up options. ***;
options ls=132 ps=79 compress=no nocenter;* obs=10;* mprint mlogic symbolgen;

%let quarter = Q4FY2007;

*** Set up the input and output paths. ***;
libname in   v8  "L:\&quarter.\Data\AFinal"; /* adjwtp.sas7bdat */
libname inv6  v6  "L:\&quarter.\Data\AFinal";  /* framea.sd2 */
libname out  v8  "L:\&quarter.\Data\AFinal"; /* postwt.sas7bdat */

%include "L:\&quarter.\Programs\Weighting\NewWeights\calpoststr.sas";
%include "L:\&quarter.\Programs\Weighting\NewWeights\design_effects_unequal_weights.sas";

***Sample***;
data framea;
set inv6.framea;
length postcell $5;
postcell=group||com_geo;
***facility TNEX region***;
length TNEX_grp $1;
if d_health in ('00', '13', '14', '15') then TNEX_grp='O';
else if d_health in ('17', '01','05') then TNEX_grp='N';
else if d_health in ('18','04') then TNEX_grp='S';
else if d_health in ('19','08','11') then TNEX_grp='W';
*Correct the TNEX regions for com_geo 0047, 9001, 9002, 9003, 9004:
All the cases in the same com_geo should be in the same TNEX region, which is the region of the
com_geo;
if COM_GEO = '0047' then TNEX_grp='S';
else if COM_GEO = '9001' then TNEX_grp='N';
else if COM_GEO = '9002' then TNEX_grp='S';
else if COM_GEO = '9003' then TNEX_grp='W';
else if COM_GEO = '9004' then TNEX_grp='O';

***CONUS region***;
length conus $1;
if TNEX_grp ='O' then conus='0';
else if TNEX_grp in ('N', 'S', 'W') then conus='1';
run;

proc freq data=framea;
tables postcell*group*com_geo*stratum/missing list;
run;

proc sort data=framea;
by MPRID;
run;

proc sort data=in.adjwtp out=adjwt;
by MPRID;
run;

data adjwt;
```

```
merge adjwt(in=A) framea(in=B) ;
by MPRID;
if A and B;
run;

*****************************************************************************
*** Do the Poststratification
*****************************************************************************;
options compress=yes;
%calpoststr(smpldata=adjwt,   frmedata=framea,   domain=postcell,   preadjwt=adjwt,   psratio=ps,
postwt=postwt, outdata=OUT.postwt);

*****************************************************************************
*** Compare the weighted counts and the population counts by the domains
*****************************************************************************;
options compress=no;
%macro comparecnt(smpldata=, frmedata=, domain=, weight=);

proc freq data=&smpldata. NOPRINT;
tables &domain./missing list out=weight_s(rename=(count=wtcnt) drop=percent);
weight &weight.;
run;

proc freq data=&frmedata. NOPRINT;
tables &domain./missing list out=unweight_f(rename=(count=popcnt) drop=percent);
run;

data cnt_sf;
merge weight_s(in=A) unweight_f(in=B);
by &domain.;
diff = wtcnt - popcnt;
reldiff=diff/popcnt;
if A and B;
run;

proc print data=cnt_sf;
sum wtcnt popcnt diff;
run;

proc univariate data=cnt_sf;
var diff reldiff;
run;

%mend comparecnt;

title3 'Check to see if the poststratification is done correctly';
%comparecnt(smpldata=in.postwt, frmedata=framea, domain=postcell, weight=postwt);
title3 'Compare the weighted count and the frame count by the different domains';
%comparecnt(smpldata=in.postwt, frmedata=framea, domain=group, weight=postwt);
%comparecnt(smpldata=in.postwt, frmedata=framea, domain=TNEX_grp, weight=postwt);
%comparecnt(smpldata=in.postwt, frmedata=framea, domain=PCM, weight=postwt);
%comparecnt(smpldata=in.postwt, frmedata=framea, domain=enbgsmpl,weight=postwt);
%comparecnt(smpldata=in.postwt, frmedata=framea, domain=patcat, weight=postwt);
%comparecnt(smpldata=in.postwt, frmedata=framea, domain=stratum, weight=postwt);
%comparecnt(smpldata=in.postwt, frmedata=framea, domain=com_geo, weight=postwt);


title3 'Compare the weighted count and the frame count by TNEX_grp*PCM';
proc freq data=in.postwt NOPRINT;
tables TNEX_grp*PCM/missing list out=weight_s(rename=(count=wtcnt) drop=percent);
weight postwt;
run;

proc freq data=framea NOPRINT;
tables TNEX_grp*PCM/missing list out=unweight_f(rename=(count=popcnt) drop=percent);
run;

data cnt_sf;
merge weight_s(in=A) unweight_f(in=B);
by TNEX_grp PCM;
diff = wtcnt - popcnt;
if A and B;
run;
```

```
proc print data=cnt_sf;
sum wtcnt popcnt diff;
run;

proc univariate data=cnt_sf;
var diff;
run;

*****************************************************************************
*** Compare the weighted sum before and after the poststratification
*****************************************************************************;

%macro procmeans(weightvar=, classvar=);
proc means data=OUT.postwt noprint;
class &classvar.;
var &weightvar.;
output out=out sum=/autoname;
run;

data print;
set out;
where _type_=1;
run;

title3 "weighted info by &classvar. using &weightvar. as weight";
proc print data=print;
sum _freq_  bwt_sum adjwt1_sum adjwt2_sum adjwt_sum postwt_sum;
run;
%mend procmeans;

%procmeans(weightvar= bwt adjwt1 adjwt2 adjwt postwt, classvar=fnstatus);
*%procmeans(weightvar= bwt adjwt1 adjwt2 adjwt postwt, classvar=stratum);

*****************************************************************************
*** Output the datasets
*****************************************************************************;

options compress=yes;

data out.postwt;
set out.postwt(drop=adjwt );
label  ENBGSMPL ='ENBGSMPL - Beneficiary/Enrollment Status'
       PCM = 'Primary care Manager Code';
run;

*****************************************************************************
*** Calculate the Design Effects
*****************************************************************************;

**create dataset of completes only;
data postwt_fnl;
set out.postwt;
where fnstatus=11;
run;

%design_effects_unequal_weights ( postwt_fnl, postcell,  postwt, deff_overall, deff_postcell );
%design_effects_unequal_weights ( postwt_fnl, com_geo,  postwt, deff_overall, deff_cac );
%design_effects_unequal_weights ( postwt_fnl, enbgsmpl, postwt, deff_overall, deff_enb );
%design_effects_unequal_weights ( postwt_fnl, tnexreg,  postwt, deff_overall, deff_tnexreg );
%design_effects_unequal_weights ( postwt_fnl, TNEX_grp, postwt, deff_overall, deff_tnexgrp );
%design_effects_unequal_weights ( postwt_fnl, conus,    postwt, deff_overall, deff_conus );
%design_effects_unequal_weights ( postwt_fnl, servaff,  postwt, deff_overall, deff_servaff );
%design_effects_unequal_weights  (  postwt_fnl,  TNEX_grp  servaff,    postwt,  deff_overall,
deff_TNEXservaff );

title3 'Design Effects Overall';
proc print data = deff_overall;
run;

*** For postcell ***;
title3 "Design Effects for postcell";
proc print data= deff_postcell;
```

```
sum _freq_;
run;

*** For geographic Area ***;
title3 "Design Effects for com_geo";
proc print data= deff_cac;
sum _freq_;
run;

*** For ENBGSMPL Groups ***;
title3 'Design Effects for ENBGSMPL';
proc print data= deff_enb;
sum _freq_;
run;

*** For Beneficiary TNEX Region ***;
title3 'Design Effects for TNEXREG';
proc print data= deff_tnexreg;
sum _freq_;
run;

*** For Facility TNEX region ***;
title3 "Design Effects for Facility's TNEX region";
proc print data= deff_tnexgrp;
sum _freq_;
run;

*** For conus region ***;
title3 "Design Effects for conus";
proc print data= deff_conus;
sum _freq_;
run;

*** For Service Affiliation for the facility  ***;
title3 "Design Effects for Facility's Service Affiliation";
proc print data= deff_servaff;
sum _freq_;
run;

*** For TNEX_grp*Servaff ***;
title3 "Design Effects for TNEX_grp by Servaff";
proc print data= deff_TNEXservaff;
sum _freq_;
run;

title3 "Contents of OUT.postwt";
proc contents data=OUT.postwt;
run;
********** The end ***********;
data test;
set out.postwt;
run;
proc freq data=test;
table postwt*stratum/list missing;
where stratum='3900107';
run;
```

F.12.B Q4FY2007\PROGRAMS\WEIGHTING\NEWWEIGHTS\CALPOSTSTR.SAS - INCLUDE FILE FOR POSTWT.SAS.

```
*************************************************************
* Macro to do the poststrification
*************************************************************;
%macro calpoststr(smpldata=, frmedata=, domain=, preadjwt=, psratio=, postwt=, outdata=);

proc freq data=&smpldata. NOPRINT;
where fnstatus in (11, 31, 32);
tables &domain./missing list out=unweight_s(rename=(count=unwtcnt) drop=percent);
run;

proc freq data=&smpldata. NOPRINT;
tables &domain./missing list out=weight_s(rename=(count=wtcnt) drop=percent);
weight &preadjwt.;
run;

proc freq data=&frmedata. NOPRINT;
tables &domain./missing list out=unweight_f(rename=(count=popcnt) drop=percent);
run;

data cnt_sf out.only_f_calpoststr;
merge unweight_s(in=A)  weight_s(in=B) unweight_f(in=C);
by &domain.;
if A and B and C then do;
  &psratio.=popcnt/wtcnt;
  label &psratio.="poststratification ratio";
  output cnt_sf;
end;
else if C and NOT A then output out.only_f_calpoststr;
run;

title3 "Check the calculation of poststratification ratio";
proc print data=cnt_sf;
sum unwtcnt wtcnt popcnt;
run;

title3 "Univariate of poststratification ratio";
proc univariate data=cnt_sf;
var &psratio.;
run;

title3 "Check the small cells or too small/large ratios - or (unwtcnt<15) or (&psratio. < 0.75)
or (&psratio. > 2)";
proc print data=cnt_sf;
where (&psratio. > 2) or (&psratio. < 0.75) or (unwtcnt <15);
run;

*Append cnt_sf back to the adjusted weight data;
proc sort data=&smpldata.;
by &domain.;
run;

data &outdata.;
merge &smpldata. cnt_sf;
by &domain.;
run;

data &outdata.;
set &outdata.;
if fnstatus in (11, 31, 32) then &psratio.=&psratio.;
else if fnstatus in (12, 20, 41, 42) then &psratio.=0;
&postwt. = &preadjwt.*&psratio.;
run;

title3 "check the calculation of final weight";
proc print data=&outdata.(obs=200);
var &domain. fnstatus &preadjwt. &psratio. &postwt.;
run;

title3 "Univariate of final weight";
proc univariate data=&outdata.;
```

```
var &postwt.;
where fnstatus=11;
run;
%mend calpoststr;
```

F.13 Q4FY2007\PROGRAMS\WEIGHTING\NEWWEIGHTS\REPWTP_TRIMMED.SAS - PRODUCE THE REPLICATE WEIGHTS - RUN QUARTERLY.

```
*************************************************************************
* PROGRAM: \Q3FY2007\Programs\Weighting\NewWeights\repwtp.SAS
* TASK:    2007 DOD QUARTERLY HEALTH CARE SURVEY
* PURPOSE: CALCULATE REPLICATE WEIGHTS FOR DOD SURVEY USING THE NEW WEIGHTING METHOD.
* WRITTEN: 12/30/1999 BY Keith Ranthbun
* Modified 1) Haixia Xu on 12/27/2006
*          2) H. Xu on 03/30/2007 for q3fy2007 weighting
*
*
* INPUTS:  postwt.sas7bdat - Final Weights file
*          framea_postwt.sas7bdat - The q3 frame file with corrected PCM and postcell defined
*
* OUTPUTS: repwtp.sas7bdat - Replicate Weights File
*
*************************************************************************
*;

%let quarter=Q4FY2007;

LIBNAME INv6  v6 "L:\&quarter.\Data\Afinal";  /* framea.sas7bdat */
LIBNAME IN  v8 "L:\&quarter.\Data\Afinal";  /* postwt.sas7bdat */
LIBNAME OUT v8 "L:\&quarter.\Data\Afinal";  /* repwtp.sas7bdat */

OPTIONS PS=79 LS=132 errors=10 COMPRESS=no NOCENTER formdlim='~' /*mlogic mprint symbolgen*/;

/*MACRO FOR TRIMMING */
%macro trimmer(domain,oldw,neww);

data trim;
set trim;
drop number means stdev sumweight cutoff toobig trimadj sumold sumnew;
run;


proc sort data=trim;
by &domain;
run;

proc means data=trim n mean std sum noprint;
var &oldw;
by &domain;
where fnstatus=11;
output out=meanspostwt n=number mean=means std=stdev sum=sumweight;
run;

data trim;
merge trim meanspostwt;
by &domain;
cutoff=means+stdev*5;
toobig=.;
trimadj=.;
if &oldw>cutoff and fnstatus=11 then toobig=1;
if toobig=1 then &neww=cutoff;
if cutoff=. and toobig=1 then &neww=&oldw;
if toobig=. then &neww=&oldw;
run;

proc means data=trim sum noprint;
var &oldw &neww;
by &domain;
where fnstatus=11;
output out=meansbig sum=sumold sumnew;
run;

data trim;
merge trim meansbig;
by &domain;
run;
```

```
data trim;
set trim;
/*cutoff~=. filter guards against divide by zero error if there is only 1 obs in domain */
if cutoff~=. then trimadj=sumold/sumnew;
if trimadj=. or fnstatus~=11 then trimadj=1;
&neww=trimadj*&neww;
run;

proc means data=trim sum noprint;
var &oldw &neww;
by &domain;
where fnstatus=11;
output out=sumcheck sum=old new;
run;
/*
data sumcheck;
set sumcheck;
diff=new-old;
run;

proc means data=sumcheck;
var diff;
run;

proc print data=sumcheck;
var &domain old new;
run;

proc freq data=trim;
table &oldw*&neww*toobig*stratum/list missing;
where &oldw>4000;
run;

proc freq data=trim;
table toobig*&oldw*&neww*stratum /list missing;
where toobig=1;
run;
*/
%mend trimmer;


%MACRO PROCESS(DOMAIN1,DOMAIN2,DOMAIN3,reps);

************************************************************************
* calculate the population counts to be used in the poststratification
************************************************************************;

data framea;
set inv6.framea;
length postcell $5;
postcell=group||com_geo;
run;

proc freq data=framea NOPRINT;
tables &domain3./missing list out=framecnt(drop=percent rename=(count=popcnt));
run;


************************************************************************
* Sort the final weights file by user-specified domains
************************************************************************;

PROC SORT DATA=IN.postwt_trimmed OUT=postwt;
     BY stratum MPRID ;
RUN;


************************************************************************
* Append SUBSET index (I) to each observation
************************************************************************;
DATA SUBSETS;
   SET postwt;
   BY stratum MPRID;
```

```
   IF _N_ = 1 OR MOD(_N_-1,&reps.) = 0 THEN SUBSET = 1;
   ELSE SUBSET + 1;

   RETAIN SUBSET;
   BBWT = BWT * (&reps. / (&reps. - 1));
RUN;

*********************************************************************
*********************************************************************
* Generate JackKnife/replicated weights adjwt01-adjwt60
*********************************************************************
*********************************************************************;
%DO I = 1 %TO &reps.;

DATA SUBSET;
   SET SUBSETS;
   IF &I. = SUBSET THEN DELETE; *Remove the current subset;
RUN;

**************************************************************************
* Calculate adjustment factor A1 for each cell
**************************************************************************;

proc sort data=subset;
by &domain1.;
run;

**************************************************************************
* Calculate adjustment factor A1 for each cell.
* This is the Eligibility Determination adjustment.
**************************************************************************;
DATA  CELLSA1  (KEEP=SUMBBWT  SUMG1-SUMG3  A1  CELLCNT  cntg1-cntg3  &domain1.  stratum  com_geo
enbgsmpl)
      MPRIDSA1 (KEEP=MPRID FNSTATUS BBWT &DOMAIN1. &DOMAIN2. &domain3. stratum com_geo enbgsmpl)
      ;
   SET subset;
   BY &DOMAIN1.;

if FNSTATUS in (11, 12, 20, 31, 41, 42) THEN DO;

   IF FIRST.&DOMAIN1. THEN DO;
      CELLCNT = 0;
      cntg1   = 0;
      cntg2   = 0;
      cntg3   = 0;
      SUMBBWT  = 0.0;
      SUMG1   = 0.0;
      SUMG2   = 0.0;
      SUMG3   = 0.0;
      A1 = 0.0;
   END;
   CELLCNT + 1;

   ****************************************************
   * Accumulate total weight sum
   ****************************************************;

   SUMBBWT + BBWT;

   ****************************************************
   * Accumulate group 1 weight sum
   ****************************************************;

   IF FNSTATUS IN (11,12) THEN
      do;
         SUMG1 + BBWT;
         cntg1 + 1;
      end;

   ****************************************************
   * Accumulate group 2 weight sum
   ****************************************************;
```

```
   ELSE IF FNSTATUS in (20,31) THEN
      do;
         SUMG2 + BBWT;
         cntg2 + 1;
      end;

   ****************************************************
   * Accumulate group 3 weight sum
   ****************************************************;

   ELSE IF FNSTATUS in (41,42) THEN
      do;
         SUMG3 + BBWT;
         cntg3 + 1;
      end;

   RETAIN SUMBBWT SUMG1-SUMG3 A1 CELLCNT cntg1-cntg3 MPRID;

   IF LAST.&DOMAIN1. THEN DO;
      A1 = (SUMG1 + SUMG2 + SUMG3)/(SUMG1 + SUMG2);
      OUTPUT CELLSA1;
   END;
END;

   OUTPUT MPRIDSA1;
RUN;

proc sort data=mpridsa1;
by &domain1.;
run;

proc sort data=cellsa1;
by &domain1.;
run;

data adj_one;
merge mpridsa1 cellsa1;
by &domain1.;
if fnstatus in (11,12,20,31) then adj1 = a1;
   else if fnstatus = 32 then adj1=1;
   else adj1 = 0;
adj_wt1 = adj1 * bbwt;
run;

*************************************************************************
* Calculate adjustment factor A2 for each cell.
* This is the Nonresponse adjustment and creates the final weight (adjwt).
*************************************************************************;

proc sort data=adj_one;
by &domain2.;
run;

DATA CELLSA2 (KEEP= &domain2. NUMER DENOM numercnt denomcnt A2);
   set adj_one;
   BY &domain2.;

IF FNSTATUS in (11, 12, 20) THEN DO;

   IF FIRST.&domain2. THEN DO;
      A2 = 0.0;
      NUMER = 0.0;
      DENOM = 0.0;
      numercnt = 0;
      denomcnt = 0;
   END;


   RETAIN NUMER DENOM A2 numercnt denomcnt;

   IF FNSTATUS IN (11,12,20) THEN
      do;
```

```
         NUMER + adj_wt1;
         numercnt + 1;
      end;

   IF FNSTATUS = 11 THEN
      do;
         DENOM + adj_wt1;
         denomcnt + 1;
      end;

   IF LAST.&domain2. THEN DO;
      A2 = NUMER/DENOM;
      OUTPUT CELLSA2;
   END;
END;

RUN;

proc sort data=adj_one;
by &domain2.;
run;

proc sort data=cellsa2;
by &domain2.;
run;

data adj_two;
merge adj_one cellsa2;
by &domain2.;
if fnstatus = 11 then adj2 = a2;
   else if fnstatus in (31, 32) then adj2 = 1;
   else adj2 = 0;
adj_wt2 = adj2 * adj_wt1;
*KEEP MPRID FNSTATUS adj_wt2 bbwt &DOMAIN1. &DOMAIN2. &domain3.;
run;

*****************************************************************************
* Calculate poststratification adjustment factor ps for each cell.
*****************************************************************************;
proc freq data=adj_two NOPRINT;
tables &domain3./missing list out=weighted(drop=percent rename=(count=wtcnt));
weight adj_wt2;
run;

proc sort data=framecnt;
by &domain3.;
run;

proc sort data=weighted;
by &domain3.;
run;

data ps;
merge framecnt(in=A) weighted(in=B);
by &domain3.;
ps = popcnt/wtcnt;
if A and B;
run;

proc sort data=ps;
by &domain3.;
run;

proc sort data=adj_two;
by &domain3.;
run;

data subset&i.;
merge adj_two ps;
by &domain3.;
jkweight = ps * adj_wt2;
subset = &i.;
*KEEP MPRID subset jkweight;
```

```
run;

proc sort data=subset&i.;
by mprid;
run;

/*TRIMMING*/
************************************;

data trim;
set subset&i.;
run;

%trimmer(postcell,jkweight,newtrim1);

data trim;
set trim;
trimwt=newtrim1;
run;

/*POSTSTRATIFY THE TRIMMED WEIGHTS*/
************************************;

proc freq data=trim NOPRINT;
tables &domain3./missing list out=weighted(drop=percent rename=(count=wtcnt));
weight trimwt;
run;

proc sort data=framecnt;
by &domain3.;
run;

proc sort data=weighted;
by &domain3.;
run;

data ps;
merge framecnt(in=A) weighted(in=B);
by &domain3.;
ps2 = popcnt/wtcnt;
if A and B;
run;

proc sort data=ps;
by &domain3.;
run;

proc sort data=trim;
by &domain3.;
run;

data subset&i.;
merge trim ps;
by &domain3.;
jkweight2 = ps2 * trimwt;
subset = &i.;
*KEEP MPRID subset jkweight2;
run;

proc sort data=subset&i.;
by mprid;
run;

proc means data=subset&i.;
var jkweight2;
run;

*********************************************************************
*********************************************************************
* End of JackKnife/replicated weights WRWT01-WRWT60 assignments
*********************************************************************
*********************************************************************;
%END;
```

```
*************************************************************************
* Combine all of the JackKnife weight subsets by MPRID
*************************************************************************;
DATA ALLSETS;
   SET SUBSET1   SUBSET2   SUBSET3   SUBSET4  SUBSET5
       SUBSET6   SUBSET7   SUBSET8   SUBSET9   SUBSET10
       SUBSET11  SUBSET12  SUBSET13  SUBSET14  SUBSET15
       SUBSET16  SUBSET17  SUBSET18  SUBSET19  SUBSET20
       SUBSET21  SUBSET22  SUBSET23  SUBSET24  SUBSET25
       SUBSET26  SUBSET27  SUBSET28  SUBSET29  SUBSET30
       SUBSET31  SUBSET32  SUBSET33  SUBSET34  SUBSET35
       SUBSET36  SUBSET37  SUBSET38  SUBSET39  SUBSET40
       SUBSET41  SUBSET42  SUBSET43  SUBSET44  SUBSET45
       SUBSET46  SUBSET47  SUBSET48  SUBSET49  SUBSET50
       SUBSET51  SUBSET52  SUBSET53  SUBSET54  SUBSET55
       SUBSET56  SUBSET57  SUBSET58  SUBSET59  SUBSET60
   ;
       BY MPRID;
   ARRAY JKWT(&reps.) wrwt1-wrwt&reps.; RETAIN wrwt1-wrwt&reps.;
       IF FIRST.MPRID THEN DO;
       DO I = 1 TO &reps.; DROP I;
          JKWT(I) = . ;
      END;
 END;
   JKWT(SUBSET) = JKWEIGHT2;
   IF LAST.MPRID THEN OUTPUT;
   KEEP MPRID SUBSET wrwt1-wrwt&reps.;
RUN;


*************************************************************************
* Sort the original data, get the final weight (WRWT), append the
* JackKnife/Replicated weights (WRWT1-WRWT60), and label variables.
*************************************************************************;
PROC SORT DATA=IN.postwt_trimmed OUT=trimwt;
BY MPRID;
RUN;

proc sort data=allsets;
by mprid;
run;

options compress=yes;

DATA OUT.repwtp ;
   MERGE trimwt ALLSETS;
   BY MPRID;

   LABEL
      MPRID  = 'MPR ID Number'
      WRWT1  = 'Replicated/JackKnife Weight 1'
      WRWT2  = 'Replicated/JackKnife Weight 2'
      WRWT3  = 'Replicated/JackKnife Weight 3'
      WRWT4  = 'Replicated/JackKnife Weight 4'
      WRWT5  = 'Replicated/JackKnife Weight 5'
      WRWT6  = 'Replicated/JackKnife Weight 6'
      WRWT7  = 'Replicated/JackKnife Weight 7'
      WRWT8  = 'Replicated/JackKnife Weight 8'
      WRWT9  = 'Replicated/JackKnife Weight 9'
      WRWT10 = 'Replicated/JackKnife Weight 10'
      WRWT11 = 'Replicated/JackKnife Weight 11'
      WRWT12 = 'Replicated/JackKnife Weight 12'
      WRWT13 = 'Replicated/JackKnife Weight 13'
      WRWT14 = 'Replicated/JackKnife Weight 14'
      WRWT15 = 'Replicated/JackKnife Weight 15'
      WRWT16 = 'Replicated/JackKnife Weight 16'
      WRWT17 = 'Replicated/JackKnife Weight 17'
      WRWT18 = 'Replicated/JackKnife Weight 18'
      WRWT19 = 'Replicated/JackKnife Weight 19'
      WRWT20 = 'Replicated/JackKnife Weight 20'
      WRWT21 = 'Replicated/JackKnife Weight 21'
      WRWT22 = 'Replicated/JackKnife Weight 22'
```

```
      WRWT23 = 'Replicated/JackKnife Weight 23'
      WRWT24 = 'Replicated/JackKnife Weight 24'
      WRWT25 = 'Replicated/JackKnife Weight 25'
      WRWT26 = 'Replicated/JackKnife Weight 26'
      WRWT27 = 'Replicated/JackKnife Weight 27'
      WRWT28 = 'Replicated/JackKnife Weight 28'
      WRWT29 = 'Replicated/JackKnife Weight 29'
      WRWT30 = 'Replicated/JackKnife Weight 30'
      WRWT31 = 'Replicated/JackKnife Weight 31'
      WRWT32 = 'Replicated/JackKnife Weight 32'
      WRWT33 = 'Replicated/JackKnife Weight 33'
      WRWT34 = 'Replicated/JackKnife Weight 34'
      WRWT35 = 'Replicated/JackKnife Weight 35'
      WRWT36 = 'Replicated/JackKnife Weight 36'
      WRWT37 = 'Replicated/JackKnife Weight 37'
      WRWT38 = 'Replicated/JackKnife Weight 38'
      WRWT39 = 'Replicated/JackKnife Weight 39'
      WRWT40 = 'Replicated/JackKnife Weight 40'
      WRWT41 = 'Replicated/JackKnife Weight 41'
      WRWT42 = 'Replicated/JackKnife Weight 42'
      WRWT43 = 'Replicated/JackKnife Weight 43'
      WRWT44 = 'Replicated/JackKnife Weight 44'
      WRWT45 = 'Replicated/JackKnife Weight 45'
      WRWT46 = 'Replicated/JackKnife Weight 46'
      WRWT47 = 'Replicated/JackKnife Weight 47'
      WRWT48 = 'Replicated/JackKnife Weight 48'
      WRWT49 = 'Replicated/JackKnife Weight 49'
      WRWT50 = 'Replicated/JackKnife Weight 50'
      WRWT51 = 'Replicated/JackKnife Weight 51'
      WRWT52 = 'Replicated/JackKnife Weight 52'
      WRWT53 = 'Replicated/JackKnife Weight 53'
      WRWT54 = 'Replicated/JackKnife Weight 54'
      WRWT55 = 'Replicated/JackKnife Weight 55'
      WRWT56 = 'Replicated/JackKnife Weight 56'
      WRWT57 = 'Replicated/JackKnife Weight 57'
      WRWT58 = 'Replicated/JackKnife Weight 58'
      WRWT59 = 'Replicated/JackKnife Weight 59'
      WRWT60 = 'Replicated/JackKnife Weight 60'
   ;
RUN;

TITLE1 "2005 DoD Quarterly Health Survey Final/Replicated Weights";
title2 "Checks for the Replicate Weights";
TITLE3 "Program Name: repwtp.SAS";

****************************************************
Check the structure of the data set OUT.repwtp;
****************************************************;

proc sort data=OUT.repwtp out=sorted;
by stratum mprid;
run;

proc print data=sorted (obs=500);
var stratum mprid SUBSET fnstatus postwt trimwt postwt2 wrwt1-wrwt5;
run;

PROC MEANS DATA=OUT.repwtp n sum;
VAR  postwt trimwt postwt2 WRWT1-WRWT&reps.;
RUN;

PROC SORT DATA=OUT.repwtp out=repwtp;
BY MPRID;
RUN;

DATA OUT.repwtp;
   SET repwtp;
   BY MPRID;

   ARRAY WGTS(&reps.) WRWT1-WRWT&reps.;
   DO I = 1 TO &reps.; DROP I;
      IF WGTS(I) EQ . THEN WGTS(I) = 0;
   END;
```

```
       KEEP MPRID BWT postwt trimwt postwt2 WRWT1-WRWT&reps. fnstatus &domain1. &domain2. &domain3.
com_geo;
    RUN;

    title4 "Check the replicate weights -- for all 50,000 cases";
    PROC MEANS DATA=OUT.repwtp n sum;
    VAR  postwt trimwt postwt2 wrwt1-wrwt&reps.;
    output  out=sums  sum(postwt  trimwt  postwt2  wrwt1-wrwt&reps.)  =  postwt  trimwt  postwt2  wrwt1-
wrwt&reps.;
    RUN;

    proc transpose data=sums out=t_sums;
    var postwt trimwt postwt2 wrwt1-wrwt&reps.;
    run;

    proc univariate data=t_sums normal ;
    var col1;
    run;

    title4 "Check the replicate weights -- for the final completes";
    PROC MEANS DATA=OUT.repwtp n sum;
    where fnstatus=11;
    VAR  postwt trimwt postwt2 wrwt1-wrwt&reps.;
    output  out=sums  sum(postwt  trimwt  postwt2  wrwt1-wrwt&reps.)  =  postwt  trimwt  postwt2  wrwt1-
wrwt&reps.;
    RUN;

    proc transpose data=sums out=t_sums;
    var postwt trimwt postwt2 wrwt1-wrwt&reps.;
    run;

    proc univariate data=t_sums normal ;
    var col1;
    run;


    **added for Amang q4 2002;
    data repwt2;
      set out.repwtp;
      where fnstatus = 11;
      array subset2(60) wrwt1-wrwt60;
      do m=1 to 60;
         if subset2(m)=0 then
           subset=m;
      end;
    run;

    proc sort data = repwt2;
    by subset;
    run;

    proc means data = repwt2 noprint;
    by subset;
    var postwt2 wrwt1-wrwt60;
    output out = amang sum= / autoname;
    run;

    ***added by Haixia on 05/11/2005 for q1, 2005 weighting.
    rename wrwt1_sum, ..., wrwt60_sum as sum_wrwt1, ..., sum_wrwt60
    so the numbered range list sum_wrwt1 - sum_wrwt60 can be used in the proc print below;

    data amang;
    set amang;
    rename postwt2_sum = sum_postwt2;
    %do i =1 %to 60;
    rename wrwt&i._sum = sum_wrwt&i.;
    %end;
    run;

    proc print data = amang;
    sum _freq_ sum_postwt2  sum_wrwt1 - sum_wrwt60;
    run;
```

```
*****************************************************************************
* CREATE FINAL REPWT DATASET FOR KEITH -- Rename the variables
*****************************************************************************;
data out.repwtp (drop = postwt postwt2 com_geo);
set in.repwtp;
fwrwt = postwt2;
%do i =1 %to 60;
rename wrwt&i.= fwrwt&i.;
%end;
label &domain1. = 'Weighting cell in the unknown eligibility adjustment';
label &domain2. = 'Weighting cell in the nonresponse adjustment';
label &domain3. = "ps cell for new wts - for all 4 quarters";
label fwrwt = "Final NEW Weight";
run;

data out.repwtp;
set out.repwtp;
* Label wts;
    %DO I = 1 %TO 60;
         LABEL    FWRWT&I. = "Replicated/JackKnife NEW Weight &I.";
    %END;
run;

PROC CONTENTS DATA=OUT.repwtp;
run;

%MEND process;

%PROCESS(pcell_a1, pcell_a2, postcell, 60);
```

F.14 Q4FY2007\PROGRAMS\WEIGHTING\ADDWGTSA.SAS - MERGE THE FINAL QUARTERLY WEIGHTS WITH THE FINAL QUESTIONNAIRE/SAMPLE FILE - RUN QUARTERLY.

```
***************************************************************************
*
* PROGRAM:  ADDWGTS.SAS
* TASK:     DOD HEALTH CARE SURVEY ANALYSIS (8860-210)
* PURPOSE:  MERGE THE FINAL WEIGHTS FILE WITH THE FINAL
*           QUESTIONNAIRE/SAMPLE FILE
*
* WRITTEN:  02/02/2001 BY KEITH RATHBUN
*
* INPUTS:   1) REPWT.SD2  - Final/Replicated Weights file - FORM A
*           2) MERGEQ.SD2 - Final FORM A Questionnaire/Sample File
*
* OUTPUTS:  1) HCSyyq_n.SD2 - Final FORM A Questionnaire/Sample File
*              combined with Final/Replicated Weights file - FORM A
*              where  yy = Year
*                     q = Quarter Number
*                     n = Final Dataset Suffix/Version Number
*
* MODIFIED: 1) 4/23/2002 - DKB added DROP statement to drop the permanent
*              random number variable (PRN) that does not need to be on the
*              final data file sent to DoD
*           2) 4/17/2003 - JA added length statement to order variables from
*              weight file.  The variable TREATU_R is positioned after the
*              replicate weights.
*           3) 2/17/2005 - JA dropped CACSMPL from repwt because it has been
*              added to mergeq.sd2 in the mergeq.sas program. This is because
*              in Q4, CACSMPL had to be updated for reporting purposes.
*           4) 5/13/2005 - JA kept only necessary variables from the weight
*              weight file.
*           5) 12/27/2005 - JA merged new/adjusted weights and old weights
*           6) 5/22/2006 - JA added xcatch to the dataset
***************************************************************************
;
LIBNAME IN      V612 "..\..\DATA\AFINAL";
LIBNAME IN8          "..\..\DATA\AFINAL";
LIBNAME OUT     V612 "..\..\DATA\AFINAL";
LIBNAME LIBRARY V612 "..\..\DATA\AFINAL\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

%MACRO PROCESS(DSNI_1=, DSNI_2=,DSNO=);
**************************************************************************
* Merge the final weights file with the final Questionnaire/Sample file
**************************************************************************;
PROC SORT DATA=IN8.&DSNI_1 OUT=&DSNI_1; BY MPRID; RUN;
PROC SORT DATA=IN.&DSNI_2 OUT=&DSNI_2; BY MPRID; RUN;

PROC CONTENTS DATA=IN8.&DSNI_1; Title 'repwtp- New weights'; RUN;
PROC CONTENTS DATA=IN.&DSNI_2; Title 'mergeq'; RUN;

**************************************************************************
* Create and attach XCATCH (Catchment Reporting variable) to final dataset.
* Note that dataset TMPXCTCH with XCATCH is created by this include file.
**************************************************************************;
DATA TEMP1;
   SET &DSNI_2;
   IF FNSTATUS = 11;
RUN;

%INCLUDE "XCATCH.INC"; * Requires input dataset called TEMP1;

PROC SORT DATA=TMPXCTCH; BY MPRID; RUN;

DATA OUT.&DSNO(DROP=PRN DMIS_ID D_PAR /*ENRID need it for COMB2007*/);
*DATA OUT.&DSNO(DROP=PRN XCATCHno);
   MERGE &DSNI_2(IN=IN2 DROP=MIQCNTL COM_GEO)
         TMPXCTCH(IN=IN3)
         &DSNI_1(IN=IN1 KEEP=MPRID POSTCELL FWRWT FWRWT1-FWRWT60);
   BY MPRID;
```

```
   IF FNSTATUS = 11;

   IF IN1 AND IN2 AND IN3;
   IF NOT (IN1 AND IN2)
   THEN PUT "ERROR: NO MATCHING MPRID WITH &DSNI_1..SD2 AND &DSNI_2..SD2";

RUN;


TITLE1 "DOD Quarterly Health Care Survey (6077-210)";
TITLE2 "Program Name: ADDWGTS.SAS";
TITLE3 "Program Inputs: &DSNI_1..SD2 -- &DSNI_2..SD2";
TITLE4 "Program Outputs: &DSNO..SD2";
PROC CONTENTS; RUN;

%MEND PROCESS;

%PROCESS(DSNI_1=repwtp, DSNI_2=MERGEQ, DSNO=HCS074_1);
```

F.15 WEIGHTING\COMB2007.SAS - COMBINE QUARTERLY DATASETS INTO ONE ANNUAL FILE - ANNUAL.

```
***************************************************************************
*
*  PROGRAM:  COMB2007.SAS
*  TASK:     ANNUAL DOD HEALTH CARE SURVEY ANALYSIS (6244-300)
*  PURPOSE:  Combine quarterly datasets into one annual file.
*
*  WRITTEN:  12/23/2002 BY KEITH RATHBUN.
*
*   INPUTS:  1) HCSyyq_1.SD2 - Q1-Q4 DOD HCS Analysis files
*                 Where yy = Year (07)
*                        q = Quarter Number (1-4)
*
*   OUTPUT:  1) COMB2007.SD2 - Combined quarterly datasets in one annual file
*
*    NOTES:  1) The output dataset produced by this program contains all
*               of the original quarterly responses plus additional
*               responses that "trickled" in after the end of the
*               fielding period. The variable called QUARTER can be used
*               to identify which version of the quarterly survey is
*               applicable to the respondent.
*
*  INCLUDES: 1) XCATCH.INC - Create catchment reporting variable
*
***************************************************************************
* Assign data libraries and options
***************************************************************************;
LIBNAME INQ1    V612 "..\..\..\Q1FY2007T\DATA\AFINAL";
LIBNAME INQ2    V612 "..\..\..\Q2FY2007T\DATA\AFINAL";
LIBNAME INQ3    V612 "..\..\..\Q3FY2007T\DATA\AFINAL";
LIBNAME INQ4    V612 "..\..\..\Q4FY2007\DATA\AFINAL";
LIBNAME OUT     V612 "..\..\DATA";
LIBNAME LIBRARY V612 "..\..\Data\fmtlib";
OPTIONS COMPRESS=YES LS=132 PS=79 NOCENTER NOFMTERR;

***************************************************************************
* Extract variable names for each quarter for overlap checking purposes.
***************************************************************************;
PROC CONTENTS DATA=INQ1.HCS071_1 OUT=Q1(KEEP=NAME) NOPRINT; RUN;
PROC SORT; BY NAME; RUN;

PROC CONTENTS DATA=INQ2.HCS072_1 OUT=Q2(KEEP=NAME) NOPRINT; RUN;
PROC SORT; BY NAME; RUN;

PROC CONTENTS DATA=INQ3.HCS073_1 OUT=Q3(KEEP=NAME) NOPRINT; RUN;
PROC SORT; BY NAME; RUN;

PROC CONTENTS DATA=INQ4.HCS074_1 OUT=Q4(KEEP=NAME) NOPRINT; RUN;
PROC SORT; BY NAME; RUN;

DATA VARIABLES;
   MERGE Q1(IN=INQ1) Q2(IN=INQ2) Q3(IN=INQ3) Q4(IN=INQ4);
   BY NAME;
   LENGTH Q1-Q4 $3;
   IF INQ1 THEN Q1 = "YES"; ELSE Q1 = "NO";
   IF INQ2 THEN Q2 = "YES"; ELSE Q2 = "NO";
   IF INQ3 THEN Q3 = "YES"; ELSE Q3 = "NO";
   IF INQ4 THEN Q4 = "YES"; ELSE Q4 = "NO";
RUN;

TITLE1 "Annual DOD Health Care Survey Database (6244-300)";
TITLE2 "Program Name: COMB2007.SAS By Keith Rathbun";
TITLE3 "Program Inputs: HCSyyq_1.SD2 - Q1-Q4 DOD HCS Sample and Analysis files";
TITLE4 "Program Output: COMB2007.SD2 - Combined quarterly datasets in one annual file";

***************************************************************************
* Print summary of variable name quarterly overlap.
***************************************************************************;
PROC PRINT; RUN;

***************************************************************************
```

```
* Combine quarterly datasets with all of the "trickle" data into one file.
*****************************************************************************;
DATA COMB2007(DROP= XCATCH /* Xcatch will be recreated based on annual counts */);
   SET INQ1.HCS071_1
       INQ2.HCS072_1
       INQ3.HCS073_1
       INQ4.HCS074_1;
   BY MPRID;
   *DROP E1-E17; *Don't need eligibility indicators on final analysis file;
   LABEL FIELDAGE = "Age at start of fielding period"
         DAGEQY   = "Age at time of data collection"
        ;
RUN;

*****************************************************************************
* Sort by MPRID and check for duplicates.  There should not be duplicates.
*****************************************************************************;
PROC SORT DATA=COMB2007 NODUPKEY OUT=TEMP1; BY MPRID; RUN;

*****************************************************************************
* Create and attach XCATCH (Catchment Reporting variable) to final dataset.
* Note that dataset TEMP with XCATCH is created by this include file.
*****************************************************************************;
%INCLUDE "XCATCH.INC"; * Requires input dataset called TEMP1;
PROC SORT DATA=TMPXCTCH; BY MPRID; RUN;


DATA OUT.COMB2007
     HCS071_1x(KEEP=MPRID XCATCH) HCS072_1x(KEEP=MPRID XCATCH)
     HCS073_1x(KEEP=MPRID XCATCH) HCS074_1x(KEEP=MPRID XCATCH) ;

   MERGE TEMP1(IN=IN1 DROP=ENRID) TMPXCTCH(IN=IN2);
   BY MPRID;
   IF IN1 AND IN2 THEN DO;
      OUTPUT OUT.COMB2007;
      IF QUARTER="Q1FY2007" THEN OUTPUT HCS071_1x;
      IF QUARTER="Q2FY2007" THEN OUTPUT HCS072_1x;
      IF QUARTER="Q3FY2007" THEN OUTPUT HCS073_1x;
      IF QUARTER="Q4FY2007" THEN OUTPUT HCS074_1x;
   END;
RUN;

DATA INQ1.HCS071_1(DROP=ENRID);
   UPDATE INQ1.HCS071_1 HCS071_1x;
   BY MPRID;
RUN;

DATA INQ2.HCS072_1(DROP=ENRID);
   UPDATE INQ2.HCS072_1 HCS072_1x;
   BY MPRID;
RUN;

DATA INQ3.HCS073_1(DROP=ENRID);
   UPDATE INQ3.HCS073_1 HCS073_1x;
   BY MPRID;
RUN;

DATA INQ4.HCS074_1(DROP=ENRID);
   UPDATE INQ4.HCS074_1 HCS074_1x;
   BY MPRID;
RUN;


PROC CONTENTS; RUN;
```

F.16 WEIGHTING\ADDWGTS.SAS - MERGE THE COMBINED ANNUAL WEIGHTS WITH THE FINAL QUESTIONNAIRE/SAMPLE FILE - ANNUAL.

```
***************************************************************************
*
* PROGRAM:  ADDWGTS.SAS
* TASK:     DOD HEALTH CARE SURVEY ANALYSIS (6244-300)
* PURPOSE:  MERGE THE FINAL WEIGHTS FILE WITH THE FINAL
*           QUESTIONNAIRE/SAMPLE FILE
*
* WRITTEN:  02/02/2001 BY KEITH RATHBUN
*
* MODIFIED: 1) 01/15/2002 BY KEITH RATHBUN: Updated to combine all quarterly
*              datasets including trickles with the annual weights file.
*           2) 12/30/2002 BY KEITH RATHBUN: Updated for 2002 survey.
*           3) 01/20/2004 BY LUCY LU: Updated for 2003 survey.
*           4) 02/10/2004 BY KEITH RATHBUN: Added catchment reporting variable
*              (XCATCH) constructed in STEP1Q.
*           5) 03/03/05 BY LUCY LU: Updateed for 2004 annual survey.
*              -- Create macro variables and eliminate macro program,
*              -- update the length statement for year 2004.
*           6) 01/04/2006 BY KEITH RATHBUN: Updated for 2005 survey.
*           7) 09/18/2007 BY LUCY LU: Updated for 2007 survey.
*
* INPUTS:   1) CREPWT.SD2  - Final/Replicated Weights file - FORM A
*           2) COMB2005.SD2 - Combined Q1-Q4 FORM A Questionnaire/Sample File
*
* OUTPUTS:  1) HCSyyA_n.SD2 - Final FORM A Questionnaire/Sample File
*              combined with Final/Replicated Weights file - FORM A
*              where  yy = Year
*                      A = Form A - Annual
*                      n = Final Dataset Suffix/Version Number
*
* NOTES:    1) This program combines all of the quarterly input datasets
*              including trickles with the annual weights file.
*
***************************************************************************;
LIBNAME OUT     V612 "..\..\DATA";
LIBNAME LIBRARY V612 "..\..\Data\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER NOFMTERR;

%LET DSNI_1 = CREPWT;
%LET DSNI_2 = COMB2007;
%LET DSNO   = HCS07A_1;

***************************************************************************
* Merge the final weights file with the final Questionnaire/Sample file
***************************************************************************;
PROC SORT DATA=OUT.&DSNI_1 OUT=&DSNI_1; WHERE FNSTATUS EQ 11; BY MPRID; RUN;
PROC SORT DATA=OUT.&DSNI_2 OUT=&DSNI_2; BY MPRID; RUN;

DATA &DSNO(DROP= DATE DRP_RND1 LEGDDSCD /* jma Oct 24 2007 */);

   MERGE &DSNI_2(IN=IN2 )
         &DSNI_1(IN=IN1 KEEP=MPRID CFWT  CFWT1-CFWT240);
   BY MPRID;

   IF FNSTATUS = 11;
   IF IN1 AND IN2;
   IF NOT (IN1 AND IN2) THEN PUT "ERROR: NO MATCHING MPRID WITH &DSNI_1..SD2 AND &DSNI_2..SD2";


   FORMAT CACSMPL CAC.  WEB WEB.
          /*TRICKDUP $trckdup. */
       N1    N1A1  N1A2     N1A3     N2       N3     N4    N5
       N6    N7    N8       N9       N10      N10A1  N10B1 N10B2
       N10B3 N10B4 N10B5    N10B6    N10B7    N10C1  N10C2
       N10C3 N11   N12      N13      N14      N15A1  N15A2 N15A3
       N15A4 N15A5 N15A6    N15B1    N15B2    N16    N16A1 N17A
       N17A1 N17B  N18      N19
```

```
          notes.

          XBMI xbmi.;

    LABEL CFWT='Combined annual NEW Weight';


  RUN;


DATA OUT.&DSNO ;
   ************************************************************************
   * Reorder file for documentation purposes.
   ************************************************************************;
   LENGTH
       MPRID       $ 8         /* ID                */
       SVCSMPL       8         /* sampling variable */
       SEXSMPL       8         /* sampling variable */
       STRATUM     $ 7         /* sampling variable */
       CACSMPL       8         /* sampling variable */
       ENBGSMPL    $ 2         /* sampling variable */
       MPCSMPL       8         /* sampling variable */
       NHFF          8         /* sampling variable */
       SERVAREA    $ 2         /* sampling variable */

/*     PRN           8 */      /* sampling variable */
       DCATCH      $ 4         /* sampling variable */
/*     ENRID       $ 4 */      /* sampling variable */
/*     DMIS_ID     $ 9 */      /* sampling variable */
       MSM         $ 2         /* sampling variable */
       D_FAC       $ 9         /* sampling variable */
/*     D_PAR       $ 4 */      /* sampling variable */
       D_HEALTH    $ 2         /* sampling variable */
       TNEXREG     $ 1         /* sampling variable */


       SERVAFF     $ 1         /* DEERS variable    */
       MRTLSTAT    $ 1         /* DEERS variable    */
       RACEETHN    $ 1         /* DEERS variable    */
       PNSEXCD     $ 1         /* DEERS variable    */
/*       LEGDDSCD    $ 2 */         /* DEERS variable    */
       DAGEQY      $ 3         /* DEERS variable    */
       FIELDAGE    $ 3         /* DEERS variable    */
       PCM         $ 3         /* DEERS variable    */
       ACV         $ 1         /* DEERS variable    */
       DBENCAT     $ 3         /* DEERS variable    */
       DMEDELG     $ 1         /* DEERS variable    */
       DSPONSVC    $ 1         /* DEERS variable    */
       MBRRELCD    $ 1         /* DEERS variable    */
       MEDTYPE     $ 1         /* DEERS variable    */
       PATCAT      $ 7         /* DEERS variable    */
       PNTYPCD     $ 1         /* DEERS variable    */
       PNLCATCD    $ 1         /* DEERS variable    */


       H07001        4         /* Questionaire variable     */
       H07002A       4         /* Questionaire variable     */
       H07002C       4         /* Questionaire variable     */
       H07002F       4         /* Questionaire variable     */
       H07002G       4         /* Questionaire variable     */
       H07002H       4         /* Questionaire variable     */
       H07002I       4         /* Questionaire variable     */
       H07002J       4         /* Questionaire variable     */
       H07002K       4         /* Questionaire variable     */
       H07002L       4         /* Questionaire variable     */
       H07002M       4         /* Questionaire variable     */
       H07002N       4         /* Questionaire variable     */
       H07002O       4         /* Questionaire variable     */
       H07002P       4         /* Questionaire variable     */
       H07002Q       4         /* Questionaire variable     */
       H07002R       4         /* Questionaire variable     */
       H07003        4         /* Questionaire variable     */
       H07004        4         /* Questionaire variable     */
```

```
H07005        4         /* Questionaire variable     */
H07006        4         /* Questionaire variable     */
H07007        4         /* Questionaire variable     */
H07008        4         /* Questionaire variable     */
H07009        4         /* Questionaire variable     */
H07010        4         /* Questionaire variable     */
H07011        4         /* Questionaire variable     */
H07012        4         /* Questionaire variable     */
H07013        4         /* Questionaire variable     */
H07014        4         /* Questionaire variable     */
H07015        4         /* Questionaire variable     */
H07016        4         /* Questionaire variable     */
H07017        4         /* Questionaire variable     */
H07018        4         /* Questionaire variable     */
H07019        4         /* Questionaire variable     */
H07020        4         /* Questionaire variable     */
H07021        4         /* Questionaire variable     */
H07022        4         /* Questionaire variable     */
H07023        4         /* Questionaire variable     */
H07024        4         /* Questionaire variable     */
H07025        4         /* Questionaire variable     */
H07026        4         /* Questionaire variable     */
H07027        4         /* Questionaire variable     */
H07028        4         /* Questionaire variable     */
H07029        4         /* Questionaire variable     */
H07030        4         /* Questionaire variable     */
H07031        4         /* Questionaire variable     */
H07032        4         /* Questionaire variable     */
H07033        4         /* Questionaire variable     */
H07034        4         /* Questionaire variable     */
H07035        4         /* Questionaire variable     */
H07036        4         /* Questionaire variable     */
H07037        4         /* Questionaire variable     */
H07038        4         /* Questionaire variable     */
H07039        4         /* Questionaire variable     */
H07040        4         /* Questionaire variable     */
H07041        4         /* Questionaire variable     */
H07042        4         /* Questionaire variable     */
H07043        4         /* Questionaire variable     */
H07044        4         /* Questionaire variable     */
H07045        4         /* Questionaire variable     */
H07046        4         /* Questionaire variable     */
H07047        4         /* Questionaire variable     */
H07048        4         /* Questionaire variable     */
H07049        4         /* Questionaire variable     */
H07050        4         /* Questionaire variable     */
H07051        4         /* Questionaire variable     */
H07052        4         /* Questionaire variable     */
H07053        4         /* Questionaire variable     */
H07054        4         /* Questionaire variable     */
H07055        4         /* Questionaire variable     */
H07056        4         /* Questionaire variable     */
H07057        4         /* Questionaire variable     */
H07058        4         /* Questionaire variable     */
H07059        4         /* Questionaire variable     */
H07060        4         /* Questionaire variable     */
H07061        4         /* Questionaire variable     */

H07063        4         /* Questionaire variable     */
H07064        4         /* Questionaire variable     */
H07065        4         /* Questionaire variable     */
H07066        4         /* Questionaire variable     */
H07067        4         /* Questionaire variable     */
H07068F       4         /* Questionaire variable     */
H07068I       4         /* Questionaire variable     */
H07069        4         /* Questionaire variable     */
H07070        4         /* Questionaire variable     */
H07070A       4         /* Questionaire variable     */
H07070B       4         /* Questionaire variable     */
H07070C       4         /* Questionaire variable     */
H07070D       4         /* Questionaire variable     */
H07070E       4         /* Questionaire variable     */
```

```
SREDA          4          /* Questionaire variable     */
SRRACEA        4          /* Questionaire variable     */
SRRACEB        4          /* Questionaire variable     */
SRRACEC        4          /* Questionaire variable     */
SRRACED        4          /* Questionaire variable     */
SRRACEE        4          /* Questionaire variable     */
SRAGE          4          /* Questionaire variable     */

S07G18         4          /* Q1 & Q2 Supplement        */
S07G19         4          /* Q1 & Q2 Supplement        */
S07G20         4          /* Q1 & Q2 Supplement        */
S07G21         4          /* Q1 & Q2 Supplement        */
S07G22         4          /* Q1 & Q2 Supplement        */
S07G23         4          /* Q1 & Q2 Supplement        */
S07G24         4          /* Q1 & Q2 Supplement        */
S07G25         4          /* Q1 & Q2 Supplement        */
S07G26         4          /* Q1 & Q2 Supplement        */
S07G27         4          /* Q1 & Q2 Supplement        */
S07G28         4          /* Q1 & Q2 Supplement        */
S07G29A        4          /* Q1 & Q2 Supplement        */
S07G29B        4          /* Q1 & Q2 Supplement        */
S07G29C        4          /* Q1 & Q2 Supplement        */
S07G29D        4          /* Q1 & Q2 Supplement        */
S07G29E        4          /* Q1 & Q2 Supplement        */
S07G29F        4          /* Q1 & Q2 Supplement        */
S07G29G        4          /* Q1 & Q2 Supplement        */
S07G29H        4          /* Q1 & Q2 Supplement        */
S07G29I        4          /* Q1 & Q2 Supplement        */
S07G29J        4          /* Q1 & Q2 Supplement        */
S07G29K        4          /* Q1 & Q2 Supplement        */
S07G30         4          /* Q1 & Q2 Supplement        */
S07G31         4          /* Q1 & Q2 Supplement        */
S07G32         4          /* Q1 & Q2 Supplement        */
S07G33         4          /* Q1 & Q2 Supplement        */
S07G34         4          /* Q1 & Q2 Supplement        */
S07G35         4          /* Q1 & Q2 Supplement        */
S07G36         4          /* Q1 & Q2 Supplement        */
S07G37         4          /* Q1 & Q2 Supplement        */
S07G38         4          /* Q1 & Q2 Supplement        */
S07G39         4          /* Q1 & Q2 Supplement        */

S07001         4          /* Q2 & Q3 Supplement        */
S07002         4          /* Q2 & Q3 Supplement        */
S07003         4          /* Q2 & Q3 Supplement        */
S07004         4          /* Q2 & Q3 Supplement        */
S07005         4          /* Q2 & Q3 Supplement        */
S07006         4          /* Q2 & Q3 Supplement        */
S07007         4          /* Q2 & Q3 Supplement        */
S07008A        4          /* Q2 & Q3 Supplement        */
S07008B        4          /* Q2 & Q3 Supplement        */
S07008C        4          /* Q2 & Q3 supplement        */
S07008D        4          /* Q2 & Q3 supplement        */
S07008E        4          /* Q2 & Q3 supplement        */
S07008F        4          /* Q2 & Q3 supplement        */
S07008G        4          /* Q2 & Q3 supplement        */
S07008H        4          /* Q2 & Q3 supplement        */
S07008I        4          /* Q2 & Q3 supplement        */

S07Q01         4          /* Q3 Supplement             */
S07Q02         4          /* Q3 Supplement             */
S07Q03         4          /* Q3 Supplement             */
S07Q04         4          /* Q3 Supplement             */
S07Q05         4          /* Q3 Supplement             */
S07Q06         4          /* Q3 Supplement             */
S07Q07         4          /* Q3 Supplement             */

S07B01         4          /* Q3 Supplement             */
S07B02         4          /* Q3 Supplement             */
S07B03         4          /* Q3 Supplement             */
S07B04         4          /* Q3 Supplement             */

S07V01         4          /* Q4 Supplement             */
S07V02         4          /* Q4 Supplement             */
```

```
S07V05        4         /* Q4 Supplement            */
S07V06        4         /* Q4 Supplement            */
S07V07        4         /* Q4 Supplement            */
S07V08        4         /* Q4 Supplement            */
S07V09        4         /* Q4 Supplement            */
S07V10        4         /* Q4 Supplement            */
S07V11A       4         /* Q4 Supplement            */
S07V11B       4         /* Q4 Supplement            */
S07V11C       4         /* Q4 Supplement            */
S07V11D       4         /* Q4 Supplement            */
S07V11E       4         /* Q4 Supplement            */
S07V11F       4         /* Q4 Supplement            */
S07V11G       4         /* Q4 Supplement            */
S07V11H       4         /* Q4 Supplement            */
S07V12A       4         /* Q4 Supplement            */
S07V12B       4         /* Q4 Supplement            */
S07V12C       4         /* Q4 Supplement            */
S07V12D       4         /* Q4 Supplement            */
S07V12E       4         /* Q4 Supplement            */
S07V12F       4         /* Q4 Supplement            */
S07V12G       4         /* Q4 Supplement            */
S07V13        4         /* Q4 Supplement            */
S07V14A       4         /* Q4 Supplement            */
S07V14B       4         /* Q4 Supplement            */
S07V14C       4         /* Q4 Supplement            */
S07V14D       4         /* Q4 Supplement            */
S07V14E       4         /* Q4 Supplement            */
S07V14F       4         /* Q4 Supplement            */
S07V14G       4         /* Q4 Supplement            */
S07V14H       4         /* Q4 Supplement            */
S07V15        4         /* Q4 Supplement            */
S07V16        4         /* Q4 Supplement            */
S07V17        4         /* Q4 Supplement            */
S07V18A       4         /* Q4 Supplement            */
S07V18B       4         /* Q4 Supplement            */
S07V18C       4         /* Q4 Supplement            */
S07V18D       4         /* Q4 Supplement            */
S07V18E       4         /* Q4 Supplement            */
S07V18F       4         /* Q4 Supplement            */
S07V18G       4         /* Q4 Supplement            */

S07Y01        4         /* Q4 Supplement            */
S07Y22        4         /* Q4 Supplement            */
S07Y23        4         /* Q4 Supplement            */
S07Y24        4         /* Q4 Supplement            */
S07Y35        4         /* Q4 Supplement            */
S07Y36A       4         /* Q4 Supplement            */
S07Y36B       4         /* Q4 Supplement            */
S07Y36C       4         /* Q4 Supplement            */
S07Y36D       4         /* Q4 Supplement            */
S07Y36E       4         /* Q4 Supplement            */
S07Y36F       4         /* Q4 Supplement            */
S07Y36G       4         /* Q4 Supplement            */
S07Y36H       4         /* Q4 Supplement            */
S07Y36I       4         /* Q4 Supplement            */
S07Y37A       4         /* Q4 Supplement            */
S07Y37B       4         /* Q4 Supplement            */
S07Y37C       4         /* Q4 Supplement            */
S07Y37D       4         /* Q4 Supplement            */
S07Y37E       4         /* Q4 Supplement            */
S07Y37F       4         /* Q4 Supplement            */
S07Y37G       4         /* Q4 Supplement            */
S07Y37H       4         /* Q4 Supplement            */
S07Y37I       4         /* Q4 Supplement            */
S07Y37J       4         /* Q4 Supplement            */
S07Y37K       4         /* Q4 Supplement            */
S07Y37L       4         /* Q4 Supplement            */
S07Y37M       4         /* Q4 Supplement            */
S07Y37N       4         /* Q4 Supplement            */

ONTIME      $ 3         /* Survey fielding variable  */
FLAG_FIN    $ 5         /* Survey Fielding variable  */
DUPFLAG     $ 3         /* Survey Fielding variable  */
```

```
FNSTATUS      8         /* Survey fielding variable  */
KEYCOUNT      8         /* Survey fielding variable  */
QUARTER     $ 8         /* Survey fielding variable  */
/*TRICKDUP    $ 3*/         /* Survey Fielding variable  */
WEB           8         /* Survey Fielding variable  */


N1               8         /* CS flag variable     */
N1A1             8         /* CS flag variable     */
N1A2             8         /* CS flag variable     */
N1A3             8         /* CS flag variable     */
N2               8         /* CS flag variable     */
N3               8         /* CS flag variable     */
N4               8         /* CS flag variable     */
N5               8         /* CS flag variable     */
N6               8         /* CS flag variable     */
N7               8         /* CS flag variable     */
N8               8         /* CS flag variable     */
N9               8         /* CS flag variable     */
N10              8         /* CS flag variable     */
N10A1            8         /* CS flag variable     */
N10B1            8         /* CS flag variable     */
N10B2            8         /* CS flag variable     */
N10B3            8         /* CS flag variable     */
N10B4            8         /* CS flag variable     */
N10B5            8         /* CS flag variable     */
N10B6            8         /* CS flag variable     */
N10B7            8         /* CS flag variable     */
N10C1            8         /* CS flag variable     */
N10C2            8         /* CS flag variable     */
N10C3            8         /* CS flag variable     */
N11              8         /* CS flag variable     */
N12              8         /* CS flag variable     */
N13              8         /* CS flag variable     */
N14              8         /* CS flag variable     */
N15A1            8         /* CS flag variable     */
N15A2            8         /* CS flag variable     */
N15A3            8         /* CS flag variable     */
N15A4            8         /* CS flag variable     */
N15A5            8         /* CS flag variable     */
N15A6            8         /* CS flag variable     */
N15B1            8         /* CS flag variable     */
N15B2            8         /* CS flag variable     */
N16              8         /* CS flag variable     */
N16A1            8         /* CS flag variable     */
N17A             8         /* CS flag variable     */
N17A1            8         /* CS flag variable     */
N17B             8         /* CS flag variable     */
N18              8         /* CS flag variable     */
N19              8         /* CS flag variable     */

MISS_1        8         /* CS Count             */
MISS_4        8         /* CS Count             */
MISS_5        8         /* CS Count             */
MISS_6        8         /* CS Count             */
MISS_7        8         /* CS Count             */
MISS_8        8         /* CS Count             */
MISS_9        8         /* CS Count             */
MISS_TOT      8         /* CS Count             */

XSERVAFF      3         /* constructed       */
XTNEXREG      3         /* constructed       */
XBMI          8         /* constructed       */
XBMICAT       3         /* constructed       */
XENRLLMT      8         /* constructed       */
XENR_PCM      8         /* constructed       */
XINS_COV      8         /* constructed       */
XBENCAT       8         /* constructed       */
XENR_RSV      8         /* constructed       */
XINS_RSV      8         /* constructed       */
XREGION       3         /* constructed       */
XCATCH        8         /* constructed       */
CONUS         3         /* constructed       */
```

```
        XOCONUS       3         /* constructed       */
        OUTCATCH      8         /* constructed       */
        XSEXA         8         /* constructed       */
        XBNFGRP       8         /* constructed       */
        /*KDISENRL      8*/         /* constructed       */
        KMILOFFC      8         /* constructed       */
        KCIVOFFC      8         /* constructed       */
        KBGPRB1       8         /* constructed       */
        KBGPRB2       8         /* constructed       */
        KMILOPQY      8         /* constructed       */
        KCIVOPQY      8         /* constructed       */
        KCIVINS       8         /* constructed       */

        /*KBRSTCR       8*/         /* constructed       */
        HP_PRNTL      8         /* constructed       */
        HP_MAMOG      8         /* constructed       */
        HP_MAM50      8         /* constructed       */
        HP_PAP        8         /* constructed       */
        HP_BP         8         /* constructed       */
        HP_FLU        8         /* constructed       */
        /*HP_PROS       8 */        /* constructed       */

        /*HP_BRST       8 */        /* constructed       */
        /*HP_CHOL       8 */        /* constructed       */
        HP_SMOKE      8         /* constructed       */
        HP_SMOKH      8         /* constructed       */
/*      HP_CESS       8 */        /* constructed       */
        HP_CESH       8         /* constructed       */
/*        HP_NORM       8 */      /* constructed       */
        HP_OBESE      8         /* constructed       */

/*        ADJ_CELL      $7 */       /* constructed       */
/*        POSTC_O       $3 */       /* constructed       */
        POSTCELL      $7        /* constructed       */

        BWT           8         /* weights           */
        FWRWT         8         /* weights           */
        FWRWT1        8         /* weights           */
        FWRWT2        8         /* weights           */
        FWRWT3        8         /* weights           */
        FWRWT4        8         /* weights           */
        FWRWT5        8         /* weights           */
        FWRWT6        8         /* weights           */
        FWRWT7        8         /* weights           */
        FWRWT8        8         /* weights           */
        FWRWT9        8         /* weights           */
        FWRWT10       8         /* weights           */
        FWRWT11       8         /* weights           */
        FWRWT12       8         /* weights           */
        FWRWT13       8         /* weights           */
        FWRWT14       8         /* weights           */
        FWRWT15       8         /* weights           */
        FWRWT16       8         /* weights           */
        FWRWT17       8         /* weights           */
        FWRWT18       8         /* weights           */
        FWRWT19       8         /* weights           */
        FWRWT20       8         /* weights           */
        FWRWT21       8         /* weights           */
        FWRWT22       8         /* weights           */
        FWRWT23       8         /* weights           */
        FWRWT24       8         /* weights           */
        FWRWT25       8         /* weights           */
        FWRWT26       8         /* weights           */
        FWRWT27       8         /* weights           */
        FWRWT28       8         /* weights           */
        FWRWT29       8         /* weights           */
        FWRWT30       8         /* weights           */
        FWRWT31       8         /* weights           */
        FWRWT32       8         /* weights           */
        FWRWT33       8         /* weights           */
        FWRWT34       8         /* weights           */
        FWRWT35       8         /* weights           */
        FWRWT36       8         /* weights           */
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FWRWT37       8         /* weights          */
FWRWT38       8         /* weights          */
FWRWT39       8         /* weights          */
FWRWT40       8         /* weights          */
FWRWT41       8         /* weights          */
FWRWT42       8         /* weights          */
FWRWT43       8         /* weights          */
FWRWT44       8         /* weights          */
FWRWT45       8         /* weights          */
FWRWT46       8         /* weights          */
FWRWT47       8         /* weights          */
FWRWT48       8         /* weights          */
FWRWT49       8         /* weights          */
FWRWT50       8         /* weights          */
FWRWT51       8         /* weights          */
FWRWT52       8         /* weights          */
FWRWT53       8         /* weights          */
FWRWT54       8         /* weights          */
FWRWT55       8         /* weights          */
FWRWT56       8         /* weights          */
FWRWT57       8         /* weights          */
FWRWT58       8         /* weights          */
FWRWT59       8         /* weights          */
FWRWT60       8         /* weights          */

CFWT          8         /* weights          */
CFWT1         8         /* weights          */
CFWT2         8         /* weights          */
CFWT3         8         /* weights          */
CFWT4         8         /* weights          */
CFWT5         8         /* weights          */
CFWT6         8         /* weights          */
CFWT7         8         /* weights          */
CFWT8         8         /* weights          */
CFWT9         8         /* weights          */
CFWT10        8         /* weights          */
CFWT11        8         /* weights          */
CFWT12        8         /* weights          */
CFWT13        8         /* weights          */
CFWT14        8         /* weights          */
CFWT15        8         /* weights          */
CFWT16        8         /* weights          */
CFWT17        8         /* weights          */
CFWT18        8         /* weights          */
CFWT19        8         /* weights          */
CFWT20        8         /* weights          */
CFWT21        8         /* weights          */
CFWT22        8         /* weights          */
CFWT23        8         /* weights          */
CFWT24        8         /* weights          */
CFWT25        8         /* weights          */
CFWT26        8         /* weights          */
CFWT27        8         /* weights          */
CFWT28        8         /* weights          */
CFWT29        8         /* weights          */
CFWT30        8         /* weights          */
CFWT31        8         /* weights          */
CFWT32        8         /* weights          */
CFWT33        8         /* weights          */
CFWT34        8         /* weights          */
CFWT35        8         /* weights          */
CFWT36        8         /* weights          */
CFWT37        8         /* weights          */
CFWT38        8         /* weights          */
CFWT39        8         /* weights          */
CFWT40        8         /* weights          */
CFWT41        8         /* weights          */
CFWT42        8         /* weights          */
CFWT43        8         /* weights          */
CFWT44        8         /* weights          */
CFWT45        8         /* weights          */
CFWT46        8         /* weights          */
CFWT47        8         /* weights          */
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CFWT48        8         /* weights          */
CFWT49        8         /* weights          */
CFWT50        8         /* weights          */
CFWT51        8         /* weights          */
CFWT52        8         /* weights          */
CFWT53        8         /* weights          */
CFWT54        8         /* weights          */
CFWT55        8         /* weights          */
CFWT56        8         /* weights          */
CFWT57        8         /* weights          */
CFWT58        8         /* weights          */
CFWT59        8         /* weights          */
CFWT60        8         /* weights          */
CFWT61        8         /* weights          */
CFWT62        8         /* weights          */
CFWT63        8         /* weights          */
CFWT64        8         /* weights          */
CFWT65        8         /* weights          */
CFWT66        8         /* weights          */
CFWT67        8         /* weights          */
CFWT68        8         /* weights          */
CFWT69        8         /* weights          */
CFWT70        8         /* weights          */
CFWT71        8         /* weights          */
CFWT72        8         /* weights          */
CFWT73        8         /* weights          */
CFWT74        8         /* weights          */
CFWT75        8         /* weights          */
CFWT76        8         /* weights          */
CFWT77        8         /* weights          */
CFWT78        8         /* weights          */
CFWT79        8         /* weights          */
CFWT80        8         /* weights          */
CFWT81        8         /* weights          */
CFWT82        8         /* weights          */
CFWT83        8         /* weights          */
CFWT84        8         /* weights          */
CFWT85        8         /* weights          */
CFWT86        8         /* weights          */
CFWT87        8         /* weights          */
CFWT88        8         /* weights          */
CFWT89        8         /* weights          */
CFWT90        8         /* weights          */
CFWT91        8         /* weights          */
CFWT92        8         /* weights          */
CFWT93        8         /* weights          */
CFWT94        8         /* weights          */
CFWT95        8         /* weights          */
CFWT96        8         /* weights          */
CFWT97        8         /* weights          */
CFWT98        8         /* weights          */
CFWT99        8         /* weights          */
CFWT100       8         /* weights          */
CFWT101       8         /* weights          */
CFWT102       8         /* weights          */
CFWT103       8         /* weights          */
CFWT104       8         /* weights          */
CFWT105       8         /* weights          */
CFWT106       8         /* weights          */
CFWT107       8         /* weights          */
CFWT108       8         /* weights          */
CFWT109       8         /* weights          */
CFWT110       8         /* weights          */
CFWT111       8         /* weights          */
CFWT112       8         /* weights          */
CFWT113       8         /* weights          */
CFWT114       8         /* weights          */
CFWT115       8         /* weights          */
CFWT116       8         /* weights          */
CFWT117       8         /* weights          */
CFWT118       8         /* weights          */
CFWT119       8         /* weights          */
CFWT120       8         /* weights          */
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CFWT121       8         /* weights          */
CFWT122       8         /* weights          */
CFWT123       8         /* weights          */
CFWT124       8         /* weights          */
CFWT125       8         /* weights          */
CFWT126       8         /* weights          */
CFWT127       8         /* weights          */
CFWT128       8         /* weights          */
CFWT129       8         /* weights          */
CFWT130       8         /* weights          */
CFWT131       8         /* weights          */
CFWT132       8         /* weights          */
CFWT133       8         /* weights          */
CFWT134       8         /* weights          */
CFWT135       8         /* weights          */
CFWT136       8         /* weights          */
CFWT137       8         /* weights          */
CFWT138       8         /* weights          */
CFWT139       8         /* weights          */
CFWT140       8         /* weights          */
CFWT141       8         /* weights          */
CFWT142       8         /* weights          */
CFWT143       8         /* weights          */
CFWT144       8         /* weights          */
CFWT145       8         /* weights          */
CFWT146       8         /* weights          */
CFWT147       8         /* weights          */
CFWT148       8         /* weights          */
CFWT149       8         /* weights          */
CFWT150       8         /* weights          */
CFWT151       8         /* weights          */
CFWT152       8         /* weights          */
CFWT153       8         /* weights          */
CFWT154       8         /* weights          */
CFWT155       8         /* weights          */
CFWT156       8         /* weights          */
CFWT157       8         /* weights          */
CFWT158       8         /* weights          */
CFWT159       8         /* weights          */
CFWT160       8         /* weights          */
CFWT161       8         /* weights          */
CFWT162       8         /* weights          */
CFWT163       8         /* weights          */
CFWT164       8         /* weights          */
CFWT165       8         /* weights          */
CFWT166       8         /* weights          */
CFWT167       8         /* weights          */
CFWT168       8         /* weights          */
CFWT169       8         /* weights          */
CFWT170       8         /* weights          */
CFWT171       8         /* weights          */
CFWT172       8         /* weights          */
CFWT173       8         /* weights          */
CFWT174       8         /* weights          */
CFWT175       8         /* weights          */
CFWT176       8         /* weights          */
CFWT177       8         /* weights          */
CFWT178       8         /* weights          */
CFWT179       8         /* weights          */
CFWT180       8         /* weights          */
CFWT181       8         /* weights          */
CFWT182       8         /* weights          */
CFWT183       8         /* weights          */
CFWT184       8         /* weights          */
CFWT185       8         /* weights          */
CFWT186       8         /* weights          */
CFWT187       8         /* weights          */
CFWT188       8         /* weights          */
CFWT189       8         /* weights          */
CFWT190       8         /* weights          */
CFWT191       8         /* weights          */
CFWT192       8         /* weights          */
CFWT193       8         /* weights          */
```

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      CFWT194       8         /* weights           */
      CFWT195       8         /* weights           */
      CFWT196       8         /* weights           */
      CFWT197       8         /* weights           */
      CFWT198       8         /* weights           */
      CFWT199       8         /* weights           */
      CFWT200       8         /* weights           */
      CFWT201       8         /* weights           */
      CFWT202       8         /* weights           */
      CFWT203       8         /* weights           */
      CFWT204       8         /* weights           */
      CFWT205       8         /* weights           */
      CFWT206       8         /* weights           */
      CFWT207       8         /* weights           */
      CFWT208       8         /* weights           */
      CFWT209       8         /* weights           */
      CFWT210       8         /* weights           */
      CFWT211       8         /* weights           */
      CFWT212       8         /* weights           */
      CFWT213       8         /* weights           */
      CFWT214       8         /* weights           */
      CFWT215       8         /* weights           */
      CFWT216       8         /* weights           */
      CFWT217       8         /* weights           */
      CFWT218       8         /* weights           */
      CFWT219       8         /* weights           */
      CFWT220       8         /* weights           */
      CFWT221       8         /* weights           */
      CFWT222       8         /* weights           */
      CFWT223       8         /* weights           */
      CFWT224       8         /* weights           */
      CFWT225       8         /* weights           */
      CFWT226       8         /* weights           */
      CFWT227       8         /* weights           */
      CFWT228       8         /* weights           */
      CFWT229       8         /* weights           */
      CFWT230       8         /* weights           */
      CFWT231       8         /* weights           */
      CFWT232       8         /* weights           */
      CFWT233       8         /* weights           */
      CFWT234       8         /* weights           */
      CFWT235       8         /* weights           */
      CFWT236       8         /* weights           */
      CFWT237       8         /* weights           */
      CFWT238       8         /* weights           */
      CFWT239       8         /* weights           */
      CFWT240       8         /* weights           */
    ;

   SET  &DSNO;

   LABEL XCATCH = "XCATCH - Catchment Area (Reporting) ";
   FORMAT XCATCH CACR.;
   BY MPRID;
RUN;

TITLE1 "DOD Annual Health Care Survey (6244-300)";
TITLE2 "Program Name: ADDWGTS.SAS";
TITLE3 "Program Inputs: &DSNI_1..SD2 -- &DSNI_2..SD2";
TITLE4 "Program Outputs: &DSNO..SD2";

PROC CONTENTS POSITION; RUN;
```

F.17 WEIGHTING\FIX2004XCATCH.SAS - FIX CATCHMENT REPORTING VARIABLE (XCATCH) FOR 2004 - ANNUAL.

```
***************************************************************************
*
* PROGRAM: Fix2004XCATCH.SAS
* PURPOSE: Fix catchment reporting variable (XCATCH) for 2004
* WRITTEN  January 25, 2006 BY Keith Rathbun
* TASK:    2007 DoD Database Development (6244-300)
*
* INPUTS:  1) HCS04A_1.SD2 - 2004 Combined Annual HCSDB dataset
*
* OUTPUTS: 1) XCATCY04.SD2 - 2004 combined corrected Annual HCSDB dataset
*             (output in the 2007 data area)
*
* NOTES:   1) XCATCH needed to be redefined with the 2007 definition
*             on the 2004 annual dataset.
*
***************************************************************************;
OPTIONS NOFMTERR NOCENTER LS=132 PS=80 COMPRESS=YES;
LIBNAME OUT V612 "..\..\DATA";
LIBNAME IN2004 V612 "..\..\..\2004\DATA";

PROC SORT DATA=IN2004.HCS04A_1
          (KEEP=MPRID PCM ENRID DCATCH D_HEALTH D_FAC D_PAR SERVAFF XREGION PATCAT)
     OUT=TEMP1;
   BY MPRID;
RUN;

DATA TEMP1;
   SET TEMP1;

   IF      SERVAFF = 'A' THEN XSERVAFF = 1; * Army;
   ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2; * Air Force;
   ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3; * Navy;
   ELSE XSERVAFF = 4;                       * Other;

   ************************************************************************
   * Assign XTNEXREG and XOCONUS using XREGION.
   ************************************************************************;
   IF XREGION IN (1,2,5) THEN XTNEXREG = 1;
   ELSE IF XREGION IN (3,4,6) THEN XTNEXREG = 2;
   ELSE IF XREGION IN (7,8,9,10,11,12,16) THEN XTNEXREG = 3;
   ELSE IF XREGION IN (13,14,15) THEN XTNEXREG = 4;

   IF XREGION      = 13 THEN XOCONUS = 1;
   ELSE IF XREGION = 14 THEN XOCONUS = 2;
   ELSE IF XREGION = 15 THEN XOCONUS = 3;
RUN;

***************************************************************************
* Create and attach XCATCH (Catchment Reporting variable) to final dataset.
* Note that dataset TMPXCTCH with XCATCH is created by this include file.
***************************************************************************;
%INCLUDE "XCATCH.INC"; * Requires input dataset called TEMP1;
PROC SORT DATA=TMPXCTCH; BY MPRID; RUN;

PROC SORT DATA=IN2004.HCS04A_1(DROP=XCATCH) OUT=HCS04A_1;
   BY MPRID;
RUN;

DATA OUT.XCATCY04;
   MERGE HCS04A_1(IN=IN1) TMPXCTCH(IN=IN2);
   BY MPRID;
   KEEP MPRID XCATCH QUARTER;
RUN;

TITLE1 "Annual DOD Health Care Survey Database (6244-300)";
TITLE2 "Program Name: Fix2004XCATCH.SAS By Keith Rathbun";
TITLE3 "Program Inputs: 2004 HCSDB sample and analysis files";
TITLE4 "Program Output: XCATCY04.SD2 - CY 2004 Combined XCATCH dataset";

PROC FREQ;
```

```
   TABLES XCATCH /MISSING LIST;
RUN;
```

F.18 WEIGHTING\FIX2005XCATCH.SAS - FIX CATCHMENT REPORTING VARIABLE (XCATCH) FOR 2005 - ANNUAL.

```
***************************************************************************
*
* PROGRAM: Fix2005XCATCH.SAS
* PURPOSE: Fix catchment reporting variable (XCATCH) for 2005
* WRITTEN  October 16, 2006 BY Keith Rathbun
* TASK:    2007 DoD Database Development (6244-300)
*
* INPUTS:  1) COMB2005.SD2 - 2005 Combined Annual HCSDB dataset
*
* OUTPUTS: 1) XCATCY05.SD2 - 2005 combined corrected Annual HCSDB dataset
*             (output in the 2007 data area)
*
* NOTES:   1) XCATCH needed to be redefined with the 2007 definition
*             on the 2005 annual dataset.
*
***************************************************************************;
OPTIONS NOFMTERR NOCENTER LS=132 PS=80 COMPRESS=YES;
LIBNAME OUT V612 "..\..\DATA";
LIBNAME IN2005 V612 "..\..\..\2005\DATA";

PROC SORT DATA=IN2005.COMB2005
          (KEEP=MPRID ENRID PCM DCATCH D_HEALTH D_FAC D_PAR SERVAFF XREGION PATCAT)
     OUT=TEMP1;
   BY MPRID;
RUN;

DATA TEMP1;
   SET TEMP1;

   IF      SERVAFF = 'A' THEN XSERVAFF = 1; * Army;
   ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2; * Air Force;
   ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3; * Navy;
   ELSE XSERVAFF = 4;                       * Other;

   ************************************************************************
   * Assign XTNEXREG and XOCONUS using XREGION.
   ************************************************************************;
   IF XREGION IN (1,2,5) THEN XTNEXREG = 1;
   ELSE IF XREGION IN (3,4,6) THEN XTNEXREG = 2;
   ELSE IF XREGION IN (7,8,9,10,11,12,16) THEN XTNEXREG = 3;
   ELSE IF XREGION IN (13,14,15) THEN XTNEXREG = 4;

   IF XREGION      = 13 THEN XOCONUS = 1;
   ELSE IF XREGION = 14 THEN XOCONUS = 2;
   ELSE IF XREGION = 15 THEN XOCONUS = 3;
RUN;

***************************************************************************
* Create and attach XCATCH (Catchment Reporting variable) to final dataset.
* Note that dataset TMPXCTCH with XCATCH is created by this include file.
***************************************************************************;
%INCLUDE "XCATCH.INC"; * Requires input dataset called TEMP1;
PROC SORT DATA=TMPXCTCH; BY MPRID; RUN;

PROC SORT DATA=IN2005.HCS05A_1(DROP=XCATCH) OUT=HCS05A_1;
   BY MPRID;
RUN;

DATA OUT.XCATCY05;
   MERGE HCS05A_1(IN=IN1) TMPXCTCH(IN=IN2);
   BY MPRID;
   KEEP MPRID XCATCH QUARTER;
RUN;

TITLE1 "Annual DOD Health Care Survey Database (6244-300)";
TITLE2 "Program Name: Fix2005XCATCH.SAS By Keith Rathbun";
TITLE3 "Program Inputs: 2005 HCSDB sample and analysis files";
TITLE4 "Program Output: XCATCY05.SD2 - CY 2005 Combined XCATCH dataset";

PROC FREQ;
```

```
   TABLES XCATCH /MISSING LIST;
RUN;
```

F.19 WEIGHTING\FIX2006XCATCH.SAS - FIX CATCHMENT REPORTING VARIABLE (XCATCH) FOR 2006 - ANNUAL.

```
***************************************************************************
*
* PROGRAM: Fix2006XCATCH.SAS
* PURPOSE: Fix catchment reporting variable (XCATCH) for 2006
* WRITTEN  November 6, 2007 BY Keith Rathbun
* TASK:    2007 DoD Database Development (6244-300)
*
* INPUTS:  1) FRAMEA.SD2 - 2006 Quarterly Sample Frames
*          2) HCS06A_1/2.SD2 - 2006 Combined Annual HCSDB dataset
*
* OUTPUTS: 1) XCATCY06.SD2 - 2006 combined corrected Annual HCSDB dataset
*             (output in the 2007 data area)
*
* NOTES:   1) XCATCH needed to be redefined with the 2007 definition
*             on the 2006 annual dataset
*
***************************************************************************;
OPTIONS NOFMTERR NOCENTER LS=132 PS=80 COMPRESS=YES;
LIBNAME OUT V612 "..\..\DATA";
LIBNAME IN2006 V612 "..\..\..\2006\DATA";

***************************************************************************
* Extract variables necessary to construct XCATCH by QUARTER.
***************************************************************************;
%MACRO GET_QTR(QTR=);
   PROC SORT DATA=IN2006.HCS06A_2
        (KEEP=MPRID ENRID PCM DCATCH D_HEALTH D_FAC SERVAFF XREGION PATCAT QUARTER)
        OUT=TEMP1_&QTR;
      BY MPRID;
      WHERE QUARTER = "&QTR";
   RUN;
%MEND;

%GET_QTR(QTR=Q1FY2006);
%GET_QTR(QTR=Q2FY2006);
%GET_QTR(QTR=Q3FY2006);
%GET_QTR(QTR=Q4FY2006);

***************************************************************************
* Extract D_PAR for use with creating XCATCH.
***************************************************************************;
%MACRO GETD_PAR(LOC=);
   LIBNAME IN V612 "..\..\..\&LOC.\DATA\AFINAL";
   PROC SORT DATA=IN.FRAMEA(KEEP=MPRID D_PAR) OUT=&LOC.;
      BY MPRID;
   RUN;
%MEND;

%GETD_PAR(LOC=Q4_2005);
%GETD_PAR(LOC=Q2FY2006);
%GETD_PAR(LOC=Q3FY2006);
%GETD_PAR(LOC=Q4FY2006);

DATA Q1;
   MERGE Q4_2005(IN=IN1) TEMP1_Q1FY2006(IN=IN2);
   BY MPRID;
   IF IN1 AND IN2;
RUN;

DATA Q2;
   MERGE Q2FY2006(IN=IN1) TEMP1_Q2FY2006(IN=IN2);
   BY MPRID;
   IF IN1 AND IN2;
RUN;

DATA Q3;
   MERGE Q3FY2006(IN=IN1) TEMP1_Q3FY2006(IN=IN2);
   BY MPRID;
   IF IN1 AND IN2;
RUN;
```

```
DATA Q4;
   MERGE Q4FY2006(IN=IN1) TEMP1_Q4FY2006(IN=IN2);
   BY MPRID;
   IF IN1 AND IN2;
RUN;

DATA TEMP1;
   SET Q1 Q2 Q3 Q4;
   BY MPRID;

   IF      SERVAFF = 'A' THEN XSERVAFF = 1; * Army;
   ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2; * Air Force;
   ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3; * Navy;
   ELSE XSERVAFF = 4;                       * Other;

   ************************************************************************
   * Assign XTNEXREG and XOCONUS using XREGION.
   ************************************************************************;
   IF XREGION IN (1,2,5) THEN XTNEXREG = 1;
   ELSE IF XREGION IN (3,4,6) THEN XTNEXREG = 2;
   ELSE IF XREGION IN (7,8,9,10,11,12,16) THEN XTNEXREG = 3;
   ELSE IF XREGION IN (13,14,15) THEN XTNEXREG = 4;

   IF XREGION      = 13 THEN XOCONUS = 1;
   ELSE IF XREGION = 14 THEN XOCONUS = 2;
   ELSE IF XREGION = 15 THEN XOCONUS = 3;
RUN;

***************************************************************************
* Create and attach XCATCH (Catchment Reporting variable) to final dataset.
* Note that dataset TMPXCTCH with XCATCH is created by this include file.
***************************************************************************;
%INCLUDE "XCATCH.INC"; * Requires input dataset called TEMP1;
PROC SORT DATA=TMPXCTCH; BY MPRID; RUN;

PROC SORT DATA=IN2006.HCS06A_1(DROP=XCATCH) OUT=HCS06A_1;
   BY MPRID;
RUN;

DATA OUT.XCATCY06;
   MERGE HCS06A_1(IN=IN1) TMPXCTCH(IN=IN2);
   BY MPRID;
   FORMAT _ALL_;
   KEEP MPRID XCATCH QUARTER;
RUN;

TITLE1 "Annual DOD Health Care Survey Database (6244-300)";
TITLE2 "Program Name: Fix2006XCATCH.SAS By Keith Rathbun";
TITLE3 "Program Inputs: 2006 HCSDB sample and analysis files";
TITLE4 "Program Output: XCATCY06.SD2 - CY 2006 Combined XCATCH dataset";

PROC FREQ;
   TABLES XCATCH /MISSING LIST;
RUN;
```

F.20 WEIGHTING\XCATCH.INC - CREATE DETAILED CACSMPL FOR ANNUAL REPORT CARDS - ANNUAL.

```
*****************************************************************************
*
* PROGRAM:   XCATCH.INC
* TASK:      DOD HEALTH CARE SURVEY ANALYSIS (6077-300)
* PURPOSE:   CREATE DETAILED CACSMPL FOR ANNUAL REPORT CARDS
*
* WRITTEN:   01/20/2004 BY KEITH RATHBUN
*
* MODIFIED:  1) 02/14/2005 BY LUCY LU. RENAME STEP1Q.INC TO XCATCH.INC
*            2) 03/10/2005 BY LUCY LU, REVISED PROGRAM TO RUN 2002 AND 2003 FILES
*            3) 01/06/2006 BY KEITH RATHBUN.  Updated for 2006.  Removed
*               PROCESS macro.
*            4) 11/16/2006 BY KEITH RATHBUN. Changed XCATCHno collapsement
*               requirement to be less than 80 instead of 20 for this
*               annual version of XCATCH.INC.
*
* INPUTS:   1) TEMP1.SD2 - Temporary SAS dataset
*           2) TMA.SD2 - TMA-provided catchment definitions
*
* OUTPUT:   1) TEMP.SD2  - Temporary SAS dataset
*
* NOTES:    1) This program is setup to run for all survey years as long
*              as the necessary variables are passed to it in TEMP1.
*           2) Required variables in TEMP1 dataset include the following:
*              MPRID, ENRID, PCM, DCATCH, D_PAR, D_HEALTH, and D_FAC.
*
* INCLUDES: 1) AssignGEOCELL.inc
*           2) AssignCOM_GEO.inc
*
*****************************************************************************;

%LET smplqtr=Q4FY2007;

LIBNAME TMA V612 "..\..\..\&smplqtr\DATA\AFINAL";
DATA TEMP(KEEP=MPRID GEOCELL PCM ENRID XTNEXREG XSERVAFF XOCONUS PATCAT);
   SET TEMP1;
   BY MPRID;
   if pcm = 'MTF' then do;
      %INCLUDE "..\..\..\&smplqtr\Programs\Sampling\AssignGeoCell.inc";
      else if ('1976' <= enrid <= '1980' ) or ( '6301' <= enrid <= '6323' ) or
         ('6991' <= enrid <= '6994')   or ('6501' <=enrid <='6512') or
         ('7166' <= enrid <= '7195') or ('6700' <= enrid <= '6881') or enrid='0000'
         then geocell=dcatch; *administrative assignment 1976-1980 added q4 2002, 6700-6881
added q1 2004,
                                 0000 added q1,2005;
   else if ('8001' <= enrid <= '8036') or ('6901' <= enrid <= '6919')
         then geocell = dcatch; *Managed care contractor assignment, added in q1 2005; *8001-
8036 added q2 2005;
      else if ('3031' <= enrid <= '3057')
         then geocell = dcatch; ***On board ship***;
      else if enrid in ('0002', '0041', '0044', '0082', '0111', '0213', '0235', '0585', '5208',
'0250',
                        '0449', '0626', '0012')
         then geocell = dcatch; ***Inactive***;  *0626 added q2 2003, 0012 added q4 2003,
                                                  0041,  0044,  0082,  0111,  0213,  0235,  0585
added q2 2005;
      else if enrid = ' ' then geocell = dcatch; ***enrolled, but missing ENRID, added q2
2005***;
      ******************************************************************;
      else if ('0190' <= enrid <='0199') then geocell = dcatch;**BYDON;
      ******************************************************************;
      else geocell = enrid;
   end;
   else if patcat='ACTDTY' then geocell=dcatch; /*Added in q1fy2007, Put the rest of ACTDTY in
their dcatch for sampling purpose*/
   else geocell=dcatch;
RUN;

PROC SORT DATA=TEMP; BY GEOCELL; RUN;
```

```
data TMA (keep = geocell d_par d_fac d_instal d_health d_dmis servaff);
   set TMA.TMA;
   rename facilit1=d_fac installa=d_instal dmis_fac=d_dmis facility=servaff ;
   length d_par $4.;
   d_par = DMIS_PAR;
   length geocell $4.;
   geocell = DMIS_ID;
   length d_health $2.;
   d_health = HEALTH_S;
run;

PROC SORT DATA=TMA; BY GEOCELL; RUN;

DATA TEMP;
   MERGE TEMP(IN=IN1) TMA(IN=IN2);
   BY GEOCELL;
   LENGTH FLAG $15;
   IF IN1 AND IN2 THEN FLAG = "BOTH";
   ELSE IF IN1 THEN FLAG = "HCSDB ONLY";
   ELSE FLAG = "TMA XLS ONLY";
   IF IN1;
RUN;

PROC FREQ;
   TABLES FLAG /MISSING LIST;
RUN;

DATA TEMP(KEEP=MPRID XCATCH XTNEXREG XSERVAFF XOCONUS);
   SET TEMP;
   LENGTH XCATCH 8;
   com_geo = geocell;
   if pcm = 'MTF' then do;
      %INCLUDE "..\..\..\&smplqtr\Programs\Sampling\AssignCOM_GEO.inc";
      else if ('1976' <= enrid <= '1980' ) or ( '6301' <= enrid <= '6323' ) or
         ('6991' <= enrid <= '6994')   or ('6501' <=enrid <='6512') or
         ('7166' <= enrid <= '7195') or ( '6700' <= enrid <= '6881' ) or enrid = '0000' or
         ('8001' <= enrid <= '8036') or ('6901' <= enrid <= '6919') or
         ('3031' <= enrid <= '3057') or
         enrid in ('0002', '0041', '0044', '0082', '0111', '0213', '0235', '0585', '5208',
'0250',
                        '0449', '0626', '0012') or
         ('0190' <= enrid <='0199') then com_geo = geocell;
      else com_geo = d_par;
   end;
   else if patcat='ACTDTY' then com_geo=d_par;

   if d_fac='NONCAT' or d_fac='TGRO' or d_fac="TPR" then do;
      if d_health in ('01','02','05','17') then com_geo = '9901';
      else if d_health in ('03','04','06','18') then com_geo = '9902';
      else if d_health in ('07','08','09','10','11','12','19') then com_geo = '9903';
      else if d_health in ('00','13','14','15') then com_geo = '9904';
   end;
   ********************************************************************************;
   ***d_fac="TPR" and d_health = '17', '18', '19' were added above for Q4, 2004,  ***;
   ***since we got the new regions 17(North T_NEX),18(South T_NEX),19(West T_NEX).***;
   ********************************************************************************;

   *** If the facility is unknown then set com_geo indicates unknown facility ***;
   *** '0999' added 03/15 to account for id 6992;
   if com_geo in ('9900', '0999', '0998',' ') then com_geo = '9904';

   ******************************************************************;
   ***Made the following 9 Navy sites stand alone in q1,2005:       ***;
   ***'0026','0068','0231','0378','0387','0405','0407','0508','6215'***;
   ******************************************************************;
   if   geocell   in   ('0026','0068','0231','0378','0387','0405','0407','0508','6215')   then
com_geo=geocell;

   xcatch = INPUT(com_geo,8.);
   label xcatch = "XCATCH - Catchment Area (Reporting)";
RUN;

PROC SORT DATA=TEMP; BY XCATCH; RUN;
```

```
PROC SUMMARY DATA=TEMP NWAY;
     CLASS XCATCH;
     OUTPUT OUT=TEMPCNT(DROP=_TYPE_ rename=_FREQ_=XCATCHno);
RUN;

PROC PRINT DATA=TEMPCNT;
RUN;

DATA TMPXCTCH(KEEP=MPRID XCATCH);
   MERGE TEMPCNT TEMP;
   BY XCATCH;

   /*** JMA 10/25/2006 Values of Xcatch which occur less than 20 times in
    *** the dataset will be updated
    ***/


   IF XCATCHno < 80 THEN DO;
      XCATCH=SUM(9000,100*XTNEXREG,XSERVAFF);

      IF XOCONUS=1 THEN XCATCH=SUM(9400,XSERVAFF);
      IF XOCONUS=2 THEN XCATCH=SUM(9500,XSERVAFF);
      IF XOCONUS=3 THEN XCATCH=SUM(9600,XSERVAFF);
   END;

RUN;
```

F.21 WEIGHTING\CREATEFY05_06.SAS - CREATE FY2005 AND FY2006 DATABASES WITH ALL OF THE NECESSARY REPORTING VARIABLES. - ANNUAL.

```
***************************************************************************
*
* PROGRAM:  CreateFY05_06.SAS
* PURPOSE:  Create FY2005 and FY2006 databases with all of the necessary
*           reporting variables.
* WRITTEN:  October 25, 2006 By Keith Rathbun
*
* MODIFIED: 1) September 2007 by Lucy Lu for 2007 annual data
*           2) November 6, 2007 by Keith Rathbun, corrections made.
*
* TASK:     2007 DoD Database Development (6244-300)
*
* INPUTS:   1) HCSyyA_1.SD2 - Combined Annual CY 2004-2006 HCSDB datasets
*              (Where yy = 04-06)
*
* OUTPUTS:  1) HCSFYyyA.SD2 - FY 2005-2006 HCSDB datasets with XCATCH
*              (Where yy = 05-06)
*
* NOTES:    1) Reconstruct XCATCH for FY2005 and FY2006.  Also, keep all of
*              the necessary beneficiary report variables.
*           2) Fix2004XCATCH.SAS, Fix2005XCATCH.SAS, and Fix2006XCATCH.SAS
*              must be run prior to running this program.  These programs
*              generate XCATCY04.SD2, XCATCY05.SD2 and XCATCY06.SD2.
*
***************************************************************************;
OPTIONS NOFMTERR NOCENTER LS=132 PS=80 COMPRESS=YES;
LIBNAME OUT V612 "..\..\DATA";
LIBNAME IN2004 V612 "..\..\..\2004\DATA";
LIBNAME IN2005 V612 "..\..\..\2005\DATA";
LIBNAME IN2006 V612 "..\..\..\2006\DATA";

***************************************************************************
* Rename 2004 beneficiary report variables to be consistent with 2006 names.
***************************************************************************;
%MACRO RENAME4TO7();
    RENAME H04075 = H07066; *Health Status;
    RENAME H04007 = H07007; *How Long in Health Plan;
    RENAME H04029 = H07028; *Need Approval form Health Plan?;
    RENAME H04011 = H07011; *Problems Getting Personal Doctor/Nurse;
    RENAME H04013 = H07013; *Problems Getting Referral to Specialist;
    RENAME H04028 = H07027; *Problems Getting Necessary Care;
    RENAME H04030 = H07029; *Delays in Care while Awaiting Approval;
    RENAME H04018 = H07017; *Advice over Telephone;
    RENAME H04023 = H07022; *Wait for Routine Visit;
    RENAME H04020 = H07019; *Wait for Urgent Care;
    RENAME H04031 = H07030; *Wait More than 15 Minutes Past Appointment;
    RENAME H04034 = H07033; *Listens Carefully;
    RENAME H04035 = H07034; *Explains so You can Understand;
    RENAME H04036 = H07035; *Shows Respect;
    RENAME H04037 = H07036; *Spends Time with You;
    RENAME H04032 = H07031; *Courteous and Respectful;
    RENAME H04033 = H07032; *Helpful;
    RENAME H04045 = H07043; *Problem Finding/Understanding Written Material;
    RENAME H04047 = H07045; *Problem Getting Help from Customer Service;
    RENAME H04053 = H07047; *Problem with Paperwork;
    RENAME H04041 = H07040; *Claims Handled in a Reasonable Time;
    RENAME H04042 = H07041; *Claims Handled Correctly;
    RENAME H04038 = H07037; *Health Care;
    RENAME H04054 = H07048; *Health Plan;
    RENAME H04009 = H07009; *Primary Care Manager;
    RENAME H04015 = H07015; *Specialty Care;
    RENAME H04063 = H07055;
    RENAME H04039 = H07038;
    RENAME H04008 = H07008;
    RENAME H04006 = H07006; *KRR added 11/6/2007;
%MEND;

***************************************************************************
* Rename 2005 beneficiary report variables to be consistent with 2006 names.
```

```
*****************************************************************************;
%MACRO RENAME5TO7();
    RENAME H05066 = H07066; *Health Status;
    RENAME H05007 = H07007; *How Long in Health Plan;
    RENAME H05028 = H07028; *Need Approval form Health Plan?;
    RENAME H05011 = H07011; *Problems Getting Personal Doctor/Nurse;
    RENAME H05013 = H07013; *Problems Getting Referral to Specialist;
    RENAME H05027 = H07027; *Problems Getting Necessary Care;
    RENAME H05029 = H07029; *Delays in Care while Awaiting Approval;
    RENAME H05017 = H07017; *Advice over Telephone;
    RENAME H05022 = H07022; *Wait for Routine Visit;
    RENAME H05019 = H07019; *Wait for Urgent Care;
    RENAME H05030 = H07030; *Wait More than 15 Minutes Past Appointment;
    RENAME H05033 = H07033; *Listens Carefully;
    RENAME H05034 = H07034; *Explains so You can Understand;
    RENAME H05035 = H07035; *Shows Respect;
    RENAME H05036 = H07036; *Spends Time with You;
    RENAME H05031 = H07031; *Courteous and Respectful;
    RENAME H05032 = H07032; *Helpful;
    RENAME H05043 = H07043; *Problem Finding/Understanding Written Material;
    RENAME H05045 = H07045; *Problem Getting Help from Customer Service;
    RENAME H05047 = H07047; *Problem with Paperwork;
    RENAME H05040 = H07040; *Claims Handled in a Reasonable Time;
    RENAME H05041 = H07041; *Claims Handled Correctly;
    RENAME H05037 = H07037; *Health Care;
    RENAME H05048 = H07048; *Health Plan;
    RENAME H05009 = H07009; *Primary Care Manager;
    RENAME H05015 = H07015; *Specialty Care;
    RENAME H05055 = H07055;
    RENAME H05038 = H07038;
    RENAME H05008 = H07008;
    RENAME H05006 = H07006; *KRR added 11/6/2007;
%MEND;

*****************************************************************************
* Rename 2006 beneficiary report variables to be consistent with 2007 names.
*****************************************************************************;
%MACRO RENAME6TO7();
    RENAME H06066 = H07066; *Health Status;
    RENAME H06007 = H07007; *How Long in Health Plan;
    RENAME H06028 = H07028; *Need Approval form Health Plan?;
    RENAME H06011 = H07011; *Problems Getting Personal Doctor/Nurse;
    RENAME H06013 = H07013; *Problems Getting Referral to Specialist;
    RENAME H06027 = H07027; *Problems Getting Necessary Care;
    RENAME H06029 = H07029; *Delays in Care while Awaiting Approval;
    RENAME H06017 = H07017; *Advice over Telephone;
    RENAME H06022 = H07022; *Wait for Routine Visit;
    RENAME H06019 = H07019; *Wait for Urgent Care;
    RENAME H06030 = H07030; *Wait More than 15 Minutes Past Appointment;
    RENAME H06033 = H07033; *Listens Carefully;
    RENAME H06034 = H07034; *Explains so You can Understand;
    RENAME H06035 = H07035; *Shows Respect;
    RENAME H06036 = H07036; *Spends Time with You;
    RENAME H06031 = H07031; *Courteous and Respectful;
    RENAME H06032 = H07032; *Helpful;
    RENAME H06043 = H07043; *Problem Finding/Understanding Written Material;
    RENAME H06045 = H07045; *Problem Getting Help from Customer Service;
    RENAME H06047 = H07047; *Problem with Paperwork;
    RENAME H06040 = H07040; *Claims Handled in a Reasonable Time;
    RENAME H06041 = H07041; *Claims Handled Correctly;
    RENAME H06037 = H07037; *Health Care;
    RENAME H06048 = H07048; *Health Plan;
    RENAME H06009 = H07009; *Primary Care Manager;
    RENAME H06015 = H07015; *Specialty Care;
    RENAME H06055 = H07055;
    RENAME H06038 = H07038;
    RENAME H06008 = H07008;
    RENAME H06006 = H07006; *KRR added 11/6/2007;
%MEND;

*****************************************************************************
* Get beneficiary report variables.
*****************************************************************************;
```

```
%MACRO GETRVAR();
   %DO YR = 4 %TO 6;
       DATA CAT&YR._Q1TOQ3 CAT&YR._Q4;
          SET OUT.XCATCY0&YR;
          IF SUBSTR(QUARTER,1,2) = "Q4" THEN OUTPUT CAT&YR._Q4;
          ELSE OUTPUT CAT&YR._Q1TOQ3;
       RUN;
       DATA TEMP&YR._Q1TOQ3(KEEP=MPRID STRATUM FWRWT DAGEQY FIELDAGE
              XTNEXREG SERVAFF CONUS ENBGSMPL SREDA XSEXA XBNFGRP
              STRATUM XINS_COV XENR_PCM XREGION XBMICAT QUARTER DBENCAT
              HP_BP HP_MAMOG HP_PAP HP_PRNTL HP_SMOKH MPCSMPL
              H07066 H07007 H07028 H07038 H07008 H07006
              H07011 H07013 H07027 H07029 H07017 H07022 H07019 H07030
              H07033 H07034 H07035 H07036 H07031 H07032 H07043 H07045
              H07047 H07040 H07041 H07037 H07048 H07009 H07015 H07055)
            TEMP&YR._Q4(KEEP=MPRID STRATUM FWRWT DAGEQY FIELDAGE
              XTNEXREG SERVAFF CONUS ENBGSMPL SREDA XSEXA XBNFGRP
              STRATUM XINS_COV XENR_PCM XREGION XBMICAT QUARTER DBENCAT
              HP_BP HP_MAMOG HP_PAP HP_PRNTL HP_SMOKH MPCSMPL
              H07066 H07007 H07028 H07038 H07008 H07006
              H07011 H07013 H07027 H07029 H07017 H07022 H07019 H07030
              H07033 H07034 H07035 H07036 H07031 H07032 H07043 H07045
              H07047 H07040 H07041 H07037 H07048 H07009 H07015 H07055);
          LENGTH QUARTER $8;
          %IF &YR = 4 OR &YR = 5 %THEN %DO;
             SET IN200&YR..HCS0&YR.A_1(DROP=STRATUM);
             RENAME ADJ_CELL = STRATUM;
          %END;
          %ELSE %DO;
             SET IN200&YR..HCS0&YR.A_1;
          %END;
          FORMAT _ALL_;
          IF SUBSTR(QUARTER,1,2) = "Q4" THEN DO;
             %IF &YR = 4 %THEN %DO;
                %RENAME4TO7;
             %END;
             %ELSE %IF &YR = 5 %THEN %DO;
                %RENAME5TO7;
             %END;
             %ELSE %IF &YR = 6 %THEN %DO;
                %RENAME6TO7;
             %END;
             OUTPUT TEMP&YR._Q4;
          END;
          ELSE OUTPUT TEMP&YR._Q1TOQ3;
       RUN;
       PROC SORT DATA=CAT&YR._Q1TOQ3; BY MPRID; RUN;
       PROC SORT DATA=CAT&YR._Q4; BY MPRID; RUN;
       PROC SORT DATA=TEMP&YR._Q1TOQ3; BY MPRID; RUN;
       PROC SORT DATA=TEMP&YR._Q4; BY MPRID; RUN;
       DATA TEMP&YR._Q1TOQ3;
          MERGE TEMP&YR._Q1TOQ3 CAT&YR._Q1TOQ3;
          BY MPRID;
       RUN;
       DATA TEMP&YR._Q4;
          MERGE TEMP&YR._Q4 CAT&YR._Q4;
          BY MPRID;
       RUN;
   %END;
%MEND GETRVAR;

%GETRVAR;

*************************************************************************
* Construct FY2005 file (Q4CY2004-Q3CY2005).
*************************************************************************;
DATA OUT.HCSFY05A;
   SET TEMP4_Q4 TEMP5_Q1TOQ3;
   BY MPRID;
   ***********************************************************************
   * Create XOCONUS for  Europe, Pacific and Latin America
   ***********************************************************************;
   IF      XREGION = 13 THEN XOCONUS = 1;
```

```
      ELSE IF XREGION = 14 THEN XOCONUS = 2;
      ELSE IF XREGION = 15 THEN XOCONUS = 3;
   RUN;

   ************************************************************************
   * Construct FY2006 file (Q4CY2005-Q3CY2006).
   ************************************************************************;
   DATA OUT.HCSFY06A;
      SET TEMP5_Q4 TEMP6_Q1TOQ3;
      BY MPRID;
      ********************************************************************
      * Create XOCONUS for  Europe, Pacific and Latin America
      ********************************************************************;
      IF      XREGION = 13 THEN XOCONUS = 1;
      ELSE IF XREGION = 14 THEN XOCONUS = 2;
      ELSE IF XREGION = 15 THEN XOCONUS = 3;
   RUN;

   TITLE1  "PROGRAM:  CreateFY05_06.SAS  -  Create  FY2005  and  FY2006  databases  with  reporting
variables.";
   TITLE2 "WRITTEN: October 25, 2006 By Keith Rathbun";
   TITLE3 "TASK:    2007 DoD Database Development (6244-300)";

   TITLE4 "HCSFY05A dataset";
   PROC CONTENTS DATA=OUT.HCSFY05A; RUN;

   PROC FREQ DATA=OUT.HCSFY05A;
      TABLES QUARTER*XTNEXREG*XREGION*CONUS /MISSING LIST;
   RUN;

   TITLE4 "HCSFY06A dataset";
   PROC CONTENTS DATA=OUT.HCSFY06A; RUN;

   PROC FREQ DATA=OUT.HCSFY06A;
      TABLES QUARTER*XTNEXREG*XREGION*CONUS /MISSING LIST;
   RUN;
```

F.22 WEIGHTING\CREPWT.SAS - CALCULATE COMBINED REPLICATE WEIGHTS - ANNUAL.

```
*************************************************************************
* PROGRAM: DOD\2006\Programs\Weighting\CREPWT.SAS
* TASK:    2006 DOD QUARTERLY HEALTH CARE SURVEY
* PURPOSE: CALCULATE COMBINED ANNUAL REPLICATE WEIGHTS FOR DOD SURVEY - New Weights
*          REQUESTED BY DON JANG.
* CREATED: 12/19/2001 by Esther M Friedman
* UPDATED: 02/09/2006 by Haixia Xu for 2005 annual weighting - new weights
*          10/10/2006 by Haixia Xu for 2006 annual weighting - new weights
*          10/09/2006 by Haixia Xu for 2007 annual weighting - new weights
*
* INPUTS:  framea.sas7bdat - Quarterly frame files
*          REPWTP.sas7bdat - Quarterly new weights
*
* OUTPUTS: crepwt.sd2 - Combined anuual replicates for new weights
*
*************************************************************************
*;

%let year=2007;

/*repwtp.sas7bdat*/
LIBNAME IN1 v8  "..\..\..\Q1FY&year.t\data\afinal";
LIBNAME IN2 v8  "..\..\..\Q2FY&year.t\data\afinal";
LIBNAME IN3 v8  "..\..\..\Q3FY&year.t\data\afinal";
LIBNAME IN4 v8  "..\..\..\Q4FY&year.\data\afinal";
/*framea.sas7bdat*/
LIBNAME INf1 v6  "..\..\..\Q1FY&year.\data\afinal";
LIBNAME INf2 v6  "..\..\..\Q2FY&year.\data\afinal";
LIBNAME INf3 v6  "..\..\..\Q3FY&year.\data\afinal";
LIBNAME INf4 v6  "..\..\..\Q4FY&year.\data\afinal";
/* crepwt.sd2 */
LIBNAME OUTv6 v6  "..\..\..\&year.\Data";

%include
"..\..\..\Q1FY&year.\programs\weighting\newweights\design_effects_unequal_weights.sas";

OPTIONS PS=79 LS=132 COMPRESS=no errors=0 NOCENTER mlogic mprint symbolgen;

title1 "Program:CREPWT.SAS";
title2 "PURPOSE: CREATES ANNUAL COMBINED WEIGHT AND COMBINED REPLICATED WEIGHT - New weights";
**********************************************************************
* MERGE THE 4 NEW (with trickles) QUARTERLY WEIGHT FILES
**********************************************************************;
%macro doqrt(qrt=);
data repwtq&qrt.;
set in&qrt..repwtp(keep=mprid fnstatus postcell bwt fwrwt fwrwt1-fwrwt60);
quarter=&qrt.;
label quarter = 'Dod quarter indicator';
format _all_;
run;

proc sort data=repwtq&qrt.;
by mprid;
run;

%mend doqrt;

%doqrt(qrt=1);
%doqrt(qrt=2);
%doqrt(qrt=3);
%doqrt(qrt=4);

*merge the new quarterly files;
data repwt;
set repwtq1 repwtq2 repwtq3 repwtq4;
by mprid;
run;

*****************************
* CREATE THE ANNUAL WEIGHTS
```

```
****************************;
* Use Equal Weighting Method:  Divide each quarterly weight by 4;
data repwt;
  set repwt;
  cfwt=fwrwt/4;
  label cfwt= 'combined annual NEW wt';
run;

***************************
* CHECK NEW ANNUAL WEIGHTS
***************************;
title3 "Combined replicate file";
proc freq data=repwt;
tables quarter fnstatus fnstatus*quarter/list missing;
run;

title3 "Weighted using fwrwt - quarterly new wt";
proc freq data=repwt;
tables quarter fnstatus fnstatus*quarter/list missing;
weight fwrwt;
run;

title3 "Weighted using cfwt - combined annual new wt";
proc freq data=repwt;
tables quarter fnstatus fnstatus*quarter/list missing;
weight cfwt;
run;

title3 'Checks for cfwt and fwrwt for fnstatus=11';
Proc print data=repwt (obs=200) noobs;
var quarter cfwt fwrwt;
where fnstatus=11;
run;

title3 'Checks for fwrwt by quarter for fnstatus=11';
proc sort data=repwt;
by quarter;
run;

proc means  data=repwt n sum mean min max Q1 median Q3;
var fwrwt;
by quarter;
where fnstatus=11;
run;

title3 'Checks for cfwt for fnstatus=11';
proc univariate data=repwt;
var cfwt;
where fnstatus=11;
run;

options compress=yes;

******************************
* CREATE THE REPLICATE WEIGHTS
******************************;
data crepwt_newwt ( drop = rep );
set repwt;
array repwt[60] fwrwt1 - fwrwt60;
array annual_repwt[240] cfwt1 - cfwt240;
do rep = 1 to 240;
if 1 <= rep <= 60 then
   do;
   if quarter in ( 2, 3, 4 ) then
      annual_repwt[rep] = fwrwt;
   else
      annual_repwt[rep] = repwt[rep];
   end;
else if 61 <= rep <= 120 then
   do;
   if quarter in ( 1, 3, 4 ) then
      annual_repwt[rep] = fwrwt;
   else
```

```
      annual_repwt[rep] = repwt[rep - 60];
   end;
else if 121 <= rep <= 180 then
   do;
   if quarter in ( 1, 2, 4 ) then
      annual_repwt[rep] = fwrwt;
   else
      annual_repwt[rep] = repwt[rep - 120];
   end;
else if 181 <= rep <= 240 then
   do;
   if quarter in ( 1, 2, 3 ) then
      annual_repwt[rep] = fwrwt;
   else
      annual_repwt[rep] = repwt[rep - 180];
   end;
     annual_repwt[rep] = annual_repwt[rep]/4;
end;*replicate loop;
run;

* Check the new cfwts;
title3 'Checks for the sum of the new cfwts';
PROC MEANS DATA=crepwt_newwt n sum;
VAR  cfwt cfwt1-cfwt240;
output out=sums sum(cfwt cfwt1-cfwt240) = cfwt cfwt1-cfwt240;
RUN;

proc transpose data=sums out=t_sums;
VAR  cfwt cfwt1-cfwt240;
run;

proc univariate data=t_sums normal ;
var col1;
run;

************************************;
* Output the combined annual replicate weights - Old and New weights
************************************;
* Label wts;
%MACRO LABWT;
    %DO J = 1 %TO 240;
         LABEL CFWT&J.  = "Combined Replicated NEW Weight &J.";
    %END;
%MEND LABWT;

data outv6.crepwt;
set crepwt_newwt;
if _N_=1 then do;
  label CFWT  = "Combined annual NEW Weight"
%LABWT;
end;
run;

title3 'Contents of crepwt.sd2';
proc contents data=outv6.crepwt ;
run;


*****************************************************************************
*** Calculate the Design Effects
*** As per Nancy and Sonya's requests, check the deff for the annual wts to see
*** how the quarterly weight affects the annual estimates.
******************************************************************************;

%macro mergefiles(qrt=);

data frame&qrt.;
set inf&qrt..framea(keep=mprid enbgsmpl tnexreg d_health com_geo servaff);

***facility TNEX region***;
length TNEX_grp $1;
if d_health in ('00', '13', '14', '15') then TNEX_grp='O';
else if d_health in ('17', '01','05') then TNEX_grp='N';
```

```
    else if d_health in ('18','04') then TNEX_grp='S';
    else if d_health in ('19','08','11') then TNEX_grp='W';
    *Correct the TNEX regions for com_geo 0047, 9001, 9002, 9003, 9004:
    All the cases in the same com_geo should be in the same TNEX region, which is the region of the
com_geo;
    if COM_GEO = '0047' then TNEX_grp='S';
    else if COM_GEO = '9001' then TNEX_grp='N';
    else if COM_GEO = '9002' then TNEX_grp='S';
    else if COM_GEO = '9003' then TNEX_grp='W';
    else if COM_GEO = '9004' then TNEX_grp='O';

    if tnex_grp in ('N', 'S', 'W') then conus=1;
    else if tnex_grp ='O' then conus=0;

    run;

    title3 "Check the construction TNEX_grp, conus for quarter &qrt.";
    proc freq data=frame&qrt.;
    tables TNEX_grp*d_health conus*tnex_grp/missing list;
    run;

    proc sort data=in&qrt..repwtp(keep=mprid) out=repwt; by mprid; run;
    proc sort data=frame&qrt.; by mprid; run;

    data merged&qrt.;
    merge repwt(in=A) frame&qrt.(in=B);
    by mprid;
    if a and b;
    run;

    %mend mergefiles;

    %mergefiles(qrt=1);
    %mergefiles(qrt=2);
    %mergefiles(qrt=3);
    %mergefiles(qrt=4);

    data merged1234;
    set merged1 merged2 merged3 merged4;
    by mprid;
    run;

    proc sort data=outv6.crepwt(keep=mprid fnstatus bwt fwrwt cfwt) out=crepwt;
    by mprid;
    run;

    data merged;
    merge crepwt(in=A) merged1234(in=B);
    by mprid;
    if a and b;
    run;

    **create dataset of completes only;
    data postwt_fnl;
    set merged;
    where fnstatus=11;
    run;

    %design_effects_unequal_weights ( postwt_fnl, enbgsmpl, cfwt, deff_overall, deff_enb );
    %design_effects_unequal_weights ( postwt_fnl, tnexreg,  cfwt, deff_overall, deff_tnexreg );
    %design_effects_unequal_weights ( postwt_fnl, TNEX_grp, cfwt, deff_overall, deff_tnexgrp );
    %design_effects_unequal_weights ( postwt_fnl, conus,    cfwt, deff_overall, deff_conus );
    %design_effects_unequal_weights ( postwt_fnl, servaff,  cfwt, deff_overall, deff_servaff );
    %design_effects_unequal_weights  (  postwt_fnl,  TNEX_grp  servaff,     cfwt,  deff_overall,
deff_TNEXservaff );

    *** For Overall ***;
    title3 'Design Effects Overall';
    proc print data = deff_overall;
    run;

    *** For ENBGSMPL Groups ***;
    title3 'Design Effects for ENBGSMPL';
```

```
proc print data= deff_enb;
sum _freq_;
run;

*** For Beneficiary TNEX Region ***;
title3 'Design Effects for TNEXREG';
proc print data= deff_tnexreg;
sum _freq_;
run;

*** For Facility TNEX region ***;
title3 "Design Effects for Facility's TNEX region";
proc print data= deff_tnexgrp;
sum _freq_;
run;

*** For conus region ***;
title3 "Design Effects for conus";
proc print data= deff_conus;
sum _freq_;
run;

*** For Service Affiliation for the facility  ***;
title3 "Design Effects for Facility's Service Affiliation";
proc print data= deff_servaff;
sum _freq_;
run;

*** For TNEX_grp*Servaff ***;
title3 "Design Effects for TNEX_grp by Servaff";
proc print data= deff_TNEXservaff;
sum _freq_;
run;

******************** The End **********************;
```

F.23.A RESPONSE_RATE\ANNUAL_RR.SAS - COMBINE Q1-Q4 AND ANNUAL RESPONSE RATES INTO ONE EXCEL FILE.

```
***************************************************************************
*
* PROGRAM: ANNUAL_RR.SAS
* TASK:    2006 DOD HEALTH CARE SURVEY ANALYSIS (6077-300)
* PURPOSE: Combine Q1-Q4 and annual response_rates.xls files
*          into one file called response_rates_annual.xls.
* WRITTEN: 03/15/2005 BY KEITH RATHBUN
*
* MODIFIED:
*
* INPUT:   1) RESPONSE_RATES.XLS files (Q1-Q4 and Annual)
*          2) EMPTY_ANNUAL.XLS file (empty template)
*
* OUTPUT:  1) RESPONSE_RATES_ANNUAL.XLS
*
* INCLUDES: None
*
* NOTES:
*
* 1) This program must be run in BATCH mode.  DO NOT modify the directory
*    references to be hard-wired to support interactive use.
*
***************************************************************************;
OPTIONS PS=79 LS=132 COMPRESS=YES ERRORS=1 NOXWAIT NOCENTER mprint mlogic symbolgen;

LIBNAME LIBRARY V612 "..\..\DATA\FMTLIB";

TITLE1 "Program: ANNUAL_RR.SAS";
TITLE2 "Purpose: Combine Q1-Q4 and Annual Response Rate XLS files";

***************************************************************************
* Assign sheetnames and establish global variables.
***************************************************************************
* All of the response_rates.xls files must be populated with the following
* sheetnames (generated by TABLE02.SAS):
***************************************************************************;
%LET DSN1  = TABLE02A;
*%LET DSN2  = XREGION;
%LET DSN2  = XOCONUS;
%LET DSN3  = CONUS;
%LET DSN4  = SEXSMPL;
%LET DSN5  = ENBGSMPL;
%LET DSN6  = CACSMPL;
%LET DSN7  = PATCAT;
%LET DSN8  = SERVAFF;
%LET DSN9  = SVCSMPL;
%LET DSN10 = XTNEXREG;
%LET DSN11 = PATCATSVCSMPL;
%LET DSN12 = PATCATSEXSMPL;
%LET DSN13 = XTNEXREGCACSMPL;

***************************************************************************
* Assign Q1-Q4 and annual spreadsheet file names and year.
***************************************************************************;
%LET FILE1 = ..\..\..\Q1FY2007t\PROGRAMS\RESPONSE_RATE\RESPONSE_RATES.XLS;
%LET FILE2 = ..\..\..\Q2FY2007t\PROGRAMS\RESPONSE_RATE\RESPONSE_RATES.XLS;
%LET FILE3 = ..\..\..\Q3FY2007t\PROGRAMS\RESPONSE_RATE\RESPONSE_RATES.XLS;
%LET FILE4 = ..\..\..\Q4FY2007\PROGRAMS\RESPONSE_RATE\RESPONSE_RATES.XLS;
%LET FILE5 = RESPONSE_RATES.XLS;
%LET YEAR  = 2007;

***************************************************************************
* Macro used to read Q1-Q4 and annual spreadsheet files.
***************************************************************************;
%MACRO READXLS(DSN=, NUMDOM=);
   %IF &NUMDOM LE 1 %THEN %DO; * Read 3 columns in sheet;
      FILENAME INDATA DDE "excel|&DSN!r5c1:r9999c3";
   %END;
   %ELSE %IF &NUMDOM = 2 %THEN %DO; * Read 4 columns in sheet;
      FILENAME INDATA DDE "excel|&DSN!r5c1:r9999c4";
```

```
   %END;
   %ELSE %IF &NUMDOM = 3 %THEN %DO; * Read 5 columns in sheet;
      FILENAME INDATA DDE "excel|&DSN!r5c1:r9999c5";
   %END;
   DATA &DSN.&I;
      INFILE INDATA DLM='09'X NOTAB LRECL=500 PAD MISSOVER DSD;
      LENGTH DOMAIN1-DOMAIN3 $40;
      LENGTH DSN $30;
      %IF &NUMDOM = 0 %THEN %DO;
         INPUT DOMAIN1 : $CHAR40.
               RR      : 4.1
               RRW     : 4.1;
         DOMAIN1 = "TABLE02A";
      %END;
      %IF &NUMDOM = 1 %THEN %DO;
         INPUT DOMAIN1 : $CHAR40.
               RR      : 4.1
               RRW     : 4.1;
      %END;
      %ELSE %IF &NUMDOM = 2 %THEN %DO;
         INPUT DOMAIN1 : $CHAR40.
               DOMAIN2 : $CHAR40.
               RR      : 4.1
               RRW     : 4.1;
      %END;
      %ELSE %IF &NUMDOM = 3 %THEN %DO;
         INPUT DOMAIN1 : $CHAR40.
               DOMAIN2 : $CHAR40.
               DOMAIN3 : $CHAR40.
               RR      : 4.1
               RRW     : 4.1;
      %END;
      NUMDOM = &NUMDOM;
      FNUM = &I;
      DSN = "&DSN";
   RUN;
%MEND READXLS;

*****************************************************************************
* Read Q1-Q4 and annual spreadsheet files.
*****************************************************************************;
%MACRO READIT;
   %GLOBAL I;
   %DO I = 1 %TO 5;
      X "START &&FILE&I";
      %READXLS(DSN=&DSN1,  NUMDOM=0);
      %READXLS(DSN=&DSN2,  NUMDOM=1);
      %READXLS(DSN=&DSN3,  NUMDOM=1);
      %READXLS(DSN=&DSN4,  NUMDOM=1);
      %READXLS(DSN=&DSN5,  NUMDOM=1);
      %READXLS(DSN=&DSN6,  NUMDOM=1);
      %READXLS(DSN=&DSN7,  NUMDOM=1);
      %READXLS(DSN=&DSN8,  NUMDOM=1);
      %READXLS(DSN=&DSN9,  NUMDOM=1);
      %READXLS(DSN=&DSN10, NUMDOM=1);
      %READXLS(DSN=&DSN11, NUMDOM=2);
      %READXLS(DSN=&DSN12, NUMDOM=2);
     %READXLS(DSN=&DSN13, NUMDOM=2);

      ************************************************************************
      * Quit spreadsheet application.
      ************************************************************************;
      FILENAME CMDS DDE "EXCEL|SYSTEM";
      DATA _NULL_;
         FILE CMDS;
         PUT '[QUIT]';
      RUN;
   %END;
%MEND READIT;

%READIT;

*****************************************************************************
```

```
* Macro used to merge the Q1-Q4 and annual spreadsheet files by DOMAIN(s).
*****************************************************************************;
%MACRO MERGEIT(DSN=, NUMDOM=);
   %IF &NUMDOM LE 1 %THEN %DO;
       PROC SORT DATA=&DSN.1; BY DOMAIN1; RUN;
       PROC SORT DATA=&DSN.2; BY DOMAIN1; RUN;
       PROC SORT DATA=&DSN.3; BY DOMAIN1; RUN;
       PROC SORT DATA=&DSN.4; BY DOMAIN1; RUN;
       PROC SORT DATA=&DSN.5; BY DOMAIN1; RUN;
   %END;
   %ELSE %IF &NUMDOM = 2 %THEN %DO;
       PROC SORT DATA=&DSN.1; BY DOMAIN1 DOMAIN2; RUN;
       PROC SORT DATA=&DSN.2; BY DOMAIN1 DOMAIN2; RUN;
       PROC SORT DATA=&DSN.3; BY DOMAIN1 DOMAIN2; RUN;
       PROC SORT DATA=&DSN.4; BY DOMAIN1 DOMAIN2; RUN;
       PROC SORT DATA=&DSN.5; BY DOMAIN1 DOMAIN2; RUN;
   %END;
   %ELSE %IF &NUMDOM = 3 %THEN %DO;
       PROC SORT DATA=&DSN.1; BY DOMAIN1 DOMAIN2 DOMAIN3; RUN;
       PROC SORT DATA=&DSN.2; BY DOMAIN1 DOMAIN2 DOMAIN3; RUN;
       PROC SORT DATA=&DSN.3; BY DOMAIN1 DOMAIN2 DOMAIN3; RUN;
       PROC SORT DATA=&DSN.4; BY DOMAIN1 DOMAIN2 DOMAIN3; RUN;
       PROC SORT DATA=&DSN.5; BY DOMAIN1 DOMAIN2 DOMAIN3; RUN;
   %END;
   DATA MERGED_&DSN;
      MERGE &DSN.1(RENAME=(RR=RR1 RRW=RRW1))
            &DSN.2(RENAME=(RR=RR2 RRW=RRW2))
            &DSN.3(RENAME=(RR=RR3 RRW=RRW3))
            &DSN.4(RENAME=(RR=RR4 RRW=RRW4))
            &DSN.5(RENAME=(RR=RR5 RRW=RRW5));
      %IF &NUMDOM LE 1 %THEN %DO;
          BY DOMAIN1;
      %END;
      %ELSE %IF &NUMDOM = 2 %THEN %DO;
          BY DOMAIN1 DOMAIN2;
      %END;
      %ELSE %IF &NUMDOM = 3 %THEN %DO;
          BY DOMAIN1 DOMAIN2 DOMAIN3;
      %END;
   RUN;
%MEND MERGEIT;

*****************************************************************************
* Merge the Q1-Q4 and annual spreadsheet files by DOMAIN(s).
*****************************************************************************;
%MERGEIT(DSN=&DSN1,  NUMDOM=0);
%MERGEIT(DSN=&DSN2,  NUMDOM=1);
%MERGEIT(DSN=&DSN3,  NUMDOM=1);
%MERGEIT(DSN=&DSN4,  NUMDOM=1);
%MERGEIT(DSN=&DSN5,  NUMDOM=1);
%MERGEIT(DSN=&DSN6,  NUMDOM=1);
%MERGEIT(DSN=&DSN7,  NUMDOM=1);
%MERGEIT(DSN=&DSN8,  NUMDOM=1);
%MERGEIT(DSN=&DSN9,  NUMDOM=1);
%MERGEIT(DSN=&DSN10, NUMDOM=1);
%MERGEIT(DSN=&DSN11, NUMDOM=2);
%MERGEIT(DSN=&DSN12, NUMDOM=2);
%MERGEIT(DSN=&DSN13, NUMDOM=2);


*****************************************************************************
* Macro used to write the combined annual spreadsheet file for each DOMAIN/DSN.
*****************************************************************************;
%MACRO WRITEXLS(DSN=, NUMDOM=);
   DATA _NULL_;
      SET MERGED_&DSN;
      ********************************************************************
      * Add values for each DOMAIN to each sheet.
      ********************************************************************;
      %IF &NUMDOM LE 1 %THEN %DO;
         FILENAME OUTDATA DDE "excel|&DSN!r1c1:r9999c11";
         FILE OUTDATA DLM='09'X NOTAB LRECL=500;
         LENGTH OLINE $50;
```

```
   IF _N_ = 1 THEN DO;
      OLINE = "RESPONSE RATES FOR &YEAR";
      PUT OLINE;
      OLINE = "FOR DOMAIN = &DSN";
      PUT OLINE /;
      H1 = "DOMAIN";     H2 = "Q1 RR"; H3 = "Q1 RRW";
      H4 = "Q2 RR";      H5 = "Q2 RRW";
      H6 = "Q3 RR";      H7 = "Q3 RRW";
      H8 = "Q4 RR";      H9 = "Q4 RRW";
      H10 = "Annual RR"; H11 = "Annual RRW";
      PUT H1  : $CHAR50.
          H2  : $CHAR50.
          H3  : $CHAR50.
          H4  : $CHAR50.
          H5  : $CHAR50.
          H6  : $CHAR50.
          H7  : $CHAR50.
          H8  : $CHAR50.
          H9  : $CHAR50.
          H10 : $CHAR50.
          H11 : $CHAR50.
         ;
   END;
   PUT DOMAIN1: $CHAR40.
       RR1    : 4.1
       RRW1   : 4.1
       RR2    : 4.1
       RRW2   : 4.1
       RR3    : 4.1
       RRW3   : 4.1
       RR4    : 4.1
       RRW4   : 4.1
       RR5    : 4.1
       RRW5   : 4.1
      ;
%END;
%ELSE %IF &NUMDOM = 2 %THEN %DO;
   FILENAME OUTDATA DDE "excel|&DSN!r1c1:r9999c12";
   FILE OUTDATA DLM='09'X NOTAB LRECL=500;
   LENGTH OLINE $50;
   IF _N_ = 1 THEN DO;
      OLINE = "RESPONSE RATES FOR &YEAR";
      PUT OLINE;
      OLINE = "FOR DOMAIN = &DSN";
      PUT OLINE /;
      H1 = "DOMAIN1";    H2 = "DOMAIN2";
      H3 = "Q1 RR";      H4 = "Q1 RRW";
      H5 = "Q2 RR";      H6 = "Q2 RRW";
      H7 = "Q3 RR";      H8 = "Q3 RRW";
      H9 = "Q4 RR";      H10 = "Q4 RRW";
      H11 = "Annual RR"; H12 = "Annual RRW";
      PUT H1  : $CHAR50.
          H2  : $CHAR50.
          H3  : $CHAR50.
          H4  : $CHAR50.
          H5  : $CHAR50.
          H6  : $CHAR50.
          H7  : $CHAR50.
          H8  : $CHAR50.
          H9  : $CHAR50.
          H10 : $CHAR50.
          H11 : $CHAR50.
          H12 : $CHAR50.
         ;
   END;
   PUT DOMAIN1: $CHAR40.
       DOMAIN2: $CHAR40.
       RR1    : 4.1
       RRW1   : 4.1
       RR2    : 4.1
       RRW2   : 4.1
       RR3    : 4.1
       RRW3   : 4.1
```

```
            RR4    : 4.1
            RRW4   : 4.1
            RR5    : 4.1
            RRW5   : 4.1
           ;
      %END;
      %ELSE %IF &NUMDOM = 3 %THEN %DO;
         FILENAME OUTDATA DDE "excel|&DSN!r1c1:r9999c13";
         FILE OUTDATA DLM='09'X NOTAB LRECL=500;
         LENGTH OLINE $50;
         IF _N_ = 1 THEN DO;
            OLINE = "RESPONSE RATES FOR &YEAR";
            PUT OLINE;
            OLINE = "FOR DOMAIN = &DSN";
            PUT OLINE /;
            H1  = "DOMAIN1";   H2  = "DOMAIN2"; H3 = "DOMAIN3";
            H4  = "Q1 RR";     H5  = "Q1 RRW";
            H6  = "Q2 RR";     H7  = "Q2 RRW";
            H8  = "Q3 RR";     H9  = "Q3 RRW";
            H10 = "Q4 RR";     H11 = "Q4 RRW";
            H12 = "Annual RR"; H13 = "Annual RRW";
            PUT H1  : $CHAR50.
                H2  : $CHAR50.
                H3  : $CHAR50.
                H4  : $CHAR50.
                H5  : $CHAR50.
                H6  : $CHAR50.
                H7  : $CHAR50.
                H8  : $CHAR50.
                H9  : $CHAR50.
                H10 : $CHAR50.
                H11 : $CHAR50.
                H12 : $CHAR50.
                H13 : $CHAR50.
               ;
         END;
         PUT DOMAIN1: $CHAR40.
             DOMAIN2: $CHAR40.
             DOMAIN3: $CHAR40.
             RR1    : 4.1
             RRW1   : 4.1
             RR2    : 4.1
             RRW2   : 4.1
             RR3    : 4.1
             RRW3   : 4.1
             RR4    : 4.1
             RRW4   : 4.1
             RR5    : 4.1
             RRW5   : 4.1
            ;
      %END;
   RUN;
%MEND;

*************************************************************************
* Copy empty template file to the combined annual response rate spreadsheet
* and start the XLS file.
*************************************************************************;
X "COPY EMPTY_ANNUAL.XLS RESPONSE_RATES_ANNUAL.XLS";
X "START RESPONSE_RATES_ANNUAL.XLS";

**************************************************************************
* Write the combined annual spreadsheet file for each DOMAIN/DSN.
**************************************************************************;
%WRITEXLS(DSN=&DSN1,  NUMDOM=0);
%WRITEXLS(DSN=&DSN2,  NUMDOM=1);
%WRITEXLS(DSN=&DSN3,  NUMDOM=1);
%WRITEXLS(DSN=&DSN4,  NUMDOM=1);
%WRITEXLS(DSN=&DSN5,  NUMDOM=1);
%WRITEXLS(DSN=&DSN6,  NUMDOM=1);
%WRITEXLS(DSN=&DSN7,  NUMDOM=1);
%WRITEXLS(DSN=&DSN8,  NUMDOM=1);
%WRITEXLS(DSN=&DSN9,  NUMDOM=1);
```

```
%WRITEXLS(DSN=&DSN10, NUMDOM=1);
%WRITEXLS(DSN=&DSN11, NUMDOM=2);
%WRITEXLS(DSN=&DSN12, NUMDOM=2);
%WRITEXLS(DSN=&DSN13, NUMDOM=2);

*************************************************************************
* Quit spreadsheet application.
*************************************************************************;
FILENAME CMDS DDE "EXCEL|SYSTEM";
DATA _NULL_;
   FILE CMDS;
   PUT '[SAVE]';
   PUT '[QUIT]';
RUN;
```

F.23.B RESPONSE_RATE\TABLE02.SAS - CALCULATE THE ANNUAL RESPONSE RATES.

```
*****************************************************************************
*
* PROGRAM: TABLE02.SAS
* TASK:    2006 DOD HEALTH CARE SURVEY ANALYSIS (6077-300)
* PURPOSE: BUILD TABLE 2: RESPONSE RATES BY DOMAIN SUMMARY
*          Quarterly DOD HEALTH CARE SURVEY FILE.
* WRITTEN: 11/09/1999 BY KEITH RATHBUN
*
* MODIFIED:
* 1) 12/14/2000, Keith Rathbun - Added printing of weighted (WN) and
*    unweighted (SN) population sizes.  Also, Update for quarterly survey
*    to use BWT instead of BWT99 (generalized variable name for ease of
*    maintenance).
* 2) 02/01/2001, Keith Rathbun - Added the PERIOD parameter.
* 3) 01/30/2002, Esther Friedman - added nested macro so it would run
*    for all 4 quarters trickle files.
* 4) 11/16/2004, Haixia Xu for Q3, 2004 RR
*              - Changed FNSTATUS from 30 to 31, SN3->SN31, WN3->WN31
*              - Use MERGEQ.SD2 as the input data
*              - Produce the RR for servaff and xtnexreg
* 5) 01/18/2005, Keith Rathbun - Added CREATXLS macro.
* 6) 03/15/2005, Keith Rathbun - Updated for 2004 annual.
* 7) 02/20/2006, Haixia Xu - Updated for 2005 annual
* 7) 11/02/2006, Haixia Xu - Updated for 2006 annual
* 7) 11/13/2007, Haixia Xu - Updated for 2007 annual
*
* INPUT:    1) MERGEQ.SD2 (All quarters)
*
* INCLUDES: 1) TABLE02.IN1
*           2) TABLE02.IN2
*
* NOTES:
*
* 1) This program must be run in BATCH mode.  DO NOT modify the directory
*    references to be hard-wired to support interactive use.
* 2) If you add a new domain combination, you will need to update the
*    EMPTY.XLS file to have a new sheet with the same name as the domain
*    variable(s) combination.
*
*****************************************************************************;
OPTIONS PS=79 LS=132 COMPRESS=YES ERRORS=1 NOXWAIT NOCENTER NOFMTERR;
LIBNAME Q1t    V612 "..\..\..\Q1FY2007t\DATA\AFINAL"; * Q1 mergeq with late response;
LIBNAME Q2t    V612 "..\..\..\Q2FY2007t\DATA\AFINAL"; * Q2 mergeq with late response;
LIBNAME Q3t    V612 "..\..\..\Q3FY2007t\DATA\AFINAL"; * Q3 mergeq with late response;
LIBNAME Q4     V612 "..\..\..\Q4FY2007\DATA\AFINAL";  * Q4 mergeq;

LIBNAME LIBRARY V612 "..\..\DATA\FMTLIB";

TITLE1 "Program: TABLE02.SAS";
TITLE2 "Purpose: Compute response rates by DOMAIN";

%LET OFILES = ..\..\DATA\Response_Rate\;
%LET QUARTER = 2007 Combined Annual;
%LET DATE= 11-13-2007;
%LET TASKNUM = 6244-300;

proc format;
  VALUE $ENBGSm
          '01' = "Active duty"
          '02' = "Active duty fam,Prime,civ PCM"
          '03' = "Active duty fam,Prime,mil PCM"
          '04' = "Active duty fam,non-enrollee"
          '05' = "Retired,<65,civ PCM"
          '06' = "Retired,<65,mil PCM"
          '07' = "Retired,<65,non-enrollee"
          '08' = "Retired,65+,enrolled"
          '10' = "Retired,65+,non-enrollee"
          '11' = "TRICARE Reserve Select";
    VALUE TNEX
    . = "Missing Data"
```

```
    1 = "North"
    2 = "South"
    3 = "West"
    4 = "Overseas" ;
RUN;

*****************************************************************
* Create ebg_com
*****************************************************************;

%macro create_ebg(qrt=);
DATA MERGEQ&qrt.;
SET Q&qrt..MERGEQ;
/*01/31/2007 by H.Xu.
As per Nancy's suggestion, collapse 09 with 08, since 09 has two few beneficiaries*/
if enbgsmpl = '09' then enbgsmpl='08';
format enbgsmpl $enbgsm.;
RUN;
%mend;

%create_ebg(qrt=1t);
%create_ebg(qrt=2t);
%create_ebg(qrt=3t);
%create_ebg(qrt=4);


/*Combine 4 quarters*/
DATA MERGERR;
   SET MERGEQ1t MERGEQ2t MERGEQ3t MERGEQ4 ;
RUN;

PROC FREQ DATA=MERGERR;
   TABLES  PATCAT*FNSTATUS
           PATCAT RACEETHN PATCAT*RACEETHN PATCAT*SVCSMPL
   /MISSING LIST;
RUN;

%MACRO PROCESS(INPT=, FORM=);
   ***************************************************************
   * Process OVERALL Summary of response rates
   ***************************************************************;
   DATA _NULL_;
      SET &INPT END=FINISHED;
      IF _N_ = 1 THEN DO;
         SN    = 0;
         SN1   = 0;
         SN11  = 0;
         SN12  = 0;
         SN2   = 0;
         SN31   = 0;
         SN4   = 0;
         SN41  = 0;
         SN42  = 0;
         WN   = 0;
         WN1  = 0;
         WN11 = 0;
         WN12 = 0;
         WN2  = 0;
         WN31  = 0;
         WN4  = 0;
         WN41 = 0;
         WN42 = 0;
      END;
      ************************************************************
      * Accumulate group 1 weighted and unweighted counts.
      ************************************************************;
      SN + 1;
      WN + BWT;
      IF FNSTATUS IN(11,12) THEN DO;
         SN1 + 1;
         WN1 + BWT;
         IF FNSTATUS = 11 THEN DO;
            SN11 + 1;
```

```
         WN11 + BWT;
      END;
      ELSE DO;
         SN12 + 1;
         WN12 + BWT;
      END;
   END;
   ******************************************************
   * Accumulate group 2 weighted and unweighted counts.
   ******************************************************;
   ELSE IF FNSTATUS = 20 THEN DO;
      SN2 + 1;
      WN2 + BWT;
   END;
   ******************************************************
   * Accumulate group 3 weighted and unweighted counts.
   ******************************************************;
   ELSE IF FNSTATUS = 31 THEN DO;
      SN31 + 1;
      WN31 + BWT;
   END;
   ******************************************************
   * Accumulate group 4 weighted and unweighted counts.
   ******************************************************;
   ELSE IF FNSTATUS IN(41,42) THEN DO;
      SN4 + 1;
      WN4 + BWT;
      IF FNSTATUS = 42 THEN DO;
         SN42 + 1;
         WN42 + BWT;
      END;
      ELSE DO;
         SN41 + 1;
         WN41 + BWT;
      END;
   END;

   DROP I;
   RETAIN
      SN
      SN1
      SN11
      SN12
      SN2
      SN31
      SN4
      SN41
      SN42
      WN
      WN1
      WN11
      WN12
      WN2
      WN31
      WN4
      WN41
      WN42
     ;

   IF FINISHED THEN GO TO FINISHED;
   RETURN;

FINISHED:
  FILE "&OFILES.TABLE02&FORM..OUT" RECFM=V LRECL=9999;
  PUT; PUT; PUT;
  PUT @001 "TABLE 2: OVERALL RESPONSE RATES SUMMARY";
  PUT @001 "&DATE., TASK: &TASKNUM.";
  PUT;
  PUT "SUMMARY OF GROUP COUNTS: FORM &FORM";
  PUT;
  PUT @131 "UNWEIGHTED COUNT"
      @181 "WEIGHTED COUNT"
     ;
```

```
     PUT @121 'FLR'
         @131 'FCR'
         @141 'FRR'
         @151 'POP'
         @171 'FLR'
         @181 'FCR'
         @191 'FRR'
         @201 'POP'
        ;
     %INCLUDE "TABLE02.IN2";
   RUN;
%MEND PROCESS;

*****************************************************************
* Process Single Domain where domain1 is the variable of interest.
*****************************************************************;
%MACRO PROCESS1(DOMAIN1=, INPT=, FORM=);

   PROC SORT DATA=&INPT; BY &DOMAIN1; RUN;

   DATA _NULL_;
      SET &INPT;
      BY &DOMAIN1;
      FILE "&OFILES.&DOMAIN1..OUT" RECFM=V LRECL=9999;
      LENGTH VARNAME1 $8;
      LENGTH VARIABLE $30;
      CALL VNAME(&DOMAIN1,VARNAME1);
      VARIABLE = VARNAME1;
      %INCLUDE "TABLE02.IN1";
      IF LAST.&DOMAIN1 THEN DO;
         PUT @001 &DOMAIN1 @;
         %INCLUDE "TABLE02.IN2";
      END; * DOMAIN;
   RUN;
%MEND PROCESS1;

*********************************************************************
* Process Double Domain where domain1/domain2 are the
* variables of interest.
*********************************************************************;
%MACRO PROCESS2(DOMAIN1=, DOMAIN2=, INPT=, FORM=);

   PROC SORT DATA=&INPT; BY &DOMAIN1 &DOMAIN2; RUN;

   DATA _NULL_;
      SET &INPT;
      BY &DOMAIN1 &DOMAIN2;
      FILE "&OFILES.&DOMAIN1&DOMAIN2..OUT" RECFM=V LRECL=9999;
      LENGTH VARNAME1 $8;
      LENGTH VARNAME2 $8;
      LENGTH VARIABLE $30;
      CALL VNAME(&DOMAIN1,VARNAME1);
      CALL VNAME(&DOMAIN2,VARNAME2);
      VARIABLE = VARNAME1 || " " || VARNAME2;
      %INCLUDE "TABLE02.IN1";
      IF LAST.&DOMAIN2 THEN DO;
         PUT @001 &DOMAIN1 @;
         PUT @041 &DOMAIN2 @;
         %INCLUDE "TABLE02.IN2";
         SN    = 0;
         SN1   = 0;
         SN11  = 0;
         SN12  = 0;
         SN2   = 0;
         SN31   = 0;
         SN4   = 0;
         SN41  = 0;
         SN42  = 0;
         WN   = 0;
         WN1  = 0;
         WN11 = 0;
         WN12 = 0;
         WN2  = 0;
```

```
         WN31  = 0;
         WN4  = 0;
         WN41 = 0;
         WN42 = 0;
      END; * DOMAIN;
   RUN;
%MEND PROCESS2;

*********************************************************************
* Process Triple Domain where domain1-3 are the variables of interest.
*********************************************************************;
%MACRO PROCESS3(DOMAIN1=, DOMAIN2=, DOMAIN3=, INPT=, FORM=);

   PROC SORT DATA=&INPT; BY &DOMAIN1 &DOMAIN2 &DOMAIN3; RUN;

   DATA _NULL_;
      SET &INPT;
      BY &DOMAIN1 &DOMAIN2 &DOMAIN3;
      FILE "&OFILES.&DOMAIN1&DOMAIN2&DOMAIN3..OUT" RECFM=V LRECL=9999;
      LENGTH VARNAME1 $8;
      LENGTH VARNAME2 $8;
      LENGTH VARNAME3 $8;
      LENGTH VARIABLE $30;
      CALL VNAME(&DOMAIN1,VARNAME1);
      CALL VNAME(&DOMAIN2,VARNAME2);
      CALL VNAME(&DOMAIN3,VARNAME3);
      VARIABLE = VARNAME1 || " " || VARNAME2 || " " || VARNAME3;
      %INCLUDE "TABLE02.IN1";
      IF LAST.&DOMAIN3 THEN DO;
         PUT @001 &DOMAIN1 @;
         PUT @041 &DOMAIN2 @;
         PUT @081 &DOMAIN3 @;
         %INCLUDE "TABLE02.IN2";
         SN    = 0;
         SN1   = 0;
         SN11  = 0;
         SN12  = 0;
         SN2   = 0;
         SN31   = 0;
         SN4   = 0;
         SN41  = 0;
         SN42  = 0;
         WN   = 0;
         WN1  = 0;
         WN11 = 0;
         WN12 = 0;
         WN2  = 0;
         WN31  = 0;
         WN4  = 0;
         WN41 = 0;
         WN42 = 0;
      END; * DOMAIN;
   RUN;
%MEND PROCESS3;


***Note that the ERROR message of division by zero may be printed out
in the log file due to no complete in some domains***;

*********************************************************
* PROCESS OVERALL RESPONSE RATE TABULATION - FORM A
*********************************************************;
%PROCESS(INPT=MERGERR, FORM=A);

*********************************************************
* PROCESS SINGLE DOMAIN RESPONSE RATE TABULATION - FORM A
*********************************************************;
*%PROCESS1(DOMAIN1=xregion,  INPT=mergeRR, FORM="FORM A");
%PROCESS1(DOMAIN1=xoconus,  INPT=mergeRR, FORM="FORM A");
%PROCESS1(DOMAIN1=conus,    INPT=mergeRR, FORM="FORM A");
%PROCESS1(DOMAIN1=sexsmpl,  INPT=mergeRR, FORM="FORM A");
%PROCESS1(DOMAIN1=enbgsmpl,  INPT=mergeRR, FORM="FORM A");
%PROCESS1(DOMAIN1=cacsmpl,  INPT=mergeRR, FORM="FORM A");
```

```
%PROCESS1(DOMAIN1=patcat,   INPT=mergeRR, FORM="FORM A");
%PROCESS1(DOMAIN1=servaff,  INPT=mergeRR, FORM="FORM A");
%PROCESS1(DOMAIN1=svcsmpl,  INPT=mergeRR, FORM="FORM A");
%PROCESS1(DOMAIN1=xtnexreg, INPT=mergeRR, FORM="FORM A");

*********************************************************
* PROCESS DOUBLE DOMAIN RESPONSE RATE TABULATION - FORM A
*********************************************************;
%PROCESS2(DOMAIN1=patcat,   DOMAIN2=svcsmpl, INPT=mergeRR, FORM="FORM A");
%PROCESS2(DOMAIN1=patcat,   DOMAIN2=sexsmpl, INPT=mergeRR, FORM="FORM A");
%PROCESS2(DOMAIN1=xtnexreg, DOMAIN2=cacsmpl, INPT=mergeRR, FORM="FORM A");

*********************************************************
* PROCESS TRIPLE DOMAIN RESPONSE RATE TABULATION - FORM A
*********************************************************;
*%PROCESS3(DOMAIN1=xxxxxxxx, DOMAIN2=xxxxxxxx, DOMAIN3=xxxxxxxx, INPT=mergeRR, FORM="FORM A");

*************************************************************************
* Copy empty template file to constructed variables spreadsheet and
* start the XLS file.
*************************************************************************;
X "COPY EMPTY.XLS RESPONSE_RATES.XLS";
X "START RESPONSE_RATES.XLS";

%MACRO CREATXLS(DSN=, NUMDOM=);
   ************************************************************************
   * Read text files with response rates for each DOMAIN .
   ************************************************************************;
   DATA &DSN(KEEP=DOMAIN1 DOMAIN2 DOMAIN3 RR RRW);
      INFILE "&OFILES.&DSN..OUT" LRECL=9999 RECFM=V;
      INPUT LINEIN $100 @; DROP LINEIN; *Skip over header records;
      LENGTH DOMAIN1-DOMAIN3 $40;
      IF _N_ GE 7 THEN DO;
         INPUT
            @001 DOMAIN1 $CHAR40.
            @041 DOMAIN2 $CHAR40.
            @081 DOMAIN3 $CHAR40.
            @121 FLR1   4.3
            @131 FCR1   4.3
            @141 FRR1   4.3
            @147 SN     7.0
            @171 FLR2   4.3
            @181 FCR2   4.3
            @191 FRR2   4.3
            @197 WN     7.0
           ;
         RR  = FRR1*100;
         RRW = FRR2*100;
         OUTPUT;
      END;
   RUN;
   ************************************************************************
   * Add values for each DOMAIN to each sheet.
   ************************************************************************;
   %IF &NUMDOM LE 1 %THEN %DO;
      FILENAME OUTDATA DDE "excel|&DSN!r1c1:r9999c3";
      DATA _NULL_;
         SET &DSN;
         FILE OUTDATA DLM='09'X NOTAB LRECL=500;
         LENGTH OLINE $50;
         IF _N_ = 1 THEN DO;
            OLINE = "RESPONSE RATES FOR &QUARTER";
            PUT OLINE;
            OLINE = "FOR DOMAIN = &DSN";
            PUT OLINE /;
            H1 = "DOMAIN"; H2 = "RR"; H3 = "RRW";
            PUT H1 : $CHAR50.
                H2 : $CHAR50.
                H3 : $CHAR50.
               ;
         END;
         PUT DOMAIN1: $CHAR40.
             RR     : 4.1
```

```
            RRW    : 4.1
           ;
      RUN;
   %END;
   %ELSE %IF &NUMDOM = 2 %THEN %DO;
      FILENAME OUTDATA DDE "excel|&DSN!r1c1:r9999c4";
      DATA _NULL_;
         SET &DSN;
         FILE OUTDATA DLM='09'X NOTAB LRECL=500;
         LENGTH OLINE $50;
         IF _N_ = 1 THEN DO;
            OLINE = "RESPONSE RATES FOR &QUARTER";
            PUT OLINE;
            OLINE = "FOR DOMAIN = &DSN";
            PUT OLINE /;
            H1 = "DOMAIN1"; H2 = "DOMAIN2"; H3 = "RR"; H4 = "RRW";
            PUT H1 : $CHAR50.
                H2 : $CHAR50.
                H3 : $CHAR50.
                H4 : $CHAR50.
               ;
         END;
         PUT DOMAIN1: $CHAR40.
             DOMAIN2: $CHAR40.
             RR     : 4.1
             RRW    : 4.1
            ;
      RUN;
   %END;
   %ELSE %IF &NUMDOM = 3 %THEN %DO;
      FILENAME OUTDATA DDE "excel|&DSN!r1c1:r9999c5";
      DATA _NULL_;
         SET &DSN;
         FILE OUTDATA DLM='09'X NOTAB LRECL=500;
         LENGTH OLINE $50;
         IF _N_ = 1 THEN DO;
            OLINE = "RESPONSE RATES FOR &QUARTER";
            PUT OLINE;
            OLINE = "FOR DOMAIN = &DSN";
            PUT OLINE /;
            H1 = "DOMAIN1"; H2 = "DOMAIN2"; H3 = "DOMAIN3"; H4 = "RR"; H5 = "RRW";
            PUT H1 : $CHAR50.
                H2 : $CHAR50.
                H3 : $CHAR50.
                H4 : $CHAR50.
                H5 : $CHAR50.
               ;
         END;
         PUT DOMAIN1 : $CHAR40.
             DOMAIN2 : $CHAR40.
             DOMAIN3 : $CHAR40.
             RR      : 4.1
             RRW     : 4.1
            ;
      RUN;
   %END;
%MEND CREATXLS;

%CREATXLS(DSN=TABLE02A, NUMDOM=0);
*%CREATXLS(DSN=XREGION, NUMDOM=1);
%CREATXLS(DSN=XOCONUS, NUMDOM=1);
%CREATXLS(DSN=CONUS, NUMDOM=1);
%CREATXLS(DSN=SEXSMPL, NUMDOM=1);
%CREATXLS(DSN=ENBGSMPL, NUMDOM=1);
%CREATXLS(DSN=CACSMPL, NUMDOM=1);
%CREATXLS(DSN=PATCAT, NUMDOM=1);
%CREATXLS(DSN=SERVAFF, NUMDOM=1);
%CREATXLS(DSN=SVCSMPL, NUMDOM=1);
%CREATXLS(DSN=XTNEXREG, NUMDOM=1);
%CREATXLS(DSN=PATCATSVCSMPL, NUMDOM=2);
%CREATXLS(DSN=PATCATSEXSMPL, NUMDOM=2);
%CREATXLS(DSN=XTNEXREGCACSMPL, NUMDOM=2);
```

```
************************************************************************
* Quit spreadsheet application.
************************************************************************;
FILENAME CMDS DDE "EXCEL|SYSTEM";
DATA _NULL_;
   FILE CMDS;
   PUT '[SAVE]';
   PUT '[QUIT]';
RUN;
```

F.23.C RESPONSE_RATE\TABLE02.IN1 - INCLUDE FILE1 USED TO CALCULATE ANNUAL RESPONSE RATES.

```
*****************************************************************************
*
* PROGRAM: TABLE02.IN1
* TASK:    2002 DOD HEALTH CARE SURVEY ANALYSIS
* PURPOSE: COMMON CODE INCLUDE FILE USED TO BUILD
*          TABLE 2: RESPONSE RATES BY DOMAIN SUMMARY
*          2002 DOD HEALTH CARE SURVEY FILE.
* WRITTEN: 01/08/99 BY KEITH RATHBUN
*
* MODIFIED:
* 1) 5/17/1999, Keith Rathbun - Removed printing of the final location rate
*    (FLR) and final completion rate (FCR).
* 2) 7/07/1999, Keith Rathbun - Added back printing of FLR
* 3) 12/14/2000, Keith Rathbun - Update for quarterly survey to use BWT
*    instead of BWT99 (generalized variable name for ease of maintenance).
* 4) 11/16/2004 by Haixia Xu - Update the coding of FNSTATUS from 30 to 31.
*                              SN3->SN31, WN3->WN31
* 5) 01/24/2005 by Keith Rathbun - Update PUT statements to accomodate up
*    to 3 CHAR*40 domains.
*
*****************************************************************************
*;
IF _N_ = 1 THEN DO;
   PUT; PUT;
   PUT @001 "TABLE 2: RESPONSE RATES BY DOMAIN SUMMARY";
   PUT @001 "&DATE., TASK: &TASKNUM.";
   PUT;
   PUT "SUMMARY OF GROUP COUNTS: " &FORM;
   PUT "VARIABLE = " VARIABLE;
   PUT;
   PUT @131 "UNWEIGHTED COUNT"
       @181 "WEIGHTED COUNT"
      ;
   PUT @121 'FLR'
       @131 'FCR'
       @141 'FRR'
       @151 'POP'
       @171 'FLR'
       @181 'FCR'
       @191 'FRR'
       @201 'POP'
      ;
END;
IF FIRST.&DOMAIN1 THEN DO;
   SN    = 0;
   SN1   = 0;
   SN11  = 0;
   SN12  = 0;
   SN2   = 0;
   SN31  = 0;
   SN4   = 0;
   SN41  = 0;
   SN42  = 0;
   WN   = 0;
   WN1  = 0;
   WN11 = 0;
   WN12 = 0;
   WN2  = 0;
   WN31  = 0;
   WN4  = 0;
   WN41 = 0;
   WN42 = 0;
END;
****************************************************
* Accumulate group 1 weighted and unweighted counts
****************************************************
;
SN + 1;
WN + BWT;
IF FNSTATUS IN(11,12) THEN DO;
```

```
   SN1 + 1;
   WN1 + BWT;
   IF FNSTATUS = 11 THEN DO;
      SN11 + 1;
      WN11 + BWT;
   END;
   ELSE DO;
      SN12 + 1;
      WN12 + BWT;
   END;
END;
*****************************************************
* Accumulate group 2 weighted and unweighted counts
*****************************************************
;
ELSE IF FNSTATUS = 20 THEN DO;
   SN2 + 1;
   WN2 + BWT;
END;
*****************************************************
* Accumulate group 3 weighted and unweighted counts
*****************************************************
;
ELSE IF FNSTATUS = 31 THEN DO;
   SN31 + 1;
   WN31 + BWT;
END;
*****************************************************
* Accumulate group 4 weighted and unweighted counts
*****************************************************
;
ELSE IF FNSTATUS IN(41,42) THEN DO;
   SN4 + 1;
   WN4 + BWT;
   IF FNSTATUS = 42 THEN DO;
      SN42 + 1;
      WN42 + BWT;
   END;
   ELSE DO;
      SN41 + 1;
      WN41 + BWT;
   END;
END;

DROP I;
RETAIN
   SN
   SN1
   SN11
   SN12
   SN2
   SN31
   SN4
   SN41
   SN42
   WN
   WN1
   WN11
   WN12
   WN2
   WN31
   WN4
   WN41
   WN42
  ;
```

F.23.D RESPONSE_RATE\TABLE02.IN2 - INCLUDE FILE2 USED TO CALCULATE ANNUAL RESPONSE RATES.

```
*************************************************************************
*
* PROGRAM: TABLE02.IN2
* TASK:    QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS
* PURPOSE: COMMON CODE INCLUDE FILE USED TO BUILD
*          TABLE 2: RESPONSE RATES BY DOMAIN SUMMARY
*          QUARTERLY DOD HEALTH CARE SURVEY FILE.
* WRITTEN: 01/08/99 BY KEITH RATHBUN
*
* MODIFIED:
* 1) 5/17/1999, Keith Rathbun - Removed printing of the final location rate
*    (FLR) and final completion rate (FCR).
* 2) 7/07/1999, Keith Rathbun - Added back printing of FLR
* 3) 12/14/2000, Keith Rathbun - Added printing of weighted (WN) and
*    unweighted (SN) population sizes.
* 4) 11/17/2004 BY Haixia Xu - Made changes due to the different coding of FNSTATUS:
*                            -Rewrite the formula used to calculating FRR1, FRR2
*                            -SN3->SN31, WN3->WN31
* 5) 01/24/2005 by Keith Rathbun - Update PUT statements to accomodate up
*    to 3 CHAR*40 domains.
*
*************************************************************************
*;

   *Final Response Rate;
   FRR1 = SN11/(SN1 + SN2 + SN4*((SN1 + SN2)/(SN1 + SN2 + SN31)) );
   FRR2 = WN11/(WN1 + WN2 + WN4*((WN1 + WN2)/(WN1 + WN2 + WN31)) );

   *Final Location Rate;
   L = ((SN1 + SN2)/(SN1 + SN2 + SN31))*SN41;
   WL = ((WN1 + WN2)/(WN1 + WN2 + WN31))*WN41;
   FLR1 = (SN1 + SN2 + L)/(SN1 + SN2 + SN4*((SN1 + SN2)/(SN1 + SN2 + SN31)));
   FLR2 = (WN1 + WN2 + WL)/(WN1 + WN2 + WN4*((WN1 + WN2)/(WN1 + WN2 + WN31)));

   *Final Completion Rate;
   FCR1 = SN11/(SN1 + SN2 + L);
   FCR2 = WN11/(WN1 + WN2 + WL);
   PUT @121 FLR1  4.3
       @131 FCR1  4.3
       @141 FRR1  4.3
       @147 SN      7.0
       @171 FLR2  4.3
       @181 FCR2  4.3
       @191 FRR2  4.3
       @197 WN    7.0
      ;
```

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APPENDIX G

SAS CODE FOR STATISTICAL AND WEB SPECIFICATIONS FOR THE 2007 TRICARE BENEFICIARY REPORTS – QUARTERS I-IV

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G.1.A Q4FY2007\PROGRAMS\REPORTCARDS\CAHPS_ADULTQ4FY2007\STEP1Q.SAS - CREATE AND RECODE VARIABLES USED IN ADULT BENEFICIARY REPORTS - RUN QUARTERLY.

```
*****************************************************************************
*
*  PROJECT:  DoD - Quarterly Adult Report Cards
*  PROGRAM:  STEP1Q.SAS
*  PURPOSE:  Create Dummy and Recode Variables used in Adult Report Card
*                  Create a Female dummy variable
*                  Create an Education dummy variable
*                  Create 15 region dummies combining regions.
*                         7 & 8 into region 8. That is, there
*                         isn't a region 7 dummy.
*                  Create 7 age dummy variables.
*
*            We require the most desired code to be the highest value.
*            Recode the dependent variables into:
*                  1 - the least desirable value
*                  2 - the 2nd least desirable value
*                  3 - the most desirable value
*                  . - missing
*
*            Create 7 variables GROUP1 - GROUP7
*                 IF (XINS_COV IN (1,2,6) AND H07007>=2) THEN GROUP1 = 1
*                 IF (XENR_PCM IN (1,2,6) AND H07007>=2) THEN GROUP2 = 1
*                 IF (XENR_PCM = 3,7      AND H07007>=2) THEN GROUP3 = 1
*                 IF XINS_COV IN (3)                     THEN GROUP4 = 1
*                          /*JSO 08/24/2006, Deleted 4,5*/
*                 IF XBNFGRP = 1                         THEN GROUP5 = 1
*                 IF XBNFGRP = 2                         THEN GROUP6 = 1
*                 IF XBNFGRP IN (3,4)                    THEN GROUP7 = 1
*                 GROUP8 is output for all beneficiaries
*
*  MODIFIED: 1) February 2001 By Keith Rathbun, Update for quarterly
*               adult report cards.  Removed permanent dataset ENTIRE.SD2.
*            2) August 2001 By Keith Rathbun, Updated DSN and LIBNAME
*               for 3rd quarter adult report cards.
*            3) OCTOBER 2001 BY DANIELE BEAHM, Because there was no post-
*               stratification done in Q3, changed all references of the
*               POSTSTR variable to ADJ_CELL
*            4) JANUARY 2002 BY DANIELE BEAHM, Modified group3 to include
*               XENR_PCM
*            5) April 2002 By Mike Scott, Updated variable names for 2002
*               survey.
*            6) July 2002 By Mike Scott: See Note #2.  Replaced variable
*               S02S01 with H04075 (new health status variable), deleted
*               code to recode S02S01 to H00077, and changed H00077/R00077
*               rename/recode to H04075/R04075 rename/recode.  The Hispanic/
*               Latino variable is not present.
*            7) January 2003 By Mike Scott, Changed ADJ_CELL to COM_SAMP.
*            8) March 2003 By Mike Scott, Updated variable names for 2003
*               survey.
*            9) June 2003 By Mike Scott, Updated for Q2 2003.
*           10) July 2003 By Mike Scott, Changed COM_SAMP to ADJ_CELL.
*           11) October 2003 By Mike Scott, Updated for Q3 2003.
*           12) January 2004 By Mike Scott, Updated for Q4 2003, and changed
*               DAGEQY to FIELDAGE.
*           13) March 2004 By Mike Scott, Updated for Q1 2004.
*           14) April 2004 By Keith Rathbun, Removed reverse coding for
*               H04031.  2004 survey question wording is 'Within 15 minutes'
*               instead of "More than 15 Minutes".  Added service affiliation
*               variables so only one version of this program is needed to
*               handle the consumer watch processing.
*           15) June 2004 by Regina Gramss, Updated for Q2 2004.
*           16) Sept 2004 by Regina Gramss, changed XRegion to xtenxreg, updated for Q3 2004.
*           17) Jan 2005 by Regina Gramss, changed XTENXREG to XSERVREG to include
*               service affiliation.  Regions have been changed from 4 categories to 16.
*           18) Apr 2005 by Regina Gramss, updated field names for 2005 data.
*           19) Jul 2005 by Regina Gramss, updated for Q2 2005
*           20) Oct 2005 by Regina Gramss, updated for Q3 2005
*           21) Dec 2005 by Regina Gramss, updated for Q4 2005
*           22) March 21, 2006 by Keith Rathbun, updated variable names
```

```
*               for Q2 FY 2006.  Changed references to ADJ_CELL to be STRATUM.
*           23) July 12, 2006 by Justin Oh, updated for Q3 FY 2006
*           24) Aug 22, 2006 by Justin Oh, changed overseas to 3 regions.
*               Regions have been changed from 16 categories to 24.
*               Added XOCONUS to the Keep statement for Overseas classifications.
*               Changed XSERVREG for Overseas (Europe,Pacific,Latin America).
*               Changed IF XINS_COV IN (3,4,5) THEN GROUP4 = 1 to
*                       IF XINS_COV IN (3)     THEN GROUP4 = 1
*               Since only XINS_COV IN (1,2,3,6) is kept, (4,5) not needed.
*           25) Oct 03, 2006 by Justin Oh, changed input data HCS063_1 to HCS064_1
*               for Q4FY2006 reports.
*           26) Apr 05, 2007 by Justin Oh, Added %LET BCHTYPE to select BCH types
*               Benchmark OR PurchasedBenchmark.
*           27) Apr 05, 2007 by Justin Oh, Added changes to select RC types
*               ReportCards OR PurchasedReportCards.
*           28) Apr 26, 2007 by Justin Oh, Added codes, variables for new
*               reservists logic.
*           29) May 15, 2007 by Justin Oh, Changed XINS_COV to NXNS_COV to assign
*               Groups 1,3, and 4 for new reservists logic.
*           30) Jul 30, 2007 by Justin Oh, Added added DBENCAT conditions to assign
*               Groups All, 4, 5, and 6.
*           31) Oct 02, 2007 by Justin Oh, changed input data HCS073_1 to HCS074_1
*               for Q4FY2007 reports.
*
*
*  INPUTS:   1) HCSyyq_1 - DoD Quarterly HCS Database
*
*  OUTPUTS:  1) GROUP1-8.SD2 - DoD Quarterly GROUP files as defined above
*
*  INCLUDES: 1) CONVERT.SAS - Convert item responses to proportional
*                             values for consistency w/ TOPS
*
*  NOTES:    1) Groups 1-3 modified 10/09/2000
*
*            2) In Q1_2002, S02S01 was renamed and recoded to H00077 (health
*               status variable for 2000).  H02077 was the Hispanic/Latino
*               variable.  In Q2_2002, H02077 is health status, and H02079
*               is the Hispanic/Latino variable.  To make the Quarter 2 data
*               file (HSC022_1.sd2) more consistent with the Quarter 1 file,
*               the health status variable which was H02077 is now H04075,
*               and the Hispanic/Latino variable which was H02079 is now
*               H02077.
*
*************************************************************************;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards                ***/
%LET RCTYPE = ReportCards;

OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMTERR NOOVP COMPRESS=YES;
LIBNAME OUT V612 "DATA";
LIBNAME IN1 V612 "..\..\..\Data\AFinal";
LIBNAME LIBRARY  "..\..\..\Data\Afinal\fmtlib";

TITLE1    'Program Saved as: STEP1Q.SAS';

%LET WGT = FWRWT;

proc format;
     value servreg 1 = 'North Army'
                   2 = 'North Air Force'
                   3 = 'North Navy'
                   4 = 'North Other'
                   5 = 'South Army'
                   6 = 'South Air Force'
                   7 = 'South Navy'
                   8 = 'South Other'
                   9 = 'West Army'
                  10 = 'West Air Force'
                  11 = 'West Navy'
                  12 = 'West Other'
                  13 = 'Europe Army'
                  14 = 'Europe Air Force'
                  15 = 'Europe Navy'
```

```
                    16 = 'Europe Other'
                    17 = 'Pacific Army'
                    18 = 'Pacific Air Force'
                    19 = 'Pacific Navy'
                    20 = 'Pacific Other'
                    21 = 'Latin America Army'
                    22 = 'Latin America Air Force'
                    23 = 'Latin America Navy'
                    24 = 'Latin America Other';

    DATA ENTIRE;
       SET IN1.HCS074_1(KEEP=
                    MPRID
                    FIELDAGE   /*MJS 01/26/04*/
                    XTNEXREG
                    SERVAFF    /*KRR 04/09/04*/
                    DBENCAT    /*JSO 04/26/2007, added for reservists logic*/
                    CONUS
                    ENBGSMPL
                    SREDA
                    XSEXA
                    XBNFGRP
                    STRATUM    /*KRR 04/03/2006, changed from ADJ_CELL*/
                    XINS_COV
                    XENR_PCM
                    XOCONUS    /*JSO 08/24/2006, Overseas Region Indicator*/
                    &WGT.
                    H07028
                    /* Getting Needed Care */
                    H07011
                    H07013
                    H07027
                    H07029
                    /* Getting Care Quickly */
                    H07017
                    H07022
                    H07019
                    H07030
                    /* How Well Doctors Communicate */
                    H07033
                    H07034
                    H07035
                    H07036
                    /* Courteous and Helpful Office Staff */
                    H07031
                    H07032
                    /* Customer Service */
                    H07043
                    H07045
                    H07047
                    /* Claims Processing */
                    H07040
                    H07041 /****************************/
                    H07066 /* Health Status             */
                    H07037 /* Health Care Rating        */
                    H07048 /* Health Plan Rating        */
                    H07009 /* Personal Doctor Rating    */
                    H07015 /* Specialist Rating         */
                    H07006 /* Health Plan Used           *//*JSO 04/26/2007, added for reservists
logic*/
                    H07007 /* How Long in Health Plan   */
                           /****************************/
                   );
        FORMAT _ALL_;
        IF SERVAFF='A' THEN XSERVAFF=1;              *Army;
           ELSE IF SERVAFF='F' THEN XSERVAFF=2;      *Air Force;
           ELSE IF SERVAFF='N' THEN XSERVAFF=3;      *Navy;
           ELSE XSERVAFF=4;                          *Other;

        IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

        IF XTNEXREG = . THEN DELETE;  /* RSG 02/2005 USE CACSMPL TO DELETE MISSING FIELDS*/
```

```
    IF XINS_COV NOT IN(1,2,3,6,9) THEN DELETE;  /*JSO 07/30/2007, Added 9*/

    NXNS_COV = XINS_COV;              /*JSO 04/26/2007 added for reservists logic*/
                                      /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
    IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
    IF DBENCAT IN('GRD','IGR') AND H07006 = 3 THEN DO;
       NXNS_COV = 3;
       XENR_PCM = .;
    END;
                        /* Note:  use tmp_cell in step2q.sas */
    LENGTH TMP_CELL XSERVREG 8;
    TMP_CELL = STRATUM; /*KRR 04/03/2006, changed from ADJ_CELL*/

    IF XTNEXREG = 1 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 1;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
       ELSE XSERVREG = 4;
    END;

    IF XTNEXREG = 2 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 5;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
       ELSE XSERVREG = 8;
    END;

    IF XTNEXREG = 3 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 9;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
       ELSE XSERVREG = 12;
    END;

    IF XTNEXREG = 4 THEN DO; /*JSO 08/24/2006, Changed Overseas Regions*/
       IF XOCONUS = 1 THEN DO;
          IF      XSERVAFF = 1 THEN XSERVREG = 13;
          ELSE IF XSERVAFF = 2 THEN XSERVREG = 14;
          ELSE IF XSERVAFF = 3 THEN XSERVREG = 15;
          ELSE                      XSERVREG = 16;
       END;
       IF XOCONUS = 2 THEN DO;
          IF      XSERVAFF = 1 THEN XSERVREG = 17;
          ELSE IF XSERVAFF = 2 THEN XSERVREG = 18;
          ELSE IF XSERVAFF = 3 THEN XSERVREG = 19;
          ELSE                      XSERVREG = 20;
       END;
       IF XOCONUS = 3 THEN DO;
          IF      XSERVAFF = 1 THEN XSERVREG = 21;
          ELSE IF XSERVAFF = 2 THEN XSERVREG = 22;
          ELSE IF XSERVAFF = 3 THEN XSERVREG = 23;
          ELSE                      XSERVREG = 24;
       END;
    END;

RUN;

***************************************************************************
* Create AGE, FEMALE and GROUP (Beneficiary/Enrollment)
* subsets. Create the region dummies.  Recode region 7 to region 8.
***************************************************************************;
DATA ENTIRE;
   SET ENTIRE;
   LENGTH DEFAULT = 4;
   IF FIELDAGE NE "  " THEN DO;   /*MJS 01/26/04*/
      AGE1824=0;
      AGE2534=0;
      AGE3544=0;
      AGE4554=0;
      AGE5564=0;
      AGE6574=0;
      AGE75UP=0;
      IF      ( '018' <= FIELDAGE <= '024' ) THEN AGE1824=1;   /*MJS 01/26/04*/
```

```
      ELSE IF ( '025' <= FIELDAGE <= '034' ) THEN AGE2534=1;
      ELSE IF ( '035' <= FIELDAGE <= '044' ) THEN AGE3544=1;
      ELSE IF ( '045' <= FIELDAGE <= '054' ) THEN AGE4554=1;
      ELSE IF ( '055' <= FIELDAGE <= '064' ) THEN AGE5564=1;
      ELSE IF ( '065' <= FIELDAGE <= '074' ) THEN AGE6574=1;
      ELSE IF (          FIELDAGE  > '074' ) THEN AGE75UP=1;
   END;

  * IF H02047=2 THEN H02048=1;
   ************************************************************************
   * Create the FEMALE dummy variable.
   ************************************************************************;
   IF XSEXA = 2 THEN
      FEMALE = 1;
   ELSE
      FEMALE = 0;

   ************************************************************************
   * Create the beneficiary group/enrollment group subsets.
   ************************************************************************;
   GROUP1 = 0;
   GROUP2 = 0;
   GROUP3 = 0;
   GROUP4 = 0;
   GROUP5 = 0;
   GROUP6 = 0;
   GROUP7 = 0;
   GROUP8 = 1;     * EVERYONE;

   IF (NXNS_COV IN (1,2,6)  AND H07007>=2) THEN GROUP1 = 1;
   IF (XENR_PCM IN (1,2,6)  AND H07007>=2) THEN GROUP2 = 1;
   /* JSO 04/05/2007 conditions to run RC type */
   IF "&RCTYPE" = 'ReportCards' AND (XENR_PCM IN (3,7) AND H07007>=2) THEN GROUP3 = 1;
   ELSE  IF  "&RCTYPE"  =  'PurchasedReportCards'  AND  ((XENR_PCM  IN  (3,7)  AND  H07007>=2)  OR
NXNS_COV IN (3,9)) THEN GROUP3 = 1;
   IF NXNS_COV IN  (3,9)     THEN GROUP4 = 1; /*JSO 08/24/2006, Deleted 4,5*//*JSO 07/30/2007,
Added 9*/
   IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN GROUP5 = 1;
                                             /*JSO 07/30/2007, added DBENCAT conditions*/
   IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN GROUP6 = 1;
                                             /*JSO 07/30/2007, added DBENCAT conditions*/
   IF XBNFGRP IN (3,4)      THEN GROUP7 = 1;

   ************************************************************************
   * Recode variables with Never, Sometimes, Usually and Always:
   *    Recode Never & Sometimes (1 & 2) to 1.
   *    Recode Usually (3) to 2.
   *    Recode Always (4) to 3.
   ************************************************************************;
   IF H07028 = 2 THEN H07029=3; /* ES 4/28/04 - Change in scoring method*/

   IF H07017 = 1      THEN R07017 = 1;
   ELSE IF H07017 = 2 THEN R07017 = 1;
   ELSE IF H07017 = 3 THEN R07017 = 2;
   ELSE IF H07017 = 4 THEN R07017 = 3;
   ELSE IF H07017 < 0 THEN R07017 = .;

   IF H07022 = 1      THEN R07022 = 1;
   ELSE IF H07022 = 2 THEN R07022 = 1;
   ELSE IF H07022 = 3 THEN R07022 = 2;
   ELSE IF H07022 = 4 THEN R07022 = 3;
   ELSE IF H07022 < 0 THEN R07022 = .;

   IF H07019 = 1      THEN R07019 = 1;
   ELSE IF H07019 = 2 THEN R07019 = 1;
   ELSE IF H07019 = 3 THEN R07019 = 2;
   ELSE IF H07019 = 4 THEN R07019 = 3;
   ELSE IF H07019 < 0 THEN R07019 = .;

   IF H07030 = 1      THEN R07030 = 1;
   ELSE IF H07030 = 2 THEN R07030 = 1;
   ELSE IF H07030 = 3 THEN R07030 = 2;
   ELSE IF H07030 = 4 THEN R07030 = 3;
```

```
ELSE IF H07030 < 0 THEN R07030 = .;

IF H07031 = 1      THEN R07031 = 1;
ELSE IF H07031 = 2 THEN R07031 = 1;
ELSE IF H07031 = 3 THEN R07031 = 2;
ELSE IF H07031 = 4 THEN R07031 = 3;
ELSE IF H07031 < 0 THEN R07031 = .;

IF H07032 = 1      THEN R07032 = 1;
ELSE IF H07032 = 2 THEN R07032 = 1;
ELSE IF H07032 = 3 THEN R07032 = 2;
ELSE IF H07032 = 4 THEN R07032 = 3;
ELSE IF H07032 < 0 THEN R07032 = .;

IF H07033 = 1      THEN R07033 = 1;
ELSE IF H07033 = 2 THEN R07033 = 1;
ELSE IF H07033 = 3 THEN R07033 = 2;
ELSE IF H07033 = 4 THEN R07033 = 3;
ELSE IF H07033 < 0 THEN R07033 = .;

IF H07034 = 1      THEN R07034 = 1;
ELSE IF H07034 = 2 THEN R07034 = 1;
ELSE IF H07034 = 3 THEN R07034 = 2;
ELSE IF H07034 = 4 THEN R07034 = 3;
ELSE IF H07034 < 0 THEN R07034 = .;

IF H07035 = 1      THEN R07035 = 1;
ELSE IF H07035 = 2 THEN R07035 = 1;
ELSE IF H07035 = 3 THEN R07035 = 2;
ELSE IF H07035 = 4 THEN R07035 = 3;
ELSE IF H07035 < 0 THEN R07035 = .;

IF H07036 = 1      THEN R07036 = 1;
ELSE IF H07036 = 2 THEN R07036 = 1;
ELSE IF H07036 = 3 THEN R07036 = 2;
ELSE IF H07036 = 4 THEN R07036 = 3;
ELSE IF H07036 < 0 THEN R07036 = .;

IF H07040 = 1      THEN R07040 = 1;
ELSE IF H07040 = 2 THEN R07040 = 1;
ELSE IF H07040 = 3 THEN R07040 = 2;
ELSE IF H07040 = 4 THEN R07040 = 3;
ELSE IF H07040 < 0 THEN R07040 = .;

IF H07041 = 1      THEN R07041 = 1;
ELSE IF H07041 = 2 THEN R07041 = 1;
ELSE IF H07041 = 3 THEN R07041 = 2;
ELSE IF H07041 = 4 THEN R07041 = 3;
ELSE IF H07041 < 0 THEN R07041 = .;

***********************************************************************
* Recode variables to one missing condition ".".
* This also renames all the "H0xxxx" to "R0xxxx".
***********************************************************************;
R07011 = H07011;  IF R07011 < 0 THEN R07011 = .;
R07009 = H07009;  IF R07009 < 0 THEN R07009 = .;
R07013 = H07013;  IF R07013 < 0 THEN R07013 = .;
R07015 = H07015;  IF R07015 < 0 THEN R07015 = .;
R07027 = H07027;  IF R07027 < 0 THEN R07027 = .;
R07029 = H07029;  IF R07029 < 0 THEN R07029 = .;
R07037 = H07037;  IF R07037 < 0 THEN R07037 = .;
R07043 = H07043;  IF R07043 < 0 THEN R07043 = .;
R07045 = H07045;  IF R07045 < 0 THEN R07045 = .;
R07047 = H07047;  IF R07047 < 0 THEN R07047 = .;
R07048 = H07048;  IF R07048 < 0 THEN R07048 = .;
R07066 = H07066;  IF R07066 < 0 THEN R07066 = .;

***********************************************************************
* Create region and service affiliation dummies.
***********************************************************************;
IF XSERVREG NE . THEN DO;  /*JSO 08/24/2006, Changed 16 to 24*/
   ARRAY REGDUMS (24) REG01 REG02 REG03 REG04 REG05 REG06
                      REG07 REG08 REG09 REG10 REG11 REG12
```

```
                        REG13 REG14 REG15 REG16 REG17 REG18
                        REG19 REG20 REG21 REG22 REG23 REG24;
      DO I = 1 TO 24;
         REGDUMS(I)=0;
      END;
      IF       XSERVREG= 1  THEN REG01  =1;
      ELSE IF  XSERVREG= 2  THEN REG02  =1;
      ELSE IF  XSERVREG= 3  THEN REG03  =1;
      ELSE IF  XSERVREG= 4  THEN REG04  =1;
      ELSE IF  XSERVREG= 5  THEN REG05  =1;
      ELSE IF  XSERVREG= 6  THEN REG06  =1;
      ELSE IF  XSERVREG= 7  THEN REG07  =1;
      ELSE IF  XSERVREG= 8  THEN REG08  =1;
      ELSE IF  XSERVREG= 9  THEN REG09  =1;
      ELSE IF  XSERVREG= 10 THEN REG10  =1;
      ELSE IF  XSERVREG= 11 THEN REG11  =1;
      ELSE IF  XSERVREG= 12 THEN REG12  =1;
      ELSE IF  XSERVREG= 13 THEN REG13  =1;
      ELSE IF  XSERVREG= 14 THEN REG14  =1;
      ELSE IF  XSERVREG= 15 THEN REG15  =1;
      ELSE IF  XSERVREG= 16 THEN REG16  =1;
      ELSE IF  XSERVREG= 17 THEN REG17  =1;
      ELSE IF  XSERVREG= 18 THEN REG18  =1;
      ELSE IF  XSERVREG= 19 THEN REG19  =1;
      ELSE IF  XSERVREG= 20 THEN REG20  =1;
      ELSE IF  XSERVREG= 21 THEN REG21  =1;
      ELSE IF  XSERVREG= 22 THEN REG22  =1;
      ELSE IF  XSERVREG= 23 THEN REG23  =1;
      ELSE IF  XSERVREG= 24 THEN REG24  =1;

      ARRAY SRVDUMS (4) SRV01 SRV02 SRV03 SRV04;
      DO I = 1 TO 4;    /*Needed for consumer watch ONLY */
         SRVDUMS(I)=0;
      END;
      IF       XSERVAFF = 1 THEN SRV01 = 1;
      ELSE IF  XSERVAFF = 2 THEN SRV02 = 1;
      ELSE IF  XSERVAFF = 3 THEN SRV03 = 1;
      ELSE IF  XSERVAFF = 4 THEN SRV04 = 1;

   END;

RUN;

*************************************************************************
* Recode item responses to proportional values using CONVERT.SAS.
*************************************************************************;
%INCLUDE "CONVERT.SAS";

%CONT1(DSN=ENTIRE, NUM=7,  Y=R07011 R07013 R07027 R07029
                           R07043 R07045 R07047);
%CONT2(DSN=ENTIRE, NUM=4,  Y=R07037 R07048 R07009 R07015);
%CONT3(DSN=ENTIRE, NUM=12, Y=R07017 R07022 R07019 R07030
                           R07033 R07034 R07035 R07036
                           R07031 R07032 R07040 R07041);

*************************************************************************
* Sort the main file to reorder it by MPRID.
*************************************************************************;
PROC SORT DATA=ENTIRE; BY MPRID; RUN;

*************************************************************************
* Print the contents of ENTIRE dataset.
*************************************************************************;
PROC CONTENTS DATA=ENTIRE;
   TITLE2 'Contents of ENTIRE';
RUN;


*************************************************************************
* Print some of the recoded records.
*************************************************************************;
PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of AGE and SEX dummies';
```

```
   VAR MPRID
       FIELDAGE   /*MJS 01/26/04*/
       XTNEXREG
       XSERVAFF
       XSERVREG
       CONUS
       ENBGSMPL
       XSEXA
       STRATUM   /*KRR 04/03/2006 Changed from ADJ_CELL*/
       XINS_COV
       NXNS_COV  /*JSO 04/26/2007, added for reservists logic*/
       DBENCAT   /*JSO 04/26/2007, added for reservists logic*/
       XENR_PCM
       &WGT.
      ;
RUN;

***************************************************************************
* Print some of the recoded records.
***************************************************************************;
PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of AGE and SEX dummies';
   VAR FIELDAGE   /*MJS 01/26/04*/
       AGE1824
       AGE2534
       AGE3544
       AGE4554
       AGE5564
       AGE6574
       AGE75UP

       XSEXA
       FEMALE

       ENBGSMPL
       XINS_COV
       NXNS_COV
       XENR_PCM
       XBNFGRP
       GROUP1
       GROUP2
       GROUP3
       GROUP4
       GROUP5
       GROUP6
       GROUP7
      ;
RUN;

PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of recoded question variables';
   VAR H07011  R07011   /*MJS 03/24/04 Changed 2003 to 2004 variable names*/
       H07009  R07009
       H07013  R07013
       H07015  R07015
       H07017  R07017
       H07022  R07022
       H07019  R07019
       H07027  R07027
       H07029  R07029
       H07030  R07030
       H07031  R07031
       H07032  R07032
       H07033  R07033
       H07034  R07034
      ;
RUN;


PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of recoded question variables';
   VAR H07035  R07035
       H07036  R07036
```

```
       H07037  R07037
       H07040  R07040
       H07041  R07041
       H07043  R07043
       H07045  R07045
       H07047  R07047
       H07048  R07048
       H07066  R07066
      ;
RUN;

/*JSO 08/24/2006, Changed 16 to 24*/
PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of recoded REGION variables';
   VAR XSERVREG
       REG01
       REG02
       REG03
       REG04
       REG05
       REG06
       REG07
       REG08
       REG09
       REG10
       REG11
       REG12
       REG13
       REG14
       REG15
       REG16
       REG17
       REG18
       REG19
       REG20
       REG21
       REG22
       REG23
       REG24;
RUN;


PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of recoded service affiliation variables';
   VAR XSERVREG
       XSERVAFF
       XOCONUS /*JSO 08/24/2006, Changed Overseas Regions*/
       SRV01
       SRV02
       SRV03
       SRV04
      ;
RUN;

***************************************************************************
* Create the 7 subgroups for processing by STEP2.SAS.
***************************************************************************;
DATA OUT.GROUP1
     OUT.GROUP2
     OUT.GROUP3
     OUT.GROUP4
     OUT.GROUP5
     OUT.GROUP6
     OUT.GROUP7
     OUT.GROUP8;

     SET ENTIRE;

     DROP
        H07011
        H07009
        H07013
        H07015
```

```
        H07017
        H07022
        H07019
        H07027
        H07029
        H07030
        H07031
        H07032
        H07033
        H07034
        H07035
        H07036
        H07037
        H07040
        H07041
        H07043
        H07045
        H07047
        H07048
        H07066
        ;
      IF GROUP1 = 1 THEN OUTPUT OUT.GROUP1;
      IF GROUP2 = 1 THEN OUTPUT OUT.GROUP2;
      IF GROUP3 = 1 THEN OUTPUT OUT.GROUP3;
      IF GROUP4 = 1 THEN OUTPUT OUT.GROUP4;
      IF GROUP5 = 1 THEN OUTPUT OUT.GROUP5;
      IF GROUP6 = 1 THEN OUTPUT OUT.GROUP6;
      IF GROUP7 = 1 THEN OUTPUT OUT.GROUP7;
      OUTPUT OUT.GROUP8;
RUN;
```

G.1.B Q4FY2007\PROGRAMS\REPORTCARDS\CAHPS_ADULTQ4FY2007\CONVERT.SAS - CONVERT ITEM RESPONSES TO PROPORTIONAL VALUES.

```
***************************************************************************
*
* PROGRAM:  CONVERT.SAS
* TASK:     DOD HEALTH CARE SURVEY ANALYSIS (8687-330)
* PURPOSE:  CONVERT ITEM RESPONSES TO PROPORTIONAL VALUES FOR CONSISTENCY
*           WITH THE TOPS SURVEY.
* WRITTEN:  October 2000 BY ERIC SCHONE
*
* MODIFIED: October 2000 BY KEITH RATHBUN, Added PROLOG.  Also, added DSN
*           to argument lists.
*
* INPUTS:  1) User-specified SAS Dataset
*
* OUTPUTS: 1) User-specified SAS Dataset with recoded values
*
* NOTES:
*
* 1) Arguments for the CONT1-CONT3 macros are as follows:
*    a) SAS dataset name (dsn)
*    b) Number of variables to be converted (num)
*    c) List of variables to be converted (y)
* 2) These macros assume that the response items have already been
*    converted/recoded to CAHPS scales.
*
***************************************************************************
* CONT1 - Convert big problem, small problem, not a problem questions to
*         proportional values.
***************************************************************************;
%macro cont1(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i = 1 to &num;
      if vars(i) ne . and vars(i) ne 3 then vars(i) = 0;
      if vars(i) = 3 then vars(i) = 1;
   end;
run;
%mend cont1;

***************************************************************************
* CONT2 - Convert rating questions to proportional values.
***************************************************************************;
%macro cont2(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i=1 to &num;
      if vars(i) ne . and vars(i) < 8 then vars(i) = 0;
      if vars(i) in (8,9,10) then vars(i) = 1;
   end;
run;
%mend cont2;

***************************************************************************
* CONT3 - Convert Never, Sometimes, Usually, Always questions to
*         proportional values.
***************************************************************************;
%macro cont3(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i=1 to &num;
      if vars(i) ne . and vars(i) >= 2 then vars(i) = 2;
      vars(i) = vars(i) - 1;
   end;
run;
%mend cont3;
```

G.1.C Q4FY2007\PROGRAMS\REPORTCARDS\CAHPS_ADULTQ4FY2007\STEP2Q.SAS - CALCULATE CAHPS ADJUSTED SCORES - RUN QUARTERLY.

```
*****************************************************************************
*
*  Project:  DoD - Quarterly Adult Report Cards
*  Program:  STEP2Q.SAS
*  Purpose:  Generate risk-adjusted CAHPS Scores for Adult Report Card.
*
*  Requires: Program STEP1Q.SAS must be run prior to running this program.
*
*  The adult report card contains a large number of risk-adjusted scores.
*  Some scores are calculated from responses to individual survey questions.
*  Composite scores are calculated by combining scores from individual
*  questions.  The scores then are compared with external civilian
*  benchmarks.  The programming tasks involved in building the report
*  card are:
*
*       1) Preparing data for analyses
*       2) Estimating risk adjustment models
*       3) Calculating risk-adjusted values and variances
*       4) Calculating benchmarks
*       5) Comparing risk-adjusted values to benchmarks
*          and hypothesis testing
*
*  Subgroup Definitions:
*  ____________________________________________________________
*     Seven Subgroups          Definitions
*  ____________________________________________________________
*  1. Prime enrollees          XINS_COV IN (1,2,6) AND H07007>=2
*  2. Enrollees w/mil PCM      XENR_PCM IN (1,2,6) AND H07007>=2
*  3. Enrollees w/civ PCM      XENR_PCM = 3        AND H07007>=2
*  4. Nonenrollees             XINS_COV IN (3) /*JSO 08/24/2006, Deleted 4,5*/
*  5. Active duty              XBNFGRP = 1
*  6. Active duty dependents   XBNFGRP = 2
*  7. Retirees and dependents  XBNFGRP IN (3,4)
*
*  Previous Program:  STEP1Q.SAS
*
*  Modified: 1) 04/10/02 By Mike Scott, Updated variable names for 2002
*               survey.
*            2) 07/11/02 By Mike Scott, Changed R00077 to R04075, since
*               H02077 (health status) is back and was recoded to R04075
*               in STEP1Q.
*            3) 03/21/03 By Mike Scott, Updated variable names for 2003
*               survey.
*            4) 03/24/04 By Mike Scott, Updated for 2004 survey.
*            5) 09/24/2004 By Regina Gramss, Updated to use XTNEXREG instead of XREGION
*               and to update for Q3 2004 data.
*            6) 01/25/2005 By Regina Gramss, Changed codes to use XSERVREG instead of
*               XTNEXREG to include service affiliation.
*            7) 04/2005 By Regina Gramss, Updated field names from 2004 to 2005
*            8) 07/2005 By Regina Gramss, Updated for Q2 2005
*            9) 10/2005 By Regina Gramss, Updated for Q3 2005
*           10) 12/2005 By Regina Gramss, Updated for Q4 2005
*           11) March 21, 2006 by Keith Rathbun, updated variable names
*               for Q2 FY 2006.
*           12) 07/2006 By Justin Oh, Updated for Q3 FY 2006
*           13) Aug 24, 2006 by Justin Oh, changed overseas to 3 regions.
*               Regions have been changed from 16 categories to 24.
*
*****************************************************************************;
OPTIONS NOCENTER LS=132 PS=79 SOURCE NOOVP COMPRESS=YES mprint mlogic;
LIBNAME IN1  V612 "DATA";
LIBNAME OUT  V612 "DATA";
LIBNAME OUT2 V612 "DATA\ADULTHATFILES";
LIBNAME LIBRARY   "..\..\..\Data\Afinal\fmtlib";

/* RSG 02/2005 hard coded skelreg so data does not have to be copied from quarter to quarter*/
/* JSO 08/24/2006, Changed from 16 to 24 Regions */

DATA SKELREG (COMPRESS=NO);
```

```
   INPUT XSERVREG;
   DATALINES;
      1
      2
      3
      4
      5
      6
      7
      8
      9
      10
      11
      12
      13
      14
      15
      16
      17
      18
      19
      20
      21
      22
      23
      24
;
RUN;

*****************************************************************************
*****************************************************************************
* Set GLOBAL parameters here.
*****************************************************************************
*****************************************************************************;

*****************************************************************************
* Set the number of Dependent variables to process.
* One does not need to start at 1, but the max must be >= min.
*****************************************************************************;
%LET MIN_VAR =  1;
%LET MAX_VAR = 23;

*****************************************************************************
* Set the number of subgroups to process.
*****************************************************************************;
%LET MIN_GRP = 1;
%LET MAX_GRP = 8;

*****************************************************************************
* These are expected to remain the same for a particular dependent
* variable run.
*****************************************************************************;
%LET WGT      = FWRWT;
%LET IND_VAR1 = R07066;
%LET IND_VAR2 =  ;  * FEMALE;
%LET IND_VAR3 =  ;  * SREDHIGH;
%LET DEBUGFLG = 0;  * Set to 1 if you want extra printout;


%LET TITL1 = Prime Enrollees;
%LET TITL2 = Enrollees w/military PCM;
%LET TITL3 = Enrollees w/civilian PCM;
%LET TITL4 = Nonenrollees;
%LET TITL5 = Active Duty;
%LET TITL6 = Active Duty Dependents;
%LET TITL7 = Retirees and Dependents;
%LET TITL8 = All Beneficiaries;


*****************************************************************************
* GETTING NEEDED CARE.
*****************************************************************************;
%LET DEPVAR1 = R07011;
```

```
%LET DEPVAR2 = R07013;
%LET DEPVAR3 = R07027;
%LET DEPVAR4 = R07029;

*****************************************************************************
* GETTING NEEDED CARE QUICKLY.
*****************************************************************************;
%LET DEPVAR5 = R07017;
%LET DEPVAR6 = R07022;
%LET DEPVAR7 = R07019;
%LET DEPVAR8 = R07030;

*****************************************************************************
* HOW WELL DOCTORS COMMUNICATE.
*****************************************************************************;
%LET DEPVAR9  = R07033;
%LET DEPVAR10 = R07034;
%LET DEPVAR11 = R07035;
%LET DEPVAR12 = R07036;

*****************************************************************************
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****************************************************************************;
%LET DEPVAR13 = R07031;
%LET DEPVAR14 = R07032;

*****************************************************************************
* CUSTOMER SERVICE.
*****************************************************************************;
%LET DEPVAR15 = R07043;
%LET DEPVAR16 = R07045;
%LET DEPVAR17 = R07047;

*****************************************************************************
* CLAIMS PROCESSING.
*****************************************************************************;
%LET DEPVAR18 = R07040;
%LET DEPVAR19 = R07041;

*****************************************************************************
* RATING ALL HEALTH CARE: 0 - 10.
*****************************************************************************;
%LET DEPVAR20 = R07037;

*****************************************************************************
* RATING OF HEALTH PLAN: 0 - 10.
*****************************************************************************;
%LET DEPVAR21 = R07048;

*****************************************************************************
* RATING OF PERSONAL DR: 0 - 10.
*****************************************************************************;
%LET DEPVAR22 = R07009;

*****************************************************************************
* SPECIALITY CARE: 0 - 10.
*****************************************************************************;
%LET DEPVAR23 = R07015;

%MACRO SCORE;
***************************************;
* use this macro for all groups;
* super region variables are to be used     ;
***************************************;
%PUT ******************************************;
%PUT STARTING MACRO SCORE;
%PUT "GROUP    = " GROUP&IGRP;
%PUT "TITLE    = " &&DEPVAR&IVAR  &&TITL&IGRP;
%PUT "DEP_VAR  = " &&DEPVAR&IVAR;
%PUT "IND_VAR1 = " &IND_VAR1;
%PUT "IND_VAR2 = " &IND_VAR2;
%PUT "IND_VAR3 = " &IND_VAR3;
%PUT "WGT      = " &WGT;
```

```
%PUT ****************************************;

*---------------------------------------------------;
* If the current group is 1 use the skeleton files;
* else used the previous groups output file;
* The mrgfile is added to by each subgroup;
*---------------------------------------------------;
%LET RMRGFILE = OUT.R_&&DEPVAR&IVAR;
%IF "&IGRP" = "1" %THEN %LET RMRGFILE = SKELREG;

* run regression using the region level variables;
* output a BETA file (1 record) and the subgroup;
* file with residuals attached (many records);
PROC REG DATA = GROUP&IGRP OUTEST=BETAS;
     TITLE2 "Regression Model for GROUP&igrp for regions";
     TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
     WEIGHT &WGT;
     %INCLUDE 'REGRSREG.INC';
     OUTPUT OUT = OUT2.H&IGRP&&DEPVAR&IVAR(KEEP=MPRID &WGT TMP_CELL
                      PRED&IGRP RESID&IGRP XSERVREG &&DEPVAR&IVAR)
              P = PRED&IGRP
              R = RESID&IGRP;

RUN;

* print of HCSDB file with the residuals and predicted values;
%IF &DEBUGFLG > 0  %THEN %DO;
    PROC PRINT DATA=OUT2.H&IGRP&&DEPVAR&IVAR (OBS=70);
         TITLE2 "OUT2.H&IGRP&&DEPVAR&IVAR:  file with predicted values and the RESID&IGRP";
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
         VAR MPRID XSERVREG &&DEPVAR&IVAR RESID&IGRP PRED&IGRP;
    RUN;

    PROC PRINT DATA=BETAS;
         TITLE2 "BETAS:  file with coefficients";
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;
%END;


*-----------------------------------------;
*----- get the standard err/variance ----;
*-----------------------------------------;
%LET DEP = &&DEPVAR&IVAR;
%R_SUDAAN(OUT2.H&IGRP&&DEPVAR&IVAR);



* calculate prelim adjusted scores for the risk-adjusters;
* merge adjuster means with the adjuster coefficients;
* then sum their products. Finally add in the intercept;
 DATA ADJUST;
    SET MEANFILE;
    IF _N_ = 1 THEN SET BETAS(DROP = _TYPE_);
    %INCLUDE 'RISKARRY.INC';
    %INCLUDE 'RISKMEAN.INC';
    DO I = 1 TO DIM(COEFFS);
       IF COEFFS(I) = . THEN COEFFS(I) = 0;
       IF MEANS(I) = .  THEN MEANS(I)  = 0;
       ADJUST + ( COEFFS(I) * MEANS(I) );
    END;
    ADJUST = ADJUST + INTERCEPT;
 RUN;


* add the region coefficients to the adjusted value from above;
* output one record per region with the region;
* level adjusted scores;
DATA COEFFREG(KEEP=XSERVREG NEWADJST);
    SET ADJUST;
    %INCLUDE 'REGARRAY.INC';
    LENGTH NAME $8;
    DO I=1 TO DIM(REGRHS);
```

```
       CALL VNAME(REGRHS(I),NAME);
       XSERVREG=INPUT(SUBSTR(NAME,4,2),2.);
       IF REGRHS(I) = . THEN REGRHS(I) = 0;
       NEWADJST=ADJUST + REGRHS(I);
       OUTPUT;
    END;
RUN;


* sum of wgts for each region;
PROC MEANS DATA=GROUP&IGRP NWAY NOPRINT ;
  CLASS XSERVREG;
  VAR   &WGT;
  OUTPUT OUT=REG_WGTS (DROP = _TYPE_ _FREQ_) N=REGCNT&IGRP SUM=REGWGT&IGRP;
RUN;


* merge the COEFFREG file with the region;
* adjusted scores to the region level total weight;
* merge by the region.  Creates a region level;
* file with the total sample weight of the region;
DATA COEFFREG;
      MERGE COEFFREG(IN=IN1)
            REG_WGTS(IN=IN2   KEEP=XSERVREG REGCNT&IGRP REGWGT&IGRP);
      BY XSERVREG;
      IF IN1;
RUN;


%IF &DEBUGFLG > 0  %THEN %DO;
    PROC PRINT DATA=MEANFILE;
         TITLE2 'Print of MEANFILE';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=ADJUST;
         TITLE2 'Print of ADJUST';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=COEFFREG;
         TITLE2 'Print of COEFFREG: Region Adjusted Scores';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=REG_WGTS;
         TITLE2 'Print of REG_WGTS: Region Area Sum of WGTS';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=COEFFREG;
         TITLE2 'Print of COEFFREG: Regions Adjusted Scores - with sum of wgts and region';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;
%END;


* Calculate region level adjusted scores from the;
* region level adjusted scores in COEFFREG;
PROC MEANS DATA=COEFFREG NWAY NOPRINT;
  WEIGHT REGWGT&IGRP;
  CLASS  XSERVREG;
  VAR    NEWADJST;
  OUTPUT OUT=REGFILE1 (DROP = _TYPE_ _FREQ_) MEAN=ADJ&IGRP;
RUN;


%IF &DEBUGFLG > 0  %THEN %DO;
   PROC PRINT DATA=REGFILE1;
        TITLE2 'Print of REGFILE1: Region Scores';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;
```

```
* merge the previous groups region results (if any);
* with the region level std errs and the region;
* level results from catchment results collapsed to region;
DATA OUT.R_&&DEPVAR&IVAR;
     MERGE &RMRGFILE(IN=INS)
           R&IGRP&&DEPVAR&IVAR
           REG_WGTS(KEEP = REGCNT&IGRP REGWGT&IGRP XSERVREG)
           REGFILE1(KEEP = ADJ&IGRP XSERVREG);
     BY XSERVREG;
     DEPENDNT = "&&DEPVAR&IVAR";
     IF INS;
RUN;

* merge the previous groups regional results (if any);
* with the region level std err and the region;
* level results from the current group/dependent var;
DATA OUT.R_&&DEPVAR&IVAR;
    MERGE OUT.R_&&DEPVAR&IVAR(IN=INS)
          R&IGRP&&DEPVAR&IVAR    /*KRR - removed perm dataset ref to OUT2 */
          REG_WGTS
          REGFILE1;
    BY XSERVREG;
    DEPENDNT = "&&DEPVAR&IVAR";
    IF INS;
RUN;

PROC PRINT DATA=OUT.R_&&DEPVAR&IVAR;
     TITLE2 "Print of XSERVREG variables in &&DEPVAR&IVAR";
     TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
RUN;
%MEND SCORE;

%MACRO MAKE_INC;
***************************************;
* creates include files for later Procs;
* Needs to be run each time.  Called   ;
* in the outer (beneficiary loop).     ;
* I chose this method because it was   ;
* clearer(to me at least).             ;
* This macro needs to be run once per  ;
* Dep var per subgroup.                ;
***************************************;

* Drop records where the dependent var is missing;
* Drop records with missing catchment or region values;
  DATA GROUP&IGRP;
       SET IN1.GROUP&IGRP;
       IF &&DEPVAR&IVAR NOT = .;
  RUN;

 DATA _NULL_;
      SET GROUP&IGRP END = EOF;
      IF &&DEPVAR&IVAR NOT = .;

      ARRAY AGECNT(7) 8 aCNT1 - aCNT7;
      RETAIN AGECNT 0;
      RETAIN CNT 0;
      ARRAY AGENAM(7)  $8 AGENAM1 - AGENAM7;
      ARRAY AGENAMX(7) $8 AGENAMX1 - AGENAMX7;
      RETAIN AGENAM;
      RETAIN AGENAMX;
      ARRAY REGCNT(24)  8 REGCNT01- REGCNT24; /*JSO 08/24/2006, Changed from 16 to 24*/
      RETAIN CATCNT 0;
      RETAIN REGCNT 0;

      * create a name array for the parent age dummies;
      IF _N_ = 1 THEN DO;
         AGENAM(1) = "AGE1824";
         AGENAM(2) = "AGE2534";
         AGENAM(3) = "AGE3544";
         AGENAM(4) = "AGE4554";
         AGENAM(5) = "AGE5564";
```

```
         AGENAM(6) = "AGE6574";
         AGENAM(7) = "AGE75UP";
      END;

      * total record count;
      CNT + 1;

      * count records in each age group;
      * we will use only age groups with more;
      * than 2 obs;
      IF AGE1824  = 1 THEN AGECNT(1) + 1;
      IF AGE2534  = 1 THEN AGECNT(2) + 1;
      IF AGE3544  = 1 THEN AGECNT(3) + 1;
      IF AGE4554  = 1 THEN AGECNT(4) + 1;
      IF AGE5564  = 1 THEN AGECNT(5) + 1;
      IF AGE6574  = 1 THEN AGECNT(6) + 1;
      IF AGE75UP  = 1 THEN AGECNT(7) + 1;

      * count records in each XSERVREG group;
      * we will only use XSERVREGs with more than than 2 obs;
      * I am using the region value as the subscript;
      * to make the code simpler and more readable;
      IF 1<= XSERVREG <=24  THEN DO; /*JSO 08/24/2006, Changed from 16 to 24*/
         REGCNT(XSERVREG) = REGCNT(XSERVREG) + 1;
      END;

      IF EOF THEN GOTO ENDFILE;
      RETURN;

ENDFILE:
     * create a title common to all procs in the current group;
     TITLE  " &&DEPVAR&IVAR  &&TITL&IGRP";

     * display counts in the log;
     %IF &DEBUGFLG > 0  %THEN %DO;
        PUT ' ';
        PUT 'AT EOF:';
        PUT "TOTAL CNT = "    CNT;
        PUT AGENAM(1) "  " AGECNT(1)=;
        PUT AGENAM(2) "  " AGECNT(2)=;
        PUT AGENAM(3) "  " AGECNT(3)=;
        PUT AGENAM(4) "  " AGECNT(4)=;
        PUT AGENAM(5) "  " AGECNT(5)=;
        PUT AGENAM(6) "  " AGECNT(6)=;
        PUT AGENAM(7) "  " AGECNT(7)=;
        PUT " ";

        DO I = 1 TO 24;  /*JSO 08/24/2006, Changed from 16 to 24*/
           IF(REGCNT(I) > 0) THEN DO;
              PUT  'REG' I Z2. REGCNT(I) 6.;
           END;
        END;
        PUT ' ';


      %END;    *** of debug test;

     *-------------------------------------------------------;
     * This include is for the regression using regions;
     * in this case we drop the last XSERVREG;
     FILE 'REGRSREG.INC';
     PUT @6  "MODEL  &&DEPVAR&IVAR = ";
     IF "&IND_VAR1" NE "" THEN PUT @12 "&IND_VAR1"; /* KRR - only output when present */
     IF "&IND_VAR2" NE "" THEN PUT @12 "&IND_VAR2"; /* KRR - only output when present */
     IF "&IND_VAR3" NE "" THEN PUT @12 "&IND_VAR3"; /* KRR - only output when present */

     CNT2 = 0;
     * setup an array of those age groups that have > 1 obs;
     DO I = 1 TO 7;
        IF AGECNT(I) > 1 THEN DO;
           CNT2 + 1;
           AGENAMX(CNT2) = AGENAM(I);
        END;
```

```
END;

* now drop the last category to create;
* an omitted category which is required;
* to solve the regression properly;
DO I = 1 TO CNT2-1;
   PUT @12 AGENAMX(I);
END;

* ditto for the catchment areas with > 0 obs;
* in this case we drop the the first USABLE category;
* this is not consistent with the catchment area code;
* but this is the method that Portia used;
FIRST = 0;        /*JSO 08/24/2006, Changed from 16 to 24*/
DO I = 1 TO 24;   * skip the 1st region with 1+ obs;
   IF REGCNT(I) > 0 THEN DO;
      IF FIRST = 1 THEN PUT @12 'REG' I Z2.;
      FIRST = 1;
   END;
END;
PUT @11 ';';


*-------------------------------------------------------;
* now create the complete var statement;
* for the Proc MEANS used to replace the;
* independent variables missing values;
* we assume the age groups will always be used;
* These are also called the RISK FACTORS;
FILE 'RISKVARS.INC';
PUT @10  "VAR";
DO I = 1 TO CNT2;
   PUT @12 AGENAMX(I);
END;

* not all the other dependent variables will be used;
* only write them out if they are not null;
CNT3 = 0;
IF "&IND_VAR1" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR1";
END;

IF "&IND_VAR2" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR2";
END;

IF "&IND_VAR3" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR3";
END;
PUT @11 ';';


*-------------------------------------------------------;
* create an ARRAY statement of the desired risk factors;
* called adjusters in the specs and in the code;
FILE 'RISKARRY.INC';
PUT @10  "ARRAY COEFFS(*) $8";
DO I = 1 TO CNT2;
   PUT @12 AGENAMX(I);
END;

CNT3 = 0;
IF "&IND_VAR1" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR1";
END;

IF "&IND_VAR2" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR2";
```

```
     END;

     IF "&IND_VAR3" NE "" THEN DO;
         CNT3 + 1;
         PUT @12 "&IND_VAR3";
     END;
     PUT @11 ';';


     *-------------------------------------------------------;
     * create an ARRAY of mean names for the output;
     * from a proc MEANS of the Risk Factors in RISKARRY;
     FILE 'RISKMEAN.INC';
     IND_CNT = CNT2 + CNT3;
     PUT @6 "ARRAY MEANS(*) $8";
     DO I = 1 TO IND_CNT;
        PUT @12 "MEAN" I Z2.;
     END;
     PUT @11 ';';

*   ----------------------------------------------------;
*   create the equivalent of the following statement;
*   OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN=MEAN1-MEAN&MEAN_CNT;
     FILE 'MEANFILE.INC';
     PUT @6 "OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN = ";
     DO I = 1 TO IND_CNT;
        PUT @12 "MEAN" I Z2.;
     END;
     PUT @11 ';';

     *-------------------------------------------------------;
     * create a super region area array;
     * with at least ONE obs;
     FILE 'REGARRAY.INC';
     PUT @10  "ARRAY REGRHS(*) $8";
     DO I = 1 TO 24;              /*JSO 08/24/2006, Changed from 16 to 24*/
        IF REGCNT(I) > 0 THEN DO; *** ems 7/12/00 changed "> 1" to "> 0";
           PUT  @16 'REG' I Z2.;
        END;
     END;
     PUT @11 ';';
 RUN;

 * Create the means of the adjuster variables;
 * They will be used to replace missing adjuster variables;
 * calculate weighted means;
 PROC MEANS DATA=GROUP&IGRP;
   WEIGHT &WGT;
   %INCLUDE 'RISKVARS.INC';
   %INCLUDE 'MEANFILE.INC';
 RUN;



%IF &DEBUGFLG > 0  %THEN %DO;
   PROC PRINT DATA=MEANFILE;
        TITLE2 "Print of MEANFILE for Risk Adjuster variables";
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;

DATA GROUP&IGRP;
     SET GROUP&IGRP;
     IF _N_ = 1 THEN SET MEANFILE;
     %INCLUDE 'RISKARRY.INC';
     %INCLUDE 'RISKMEAN.INC';
     DO I = 1 TO DIM(COEFFS);
        IF COEFFS(I) = . THEN DO;
           COEFFS(I) = MEANS(I);
        END;
     END;
RUN;
/* PROC MEANS DATA=out.group8;
```

```
   WEIGHT &WGT;
   %INCLUDE 'RISKVARS.INC';
   %INCLUDE 'MEANFILE.INC';
 RUN;*/
%MEND MAKE_INC;

%MACRO R_SUDAAN(INFILE);
*****************************************************
* Use this macro to create standard err (variances)
* for XSERVREGs.
*****************************************************;
%PUT ****************************************;
%PUT STARTING MACRO R_SUDAAN (XSERVREG);
%PUT ****************************************;

DATA &INFILE;
   SET &INFILE;
   IF 1<= XSERVREG <= 24;  /*JSO 08/24/2006, Changed from 16 to 24*/
RUN;


* Sort data by TMP_CELL;
PROC SORT DATA=&INFILE;
   BY TMP_CELL;
RUN;

%IF &DEBUGFLG > 5  %THEN %DO;
   PROC PRINT DATA=&INFILE(OBS=5);
        TITLE2 'Print of the input file to SUDAAN (XSERVREG)';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;


* Calculate values for super regions;
PROC DESCRIPT DATA=&INFILE DESIGN=STRWR NOPRINT;
   WEIGHT &WGT;
   SETENV DECWIDTH=4;
   NEST TMP_CELL / missunit;
   VAR RESID&IGRP;
   TABLES XSERVREG;
   SUBGROUP XSERVREG;
   LEVELS 24;   /*JSO 08/24/2006, Changed from 16 to 24*/
   OUTPUT  SEMEAN
         / REPLACE TABLECELL=DEFAULT
           FILENAME=RS&DEP;
   RUN;

   DATA R&IGRP&&DEPVAR&IVAR;
        SET RS&DEP;
        KEEP XSERVREG SEMEAN;
        IF SEMEAN NE .;
        RENAME SEMEAN = SEMEAN&IGRP;
   RUN;


   PROC PRINT DATA=R&IGRP&&DEPVAR&IVAR;
      TITLE2 "Print XSERVREG DESCRIPT DATA=R&IGRP&&DEPVAR&IVAR";
      TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;

%MEND  R_SUDAAN;


%***********************************;
%*  call the macros;
%***********************************;

%MACRO MAINLOOP(MIN_VAR,MAX_VAR,MIN_GRP,MAX_GRP);
    %* loop over the set of dependent variables;
       %DO IVAR = &MIN_VAR %TO &MAX_VAR;
          %DO IGRP = &MIN_GRP %TO &MAX_GRP;
             %MAKE_INC;
```

```
            %SCORE;
         %END;
      %END;

%MEND;

%MAINLOOP(&MIN_VAR,&MAX_VAR,&MIN_GRP,&MAX_GRP);
```

G.1.D Q4FY2007\PROGRAMS\REPORTCARDS\CAHPS_ADULTQ4FY2007\REGRSREG.INC - INCLUDE FILE1 IN STEP2Q.SAS.

```
MODEL  R07015 =
      R07066
      AGE1824
      AGE2534
      AGE3544
      AGE4554
      REG02
      REG03
      REG04
      REG05
      REG06
      REG07
      REG08
      REG09
      REG10
      REG11
      REG12
      REG13
      REG14
      REG15
      REG16
      REG17
      REG18
      REG19
      REG20
      REG21
      REG24
     ;
```

G.1.E Q4FY2007\PROGRAMS\REPORTCARDS\CAHPS_ADULTQ4FY2007\RISKARRY.INC - INCLUDE FILE2 IN STEP2Q.SAS.

```
ARRAY COEFFS(*) $8
  AGE1824
  AGE2534
  AGE3544
  AGE4554
  AGE5564
  R07066
 ;
```

G.1.F Q4FY2007\PROGRAMS\REPORTCARDS\CAHPS_ADULTQ4FY2007\RISKMEAN.INC - INCLUDE FILE3 IN STEP2Q.SAS.

```
ARRAY MEANS(*) $8
      MEAN01
      MEAN02
      MEAN03
      MEAN04
      MEAN05
      MEAN06
     ;
```

G.1.G Q4FY2007\PROGRAMS\REPORTCARDS\CAHPS_ADULTQ4FY2007\REGARRAY.INC - INCLUDE FILE4 IN STEP2Q.SAS.

```
ARRAY REGRHS(*) $8
      REG01
      REG02
      REG03
      REG04
      REG05
      REG06
      REG07
      REG08
      REG09
      REG10
      REG11
      REG12
      REG13
      REG14
      REG15
      REG16
      REG17
      REG18
      REG19
      REG20
      REG21
      REG24
 ;
```

G.1.H Q4FY2007\PROGRAMS\REPORTCARDS\CAHPS_ADULTQ4FY2007\RISKVARS.INC - INCLUDE FILE5 IN STEP2Q.SAS.

```
VAR
  AGE1824
  AGE2534
  AGE3544
  AGE4554
  AGE5564
  R07066
 ;
```

G.1.I Q4FY2007\PROGRAMS\REPORTCARDS\CAHPS_ADULTQ4FY2007\MEANFILE.INC - INCLUDE FILE6 IN STEP2Q.SAS.

```
OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN =
      MEAN01
      MEAN02
      MEAN03
      MEAN04
      MEAN05
      MEAN06
     ;
```

G.1.J Q4FY2007\PROGRAMS\REPORTCARDS\CAHPS_ADULTQ4FY2007\COMPOSIT.SAS - CALCULATE CAHPS COMPOSITE SCORES - RUN QUARTERLY.

```
*****************************************************************************
* Project:  DoD - Quarterly Adult Report Cards
* Program:  COMPOSIT.SAS
* Purpose:  Generate Quarterly Adult Report Card composite scores
* Requires: Programs STEP1Q.SAS and STEP2Q.SAS must be run prior
*           to this program.
*
* Modified: 1) 02/27/2001 By Keith Rathbun, Small changes to input DSNs to
*              accommodate the move of ALLSCORE.SAS functionality into the
*              STEP2Q.SAS program.
*           2) 01/08/2002 By Daniele Beahm, Changed versions in libname statements
*              so program can be run with SAS v8 and still produce SAS v612 datasets.
*           3) 04/10/2002 By Mike Scott, Updated variable names for 2002
*              survey.
*           4) 03/21/2003 By Mike Scott, Updated variable names for 2003
*              survey.
*           5) 03/24/2004 By Mike Scott, Updated for 2004.
*           6) 06/15/2004 By Regina Gramss, Update for Q2, added in
*              codes to compensate for any negative trend and to
*              print out the number of nonmissing data producing the
*              negative trend - those equal to or more than 30 nonmissing
*              data need to be further evaluated.
*           7) 09/2004 By Regina Gramss, Update for Q3, added in codes to
*              use XTNEXREG field instead of XREGION.
*           8) 01/2005 By Regina Gramss, Changed codes to use XSERVREG instead of
*              XTNEXREG, to incorporate service affliliation.
*           9) 04/2005 By Regina Gramss, Updated field names from 2004 to 2005.
*          10) 01/31/2006 By Regina Gramss, deleted following lines for "data r_&var1":
*              "%if &i~=8 %then %do" (keep set statement then delete the following:)
*              "%end
*               %else %do
*                 set in2.h5&var1(rename=(resid5=r_&var1)) in2.h6&var1(rename=(resid6=r_&var1))
in2.h7&var1(rename=(resid7=r_&var1))
*               %end"
*          11) 03/21/2006 By Keith Rathbun, Updated variable names for 2003
*              survey.
*
*****************************************************************************;
OPTIONS NOCENTER LS=132 PS=78 SOURCE SOURCE2 MLOGIC MPRINT NOOVP COMPRESS=YES NOFMTERR;
libname in  v612 "data";
libname in2 v612 "data\adulthatfiles";
libname out v612 "data";
LIBNAME LIBRARY   "..\..\..\DATA\AFINAL\FMTLIB";

%LET WGT = FWRWT;

 %MACRO COMPOSIT (TYPE=,COMPOS=,VAR1=,VAR2=,VAR3=,VAR4=,QCOUNT=);

  DATA _NULL_;
   %IF "&TYPE" = "R" %THEN %DO;
       CALL SYMPUT ('BYVAR','XSERVREG');
   %END; %ELSE
   %IF "&TYPE" = "C" %THEN %DO;
       CALL SYMPUT ('BYVAR','CACSMPL');
   %END;

 ****************************************;
 *   Create a Composite Score           ;
 ****************************************;
 DATA _NULL_;
     FILE 'FILES.INC';
     PUT @6 'SET';
     IF "&VAR1" NE '' THEN PUT @8 "IN.&TYPE._&VAR1";
     IF "&VAR2" NE '' THEN PUT @8 "IN.&TYPE._&VAR2";
     IF "&VAR3" NE '' THEN PUT @8 "IN.&TYPE._&VAR3";
     IF "&VAR4" NE '' THEN PUT @8 "IN.&TYPE._&VAR4";
     PUT @8 ';';
 RUN;
```

```
 DATA COMPOS&COMPOS;
      LENGTH DEPENDNT $ 8;
      %INCLUDE 'FILES.INC';
      DEPENDNT = "&TYPE.COMPOS&COMPOS";
 RUN;

 PROC SORT DATA=COMPOS&COMPOS;
      BY &BYVAR;
 RUN;

 PROC PRINT DATA=COMPOS&COMPOS(OBS=60);
      TITLE "Print of COMPOS&COMPOS after sort";
 RUN;

 DATA COMPOS&COMPOS;
      SET COMPOS&COMPOS;
      BY &BYVAR;
   %IF "&TYPE" = "R" %THEN %DO;
       ARRAY N(*) REGCNT1 - REGCNT8;
       ARRAY W(*) REGWGT1 - REGWGT8;
       ARRAY TN(*) TOTCNT1 - TOTCNT8;
       ARRAY TW(*) TOTWGT1 - TOTWGT8;
   %END; %ELSE
   %IF "&TYPE" = "C" %THEN %DO;
       ARRAY N(*) CATCNT1 - CATCNT8;
       ARRAY W(*) CATWGT1 - CATWGT8;
       ARRAY TN(*) TOTCNT1 - TOTCNT8;
       ARRAY TW(*) TOTWGT1 - TOTWGT8;
   %END;
      ARRAY ADJ(*)    ADJ1 - ADJ8;
      ARRAY TOTADJ(*) TOTADJ1 - TOTADJ8;
      ARRAY AVGADJ(*) AVJADJ1 - AVJADJ8;
      RETAIN TOTADJ TN TW;
      RETAIN AVGADJ;

      IF FIRST.&BYVAR THEN DO;
         DO I = 1 TO DIM(TOTADJ);
            TOTADJ(I) = 0; TN(I)=0; TW(I)=0;
         END;
      END; DROP I;

      PUT ' ';
      PUT ' --- STARTING LOOP1: ' &BYVAR=;
      DO I = 1 TO DIM(TOTADJ);
         PUT I= ADJ(I)=;
         IF ADJ(I) NE . THEN DO;
            TOTADJ(I) = TOTADJ(I) + ADJ(I);
            TN(I)=TN(I)+N(I);
            TW(I)=TW(I)+W(I);
         END;
         PUT I= ADJ(I)= TOTADJ(I)=;
      END;


      PUT ' ';
      PUT ' --- STARTING LOOP2: ' &BYVAR=;
      IF LAST.&BYVAR THEN DO;
         DO I = 1 TO DIM(TOTADJ);
            PUT I= ADJ(I)= TOTADJ(I)= AVGADJ(I)=;
            AVGADJ(I) = TOTADJ(I)/&QCOUNT;
            adj(i)=avgadj(i);
            N(I)=TN(I)/&QCOUNT;
            W(I)=TW(I)/&QCOUNT;
         END;
         OUTPUT;
      END;

 RUN;

%do i=1 %to 8;
/* Collect Standard Errors and residuals from variables in composite */
%if &type=R|(&i=1|&i=2|&i>4) %then %do;
```

```
%if &var1~= %then %do;
%let n=r_&var1;
%let m=s_&var1;

data s_&var1(rename=(semean&i=s_&var1));
set in.&type._&var1(keep=semean&i &byvar);
proc sort; by &byvar;
data r_&var1;
set in2.h&i.&var1(rename=(resid&i=r_&var1));
proc sort data=r_&var1; by mprid;
%end;
%if &var2~= %then %do;
%let n=%str(&n r_&var2);
%let m=%str(&m s_&var2);
data s_&var2(rename=(semean&i=s_&var2));
set in.&type._&var2(keep=semean&i &byvar);
proc sort; by &byvar;
data r_&var2;
set in2.h&i.&var2(rename=(resid&i=r_&var2));
proc sort data=r_&var2; by mprid;
%end;
%if &var3~= %then %do;
%let n=%str(&n r_&var3);
data s_&var3(rename=(semean&i=s_&var3));
set in.&type._&var3(keep=semean&i &byvar);
proc sort; by &byvar;
data r_&var3;
set in2.h&i.&var3(rename=(resid&i=r_&var3));
proc sort data=r_&var3; by mprid;
%let m=%str(&m s_&var3); %end;

%if &var4~= %then %do;
%let n=%str(&n r_&var4);
data s_&var4(rename=(semean&i=s_&var4));
set in.&type._&var4(keep=semean&i &byvar);
proc sort; by &byvar;
data r_&var4;
set in2.h&i.&var4(rename=(resid&i=r_&var4));
%let m=%str(&m s_&var4);
proc sort data=r_&var4; by mprid;
%end;
/* Merge residual files and estimate correlations */
data infile;
merge &n; by mprid;
proc sort; by &byvar;
proc corr  outp=outf noprint;
by &byvar;
var &n;
weight &WGT.;
data outf;
set outf; by &byvar;
where _type_='CORR';
/*  sum standard error of a row variable times correlation times standard error of each column
variable, then sum sums and take square root, divide by number of variables */
data final;
merge &m outf; by &byvar;
data final;
set final; by &byvar;
array r_val &n;
array s_val &m;
sde=0;
do i=1 to dim(s_val);
%do j=1 %to &qcount;
if _name_="R_&&var&j" then
sde=sum(sde,r_val(i)*s_&&var&j*s_val(i));
%end;
end;
data sefin&compos._&i ERROR;
set final;
by &byvar;
if first.&byvar then tv=0;
 tv+sde;
if last.&byvar then do;
```

```
     if tv >= 0 then sde&i=(tv**.5)/&qcount; /* RSG 06/22/2004 change to only do the power
calculation if the tv value is nonnegative*/
     else if tv < 0 then do;   /* RSG 06/22/2004 those with negative trend is set aside to print
out*/
       output error;          /*                  and determine whether it is from nonmissing data
of 30 or more*/
       sde&i=.;
      end;
      output sefin&compos._&i;
     end;
     run;
     /* RSG 06/22/2004 - count how many nonmissing values are in the trend data
        to determine whether the negative trend in above datastep
        (tv < 0) is something to be concerned about */
     proc means data=infile noprint;
     by &byvar;
     var &n;
     output out=miss (drop=_type_ _freq_) n=;
     data error2;
     merge error(in=a drop=&n) miss(in=b);
     by &byvar;
     if a;
     run;
     proc print data=error2; /* RSG 06/22/2004   print out negative trend data and count of
nonmissing data*/
     var &byvar tv &n;
     title "ERROR - NEGAVTIVE TREND FOR &N IN GROUP=&I. AND COMPOSE=&COMPOS.";
     run;
     title ' '; /** RSG 06/22/2004 - BLANK OUT TITLE FOR NEXT LOOP **/

     %if &i=1 %then %do;
     data sefin&compos;
     set sefin&compos._1(keep=&byvar sde&i); by &byvar;
     rename sde&i=semean&i;
     run;
     %end;
     %else %do;
     data sefin&compos;
     merge sefin&compos sefin&compos._&i(keep=&byvar sde&i); by &byvar;
     rename sde&i=semean&i;
     run;
     %end;


     %end;
     %end;

     data out.&type.compos&compos;
     merge compos&compos sefin&compos; by &byvar;
     run;
     PROC PRINT DATA=OUT.&TYPE.COMPOS&COMPOS;
           TITLE1 COMPTITL;
      RUN;
     %MEND COMPOSIT;

     *--------------------------------------;
     *-       set the parameters here      -;
     *--------------------------------------;
     ************************************;
     * Call the macro for each composite ;
     ************************************;
     %COMPOSIT (type=R,compos=1,var1=R07011,var2=R07013,var3=R07027,var4=R07029,qcount=4);
     %COMPOSIT (type=R,compos=2,var1=R07017,var2=R07022,var3=R07019,var4=R07030,qcount=4);
     %COMPOSIT (type=R,compos=3,var1=R07033,var2=R07034,var3=R07035,var4=R07036,qcount=4);
     %COMPOSIT (type=R,compos=4,var1=R07031,var2=R07032,qcount=2);
     %COMPOSIT (type=R,compos=5,var1=R07043,var2=R07045,var3=R07047,qcount=3);
     %COMPOSIT (type=R,compos=6,var1=R07040,var2=R07041,qcount=2);
```

G.1.K Q4FY2007\PROGRAMS\REPORTCARDS\CAHPS_ADULTQ4FY2007\FILES.INC - INCLUDE FILE IN COMPOSIT.SAS.

```
SET
  IN.R_R07040
  IN.R_R07041
  ;
```

G.2.A Q4FY2007\PROGRAMS\LOADWEB\CAHPS_ADULTQ4FY2007\LOADCAHQ.SAS - CONVERT CAHPS SCORES INTO WEB LAYOUT - RUN QUARTERLY.

```
*****************************************************************************
*
* PROGRAM:  LOADCAHQ.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
* PURPOSE:  Convert the CAHPS Scores Database into the WEB layout
*
* WRITTEN:  11/09/2000 BY KEITH RATHBUN, Adapted from LOADCAHP.SAS.
*
* INPUTS:   1) CAHPS Individual and Composite data sets with adjusted scores
*
* OUTPUT:   1) LOADCAHQ.SD2 - Combined CAHPS Scores Database in WEB layout
*
* INCLUDES: 1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*              and composite data sets
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - STEP1Q.SAS - Recode questions and generate group files
*    - STEP2Q.SAS - Calculate individual adjusted scores for group 1-7
*    - COMPOSIT.SAS - Calculate composite adjusted scores for group 1-8
*
* 2) The output file (LOADCAHQ.SD2) will be run through the
*    MAKEHTMQ.SAS program to generate the WEB pages.
*
* MODIFIED:
*
*  1) 04/10/2002 BY MIKE SCOTT, Updated variable names for 2002 survey.
*  2) 03/21/2003 BY MIKE SCOTT, Updated variable names for 2003 survey.
*  3) 06/25/2003 BY MIKE SCOTT, Updated for Q2 2003.
*  4) 07/03/2003 BY MIKE SCOTT, Added TIMEPD variable to be set to the period
*     or 'Trend'.  Changed from setting BENTYPE to the period or 'Trend' to
*     setting to 'Composite'.
*  5) 10/21/2003 BY MIKE SCOTT, Updated for Q3 2003.
*  6) 01/07/2004 BY MIKE SCOTT, Updated for Q4 2003.
*  7) 03/23/2004 BY MIKE SCOTT, Updated for Q1 2004.
*  8) 06/15/2004 BY REGINA GRAMSS, Updated for q2 2004.
*  9) 09/2004 BY REGINA GRAMSS, Updated for Q3 2004, changed all reference
*     to XREGION to XTNEXREG.
* 10) 01/2005 BY REGINA GRAMSS, Changed XTNEXREG to XSERVREG to include
*     service affiliation into regions.
* 11) 04/2005 BY REGINA GRAMSS, Updated 2004 field names for 2005.
* 12) 07/2005 BY REGINA GRAMSS, updated for Q2 2005.
* 13) 10/2005 BY REGINA GRAMSS, Updated for Q3 2005
* 14) 12/2005 BY REGINA GRAMSS, Updated for Q4 2005
* 15) 03/21/2006 BY KEITH RATHBUN, Updated variable names for 2006 survey.
* 16) 07/12/2006 by Justin Oh, updated for Q3 FY 2006
* 17) 10/03/2006 by Justin Oh - Updated BENTYPE composite year to 2006 Q3
*     Changed Libname IN for Q4FY2006.
* 18) 12/15/2006 by Justin Oh - Updated BENTYPE composite year to 2006 Q4
*     Changed Libname IN for Q1FY2007.
* 19) 04/05/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q1
*     Changed Libname IN for Q2FY2007.
* 20) 04/05/2007 by Justin Oh - Added %LET RCTYPE to select RC types
*     ReportCards OR PurchasedReportCards.
* 21) 09/04/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q3
*     Changed Libname IN for Q4FY2007.
*
*****************************************************************************
* Assign data libraries and options
*****************************************************************************;
/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards                ***/
%LET RCTYPE = ReportCards;

LIBNAME IN  v612  "..\..\&RCTYPE\CAHPS_ADULTQ4FY2007\DATA";
LIBNAME OUT v612  "DATA";
LIBNAME LIBRARY   "..\..\..\DATA\AFINAL\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;
```

```
*****************************************************************************
* Load Format definitions for CAHPS Individual and composite data sets.
*****************************************************************************;
%INCLUDE "..\LOADCAHQ.INC";

*****************************************************************************
*****************************************************************************
*
* Process Macro Input Parameters:
*
* 1) QUESTION = Variable Question Name (DSN).
*    - For individual Questions it is the variable name
*    - For composite Questions it is called xCOMPOSn
*      where n = a predefined composite # and
*            x = R (Region) or C (Catchment)
* 2) TYPE = Type of Score (COMPOSITE or INDIVIDUAL)
* 3) REGCAT = Region/Catchment Area
*
*****************************************************************************
*****************************************************************************;
%MACRO PROCESS(QUESTION=,TYPE=);
*****************************************************************************
* Assign value for BENTYPE composite year
*****************************************************************************;
%LET YEAR = "2007 Q3"; * Note that this is based on Calendar Year here;

*****************************************************************************
* Assign prefix for weighted/unweighted count variables.
* Unweighted counts is REGCNTn where n=group number.
* Weighted counts is REGWGTn where n=group number.
*****************************************************************************;
%LET PREFIX = REG;

*****************************************************************************
*
* Convert the CAHPS individual Scores Record into WEB layout.
* There are 8 logical records (adjusted scores) per physical record:
*
* ____________________________________________________________
*    Adjusted Score           Definitions
*    Group Number
* ____________________________________________________________
* 1. Prime enrollees          XINS_COV IN (1,2,6) AND H07007>=2
* 2. Enrollees w/mil PCM      XENR_PCM IN (1,2,6) AND H07007>=2
* 3. Enrollees w/civ PCM      XENR_PCM = 3        AND H07007>=2
* 4. Nonenrollees             XINS_COV IN (3) /*JSO 08/24/2006, Deleted 4,5*/
* 5. Active duty              XBNFGRP = 1
* 6. Active duty dependents   XBNFGRP = 2
* 7. Retirees and dependents  XBNFGRP IN (3,4)
*
*****************************************************************************;
DATA &QUESTION;
   SET IN.&QUESTION;

   LENGTH MAJGRP  $30;
   LENGTH REGION   $25; **RSG 01/2005 - Changed format to be large enough to include service
affiliation;
   LENGTH REGCAT  $26;
   LENGTH BENTYPE $50;
   LENGTH BENEFIT $34;
   LENGTH TIMEPD  $35; **MJS 07/03/03 Added line;

   ********************************************************************
   * Assign Region
   ********************************************************************;
   REGION  = PUT(XSERVREG,SERVREGF.);
   ********************************************************************
   * Assign benefit and benefit type
   ********************************************************************;
   IF "&TYPE" = "INDIVIDUAL" THEN DO;
      IF DEPENDNT IN("R07037","R07048","R07009","R07015") THEN
         BENTYPE = "Composite";   ***MJS 07/03/03 Changed from BENTYPE = PUT(&YEAR,$BENTYPF.);
```

```
   ELSE
      BENTYPE = PUT(DEPENDNT,$BENTYPF.);
   BENEFIT = PUT(DEPENDNT,$BENEF.);
   TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added line;
END;
ELSE IF "&TYPE" = "COMPOSITE" THEN DO;
   BENTYPE = "Composite";   ***MJS 07/03/03 Changed from BENTYPE = PUT(&YEAR,$BENTYPF.);
   BENEFIT = PUT(DEPENDNT,$BENEF.);
   TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added line;
END;
ELSE PUT "ERROR - Invalid TYPE = &TYPE";

*********************************************************************
* For now, Initialize Significance test to zero.
*********************************************************************;
SIG = 0;
*********************************************************************
* Assign Region
*********************************************************************;
REGCAT = PUT(XSERVREG,SERVREGF.);

*********************************************************************
* 1 = Prime Enrollees
*********************************************************************;
MAJGRP = PUT(1,MAJGRPF.);
SCORE = ADJ1;
SEMEAN = SEMEAN1;
N_OBS = &PREFIX.CNT1;
N_WGT = &PREFIX.WGT1;
OUTPUT;

*********************************************************************
* 2 = Enrollees with Military PCM
*********************************************************************;
MAJGRP = PUT(2,MAJGRPF.);
SCORE = ADJ2;
SEMEAN = SEMEAN2;
N_OBS = &PREFIX.CNT2;
N_WGT = &PREFIX.WGT2;
OUTPUT;

*********************************************************************
* 3 = Enrollees with Civilian PCM
*********************************************************************;
MAJGRP = PUT(3,MAJGRPF.);
SCORE = ADJ3;
SEMEAN = SEMEAN3;
N_OBS = &PREFIX.CNT3;
N_WGT = &PREFIX.WGT3;
OUTPUT;

*********************************************************************
* 4 = Non-enrolled Beneficiaries
*********************************************************************;
MAJGRP = PUT(4,MAJGRPF.);
SCORE = ADJ4;
SEMEAN = SEMEAN4;
N_OBS = &PREFIX.CNT4;
N_WGT = &PREFIX.WGT4;
OUTPUT;

*********************************************************************
* 5 = Active Duty
*********************************************************************;
MAJGRP = PUT(5,MAJGRPF.);
SCORE = ADJ5;
SEMEAN = SEMEAN5;
N_OBS = &PREFIX.CNT5;
N_WGT = &PREFIX.WGT5;
OUTPUT;

*********************************************************************
* 6 = Active Duty Dependents
```

```
   ********************************************************************;
   MAJGRP = PUT(6,MAJGRPF.);
   SCORE = ADJ6;
   SEMEAN = SEMEAN6;
   N_OBS = &PREFIX.CNT6;
   N_WGT = &PREFIX.WGT6;
   OUTPUT;

   ********************************************************************
   * 7 = Retirees and Dependents
   ********************************************************************;
   MAJGRP = PUT(7,MAJGRPF.);
   SCORE = ADJ7;
   SEMEAN = SEMEAN7;
   N_OBS = &PREFIX.CNT7;
   N_WGT = &PREFIX.WGT7;
   OUTPUT;

   ********************************************************************
   * 8 = All Beneficiaries              ALL Beneficiaries
   ********************************************************************;
   MAJGRP = PUT(8,MAJGRPF.);
   SCORE  = ADJ8;
   SEMEAN = SEMEAN8;
   N_OBS = &PREFIX.CNT8;
   N_WGT = &PREFIX.WGT8;
   OUTPUT;

KEEP MAJGRP
     REGION
     REGCAT
     BENTYPE
     BENEFIT
     TIMEPD   /*MJS 07/03/03 Added*/
     SCORE
     SEMEAN
     N_OBS
     N_WGT
     SIG
   ;
RUN;

%MEND;

*************************************************************************
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS1,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R07011,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07013,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07027,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07029,TYPE=INDIVIDUAL);

*************************************************************************
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS2,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R07017,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07022,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07019,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07030,TYPE=INDIVIDUAL);

*************************************************************************
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS3,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R07033,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07034,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07035,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07036,TYPE=INDIVIDUAL);
```

```
*************************************************************************
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS4,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R07031,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07032,TYPE=INDIVIDUAL);

*************************************************************************
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS5,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R07043,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07045,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07047,TYPE=INDIVIDUAL);

*************************************************************************
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS6,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R07040,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07041,TYPE=INDIVIDUAL);

*************************************************************************
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*************************************************************************;
%PROCESS(QUESTION=R_R07037,TYPE=INDIVIDUAL);

*************************************************************************
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*************************************************************************;
%PROCESS(QUESTION=R_R07048,TYPE=INDIVIDUAL);

*************************************************************************
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*************************************************************************;
%PROCESS(QUESTION=R_R07009,TYPE=INDIVIDUAL);

*************************************************************************
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*************************************************************************;
%PROCESS(QUESTION=R_R07015,TYPE=INDIVIDUAL);

*************************************************************************
*************************************************************************
* STACK up all of the files into one final output dataset.
*************************************************************************
*************************************************************************;
DATA OUT.LOADCAHQ;
   SET R_R07011
       R_R07013
       R_R07027
       R_R07029
       R_R07017
       R_R07022
       R_R07019
       R_R07030
       R_R07033
       R_R07034
       R_R07035
       R_R07036
       R_R07031
       R_R07032
       R_R07043
       R_R07045
       R_R07047
```

```
       R_R07040
       R_R07041
       R_R07037
       R_R07048
       R_R07009
       R_R07015
       RCOMPOS1
       RCOMPOS2
       RCOMPOS3
       RCOMPOS4
       RCOMPOS5
       RCOMPOS6
    ;
    IF SCORE = . THEN DELETE;
RUN;

TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6244-410)";
TITLE2 "Program Name: LOADCAHQ.SAS By Keith Rathbun";
TITLE3 "Program Inputs: CAHPS Individual and Composite data sets with adjusted scores";
TITLE4 "Program Outputs: LOADCAHQ.SD2 - Combined CAHPS Scores Database in WEB layout";

PROC FREQ;
TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT
       REGION*REGCAT
      /MISSING LIST;
RUN;
```

G.2.B Q4FY2007\PROGRAMS\LOADWEB\LOADCAHQ.INC - FORMAT DEFINITIONS FOR CONVERTING THE SCORES DATABASE INTO THE WEB LAYOUT - RUN QUARTERLY.

```
*************************************************************************
*
* PROGRAM:  LOADCAHQ.INC
* TASK:     QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (8860-410)
* PURPOSE:  Format definitions for converting the CAHPS Scores Database
*           into the WEB layout.
*
* WRITTEN:  11/09/2000 BY KEITH RATHBUN, Adapted from LOADCAHP.INC.
*
* MODIFIED: 1) 08/13/2001 BY KEITH RATHBUN, Added XSERVAFF format to
*              accommodate the short reports.
*           2) 01/24/2002 BY KEITH RATHBUN, Added BENTYPF = 1998,1999,2000
*              added catchment composites.
*           3) 04/10/2002 BY KEITH RATHBUN, Added parameters for 2002 survey.
*           4) 04/03/2003 BY MIKE SCOTT, Added parameters for 2003 survey.
*           5) 07/08/2003 BY MIKE SCOTT, Added formats GETNCARE, GETCAREQ,
*              CRTSHELP, HOWWELL, CUSTSERV, CLMSPROC, and PREVCARE.
*           6) 03/22/2004 BY KEITH RATHBUN, Added parameters for 2004 survey.
*              Changed R04031 to be "Wait Less than 15 Minutes For Appointment".
*           7) 05/06/2004 BY MIKE SCOTT, Changed R04031 back to 2003 version of
*              the label ("Wait More than 15 Minutes Past Appointment") so that
*              the Q1 2004 version of the question is consistent with past
*              versions.  The label will be changed to the new version ("Waiting
*              in the Doctor's Office") in Makehtmq.sas.
*           8) 02/2006 BY REGINA GRAMSS, Changed date format to fielding dates.
*           9) 03/21/2006 BY KEITH RATHBUN, Added parameters for 2006 survey.
*          10) 08/22/2006 BY JUSTIN OH, Changed SERVREGF format for Overseas.
*          11) 12/15/2006 BY JUSTIN OH, Added parameters for 2007 survey.
*          12) 02/02/2007 BY JUSTIN OH, Added "s" in Healthy Behaviors in VALUE BEN.
*
* INPUTS:   No direct input
*
* OUTPUT:   No direct output
*
* NOTES:    1) Under the new contract (8860), the survey year was changed
*              to be based on the year the survey is administered (2002)
*              as opposed to the questioning reference frame (2001).  This
*              include file contains variable names for both the 2001
*              survey administration year and the the 2002 administration
*              year surveys.
*
*************************************************************************
;
*************************************************************************
* FORMAT Definitions
*************************************************************************;
PROC FORMAT;
   VALUE MAJGRPF
      1 = "Prime Enrollees            "
      2 = "Enrollees with Military PCM"
      3 = "Enrollees with Civilian PCM"
      4 = "Non-enrolled Beneficiaries "
      5 = "Active Duty                "
      6 = "Active Duty Dependents     "
      7 = "Retirees and Dependents    "
      8 = "All Beneficiaries          "
   ;
   VALUE XSERVAFF
      1 = "ARMY"
      2 = "AIR FORCE"
      3 = "NAVY"
      4 = "OTHER"
   ;
   VALUE REGIONF
      0 = "CONUS MHS "
      1 = "North"
      2 = "South"
      3 = "West"
      4 = "Overseas"
```

```
   ;

/*JSO 08/24/2006, Changed Overseas to Service for Europe,Pacific,Latin*/
   VALUE SERVREGF
      1 = "North Army"
      2 = "North Air Force"
      3 = "North Navy"
      4 = "North Other"
      5 = "South Army"
      6 = "South Air Force"
      7 = "South Navy"
      8 = "South Other"
      9 = "West Army"
     10 = "West Air Force"
     11 = "West Navy"
     12 = "West Other"
     13 = "Europe Army"
     14 = "Europe Air Force"
     15 = "Europe Navy"
     16 = "Europe Other"
     17 = "Pacific Army"
     18 = "Pacific Air Force"
     19 = "Pacific Navy"
     20 = "Pacific Other"
     21 = "Latin America Army"
     22 = "Latin America Air Force"
     23 = "Latin America Navy"
     24 = "Latin America Other"
     25 = "CONUS ARMY"
     26 = "CONUS AIR FORCE"
     27 = "CONUS NAVY"
     28 = "CONUS OTHER";

/*JSO 08/24/2006, Changed Overseas to Europe,Pacific,Latin*/
   VALUE SERVREGO
      1 = "North Army"
      2 = "North Air Force"
      3 = "North Navy"
      4 = "North Other"
      5 = "South Army"
      6 = "South Air Force"
      7 = "South Navy"
      8 = "South Other"
      9 = "West Army"
     10 = "West Air Force"
     11 = "West Navy"
     12 = "West Other"
     13 = "Overseas Europe"
     14 = "Overseas Pacific"
     15 = "Overseas Latin America";

   VALUE $BENTYPF
    "1998    " = "1998                                        "
    "1999    " = "1999                                        "
    "2000    " = "2000                                        "
    "2001    " = "2001                                        "
    "2002    " = "2002                                        "
    "2003    " = "2003                                        "
    "2004    " = "2004                                        "
    "2005    " = "2005                                        "
    "2006    " = "2006                                        "
    "2000 Q1 " = "January, 2000 to December, 2000            "
    "2000 Q2 " = "April, 2000 to March, 2001                 "
    "2000 Q3 " = "July, 2000 to June, 2001                   "
    "2000 Q4 " = "October, 2000 to September, 2001           "
    "2002 Q1 " = "January, 2001 to December, 2001            "
    "2002 Q2 " = "April, 2001 to March, 2002                 "
    "2002 Q3 " = "July, 2001 to June, 2002                   "
    "2002 Q4 " = "October, 2001 to September, 2002           "
    "2003 Q1 " = "January, 2002 to December, 2002            "
    "2003 Q2 " = "April, 2002 to March, 2003                 "
    "2003 Q3 " = "July, 2002 to June, 2003                   "
    "2003 Q4 " = "October, 2002 to September, 2003           "
```

```
        "2004 Q1 " = "January, 2003 to December, 2003               "
        "2004 Q2 " = "April, 2003 to March, 2004                    "
        "2004 Q3 " = "Quarter 3, CY 2004                            "
        "2004 Q4 " = "Quarter 4, CY 2004                            "
        "2005 Q1 " = "January, 2005                                 "
        "2005 Q2 " = "April, 2005                                   "
        "2005 Q3 " = "July, 2005                                    "
        "2005 Q4 " = "October, 2005                                 "
        "2006 Q1 " = "January, 2006                                 "
        "2006 Q2 " = "April, 2006                                   "
        "2006 Q3 " = "July, 2006                                    "
        "2006 Q4 " = "October, 2006                                 "
        "2007 Q1 " = "January, 2007                                 "
        "2007 Q2 " = "April, 2007                                   "
        "2007 Q3 " = "July, 2007                                    "
        "2007 Q4 " = "October, 2007                                 "
        /*****************************************************************************/
        /* Admin. Year Defn.                                                         */
        /* 2001        2002        2003       2004      2005      2006      2007    */
        /*****************************************************************************/
        "R00007   ", "R02009   ", "R03009   ", "R04011", "R05011", "R06011", "R07011" = "Problems
Getting Personal Doctor/Nurse        "
        "R00014   ", "R02016   ", "R03013   ", "R04013", "R05013", "R06013", "R07013" = "Problems
Getting Referral to Specialist       "
        "R00028   ", "R02030   ", "R03027   ", "R04028", "R05027", "R06027", "R07027" = "Problems
Getting Necessary Care               "
        "R00029   ", "R02031   ", "R03028   ", "R04030", "R05029", "R06029", "R07029" = "Delays in
Care while Awaiting Approval        "
        "R00019   ", "R02021   ", "R03018   ", "R04018", "R05017", "R06017", "R07017" = "Advice over
Telephone                          "
        "R00021   ", "R02023   ", "R03020   ", "R04023", "R05022", "R06022", "R07022" = "Wait for
Routine Visit                       "
        "R00024   ", "R02026   ", "R03023   ", "R04020", "R05019", "R06019", "R07019" = "Wait for
Urgent Care                         "
        "R00030   ", "R02032   ", "R03029   ", "R04031", "R05030", "R06030", "R07030" = "Wait More
than 15 Minutes Past Appointment    "
        "R00033   ", "R02035   ", "R03032   ", "R04034", "R05033", "R06033", "R07033" = "Listens
Carefully                            "
        "R00034   ", "R02036   ", "R03033   ", "R04035", "R05034", "R06034", "R07034" = "Explains so
You can Understand                 "
        "R00035   ", "R02037   ", "R03034   ", "R04036", "R05035", "R06035", "R07035" = "Shows Respect
"
        "R00036   ", "R02038   ", "R03035   ", "R04037", "R05036", "R06036", "R07036" = "Spends Time
with You                           "
        "R00031   ", "R02033   ", "R03030   ", "R04032", "R05031", "R06031", "R07031" = "Courteous and
Respectful                         "
        "R00032   ", "R02034   ", "R03031   ", "R04033", "R05032", "R06032", "R07032" = "Helpful
"
        "R00048   ", "R02048   ", "R03044   ", "R04045", "R05043", "R06043", "R07043" = "Problem
Finding/Understanding Written Material"
        "R00050   ", "R02050   ", "R03046   ", "R04047", "R05045", "R06045", "R07045" = "Problem
Getting Help from Customer Service    "
        "R00055   ", "R02055   ", "R03051   ", "R04053", "R05047", "R06047", "R07047" = "Problem with
Paperwork                          "
        "R00044   ", "R02044   ", "R03040   ", "R04041", "R05040", "R06040", "R07040" = "Claims
Handled in a Reasonable Time         "
        "R00045   ", "R02045   ", "R03041   ", "R04042", "R05041", "R06041", "R07041" = "Claims
Handled Correctly                    "
        "R00037   ", "R02039   ", "R03036   ", "R04038", "R05037", "R06037", "R07037" = "Health Care
"
        "R00056   ", "R02056   ", "R03052   ", "R04054", "R05048", "R06048", "R07048" = "Health Plan
"
        "R00009   ", "R02011   ", "R03011   ", "R04009", "R05009", "R06009", "R07009" = "Primary Care
Manager                            "
        "R00016   ", "R02018   ", "R03015   ", "R04015", "R05015", "R06015", "R07015" = "Specialty
Care                                "
                                   "PHYSIC  " = "Physical                                    "
                                   "MENTAL  " = "Mental                                      "
       ;
       VALUE $BENEF
        "RCOMPOS1","CCOMPOS1","R00007","R00014","R00028","R00029",
                              "R02009","R02016","R02030","R02031",
                              "R03009","R03013","R03027","R03028",
```

```
                          "R04011","R04013","R04028","R04030",
                          "R05011","R05013","R05027","R05029",
                          "R06011","R06013","R06027","R06029",
                          "R07011","R07013","R07027","R07029"
        = "Getting Needed Care  "

        "RCOMPOS2","CCOMPOS2","R00019","R00021","R00024","R00030",
                          "R02021","R02023","R02026","R02032",
                          "R03018","R03020","R03023","R03029",
                          "R04018","R04023","R04020","R04031",
                          "R05017","R05022","R05019","R05030",
                          "R06017","R06022","R06019","R06030",
                          "R07017","R07022","R07019","R07030"
        = "Getting Care Quickly "

        "RCOMPOS3","CCOMPOS3","R00033","R00034","R00035","R00036",
                          "R02035","R02036","R02037","R02038",
                          "R03032","R03033","R03034","R03035",
                          "R04034","R04035","R04036","R04037",
                          "R05033","R05034","R05035","R05036",
                          "R06033","R06034","R06035","R06036",
                          "R07033","R07034","R07035","R07036"
        = "How Well Doctors Communicate "

        "RCOMPOS4","CCOMPOS4","R00031","R00032",
                          "R02033","R02034",
                          "R03030","R03031",
                          "R04032","R04033",
                          "R05031","R05032",
                          "R06031","R06032",
                          "R07031","R07032"
        = "Courteous and Helpful Office Staff "

        "RCOMPOS5","CCOMPOS5","R00048","R00050","R00055",
                          "R02048","R02050","R02055",
                          "R03044","R03046","R03051",
                          "R04045","R04047","R04053",
                          "R05043","R05045","R05047",
                          "R06043","R06045","R06047",
                          "R07043","R07045","R07047"
        = "Customer Service          "

        "RCOMPOS6","CCOMPOS6","R00044","R00045",
                          "R02044","R02045",
                          "R03040","R03041",
                          "R04041","R04042",
                          "R05040","R05041",
                          "R06040","R06041",
                          "R07040","R07041"
        = "Claims Processing                    "
        "RCOMPOS11","COMPOS11","MENTAL","PHYS"
        = "Health Status                        "
        /*************************************************************************/
        /* Admin. Year Defn.                                                     */
        /* 2001      2002      2003      2004      2005      2006      2007      */
        /*************************************************************************/
        "R00037",  "R02039",  "R03036",  "R04038",  "R05037",  "R06037",  "R07037"  =  "Health  Care
"
        "R00056",  "R02056",  "R03052",  "R04054",  "R05048",  "R06048",  "R07048"  =  "Health  Plan
"
        "R00009",  "R02011",  "R03011",  "R04009",  "R05009",  "R06009",  "R07009"  =  "Primary  Care
Manager                    "
        "R00016",  "R02018",  "R03015",  "R04015",  "R05015",  "R06015",  "R07015"  =  "Specialty  Care
"
       ;
    VALUE BEN
    /*  0 = 'Total'  deleted no longer calculating total 04/2005 RSG ***/
      1 = 'Getting Needed Care'
      2 = 'Getting Care Quickly'
      3 = 'Courteous and Helpful Office Staff'
      4 = 'How Well Doctors Communicate'
      5 = 'Customer Service'
      6 = 'Claims Processing'
```

```
  7 = 'Health Plan'
  8 = 'Health Care'
  9 = 'Primary Care Manager'
 10 = 'Specialty Care'
 11 = 'Preventive Care'
 12 = 'Healthy Behaviors';

  VALUE MAJOR
  1 = "Prime Enrollees            "
  2 = "Enrollees with Military PCM"
  3 = "Enrollees with Civilian PCM"
  4 = "Non-enrolled Beneficiaries "
  5 = "Active Duty                "
  6 = "Active Duty Dependents     "
  7 = "Retirees and Dependents    "
  8 = "All Beneficiaries          ";

  VALUE GETNCARE
  1 = "Problems Getting Personal Doctor/Nurse"
  2 = "Problems Getting Referral to Specialist"
  3 = "Problems Getting Necessary Care"
  4 = "Delays in Care while Awaiting Approval"
  5 = "Composite";

  VALUE GETCAREQ
  1 = "Advice over Telephone"
  2 = "Wait for Routine Visit"
  3 = "Wait for Urgent Care"
  4 = "Wait More than 15 Minutes Past Appointment"
  5 = "Composite";

  VALUE CRTSHELP
  1 = "Courteous and Respectful"
  2 = "Helpful"
  3 = "Composite";

  VALUE HOWWELL
  1 = "Listens Carefully"
  2 = "Explains so You can Understand"
  3 = "Shows Respect"
  4 = "Spends Time with You"
  5 = "Composite";

  VALUE CUSTSERV
  1 = "Problem Finding/Understanding Written Material"
  2 = "Problem Getting Help from Customer Service"
  3 = "Problem with Paperwork"
  4 = "Composite";

  VALUE CLMSPROC
  1 = "Claims Handled in a Reasonable Time"
  2 = "Claims Handled Correctly"
  3 = "Composite";

  VALUE PREVCARE
  1 = "Mammography"
  2 = "Pap Smear"
  3 = "Hypertension"
  4 = "Prenatal Care"
  5 = "Composite";

  VALUE SMOKEF
  1 = "Non-Smoking Rate"
  2 = "Counselled To Quit"
  3 = "Percent Not Obese"
  4 = "Composite";
RUN;
```

G.3.A Q1FY2007\PROGRAMS\BENCHMARK\BENCHA01.SAS - EXTRACT ADULT CAHPS QUESTIONS FROM NCBD - RUN QUARTERLY.

```
*****************************************************************************
*
* PROGRAM:  BENCHA01.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Extract Adult CAHPS Questions
*
* WRITTEN:  06/02/2000 BY KEITH RATHBUN
*
* INPUTS:   1) AC2006DB.SD2 - 2006 Adult CAHPS Questions
*
* OUTPUT:   1) BENCHA01.SD2 - 2006 Adult CAHPS Questions Renamed to be
*              consistent with the 2006 MPR DOD Survey.
*
* MODIFIED: 1) 12/19/2000 BY KEITH RATHBUN for Q1 2000 Survey.
*           2) 04/11/2002 BY MIKE SCOTT, Updated variable names for 2002
*              Survey.
*           3) 07/30/2002 BY MIKE SCOTT, Updated to use 2001 NCBD.
*           4) 03/21/2003 BY MIKE SCOTT, Updated for 2003 survey.
*           5) 05/06/2003 BY MIKE SCOTT, Updated for 2002 benchmarks.
*           6) 03/23/2004 BY MIKE SCOTT, Updated for Q1 2004.
*           7) 04/16/2004 BY KEITH RATHBUN, Updated to use 2003 NCBD.
*           8) 05/17/2005 BY REGINA GRAMSS, Updated for Q1 2005.
*           9) 03/24/2006 BY KEITH RATHBUN, Updated for Q2 FY 2006.
*              Changed variable names to match the 2006 HCSDB survey.
*              Changed CAHPS variable names to match those in 2005 NCBD.
*          10) 02/21/2007 BY JUSTIN OH, Updated for Q1 FY 2007.
*              Changed variable names to match the 2006 HCSDB survey.
*              Changed CAHPS variable names to match those in 2006 NCBD.
*              Changed SREDHIGH varible AC60_05 to AC58_06
*
* NOTES:
*
* 1) This program will generate the input for BENCHA02.SAS.
*
*****************************************************************************
* Assign data libraries and options
*****************************************************************************;
LIBNAME IN  V612 "..\..\..\2006AdultChildNCBD\AC";
LIBNAME OUT V612 "data";
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

DATA OUT.BENCHA01;
   SET IN.AC2006DB (RENAME=(BIRTHYY=YOB));
   FORMAT _ALL_;
   *******************************************
   * Getting Needed Care
   *******************************************;
   H07028   = AC25_06;
   H07011   = AC07_06;
   H07013   = AC09_06;
   H07027   = AC24_06;
   H07029   = AC26_06;
   *******************************************
   * Getting Care Quickly
   *******************************************;
   H07017   = AC14_06;
   H07022   = AC19_06;
   H07019   = AC16_06;
   H07030   = AC27_06;
   *******************************************
   * How Well Doctors Communicate
   *******************************************;
   H07033   = AC30_06;
   H07034   = AC31_06;
   H07035   = AC32_06;
   H07036   = AC33_06;
   *******************************************
   * Courteous and Helpful Office Staff
   *******************************************;
```

```
  H07031   = AC28_06;
  H07032   = AC29_06;
  ********************************************
  * Customer Service
  ********************************************;
  H07043   = AC40_06;
  H07045   = AC42_06;
  H07047   = AC48_06;
  ********************************************
  * Claims Processing
  ********************************************;
  H07040   = AC36_06;
  H07041   = AC37_06;
  ********************************************
  * Health Care Rating
  ********************************************;
  H07037   = AC34_06;
  ********************************************
  * Health Plan Rating
  ********************************************;
  H07048   = AC49_06;
  ********************************************
  * Personal Doctor Rating
  ********************************************;
  H07009   = AC05_06;
  ********************************************
  * Specialist Rating
  ********************************************;
  H07015   = AC11_06;
  ********************************************
  * Health Status
  ********************************************;
  H07066   = AC50_06;
  H07008   = AC04_06;
  AGEGROUP = AGE;   *NEED TO USE USE THIS DIRECTLY (already grouped);
  XSEXA    = GENDER;
  SREDHIGH = AC58_06;                          /*JSO 02/21/06 chged AC60_05 to AC58_06 */
  if product in (7,9) then model=4;            /*MJS 05/06/03 product now numeric*/
  if product=3 then model=2;                   /*coded according to AC FORMATS.SAS*/
  if product=1 then model=1;
  if product=4 then model=6;
  if product=8 then model=5;
  if product=2 then model=3;
  nproduct=planid+0;                              /*MJS 05/06/03 was plnid now planid*/

LABEL  H07011    = "AC07_06 - CAHPS variable"
       H07013    = "AC09_06 - CAHPS variable"
       H07027    = "AC24_06 - CAHPS variable"
       H07028    = "AC25_06 - CAHPS variable"
       H07029    = "AC26_06 - CAHPS variable"
       H07017    = "AC14_06 - CAHPS variable"
       H07022    = "AC19_06 - CAHPS variable"
       H07019    = "AC16_06 - CAHPS variable"
       H07030    = "AC27_06 - CAHPS variable"
       H07033    = "AC30_06 - CAHPS variable"
       H07034    = "AC31_06 - CAHPS variable"
       H07035    = "AC32_06 - CAHPS variable"
       H07036    = "AC33_06 - CAHPS variable"
       H07031    = "AC28_06 - CAHPS variable"
       H07032    = "AC29_06 - CAHPS variable"
       H07043    = "AC40_06 - CAHPS variable"
       H07045    = "AC42_06 - CAHPS variable"
       H07047    = "AC48_06 - CAHPS variable"
       H07040    = "AC36_06 - CAHPS variable"
       H07041    = "AC37_06 - CAHPS variable"
       H07037    = "AC34_06 - CAHPS variable"
       H07048    = "AC49_06 - CAHPS variable"
       H07009    = "AC05_06 - CAHPS variable"
       H07015    = "AC11_06 - CAHPS variable"
       H07066    = "AC50_06 - CAHPS variable"
       H07008    = "AC04_06 - CAHPS variable"
       AGEGROUP  = "AGE - CAHPS variable"
       XSEXA     = "GENDER - CAHPS variable"
```

```
        SREDHIGH  = "AC58_06 - CAHPS variable"   /*JSO 02/21/06 chged AC60_05 to AC58_06 */
       ;
 KEEP   H07011
        H07013
        H07027
        H07028
        H07029
        H07017
        H07022
        H07019
        H07030
        H07033
        H07034
        H07035
        H07036
        H07031
        H07032
        H07043
        H07045
        H07047
        H07040
        H07041
        H07037
        H07048
        H07009
        H07015
        H07066
        H07008
        AGEGROUP
        XSEXA
        SREDHIGH
        MODEL
        NPRODUCT
        AC03_06
        DISP
        YOB
       ;
RUN;

TITLE1 "Extract Adult CAHPS Questions (DoD)";
TITLE2 "Program Name: BENCHA01.SAS By Keith Rathbun";
TITLE3 "Program Input: AC2006DB.sd2";
TITLE4 "Program Output: BENCHA01.sd2";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES _ALL_ /MISSING LIST;
RUN;
```

G.3.B Q1FY2007\PROGRAMS\BENCHMARK\BENCHA02.SAS - RECODE ADULT CAHPS QUESTIONS FROM NCBD TO BE CONSISTENT WITH THE HCSDB - RUN QUARTERLY.

```
*************************************************************************
*
* PROGRAM:  BENCHA02.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Recode Adult CAHPS Questions
*
* WRITTEN:  06/02/2000 BY KEITH RATHBUN
*
* INPUT:    1) BENCHA01.SD2 - Adult CAHPS Questions Renamed to be
*              consistent with the MPR DOD Survey.
*
* OUTPUT:   1) BENCHA02.SD2 - Recoded Adult CAHPS Questions Renamed
*              to be consistent with the MPR DOD Survey.
*
* MODIFIED: 1) 12/19/2000 BY KEITH RATHBUN for Q1 2000 Survey.
*           2) 04/11/2002 BY MIKE SCOTT, Updated variable names for 2002
*              Survey.
*           3) 07/30/2002 BY MIKE SCOTT, Updated to use 2001 NCBD.
*           4) 03/21/2003 BY MIKE SCOTT, Updated for 2003 survey.
*           5) 05/06/2003 BY MIKE SCOTT, Changed labels from _01 to _02.
*           6) 03/23/2004 BY MIKE SCOTT, Updated for Q1 2004.
*           7) April 2004 By Keith Rathbun, Removed reverse coding for
*              H04031.  2004 survey question wording is 'Within 15 minutes'
*              instead of "More than 15 Minutes".  Updated CAHPS variable
*              labels to be consistent with 2003 NCBD.
*           8) 06/2005 By Regina Gramss, Updated codes with 2005 variable
*              names/labels.
*           9) 03/24/2006 BY KEITH RATHBUN, Updated for 2006 survey.
*              Changed CAHPS variable names to match those in 2005 NCBD.
*
* NOTES:
*
* 1) Run this program after BENCHA01.SAS.
* 2) This program will generate the input for BENCHA03.SAS.
*
*************************************************************************
* Assign data libraries and options
*************************************************************************;
LIBNAME IN      "data";
LIBNAME OUT     "data";
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

DATA OUT.BENCHA02(rename=(nproduct=product));
   SET IN.BENCHA01;

   ************************************************************************
   * Recode variables with Never, Sometimes, Usually and Always.
   * Recode Never & Sometimes (1 & 2) to 1.
   * Recode Usually (3) to 2.
   * Recode Always (4) to 3.
   ************************************************************************;
   IF H07028 = 2      THEN H07029=3;     /* ES 4/28/04  Change in scoring logic */

   IF H07022 = 1       THEN R07022 = 1;   /* MJS 03/23/04 Changed 2003 to 2004 variables names
*/
   ELSE IF H07022 = 2 THEN R07022 = 1;
   ELSE IF H07022 = 3 THEN R07022 = 2;
   ELSE IF H07022 = 4 THEN R07022 = 3;
   ELSE IF H07022 < 0 THEN R07022 = .;

   IF H07017 = 1      THEN R07017 = 1;
   ELSE IF H07017 = 2 THEN R07017 = 1;
   ELSE IF H07017 = 3 THEN R07017 = 2;
   ELSE IF H07017 = 4 THEN R07017 = 3;
   ELSE IF H07017 < 0 THEN R07017 = .;

   IF H07019 = 1      THEN R07019 = 1;
   ELSE IF H07019 = 2 THEN R07019 = 1;
   ELSE IF H07019 = 3 THEN R07019 = 2;
```

```
ELSE IF H07019 = 4 THEN R07019 = 3;
ELSE IF H07019 < 0 THEN R07019 = .;

IF H07030 = 1      THEN R07030 = 1;
ELSE IF H07030 = 2 THEN R07030 = 1;
ELSE IF H07030 = 3 THEN R07030 = 2;
ELSE IF H07030 = 4 THEN R07030 = 3;
ELSE IF H07030 < 0 THEN R07030 = .;

IF H07031 = 1      THEN R07031 = 1;
ELSE IF H07031 = 2 THEN R07031 = 1;
ELSE IF H07031 = 3 THEN R07031 = 2;
ELSE IF H07031 = 4 THEN R07031 = 3;
ELSE IF H07031 < 0 THEN R07031 = .;

IF H07032 = 1      THEN R07032 = 1;
ELSE IF H07032 = 2 THEN R07032 = 1;
ELSE IF H07032 = 3 THEN R07032 = 2;
ELSE IF H07032 = 4 THEN R07032 = 3;
ELSE IF H07032 < 0 THEN R07032 = .;

IF H07033 = 1      THEN R07033 = 1;
ELSE IF H07033 = 2 THEN R07033 = 1;
ELSE IF H07033 = 3 THEN R07033 = 2;
ELSE IF H07033 = 4 THEN R07033 = 3;
ELSE IF H07033 < 0 THEN R07033 = .;

IF H07034 = 1      THEN R07034 = 1;
ELSE IF H07034 = 2 THEN R07034 = 1;
ELSE IF H07034 = 3 THEN R07034 = 2;
ELSE IF H07034 = 4 THEN R07034 = 3;
ELSE IF H07034 < 0 THEN R07034 = .;

IF H07035 = 1      THEN R07035 = 1;
ELSE IF H07035 = 2 THEN R07035 = 1;
ELSE IF H07035 = 3 THEN R07035 = 2;
ELSE IF H07035 = 4 THEN R07035 = 3;
ELSE IF H07035 < 0 THEN R07035 = .;

IF H07036 = 1      THEN R07036 = 1;
ELSE IF H07036 = 2 THEN R07036 = 1;
ELSE IF H07036 = 3 THEN R07036 = 2;
ELSE IF H07036 = 4 THEN R07036 = 3;
ELSE IF H07036 < 0 THEN R07036 = .;

IF H07040 = 1      THEN R07040 = 1;
ELSE IF H07040 = 2 THEN R07040 = 1;
ELSE IF H07040 = 3 THEN R07040 = 2;
ELSE IF H07040 = 4 THEN R07040 = 3;
ELSE IF H07040 < 0 THEN R07040 = .;

IF H07041 = 1      THEN R07041 = 1;
ELSE IF H07041 = 2 THEN R07041 = 1;
ELSE IF H07041 = 3 THEN R07041 = 2;
ELSE IF H07041 = 4 THEN R07041 = 3;
ELSE IF H07041 < 0 THEN R07041 = .;

IF H07066 = 1           THEN R07066 = 5;
ELSE IF H07066 = 2      THEN R07066 = 4;
ELSE IF H07066 = 3      THEN R07066 = 3;
ELSE IF H07066 = 4      THEN R07066 = 2;
ELSE IF H07066 = 5      THEN R07066 = 1;
ELSE IF H07066>5|H07066<1 THEN R07066 = .;

*************************************************************************
* Recode variables to one missing condition "."
* This also makes all the "H000xx" to "R000xx".
*************************************************************************;
R07011 = H07011;  IF R07011 < 0 THEN R07011 = .;
R07009 = H07009;  IF R07009 < 0|R07009>10 THEN R07009 = .;
R07013 = H07013;  IF R07013 < 0 THEN R07013 = .;
R07015 = H07015;  IF R07015 < 0|R07015>10 THEN R07015 = .;
R07027 = H07027;  IF R07027 < 0 THEN R07027 = .;
```

```
   R07029 = H07029;  IF R07029 < 0 THEN R07029 = .;
   R07037 = H07037;  IF R07037 < 0|R07037>10 THEN R07037 = .;
   R07043 = H07043;  IF R07043 < 0 THEN R07043 = .;
   R07045 = H07045;  IF R07045 < 0 THEN R07045 = .;
   R07047 = H07047;  IF R07047 < 0 THEN R07047 = .;
   R07048 = H07048;  IF R07048 < 0|R07048>10 THEN R07048 = .;

   LABEL R07011   = "AC07_05 - Recoded CAHPS variable"
         R07009   = "AC05_05 - Recoded CAHPS variable"
         R07013   = "AC09_05 - Recoded CAHPS variable"
         R07015   = "AC11_05 - Recoded CAHPS variable"
         R07017   = "AC14_05 - Recoded CAHPS variable"
         R07022   = "AC19_05 - Recoded CAHPS variable"
         R07019   = "AC16_05 - Recoded CAHPS variable"
         R07027   = "AC24_05 - Recoded CAHPS variable"
         R07029   = "AC26_05 - Recoded CAHPS variable"
         R07030   = "AC27_05 - Recoded CAHPS variable"
         R07031   = "AC28_05 - Recoded CAHPS variable"
         R07032   = "AC29_05 - Recoded CAHPS variable"
         R07033   = "AC30_05 - Recoded CAHPS variable"
         R07034   = "AC31_05 - Recoded CAHPS variable"
         R07035   = "AC32_05 - Recoded CAHPS variable"
         R07036   = "AC33_05 - Recoded CAHPS variable"
         R07037   = "AC34_05 - Recoded CAHPS variable"
         R07043   = "AC40_05 - Recoded CAHPS variable"
         R07045   = "AC42_05 - Recoded CAHPS variable"
         R07047   = "AC48_05 - Recoded CAHPS variable"
         R07048   = "AC49_05 - Recoded CAHPS variable"
         R07066   = "AC50_05 - Recoded CAHPS variable"
         R07040   = "AC36_05 - Recoded CAHPS variable"
         R07041   = "AC37_05 - Recoded CAHPS variable"

         nPRODUCT  = "Product ID - CAHPS variable";
       ;
       drop product;
RUN;

TITLE1 "Recode Adult CAHPS Questions (6244-410)";
TITLE2 "Program Name: BENCHA02.SAS By Keith Rathbun";
TITLE3 "Program Input: BENCHA01.SD2";
TITLE4 "Program Output: BENCHA02.SD2";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES  AGEGROUP
        XSEXA
        SREDHIGH
        MODEL
        R07011 * H07011
        R07009 * H07009
        R07013 * H07013
        R07015 * H07015
        R07017 * H07017
        R07022 * H07022
        R07019 * H07019
        R07027 * H07027
        R07029 * H07029
        R07030 * H07030
        R07031 * H07031
        R07032 * H07032
        R07033 * H07033
        R07034 * H07034
        R07035 * H07035
        R07036 * H07036
        R07037 * H07037
        R07043 * H07043
        R07045 * H07045
        R07047 * H07047
        R07048 * H07048
        R07066 * H07066
        R07040 * H07040
        R07041 * H07041
```

```
   /MISSING LIST;
RUN;
```

G.3.C Q4FY2007\PROGRAMS\BENCHMARK\BENCHA03.SAS - CALCULATE CAHPS BENCHMARK DATA FOR HCSDB - RUN QUARTERLY.

```
*************************************************************************
*
* PROGRAM:  BENCHA03.SAS
* TASK:     2006 DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Adjust Adult CAHPS Benchmarks
*
* WRITTEN:  June 2000 BY ERIC SCHONE
*
* INPUTS:   1) BENCHA02.SD2 - 2005 Adult CAHPS Questions Renamed to be
*              consistent with the 2006 MPR DOD Survey.
*           2) GROUP8.SD2 - CAHPS Group8 (all beneficiaries) Dataset
*
* OUTPUTS:  1) Benchmark Composite Scores Data Sets
*
* MODIFIED: 1) Nov 2000 BY ERIC SCHONE - Output permanent datasets with
*              scores and standard errors and process the rest of the
*              composites and ratings.
*           2) Dec 2000 BY KEITH RATHBUN - Update variable names for
*              Q1 2000 Survey.
*           3) Jan 2002 BY KEITH RATHBUN - Updated to run under SAS
*              version 8 (changed INTERCEP to INTERCEPT).
*           4) Apr 2002 BY MIKE SCOTT - Updated variable names for Q1
*              2002 Survey.
*           5) Jul 2002 BY MIKE SCOTT - Changed R00077 to R04075, since
*              H02077 (health status) is back and was renamed to R04075
*              in HSC022_1.sd2.
*           6) Mar 2003 BY MIKE SCOTT - Updated for 2003 survey.
*           7) May 2003 BY MIKE SCOTT - Changed ac03_01 to ac03_02.
*           8) Jun 2003 BY MIKE SCOTT - Updated for Q2 2003.
*           9) Oct 2003 BY MIKE SCOTT - Updated for Q3 2003.
*          10) Mar 2004 BY MIKE SCOTT - Updated for Q1 2004.
*          11) April 2004 BY KEITH RATHBUN - Updated to use the CAHPS 2003
*              variable ac03_03.
*          12) June 2004 BY REGINA GRAMSS - Updated to use for Q2 2004
*          13) Sept 2004 BY REGINA GRAMSS - Update for Q3 2004
*          14) May 2005 BY REGINA GRAMSS - Updated for Q1 2005
*          15) Jul 2005 BY REGINA GRAMSS - Updated for Q2 2005
*          16) Oct 2005 BY REGINA GRAMSS - Updated for Q3 2005
*          17) Dec 2005 BY REGINA GRAMSS - Updated for Q4 2005
*          18) 03/24/2006 BY KEITH RATHBUN, Updated for Q2 FY 2006.
*              Changed variable names to match the 2006 HCSDB survey.
*          19) 07/12/2006 by Justin Oh - Updated for Q3 FY 2006.
*          20) 10/03/2006 by Justin Oh - Changed libname in2 for Q4FY2006.
*              Change the INCLUDE path to CONVERT.sas file.
*          21) 12/18/2006 by Justin Oh - Changed libname in2 for Q1FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          22) 04/05/2007 by Justin Oh - Changed libname in2 for Q2FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          23) 04/05/2007 by Justin Oh - Added %LET RCTYPE to select RC types
*              ReportCards OR PurchasedReportCards.
*          24) 04/05/2007 by Keith Rathbun - Changed libname in2 for Q3FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          25) 09/04/2007 by Justin Oh - Changed libname in2 for Q4FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*
* NOTES:
*
* 1) Run this program after BENCHA01.SAS and BENCHA02.SAS.
* 2) This program will generate the input for BENCHA04.SAS.
*
*************************************************************************
* Assign data libraries and options
*************************************************************************;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards                ***/
%LET RCTYPE = ReportCards;

libname in  V612 '..\..\..\Q1FY2007\Programs\Benchmark\Data';     /*Use BENCHA02.SD2 from Q1*/
libname in2 V612 "..\&RCTYPE\CAHPS_AdultQ4FY2007\Data";
```

```
libname out V612 'Data';
LIBNAME LIBRARY   "..\..\DATA\AFINAL\FMTLIB";

%let wgt=fwrwt;

OPTIONS MLOGIC MPRINT NOCENTER LS=132 PS=79;


%macro comb(f,t,q,l);

proc summary data=&f;
 var &t;
 where &q~=.;
 weight &wgt;
 output out=temp mean=&t;
run;

data temp;
 set temp;
 array old &t;
 call symput('z',left(dim(old)));
run;

data temp(drop=_type_ &t);
 set temp;
 array old &t;
 array new var1-var&z;
  do i=1 to &z;
   new(i)=old(i);
  end;
run;

data &q._&l;
 merge temp c_&q;
 array coeffs &t;
 array means var1-var&z;
  DO I = 1 TO DIM(COEFFS);
   IF COEFFS(I) = . THEN COEFFS(I) = 0;
   IF MEANS(I) = . THEN MEANS(I) = 0;
   ADJUST + ( COEFFS(I) * MEANS(I) );
  END;

 ADJUST = ADJUST + intercept;
 &q._&l=adjust;

run;

%mend comb;

%macro adjust(x,y);



proc summary data=setup;
where &x>.;
 class product;

 output out=count;
run;

data count count2(rename=(_freq_=denom));
 set count;
 if _type_=0 then output count2;
 else output count;
run;

data count(keep=pweight product);
 if _n_=1 then set count2;
 set count;
 pweight=denom/_freq_;
run;

data temp;
```

```
 merge count  setup; by product;

run;
proc summary data=temp;
where &x>.;
weight pweight;
var &y;
output out=temp2 mean=&y;
data temp2;
 set temp2;
 array old &y;
 call symput('z',left(dim(old)));
run;
data temp2(keep=var1-var&z);
 set temp2;
 array old &y;
 array new var1-var&z;
  do i=1 to &z;
   new(i)=old(i);
  end;
run;
data temp;
set temp;
if _n_=1 then set temp2;
 array old &y;
 array new var1-var&z;
  do i=1 to &z;
  if old(i)=. then
   old(i)=new(i);
  end;
run;
proc reg data=temp outest=c_&x noprint;
 model &x=&y;
 weight pweight;
 output out=r_&x r=r_&x;
run;

proc sort data=r_&x; by product;
run;

PROC DESCRIPT DATA=r_&x DESIGN=STRWR NOPRINT;
 WEIGHT pweight;
 SETENV DECWIDTH=4;
 NEST product / missunit;
 VAR R_&x;
 OUTPUT  SEMEAN / TABLECELL=DEFAULT
 FILENAME=s_&x;
RUN;

data s_&x(rename=(semean=s_&x));
 set s_&x(keep=semean);
 %do i=1 %to 8;
  %if &i=8 %then %do;

   data group8;
    set in2.group5 in2.group6 in2.group7;
   run;
   %comb(group8,&y,&x,8);
  %end;
  %else %do;
   %comb(in2.group&i,&y,&x,&i);
  %end;
 %end;


%mend adjust;

/* adjust all the variables */

%macro comp(compno,a,b,c,d);
 %if &a~= %then %do;
  %let n=r_&a;
  %let m=s_&a;
```

```
  %do i=1 %to 8;
   %let p&i=&a._&i;
  %end;
  %let grpnum=1;
   proc sort data=r_&a;
    by mpid;
   run;
 %end;
 %if &b~= %then %do;
  %let n=%str(&n r_&b);
  %let m=%str(&m s_&b);
  %do i=1 %to 8;
   %let p&i=%str(&&p&i &b._&i);
  %end;
  %let grpnum=2;
   proc sort data=r_&b;
    by mpid;
   run;
 %end;
 %if &c~= %then %do;
  proc sort data=r_&c;
   by mpid;
  run;
  %let grpnum=3;
  %let n=%str(&n r_&c);
  %do i=1 %to 8;
   %let p&i=%str(&&p&i &c._&i);
  %end;
  %let m=%str(&m s_&c); %end;

  %if &d~= %then %do;
   proc sort data=r_&d;
    by mpid;
   run;
   %let grpnum=4;
   %let n=%str(&n r_&d);
    %do i=1 %to 8;
     %let p&i=%str(&&p&i &d._&i);
    %end;

    %let m=%str(&m s_&d);
  %end;

data infile;
 merge &n;
 by mpid;
run;

proc corr outp=outf noprint;
 var &n;
 weight pweight;
run;

data final;
 if _n_=1 then do;
  %if &a~= %then %do;
   set s_&a;
  %end;
  %if &b~= %then %do;
   set s_&b;
  %end;
  %if &c~= %then %do;
   set s_&c;
  %end;
  %if &d~= %then %do;
   set s_&d;
  %end;
 end;
 set  outf;
 call symput('s'||compress(_n_),substr(_name_,3));
 where _type_='CORR';
run;
```

```
data final;
 set final;
 array r_val &n;
 array s_val &m;
 sde=0;
 do i=1 to dim(s_val);
  %do i=1 %to &grpnum;
   if _name_="r_&&s&i" then
   sde=sde+r_val(i)*s_&&s&i*s_val(i);
  %end;
 end;
run;

data sefin&compno;
 set final end=last;
 tv+sde;
 if last then do;
 sde=(tv**.5)/&grpnum;
 output;
end;

%do i=1 %to 8;
 data temp(keep=&&p&i);
  merge &&p&i;
 run;

data output;
 set &&p&i;
 totadj+adjust;
run;

data output(keep=totadj);
 set output end=last;
 if last then do;
  totadj=totadj/&grpnum;
  output;
 end;
run;

data out&compno._&i;
 merge output temp;
run;

data out.comp&compno._&i;
   merge out&compno._&i
         sefin&compno;
run;

%end;

%mend comp;

/* create composites */
proc sort data=in.bencha02 out=setup;
 by product;
run;
data setup;
set setup;
if ^(model in (2,4));
if disp in ('M10','I10')  ;   ***KRR 04/19/04 Changed _02 to _03;
data setup;
 set setup; by product;
 mpid=_n_;
 if agegroup ne . then do;
 age1824=0; age2534=0; age3544=0; age4554=0; age5564=0; age6574=0;

      if agegroup=1 then age1824=1;
 else if agegroup=2 then age2534=1;
 else if agegroup=3 then age3544=1;
 else if agegroup=4 then age4554=1;
 else if agegroup=5 then age5564=1;
 else if agegroup=6 then age6574=1;
 end;
```

```
 if agegroup<6;
run;
%INCLUDE "..\REPORTCARDS\CAHPS_AdultQ4FY2007\CONVERT.SAS";

%CONT1(DSN=SETUP, NUM=7,  Y=R07011 R07013 R07027 R07029
                            R07043 R07045 R07047);
%CONT2(DSN=SETUP, NUM=4,  Y=R07037 R07048 R07009 R07015);
%CONT3(DSN=SETUP, NUM=12, Y=R07017 R07022 R07019 R07030
                            R07033 R07034 R07035 R07036
                            R07031 R07032 R07040 R07041);
/* GETTING NEEDED CARE */
%adjust(R07011,age1824 age2534 age3544 age4554  R07066);
%adjust(R07013,age1824 age2534 age3544 age4554  R07066);
%adjust(R07027,age1824 age2534 age3544 age4554  R07066);
%adjust(R07029,age1824 age2534 age3544 age4554  R07066);
%comp(1,R07011,R07013,R07027,R07029);

/* GETTING NEEDED CARE QUICKLY */
%adjust(R07017,age1824 age2534 age3544 age4554  R07066);
%adjust(R07022,age1824 age2534 age3544 age4554  R07066);
%adjust(R07019,age1824 age2534 age3544 age4554  R07066);
%adjust(R07030,age1824 age2534 age3544 age4554  R07066);
%comp(2,R07017,R07022,R07019,R07030);

/* HOW WELL DOCTORS COMMUNICATE */
%adjust(R07033,age1824 age2534 age3544 age4554  R07066);
%adjust(R07034,age1824 age2534 age3544 age4554  R07066);
%adjust(R07035,age1824 age2534 age3544 age4554  R07066);
%adjust(R07036,age1824 age2534 age3544 age4554  R07066);
%comp(3,R07033,R07034,R07035,R07036);

/* COURTEOUS AND HELPFUL OFFICE STAFF */
%adjust(R07031,age1824 age2534 age3544 age4554  R07066);
%adjust(R07032,age1824 age2534 age3544 age4554  R07066);
%comp(4,R07031,R07032);

/* CUSTOMER SERVICE */
%adjust(R07043,age1824 age2534 age3544 age4554  R07066);
%adjust(R07045,age1824 age2534 age3544 age4554  R07066);
%adjust(R07047,age1824 age2534 age3544 age4554  R07066);
%comp(5,R07043,R07045,R07047);

/* CLAIMS PROCESSING */
%adjust(R07040,age1824 age2534 age3544 age4554  R07066);
%adjust(R07041,age1824 age2534 age3544 age4554  R07066);
%comp(6,R07040,R07041);

/* RATING ALL HEALTH CARE: 0 - 10 */
%adjust(R07037,age1824 age2534 age3544 age4554  R07066);
%comp(7,R07037);

/* RATING OF HEALTH PLAN: 0 - 10 */
%adjust(R07048,age1824 age2534 age3544 age4554  R07066);
%comp(8,R07048);

/* RATING OF PERSONAL DR: 0 - 10 */
%adjust(R07009,age1824 age2534 age3544 age4554  R07066);
%comp(9,R07009);

/* SPECIALTY CARE */
%adjust(R07015,age1824 age2534 age3544 age4554  R07066);
%comp(10,R07015);
```

G.3.D Q4FY2007\PROGRAMS\BENCHMARK\BENCHA04.SAS - CONVERT THE BENCHMARK SCORES DATABASE INTO THE WEB LAYOUT - RUN QUARTERLY.

```
*************************************************************************
*
* PROGRAM:  BENCHA04.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Convert the Benchmark Scores Database into the WEB layout
*
* WRITTEN:  06/01/2000 BY KEITH RATHBUN
*
* INPUTS:   1) Benchmark data sets with adjusted scores
*              (COMPn_i.SD2 where n = composite number and i = group number)
*
* OUTPUT:   1) BENCHA04.SD2 - Combined Benchmark Scores Database in WEB layout
*
* INCLUDES: 1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*              and composite data sets
*
* MODIFIED: 1) Dec 2000 bY Keith Rathbun: Updated variable names for
*              Q1 2000 Survey.  For the quarterly survey group 8 (all benes)
*              is being used as the benchmark for all groups (1-8).  Thus,
*              this group is copied and output to each of the other 7 groups.
*           2) 01/23/2002 by Mike Scott: Updated variable names to be consistent
*              with 2000 survey.
*           4) 04/15/2002 by Mike Scott - Updated variable names for
*              Q1 2002 Survey.
*           5) 03/21/2003 by Mike Scott - Updated for 2003 survey.
*           6) 06/26/2003 by Mike Scott - Updated for Q2 2003.
*           7) 07/03/2003 by Mike Scott - Added TIMEPD variable to be set to the period
*              or 'Trend'.  Changed from setting BENTYPE to the period or 'Trend' to
*              setting to 'Composite'.
*           8) 07/18/2003 by Mike Scott - Added TIMEPD to FREQ.
*           9) 10/21/2003 by Mike Scott - Updated for Q3 2003.
*          10) 03/23/2004 by Mike Scott - Updated for Q1 2004.
*          11) 06/15/2004 by Regina Gramss - Updated for Q2 2004.
*          12) 09/2004    by Regina Gramss - Updated for Q3 2004.
*          13) 05/2005    by Regina Gramss - Updated for Q1 2005.
*          14) 10/2005    by Regina Gramss - Updated for Q3 2005.
*          15) 03/24/2006 by Keith Rathbun - Updated for Q2 FY 2006.
*              Added MACRO loop to process the 8 groups.
*          16) 10/03/2006 by Justin Oh - Updated BENTYPE composite year to 2006 Q3.
*          17) 12/18/2007 by Justin Oh - Updated BENTYPE composite year to 2006 Q4.
*          18) 04/05/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q1.
*              19) 04/05/2007 by Justin Oh - Updated LIBNAME IN2 to be used for purchase RC
programs.
*          20) 09/04/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q3.
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - BENCHA01.SAS - Extract Benchmark variables
*    - BENCHA02.SAS - Recode Benchmark variables
*    - BENCHA03.SAS - Construct Scores and SEMEAN datasets
*
* 2) The output file (BENCHA04.SD2) will be run through the
*    MAKEHTML.SAS program to generate the WEB pages.
*
*************************************************************************
* Assign data libraries and options
*************************************************************************;
LIBNAME IN  V612 "DATA";
LIBNAME IN2 V612 "..\Benchmark\qpredtest";
LIBNAME OUT V612 "DATA";
LIBNAME LIBRARY  "..\..\DATA\AFINAL\FMTLIB";


OPTIONS PS=79 LS=132 COMPRESS=NO NOCENTER;

*************************************************************************
* Load Format definitions for CAHPS Individual and composite data sets.
*************************************************************************;
```

```
%INCLUDE "..\LOADWEB\LOADCAHQ.INC";

*************************************************************************
*************************************************************************
*
* Process Macro Input Parameters:
*
* 1) CNUM = Composite or rating variable number (1-10)
* 2) GNUM = Group number (1-8)
* 3) NVAR = Number of variables in the composite
* 4) VARS = List of individual variables for composite
* 5) SE   = List of individual standard error variables
*
* ____________________________________________________________
*    Adjusted Score           Definitions
*    Group Number
* ____________________________________________________________
* 1. Prime enrollees          XINS_COV IN (1,2,6) AND H07007_R>=7
* 2. Enrollees w/mil PCM      XENR_PCM IN (1,2,6) AND H07007_R>=7
* 3. Enrollees w/civ PCM      XENR_PCM = 3        AND H07007_R>=7
* 4. Nonenrollees             XINS_COV IN (3,4,5)
* 5. Active duty              BFGROUPP = 1
* 6. Active duty dependents   BFGROUPP = 2
* 7. Retirees and dependents  BFGROUPP IN (3,4)
* 8. All Beneficiaries
*
*************************************************************************;
%MACRO PROCESS(CNUM=, GNUM=, NVAR=, VARS=, SE=);
************************************************************************
* Assign value for BENTYPE composite year
************************************************************************;
%LET YEAR = "2007 Q3"; * Note that this is based on Calendar Year here;

************************************************************************
* Convert benchmark scores datasets into WEB layout.
************************************************************************;
%IF &CNUM<7 %THEN %DO;

  DATA INP;
    SET IN2.COMP&CNUM;
     WHERE X=&GNUM;



   DATA INP;
    SET INP  IN2.PROJERR&GNUM;
    RENAME SE=SESX;
RUN;
%END;
%ELSE %DO;

   DATA INP;
    SET IN2.PROJERR&GNUM;
    RENAME SE=SESX;
RUN;
%END;



   DATA COMP&CNUM._&Gnum;
      SET INP;
     IF _N_=1 THEN
     SET IN.COMP&CNUM._&GNUM;
      LENGTH MAJGRP  $30;
      LENGTH REGION  $25;
      LENGTH REGCAT  $26;
      LENGTH BENTYPE $50;
      LENGTH BENEFIT $34;
      LENGTH TIMEPD  $35;   ***MJS 07/03/03 Added line;

      ******************************************************************
      * For now, assign SIG = 0
      ******************************************************************;
```

```
   SIG = 0;

   ********************************************************************
   * Assign major group
   ********************************************************************;
   MAJGRP  = PUT(&Gnum,MAJGRPF.);

   ********************************************************************
   * Assign Region and Regcat
   ********************************************************************;
   REGION  = "Benchmark";
   REGCAT  = "Benchmark";

   ********************************************************************
   * Assign benefit and benefit type
   ********************************************************************;
   IF      &CNUM = 1  THEN BENEFIT = "Getting Needed Care";
   ELSE IF &CNUM = 2  THEN BENEFIT = "Getting Care Quickly";
   ELSE IF &CNUM = 3  THEN BENEFIT = "How Well Doctors Communicate";
   ELSE IF &CNUM = 4  THEN BENEFIT = "Courteous and Helpful Office Staff";
   ELSE IF &CNUM = 5  THEN BENEFIT = "Customer Service";
   ELSE IF &CNUM = 6  THEN BENEFIT = "Claims Processing";
   ELSE IF &CNUM = 7  THEN BENEFIT = "Health Care";
   ELSE IF &CNUM = 8  THEN BENEFIT = "Health Plan";
   ELSE IF &CNUM = 9  THEN BENEFIT = "Primary Care Manager";
   ELSE IF &CNUM = 10 THEN BENEFIT = "Specialty Care";

   BENTYPE = "Composite";   ***MJS 07/03/03 Changed from BENTYPE = PUT(&YEAR,$BENTYPF.);
   TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added;
    IF &CNUM<7 THEN DO;
       IF X=&GNUM THEN DO;
   ********************************************************************
   * Assign composite score and SEMEAN
   ********************************************************************;
         SCORE = TOTADJ;
         SEMEAN = SQRT(SDE**2+SESX**2);

   ********************************************************************
   * Output composite score record for each REGION
   ********************************************************************;
         OUTPUT;
       END;
    END;
   ********************************************************************
   * Now, output the individual score records
   ********************************************************************;
   IF &NVAR GT 1|&CNUM>6 THEN DO;
      ARRAY ITEMS &VARS;
      ARRAY SE    &SE;
      LENGTH NAME $8;
      DO I = 1 TO DIM(ITEMS); DROP I;
         CALL VNAME(ITEMS(I),NAME);
         NAME = SUBSTR(NAME,1,6);
         SCORE  = ITEMS(I);
         SEMEAN = SQRT(SE(I)**2+SESX**2);
         IF &NVAR GT 1 THEN
         BENTYPE = PUT(NAME,$BENTYPF.);
         TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added;
        IF COMPRESS(UPCASE(NAME))=COMPRESS(UPCASE(VAR)) THEN OUTPUT;
      END;
   END;

KEEP MAJGRP
     REGION
     REGCAT
     BENTYPE
     BENEFIT
     TIMEPD   /*MJS 07/03/03 Added*/
     SEMEAN
     SCORE
     SIG
   ;
RUN;
```

```
%MEND;

*************************************************************************
*************************************************************************
* Process each of the 8 Groups.
*************************************************************************
*************************************************************************;
%MACRO DOIT;
%DO I = 1 %TO 8;
   ************************************************************************
   * COMPOSITE # 1.
   * GETTING NEEDED CARE VARIABLES.
   ************************************************************************;
   %PROCESS(CNUM=1, GNUM=&I, NVAR=4, VARS=R07011_&I R07013_&I R07027_&I R07029_&I,
         SE=S_R07011 S_R07013 S_R07027 S_R07029);

   ************************************************************************
   * COMPOSITE # 2.
   * GETTING CARE QUICKLY VARIABLES.
   ************************************************************************;
   %PROCESS(CNUM=2, GNUM=&I, NVAR=4, VARS=R07017_&I R07022_&I R07019_&I R07030_&I,
         SE=S_R07017 S_R07022 S_R07019 S_R07030);

   ************************************************************************
   * COMPOSITE # 3.
   * HOW WELL DOCTORS COMMUNICATE.
   ************************************************************************;
   %PROCESS(CNUM=3, GNUM=&I, NVAR=4, VARS=R07033_&I R07034_&I R07035_&I R07036_&I,
         SE=S_R07033 S_R07034 S_R07035 S_R07036);

   ************************************************************************
   * COMPOSITE # 4.
   * COURTEOUS AND HELPFUL OFFICE STAFF.
   ************************************************************************;
   %PROCESS(CNUM=4, GNUM=&I, NVAR=2, VARS=R07031_&I R07032_&I, SE=S_R07031 S_R07032);

   ************************************************************************
   * COMPOSITE # 5.
   * CUSTOMER SERVICE.
   ************************************************************************;
   %PROCESS(CNUM=5, GNUM=&I, NVAR=3, VARS=R07043_&I R07045_&I R07047_&I,
         SE=S_R07043 S_R07045 S_R07047);

   ************************************************************************
   * COMPOSITE # 6.
   * CLAIMS PROCESSING.
   ************************************************************************;
   %PROCESS(CNUM=6, GNUM=&I, NVAR=2, VARS=R07040_&I R07041_&I, SE=S_R07040 S_R07041);

   ************************************************************************
   * INDIVIDUAL # 1.
   * RATING OF ALL HEALTH CARE: 0 - 10.
   ************************************************************************;
   %PROCESS(CNUM=7, GNUM=&I, NVAR=1, VARS=R07037_&I, SE=S_R07037);

   ************************************************************************
   * INDIVIDUAL # 2.
   * RATING OF HEALTH PLAN: 0 - 10.
   ************************************************************************;
   %PROCESS(CNUM=8, GNUM=&I, NVAR=1, VARS=R07048_&I, SE=S_R07048);

   ************************************************************************
   * INDIVIDUAL # 3.
   * RATING OF PERSONAL DOCTOR: 0 - 10.
   ************************************************************************;
   %PROCESS(CNUM=9, GNUM=&I, NVAR=1, VARS=R07009_&I, SE=S_R07009);

   ************************************************************************
   * INDIVIDUAL # 4.
   * SPECIALTY CARE: 0 - 10.
   ************************************************************************;
   %PROCESS(CNUM=10, GNUM=&I, NVAR=1, VARS=R07015_&I, SE=S_R07015);
```

```
%END;
%MEND DOIT;
%DOIT;

*************************************************************************
*************************************************************************
* STACK up all of the files into one final output dataset.
*************************************************************************
*************************************************************************;
DATA OUT.BENCHA04;
   SET COMP1_1  COMP1_2  COMP1_3  COMP1_4  COMP1_5  COMP1_6  COMP1_7  COMP1_8
       COMP2_1  COMP2_2  COMP2_3  COMP2_4  COMP2_5  COMP2_6  COMP2_7  COMP2_8
       COMP3_1  COMP3_2  COMP3_3  COMP3_4  COMP3_5  COMP3_6  COMP3_7  COMP3_8
       COMP4_1  COMP4_2  COMP4_3  COMP4_4  COMP4_5  COMP4_6  COMP4_7  COMP4_8
       COMP5_1  COMP5_2  COMP5_3  COMP5_4  COMP5_5  COMP5_6  COMP5_7  COMP5_8
       COMP6_1  COMP6_2  COMP6_3  COMP6_4  COMP6_5  COMP6_6  COMP6_7  COMP6_8
       COMP7_1  COMP7_2  COMP7_3  COMP7_4  COMP7_5  COMP7_6  COMP7_7  COMP7_8
       COMP8_1  COMP8_2  COMP8_3  COMP8_4  COMP8_5  COMP8_6  COMP8_7  COMP8_8
       COMP9_1  COMP9_2  COMP9_3  COMP9_4  COMP9_5  COMP9_6  COMP9_7  COMP9_8
       COMP10_1 COMP10_2 COMP10_3 COMP10_4 COMP10_5 COMP10_6 COMP10_7 COMP10_8
    ;
    IF SCORE = . THEN DELETE;
RUN;

TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6244-410)";
TITLE2 "Program Name: BENCHA04.SAS By Keith Rathbun";
TITLE3 "Program Inputs: Benchmark Individual and Composite data sets with adjusted scores";
TITLE4 "Program Outputs: BENCHA04.SD2 - Combined Benchmark Scores Database in WEB layout";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES TIMEPD BENEFIT BENTYPE MAJGRP REGION REGCAT
       REGION*REGCAT
      /MISSING LIST;
RUN;
```

G.4.A Q4FY2007\PROGRAMS\REPORTCARDS\MPR_ADULTQ4FY2007\PRVCOMPQ.SAS - CALCULATE PREVENTIVE CARE COMPOSITE SCORES - RUN QUARTERLY.

```
*****************************************************************
*  Project:   DoD Reporting and Analysis 6077-410
*  Program:   PRVCOMPQ.SAS
*  Author:    Chris Rankin
*  Date:      12/22/2000
*  Modified:  4/19/2001 By Keith Rathbun: Restrict population to
*             xins_cov in(1,2,3,6).  Use POSTSTR instead of
*             adj_cell.
*  Modified:  10/25/01 By Daniele Beahm: Because no poststratification
*             was done for q3 2000, changed POSTSTR back to ADJ_CELL
*             04/09/02 modified macros the first three macros to create
*             temporary datasets (instead of writing permanent datasets)
*             07/15/02 By Mike Scott: Changed HCS021 to HCS022 for Q2 2002.
*             01/12/03 By Mike Scott: Changed ADJ_CELL to COM_SAMP.
*             03/21/03 By Mike Scott: Changed HCS024 to HCS031 for Q2 2002.
*             04/01/03 By Mike Scott: Replaced HP_FLU with HP_CHOL.
*             04/30/03 By Mike Scott: Changed COM_SAMP to ADJ_CELL.  Changed
*             CMPNUM1 from 4 to 5 and CMPNUM2 from 4 to 3.
*             06/13/03 By Eric Schone.  Changed composite mean & std err calculations
*             to use weights from 2000 input data.
*             07/23/03 By Mike Scott: Removed ..\PROGRAMS\ from INCLUDE.
*             10/21/03 By Mike Scott: Updated for Q3 2003.
*             01/07/04 By Mike Scott: Updated for Q4 2003.
*             02/02/04 By Mike Scott: Set PRVVAR6, PRVVAR7, and PRVVAR8 in DATA NORMDATA
*             to H04023, H04020, and H04031.
*             03/24/04 By Mike Scott: Updated for Q1 2004.
*             04/09/04 By Keith Rathbun: Added Service Affiliation variables to
*             accomodate the consumer watch.
*             06/22/04 By Regina Gramss: Updated for Q2 2004.
*             09/2004  By Regina Gramss: Updated for Q3 2004, to use XTNEXREG
*                                        vs. XREGION
*             01/2005 By Regina Gramss: Updated to create "Last conus_q" for
*                     Q4 2004, replace XTNEXREG with XSERVREG
*             04/2005 By Regina Gramss: Updated for Q1 2005 (update 2004 field names)
*             07/2005 By Regina Gramss: updated for Q2 2005
*             10/2005 By Regina Gramss: Updated for Q3 2005
*             12/2005 By Regina Gramss: Updated for Q4 2005
*             03/24/2006 By Keith Rathbun: Updated for Q2 FY 2006.  Changed reference
*             to ADJ_CELL in 2006 data to be STRATUM.
*             07/2006 By Justin Oh: updated for Q2 FY 2006
*             08/22/2006 By Justin Oh
*                     Changed XSERVREG for Overseas
*                     Changed IF XINS_COV IN (3,4,5) THEN GROUP4 = 1 to
*                             IF XINS_COV IN (3)     THEN GROUP4 = 1
*                             Since only XINS_COV IN (1,2,3,6) is kept.
*                     Create XOCONUS for 2005 data.
*                     Added XREGION in the keep statement for NORMDATA.
*             10/04/2006 By Justin Oh Updated %LET INDATA and YRDATA.
*             11/15/2006 By Justin Oh Added FIELDAGE in 4 keep statements
*             12/22/2006 By Justin Oh Updated %LET INDATA and YRDATA HCS071_1.
*             04/05/2007 By Justin Oh Updated %LET INDATA and YRDATA HCS072_1.
*             04/05/2007 By Justin Oh Added conditions for RC types
*                        ReportCards OR PurchasedReportCards.
*             05/10/2007 By Justin Oh, Added codes, variables for new reservists logic for
*                        both Norm and Quarter datasets.
*             05/15/2007 By Justin Oh, Changed XINS_COV to NXNS_COV to assign
*                        Groups 1,3, and 4 for new reservists logic.
*             07/30/2007 By Justin Oh, Added added DBENCAT conditions to assign
*                        Groups All, 4, 5, and 6.
*             09/04/2007 By Justin Oh Updated %LET INDATA and YRDATA HCS074_1.
*
*  Purpose:   Calculate MPR Preventive Care Composites
*  Input:     HCSyyq_1.SD2
*  Output:    RFINAL.SD2
*             CFINAL.SD2
*             MFINAL.SD2
*             SFINAL.SD2
*
*  Include
```

```
*   Files:    LOADCAHPQ.INC
*   Notes:    Next program is Loadmprq.sas
*
*             ***CHECK PARAMETER ASSIGNMENTS***
*****************************************************************;

OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 MLOGIC MPRINT
        NOFMTERR COMPRESS=YES;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards                ***/
%LET RCTYPE = ReportCards;

LIBNAME IN      v612 "..\..\..\DATA\AFINAL";
LIBNAME INNORM  v612 "..\..\..\..\2005\DATA";
LIBNAME OUT     v612 ".";
LIBNAME LIBRARY      "..\..\..\DATA\AFINAL\FMTLIB";

%LET WGT=FWRWT;
%LET NORMWGT = CFWT;
%LET NORMDAT = HCS05A_1;

%LET DEBUG=Y;      /** Set to Y for Debug print of datasets **/
%LET INDATA=HCS074_1;

%LET YRDATA=HCS074_1;

/***** The following parameters are used in the Variance ****/
/***** calcuation macro for region and catchment area    ****/

%LET GRPNUM=8;      /** number of groups          **/
%LET COMPNUM=7;      /** number of variables        **/  /* RSG - 04/2005 changed from 8 to 7
(eliminate cholesterol*/
%LET REGNUM=15;     /** number of regions          **/  /* RSG - 01/2005 CHANGED TO FIT THE 16
CATEGORIES OF XSERVREG */
                                                            /*  JSO  08/24/2006  (16  TO  15)  Changed
Overseas Regions*/
%LET CATCHNUM=9999; /** number of catchment areas **/

%LET CMPNUM1=4;     /** number of variables in first composite   **/    /*RSG 04/2005 Changed
CMPNUM1 from 5 to 4*/
%LET CMPNUM2=3;     /** number of variables in second composite **/    /*MJS 04/30/03 Changed
CMPNUM2 from 4 to 3*/

%LET COMPCNT=2;    /** number of composites                    **/

**** set up benchmarks for preventive services ;
**** note -- these are the hp 2000 goals       ;

%LET GOALVAR1= .90;    /** HP Goal for prenatal care        **/
%LET GOALVAR2= .70;    /** HP Goal for Mammography          **/
%LET GOALVAR3= .90;    /** HP Goal for Papsmear             **/
%LET GOALVAR4= .95;    /** HP Goal for Blood Pressure check **/
%LET GOALVAR5= .90;     /** access goals                          **/ /*04/2005 - RSG: DELETED
CHOLESTEROLE GOAL*/
%LET GOALVAR6= .90;
%LET GOALVAR7= .98;

%INCLUDE "..\..\LOADWEB\LOADCAHQ.INC";   ***MJS 07/23/03 Removed ..\PROGRAMS\;

*************************************************************;
* Beneficiary group note
*    Eight groups             Definitions
* ____________________________________________________________;
* 1. Prime enrollees          XINS_COV IN (1,2,6) AND H07007>=2
* 2. Enrollees w/mil PCM      XENR_PCM IN (1,2,6) AND H07007>=2
* 3. Enrollees w/civ PCM      XENR_PCM IN (3,7)   AND H07007>=2
* 4. Nonenrollees             XINS_COV IN (3) /*JSO 08/24/2006, Deleted 4,5*/
* 5. Active duty              XBNFGRP = 1
* 6. Active duty dependents   XBNFGRP = 2
* 7. Retirees                 XBNFGRP IN (3,4)
* 8. All beneficiaries        ALL
*************************************************************;
```

```
/**** note -- output all data to a single dataset for macro */
/**** call                                                  */
/**** MACROS are no longer called for catchment areas       */

/* 08/24/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
LIBNAME LIBRARY '..\..\..\..\2005\Data\fmtlib';

DATA NORMDATA(KEEP=XTNEXREG XSERVREG &WGT PRVVAR1-PRVVAR&COMPNUM. NUMV1-NUMV&COMPNUM.
                  DENV1-DENV&COMPNUM XSERVAFF FIELDAGE);
                  /* 11/15/2006 JSO Added FIELDAGE in the keep statement */

  set INNORM.&NORMDAT(KEEP=MPRID XINS_COV HP_BP HP_MAMOG HP_PAP HP_PRNTL XTNEXREG
                           XENR_PCM XBNFGRP ENBGSMPL &NORMWGT ADJ_CELL DBENCAT
                           H05022 H05019 H05030 H05007 H05006 SERVAFF XREGION FIELDAGE);
                      /* 08/24/2006 JSO Added XREGION in the keep statement to get XOCONUS */
                      /* 11/15/2006 JSO Added FIELDAGE in the keep statement */
                      /* 05/10/2007 JSO Added H05006, DBENCAT in the keep statement */

************************************************************************
* For quarterly reports, catchment level reporting is not done
* so the value of cellp is set to 1.
* For annual reporting purposes, cellp will need to be assigned
* to geocell
************************************************************************;

/*RSG 02/2005 Added codes to define XTNEXREG & XSERVAFF*/

  IF SERVAFF = 'A' THEN XSERVAFF = 1;        *Army;
  ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;   *Air Force;
  ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;   *Navy;
  ELSE XSERVAFF = 4;                         *Other/unknown;

  IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

  IF XTNEXREG = . THEN DELETE;

  IF XINS_COV NOT IN(1,2,3,6,9) THEN DELETE;  /*JSO 07/30/2007, Added 9*/

  NXNS_COV = XINS_COV;              /*JSO 04/26/2007 added for reservists logic*/
                                    /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
  IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
  IF DBENCAT IN('GRD','IGR') AND H05006 = 3 THEN DO;
     NXNS_COV = 3;
     XENR_PCM = .;
  END;

  PRVVAR1=HP_PRNTL;        /** prenatal care  **/
  PRVVAR2=HP_MAMOG;        /** mammography    **/
  PRVVAR3=HP_PAP;          /** papsmear       **/
  PRVVAR4=HP_BP;           /** blood pressure **/
  PRVVAR5=H05022;          /** access var 1   **/
  PRVVAR6=H05019;          /** access var 2   **/
  PRVVAR7=H05030;          /** access var 3   **/

/**** set up numerator and denominator for proportions ****/

  ARRAY PRVVAR(*) PRVVAR1-PRVVAR&COMPNUM;
  ARRAY  NUMER(*) NUMV1-NUMV&COMPNUM;
  ARRAY  DENOM(*) DENV1-DENV&COMPNUM;

  DO I = 1 TO &COMPNUM;
     IF I LE  &CMPNUM1 THEN DO;
        IF PRVVAR(I) = 1 THEN NUMER(I) = 1;
        ELSE NUMER(I)=0;
        IF PRVVAR(I) IN (1, 2) THEN DENOM(I)=1;
     END;
     ELSE IF I GT &CMPNUM1 THEN DO;
        IF PRVVAR(I) IN (1, 2) THEN NUMER(I)=1;
        ELSE NUMER(I)=0;
        IF PRVVAR(I) > 0 THEN DENOM(I)=1;
     END;
  END;
```

```
      DROP I;
      DENV4=1;

     /* 08/22/2006, JSO Create XOCONUS for 2005 data */
        IF      XREGION=13 THEN XOCONUS=1;
        ELSE IF XREGION=14 THEN XOCONUS=2;
        ELSE IF XREGION=15 THEN XOCONUS=3;

     /*RSG 02/2005 Added codes to define XSERVREG CACSMPL*/

        IF XTNEXREG = 1 THEN DO;
           IF XSERVAFF = 1 THEN XSERVREG = 1;
          ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
          ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
          ELSE XSERVREG = 4;
        END;

        IF XTNEXREG = 2 THEN DO;
           IF XSERVAFF = 1 THEN XSERVREG = 5;
          ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
          ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
          ELSE XSERVREG = 8;
        END;

        IF XTNEXREG = 3 THEN DO;
           IF XSERVAFF = 1 THEN XSERVREG = 9;
          ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
          ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
          ELSE XSERVREG = 12;
        END;

        IF XTNEXREG = 4 THEN DO; /*JSO 08/22/2006, Changed Overseas Regions*/
           IF      XOCONUS = 1 THEN XSERVREG = 13;
           ELSE IF XOCONUS = 2 THEN XSERVREG = 14;
           ELSE IF XOCONUS = 3 THEN XSERVREG = 15;
        END;

       RENAME &NORMWGT = &WGT;
    run;

    /* 08/22/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
    LIBNAME LIBRARY  "..\..\..\Data\Afinal\fmtlib";

    DATA &YRDATA(KEEP=BGROUP MHS CONUS XSERVAFF CACSMPL &WGT TMP_CELL
                      PRVVAR1-PRVVAR&COMPNUM. NUMV1-NUMV&COMPNUM.
                      DENV1-DENV&COMPNUM XTNEXREG XSERVREG FIELDAGE);
                      /* 11/15/2006 JSO Added FIELDAGE in the keep statement */

      SET IN.&INDATA(KEEP=XINS_COV HP_BP XTNEXREG HP_MAMOG HP_PAP HP_PRNTL    /*RSG 04/2005 DELETE
HP_CHOL*/
                           XREGION SERVAFF XENR_PCM XBNFGRP ENBGSMPL &WGT CACSMPL
                           STRATUM H07022 H07019 H07030 H07007 H07006 D_HEALTH FIELDAGE DBENCAT);
                           /* 11/15/2006 JSO Added FIELDAGE in the keep statement */
                           /* 05/10/2007 JSO Added H07006, DBENCAT in the keep statement */

    ************************************************************************
    * For quarterly reports, catchment level reporting is not done
    * so the value of cellp is set to 1.
    * For annual reporting purposes, cellp will need to be assigned
    * to geocell
    ************************************************************************;
      IF SERVAFF = 'A' THEN XSERVAFF = 1;        *Army;
      ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;   *Air Force;
      ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;   *Navy;
      ELSE XSERVAFF = 4;                         *Other/unknown;

      CELLP = 1;
      LENGTH TMP_CELL 8;
      TMP_CELL = STRATUM;   /* Make STRATUM a numeric variable */

      IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

      IF XTNEXREG = . THEN DELETE;
```

```
  IF XINS_COV NOT IN(1,2,3,6,9) THEN DELETE;  /*JSO 07/30/2007, Added 9*/

  NXNS_COV = XINS_COV;   /*JSO 05/14/2007 added for reservists logic*/
                         /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
  IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
  IF DBENCAT IN('GRD','IGR') AND H07006 = 3 THEN DO;
     NXNS_COV = 3;
     XENR_PCM = .;
  END;

  PRVVAR1=HP_PRNTL;        /** prenatal care  **/
  PRVVAR2=HP_MAMOG;        /** mammography    **/
  PRVVAR3=HP_PAP;          /** papsmear       **/
  PRVVAR4=HP_BP;           /** blood pressure **/
  /*RSG 04/2005 - delete cholesterol, renumber PRVVAR below*/
  PRVVAR5=H07022;          /** access var 1   **/
  PRVVAR6=H07019;          /** access var 2   **/
  PRVVAR7=H07030;          /** access var 3   **/

/**** set up numerator and denominator for proportions ****/

  ARRAY PRVVAR(*) PRVVAR1-PRVVAR&COMPNUM;
  ARRAY  NUMER(*) NUMV1-NUMV&COMPNUM;
  ARRAY  DENOM(*) DENV1-DENV&COMPNUM;

  DO I = 1 TO &COMPNUM;
     IF I LE  &CMPNUM1 THEN DO;
        IF PRVVAR(I) = 1 THEN NUMER(I) = 1;
        ELSE NUMER(I)=0;
        IF PRVVAR(I) IN (1, 2) THEN DENOM(I)=1;
     END;
     ELSE IF I GT &CMPNUM1 THEN DO;
        IF PRVVAR(I) IN (1, 2) THEN NUMER(I)=1;
        ELSE NUMER(I)=0;
        IF PRVVAR(I) > 0 THEN DENOM(I)=1;
     END;
  END;
  DROP I;
  DENV4=1;

  MHS= 1;   /* set up dummy for MHS-- include all observations */

 /* 08/22/2006, JSO Create XOCONUS for 2005 data */
  IF      XREGION=13 THEN XOCONUS=1;
  ELSE IF XREGION=14 THEN XOCONUS=2;
  ELSE IF XREGION=15 THEN XOCONUS=3;

  IF XTNEXREG = 1 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 1;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
      ELSE XSERVREG = 4;
  END;

  IF XTNEXREG = 2 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 5;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
      ELSE XSERVREG = 8;
  END;

  IF XTNEXREG = 3 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 9;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
      ELSE XSERVREG = 12;
  END;

  IF XTNEXREG = 4 THEN DO; /*JSO 08/22/2006, Changed Overseas Regions*/
     IF      XOCONUS = 1 THEN XSERVREG = 13;
     ELSE IF XOCONUS = 2 THEN XSERVREG = 14;
     ELSE IF XOCONUS = 3 THEN XSERVREG = 15;
```

```
      END;

    ***************************************************************************
    * Assign indicator of CONUS based on XTNEXREG.  CONUS stands for
    * Contential United States it but includes both Alaska and Hawaii.
    ***************************************************************************;
      IF XTNEXREG IN (1,2,3) THEN CONUS=1;                                    /*RSG 01/2005 OVERALL
CONUS*/

      ELSE IF XTNEXREG = 4 THEN CONUS=2;

    * Prime enrollees     *;

      IF (NXNS_COV IN (1,2,6) AND H07007>=2) THEN DO;
         BGROUP=1;
         OUTPUT;
      END;

    * Enrollees with military PCMs *; /*JSO 04/05/2007, added conditions for RC type*/
    IF "&RCTYPE" = 'ReportCards' AND
         (XENR_PCM IN (1,2,6) AND H07007>=2) THEN DO;
         BGROUP=2;
         OUTPUT;
      END;
    ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
         (XENR_PCM IN (1,2) AND H07007>=2) THEN DO;
         BGROUP=2;
         OUTPUT;
      END;

    * Enrollees with civilian PCMs *; /*JSO 04/05/2007, added conditions for RC type*/
    IF "&RCTYPE" = 'ReportCards' AND
         (XENR_PCM IN (3,7) AND H07007>=2) THEN DO;
         BGROUP=3;
         OUTPUT;
      END;
    ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
         ((XENR_PCM IN (3) AND H07007>=2) OR NXNS_COV IN (3,9)) THEN DO;   /*JSO 07/30/2007, Added
9*/
         BGROUP=3;
         OUTPUT;
      END;

    * Nonenrollees *;

      IF NXNS_COV IN (3,9) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
         BGROUP=4;                  /*JSO 07/30/2007, Added 9*/
         OUTPUT;
      END;

    * Active duty      *;

      IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
         BGROUP=5;        /*JSO 07/30/2007, added DBENCAT conditions*/
         OUTPUT;
      END;

    * Active duty dependents  *;

      IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN DO;
         BGROUP=6;        /*JSO 07/30/2007, added DBENCAT conditions*/
         OUTPUT;
      END;

    * Retirees  *;

      IF XBNFGRP IN (3,4) THEN DO;
         BGROUP=7;
         OUTPUT;
      END;

    * All beneficiaries *;
```

```
      BGROUP=8;
      OUTPUT;
    RUN;


    DATA HCSDB;
    SET &YRDATA;
    RUN;

    ******************************************************
    *** First, calculate standard errors and create     ***
    *** a file for each analytical unit                 ***
    ******************************************************;

    PROC SORT DATA=HCSDB; BY TMP_CELL;
    RUN;

    ******************************************************
    ***** Sudaan macro to calculate standard errors   *****
    ***** there are three output datasets created     *****
    ***** (XTNEXREG, XSERVREG, MHS, XSERVAFF)                     *****
    ***** Note:  7/10/2000 use CONUS for MHS          *****
    ***** Note:  there are 8 variables and 8 groups   *****
    ******************************************************;

    %MACRO A_SUDAAN(TABLEVAR);

    *** set the number of levels in the proc descript ***;
    *** for region or catchment                      ***;

     %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
         %LET ENDNUM=4;
         %LET PREF=S;         /** dataset prefix for service affiliation data    **/
     %END;
     %IF %UPCASE(&TABLEVAR)=XSERVREG %THEN %DO;
         %LET ENDNUM=&REGNUM;
         %LET PREF=R;         /** dataset prefix for region data    **/
     %END;
     %ELSE  %IF  %UPCASE(&TABLEVAR)=CONUS  %THEN  %LET  PREF=C;              /**  dataset  prefix  for
catchement area data **/

     %ELSE %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
         %LET ENDNUM=4;      /** RSG 01/2005 Change level of conus to 4 **/
         %LET PREF=M;
     %END;

     %DO I=1 %TO &GRPNUM;     /** 8 groups    **/

         %DO J=1 %TO &COMPNUM;   /** 7 variables **/

             DATA INDATA&I.&J(KEEP=&WGT MHS CONUS XSERVAFF XTNEXREG XSERVREG CACSMPL
                                 XSERVAFF NUMV&J DENV&J TMP_CELL);
               SET HCSDB;
               WHERE XSERVREG > 0 AND BGROUP=&I AND DENV&J > 0;
               %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
                   IF XSERVAFF > 4 OR XSERVAFF = . THEN DELETE;  /*RSG 01/2005 Delete Conus greater
than 4 which are not conus */
               %END;
                 %IF %UPCASE(&TABLEVAR)=CONUS %THEN %DO;
                     IF CONUS NE 1 THEN DELETE;
                 %END;
                 %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
                     IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
                 %END;
             RUN;

    *** Calculate values for regions, catchment areas ****;

             %IF %UPCASE(&TABLEVAR) NE CONUS %THEN %DO;

                PROC DESCRIPT DATA=INDATA&I.&J DESIGN=STRWR NOPRINT;
                    WEIGHT &WGT;
                    SETENV DECWIDTH=4;
```

```
                NEST TMP_CELL / MISSUNIT;
                VAR NUMV&J;
                TABLES &TABLEVAR;
                SUBGROUP &TABLEVAR;
                LEVELS &ENDNUM;
                OUTPUT SEMEAN/ TABLECELL=DEFAULT
                FILENAME=&PREF.GRP&I.V&J;
            RUN;

         %END;
         %ELSE %IF %UPCASE(&TABLEVAR)=CONUS %THEN %DO;

**** No tables, levels, or subgroups needed ****;

            PROC DESCRIPT DATA=INDATA&I.&J DESIGN=STRWR NOPRINT;
               WEIGHT &WGT;
               SETENV DECWIDTH=4;
               NEST TMP_CELL / MISSUNIT;
               VAR NUMV&J;
               OUTPUT SEMEAN/ TABLECELL=DEFAULT
               FILENAME=&PREF.GRP&I.V&J;
            RUN;

         %END;

***** first, put all variables into one dataset for each group *****;

         DATA &PREF.GRP&I.V&J;
            SET &PREF.GRP&I.V&J;
            IF SEMEAN NE .;
            MHS=1;
            %IF %UPCASE(&TABLEVAR)=CONUS %THEN %DO;
                CONUS=1;
            %END;
         RUN;

         %IF &J=1 %THEN %DO;
            DATA &PREF.SEGRP&I;
               SET &PREF.GRP&I.V&J(KEEP=&TABLEVAR SEMEAN);
               GROUP=&I;
               IF SEMEAN NE .;
               RENAME SEMEAN = SERRV&J;
            RUN;
         %END;
         %ELSE %DO;
            DATA &PREF.SEGRP&I;
               MERGE &PREF.SEGRP&I &PREF.GRP&I.V&J(KEEP=&TABLEVAR SEMEAN);
               BY &TABLEVAR;
               GROUP=&I;
               RENAME SEMEAN = SERRV&J;
            RUN;
         %END;
     %END;

***** Put all data into one dataset  *****
***** Note:  changed output dataset  *****
***** to include group               *****;

     %IF &I=1 %THEN %DO;

        DATA &PREF.SERR;
           SET &PREF.SEGRP&I;
           KEEP GROUP &TABLEVAR SERRV1-SERRV&COMPNUM;
        RUN;
     %END;
     %ELSE %DO;

        DATA &PREF.SERR;
           SET &PREF.SERR
           &PREF.SEGRP&I;
        RUN;
     %END;
```

```
******** DEBUG PRINT   *******;

     %IF &DEBUG=Y %THEN %DO;
        %IF &I=&GRPNUM AND &PREF=R %THEN %DO;
             PROC PRINT DATA=&PREF.SERR;
                VAR &TABLEVAR GROUP SERRV1-SERRV&COMPNUM;
             RUN;
        %END;
     %END;

 %END;

%MEND A_SUDAAN;

%A_SUDAAN (CONUS);
%A_SUDAAN (XSERVAFF);
%A_SUDAAN (XSERVREG);
%A_SUDAAN (XTNEXREG);

*******************************************************
*** Next, calculate correlation coefficients         ***
*** and create a file for each analytical unit       ***
*******************************************************;

%MACRO GETCORR(BYVAR);

 %IF %UPCASE(&BYVAR)=XTNEXREG %THEN %LET PREF=S;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVREG %THEN %LET PREF=R;
 %ELSE %IF %UPCASE(&BYVAR)=CONUS %THEN %LET PREF=C;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %LET PREF=M;

 PROC SORT DATA=HCSDB; BY &BYVAR;
 RUN;

 %DO I = 1 %TO &GRPNUM;

    PROC CORR NOPRINT DATA=HCSDB OUTP=&PREF.CORRC&I;
       %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %DO;
          WHERE BGROUP=&I AND 1 <= XSERVAFF <= 4;      /** RSG 0/2005 Change conus values to
keep to be between 1-4 **/
       %END;
      %IF %UPCASE(&BYVAR)=CONUS %THEN %DO;
         WHERE BGROUP=&I AND CONUS = 1;
      %END;
       %ELSE %DO;
          WHERE BGROUP=&I;
       %END;
       BY &BYVAR;
       VAR PRVVAR1-PRVVAR&COMPNUM;
       WITH PRVVAR1-PRVVAR&COMPNUM;
       WEIGHT &WGT;
    RUN;

    DATA &PREF.CORRC&I;
      SET &PREF.CORRC&I;
      WHERE _TYPE_="CORR";
      GROUP=&I;
      ARRAY OLD PRVVAR1-PRVVAR&COMPNUM;
      ARRAY NEW CORV1-CORV&COMPNUM;
      DO J = 1 TO &COMPNUM;
         NEW(J)=OLD(J);
      END;
      DROP J PRVVAR1-PRVVAR&COMPNUM;
    RUN;

    %IF &I=1 %THEN %DO;

       DATA &PREF.CORRC;
         SET &PREF.CORRC&I;
       RUN;

    %END;
    %ELSE %DO;
```

```
       DATA &PREF.CORRC;
         SET &PREF.CORRC
         &PREF.CORRC&I;
       RUN;

    %END;
    %IF &DEBUG=Y %THEN %DO;
        %IF &I=&COMPNUM AND &PREF=R %THEN %DO;
           PROC PRINT DATA=&PREF.CORRC;
              WHERE GROUP=1;
           RUN;
        %END;
    %END;
 %END;

*** Flatten dataset(for each region, condense matrix to one row) ***;

 %DO K=1 %TO &COMPNUM;

    DATA &PREF.CORR&K;
      SET &PREF.CORRC;
      WHERE _NAME_ = "PRVVAR&K";
      ARRAY CORR   (&COMPNUM) CORV1-CORV&COMPNUM;
      ARRAY CORR&K (&COMPNUM) CORV&K.1-CORV&K.&COMPNUM;
      DO L=1 TO &COMPNUM;
         CORR&K(L)=CORR(L);
      END;
      KEEP GROUP &BYVAR CORV&K.1-CORV&K.&COMPNUM;
    RUN;
    %IF &K=1 %THEN %DO;
        DATA &PREF.CORR;
          SET &PREF.CORR&K;
        RUN;
    %END;
    %ELSE %DO;
       DATA &PREF.CORR;
         MERGE &PREF.CORR(IN=IN_1) &PREF.CORR&K(IN=IN_2);
          BY GROUP &BYVAR;
       RUN;
    %END;
    %IF &DEBUG=Y %THEN %DO;
       %IF &PREF=R %THEN %DO;
          PROC PRINT DATA=&PREF.CORR;
             WHERE GROUP=1;
          RUN;
       %END;
     %END;
 %END;

%MEND GETCORR;

%GETCORR(CONUS);
%GETCORR(XSERVAFF);
%GETCORR(XSERVREG);
%GETCORR(XTNEXREG);

*******************************************************
***  Macro to derive composites for each         *******
***  beneficiary group, level                    *******
***  output one dataset for each group           *******
*******************************************************;

%MACRO GETPROP(BYVAR);

 %LET START = %EVAL(&CMPNUM1+1);

 %IF %UPCASE(&BYVAR)=XSERVREG %THEN %LET PREF=R;
 %ELSE %IF %UPCASE(&BYVAR)=CONUS %THEN %LET PREF=C;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %LET PREF=M;
 %ELSE %IF %UPCASE(&BYVAR)=XTNEXREG %THEN %LET PREF=S;
```

```
 PROC MEANS NWAY NOPRINT DATA=HCSDB;
    CLASS BGROUP &BYVAR;
    VAR NUMV1-NUMV&COMPNUM
        DENV1-DENV&COMPNUM;
    WEIGHT &WGT;
    OUTPUT OUT= &PREF.CMPSUM(DROP = _TYPE_)
    SUM =  ;
 RUN;
 PROC MEANS NWAY NOPRINT DATA=normdata;
 *   CLASS &BYVAR;
    VAR
        DENV1-DENV&COMPNUM;
    WEIGHT &wgt.;
    OUTPUT OUT= &PREF.norms(DROP = _TYPE_)
    SUM =  nrmv1-nrmv&compnum;
 RUN;

 PROC MEANS NWAY NOPRINT DATA=HCSDB;
    CLASS BGROUP &BYVAR;
    VAR DENV1-DENV&COMPNUM;
    OUTPUT OUT=&PREF.DGFR(DROP=_TYPE_ _FREQ_)
    SUM= NOBSV1-NOBSV&COMPNUM;
 RUN;

data &pref.cmpsum;

if _n_=1 then set &pref.norms;
set &pref.cmpsum;
proc sort data=&pref.cmpsum; by bgroup &byvar;
 DATA &PREF.CMPSUM;
    MERGE &PREF.CMPSUM(RENAME=(_FREQ_=N_OBS))
          &PREF.DGFR;
    BY BGROUP &BYVAR;
    %IF &PREF=M %THEN %DO;  /** added 7/10/2000 **/
        WHERE 1 <= XSERVAFF <= 4;          /** RSG 01/2005 Change conus values to keep to be
between 1-4 **/
    %END;
    %ELSE %IF &PREF=C %THEN %DO;
        WHERE CONUS = 1;
    %END;

   **** set up group variable  **;

    RENAME BGROUP=GROUP;;

   **** set up proportions, and composites **;

   ARRAY PROPORT PROPV1-PROPV&COMPNUM;
   ARRAY NUMER   NUMV1-NUMV&COMPNUM;
   ARRAY DENOM   DENV1-DENV&COMPNUM;
   array norm    nrmv1-nrmv&compnum;

   DO J=1 TO DIM(PROPORT);
      PROPORT(J) = NUMER(J)/DENOM(J);
   END;
   DROP J;

  **** composites **;


** added goalvars to datastep, 5/30/2000                ;
** taken out of temporary array for variance calculations;
** and used, kept as variables                          ;

  GOALVAR1=&GOALVAR1;
  GOALVAR2=&GOALVAR2;
  GOALVAR3=&GOALVAR3;
  GOALVAR4=&GOALVAR4;
  GOALVAR5=&GOALVAR5;
  GOALVAR6=&GOALVAR6;
  GOALVAR7=&GOALVAR7;
/*RSG 04/2005 - delete goal8 since chol eliminated*/
```

```
    ** the weight for preventive service is defined as the         ;
    **   proportion   of   the   denominator   for   that   service   to   the                    ;
;
    ** composite denominator                                       ;
    ** healthy people 2000 goals -- used as benchmarks             ;

      ARRAY   SVCWGT(&COMPNUM) WGTV1-WGTV&COMPNUM;
      ARRAY    BMARK(&COMPNUM) GOALVAR1-GOALVAR&COMPNUM;
      ARRAY WGTBMARK(&COMPNUM) WTDV1-WTDV&COMPNUM;
      array comp(&compnum) cmpv1-cmpv&compnum;
    cpden1=sum(of nrmv1-nrmv&cmpnum1);
    cpden2=sum(of nrmv&start-nrmv&compnum);
      DO K = 1 TO &COMPNUM;
          IF K < &START THEN SVCWGT(K)= norm(K)/CPDEN1;
          ELSE SVCWGT(K) = norm(K)/CPDEN2;
          WGTBMARK(K) = SVCWGT(K)*BMARK(K);
          comp(k)=svcwgt(k)*proport(k);
      END;
      DROP K;
      CPBMK1=SUM(OF WTDV1-WTDV&CMPNUM1);
      CPBMK2=SUM(OF WTDV&START-WTDV&COMPNUM);
      comp1=sum(of cmpv1-cmpv&cmpnum1);
    comp2=sum(of cmpv&start-cmpv&compnum);
     DROP WGTV1-WGTV&COMPNUM WTDV1-WTDV&COMPNUM
           NUMV1-NUMV&COMPNUM;
     RUN;

     %IF &DEBUG=Y AND &PREF=R %THEN %DO;
         PROC PRINT DATA=&PREF.CMPSUM;  /* print out final dataset */
         RUN;                              /* for region to check     */
     %END;

    %MEND GETPROP;

    %GETPROP(CONUS);
    %GETPROP(XSERVAFF);
    %GETprop(XSERVREG);
    %GETPROP(XTNEXREG);

    *******************************************************
    ** since MHS benchmarks will be displayed           ****
    ** set up adjustment factor to apply to             ****
    ** each analytical unit's composite benchmarks      ****
    *******************************************************;


    *******************************************************
    ***  Macro to merge 3 datasets for each          *******
    ***  called by analytical unit                   *******
    ***  output final dataset for                    *******
    ***  XSERVAFF, XSERVREG, XTNEXREG, MHS (CONUS)   *******
    *******************************************************;

    PROC FORMAT;  /*RSG 02/2005 - hardcoded in prog to have caps vs format in loadcahq.inc*/
       VALUE REGIONF
          0 = "CONUS MHS "
          1 = "NORTH"
          2 = "SOUTH"
          3 = "WEST"
          4 = "OVERSEAS"
       ;
    %MACRO GETSIG(BYVAR);

     %LET START = %EVAL(&CMPNUM1+1);
     %LET NEXT  = %EVAL(&CMPNUM1+2);

     %IF &BYVAR=XSERVREG %THEN %LET PREF=R;
     %ELSE %IF &BYVAR=CONUS %THEN %LET PREF=C;
     %ELSE %IF &BYVAR=XSERVAFF %THEN %LET PREF=M;
     %ELSE %IF &BYVAR=XTNEXREG %THEN %LET PREF=S;


     DATA OUT.&PREF.FINAL(KEEP= MAJGRP REGION REGCAT GOALVAR1-GOALVAR&COMPNUM
```

```
                SIGV1-SIGV&COMPNUM SCORV1-SCORV&COMPNUM
                CPSIG1-CPSIG&COMPCNT CP1SE CP2SE
                CSCOR1-CSCOR&COMPCNT CPBMK1-CPBMK&COMPCNT
                SERRV1-SERRV&COMPNUM CP1SE CP2SE
                COMP1 COMP2 PROPV1-PROPV&COMPNUM
                DFSCR1-DFSCR&COMPNUM DF_CP1 DF_CP2
                NOBSV1-NOBSV&COMPNUM CPOBS1-CPOBS&COMPCNT
                DENV1-DENV&COMPNUM CPDEN1-CPDEN&COMPCNT);

      FORMAT MAJGRP $30. REGION $25. REGCAT $26.;
          MERGE &PREF.CMPSUM(IN=IN_PROP) &PREF.CORR
          &PREF.SERR;
          BY GROUP &BYVAR;
          IF IN_PROP;
    %DO Z=1 %TO &COMPCNT;

            CSCOR&Z=COMP&Z.*100;

      %END;
     **  MAJGRP -- text field for group   **;
      IF      GROUP=1 THEN MAJGRP="Prime Enrollees            ";
      ELSE IF GROUP=2 THEN MAJGRP="Enrollees with Military PCM";
      ELSE IF GROUP=3 THEN MAJGRP="Enrollees with Civilian PCM";
      ELSE IF GROUP=4 THEN MAJGRP="Non-enrolled Beneficiaries ";
      ELSE IF GROUP=5 THEN MAJGRP="Active Duty                ";
      ELSE IF GROUP=6 THEN MAJGRP="Active Duty Dependents     ";
      ELSE IF GROUP=7 THEN MAJGRP="Retirees and Dependents    ";
      ELSE IF GROUP=8 THEN MAJGRP="All Beneficiaries          ";

     **** REGION AND REGCAT SETUP          **;
      %IF &PREF=S %THEN %DO;
          REGCAT=PUT(XTNEXREG,REGIONF.);
          REGION=PUT(XTNEXREG,REGIONF.);
      %END;
      %else %IF &PREF=C %THEN %DO;
          REGION="CONUS MHS";
          REGCAT="CONUS MHS";
      %END;
      %ELSE %IF &PREF=R %THEN %DO;
          REGION=PUT(XSERVREG, SERVREGO.);
          REGCAT=PUT(XSERVREG, SERVREGO.);
      %END;
      %ELSE %IF &PREF=M %THEN %DO;                        /** RSG 1/2005 Add codes for service
grouping **/
          REGION=PUT(XSERVAFF,XSERVAFF.);
          REGCAT=PUT(XSERVAFF,XSERVAFF.);
      %END;

     **** setup t statistics, degreees of freedom    **;
      ARRAY    TSTAT{&COMPNUM} T_V1-T_V&COMPNUM;
      ARRAY    BMARK{&COMPNUM} GOALVAR1-GOALVAR&COMPNUM;
      ARRAY  STNDERR{&COMPNUM} SERRV1-SERRV&COMPNUM;
      ARRAY  SERRSQR{&COMPNUM} SESQV1-SESQV&COMPNUM;
      ARRAY     DEGF{&COMPNUM} DFSCR1-DFSCR&COMPNUM;
      ARRAY    DENOM{&COMPNUM} DENV1-DENV&COMPNUM;
      ARRAY  PROPORT{&COMPNUM} PROPV1-PROPV&COMPNUM;
      ARRAY    SCORE{&COMPNUM} SCORV1-SCORV&COMPNUM;
      ARRAY   PVALUE{&COMPNUM} PVALV1-PVALV&COMPNUM;
      ARRAY      SIG{&COMPNUM} SIGV1-SIGV&COMPNUM;
      ARRAY     NOBS{&COMPNUM} NOBSV1-NOBSV&COMPNUM;
      array     norm{&compnum} nrmv1-nrmv&compnum;

     ** get the item variance, t-statistics, df, p-values **;
     ** and whether significant                           **;
      DO I=1 TO &COMPNUM;
          SERRSQR{I}=STNDERR{I}**2;  /* Item variance */
          SCORE{I}=PROPORT{I}*100;   /* Score (prop. * 100) */
          IF STNDERR{I} > 0 THEN TSTAT{I}=(PROPORT{I}-BMARK{I})/STNDERR{I};
          ELSE TSTAT{I}=.;
          DEGF{I}=NOBS{I}-1;
          PVALUE{I}=(1-PROBT(ABS(TSTAT{I}),DEGF{I}))*2;
          IF PVALUE{I} GE .05 THEN SIG{I}=0;
          ELSE IF PVALUE{I} < .05 THEN DO;
```

```
            IF PROPORT{I} > BMARK{I} THEN SIG{I}=1;
            IF PROPORT{I} < BMARK{I} THEN SIG{I}=-1;
        END;
    END;
    DROP I;

   ** multiply each item pair std. errors and correlation coefficients **;
   ** preventive care composite                                        **;
  ARRAY SEwC1{&CMPNUM1} SEwV1-SEwV&CMPNUM1;

    ARRAY SERRC1{&CMPNUM1} SERRV1-SERRV&CMPNUM1;
    %DO J = 1 %TO &CMPNUM1;
        ARRAY  SMEAN&J{&CMPNUM1} SEMV&J.1-SEMV&J.&CMPNUM1;
        ARRAY CORVAR&J{&CMPNUM1} CORV&J.1-CORV&J.&CMPNUM1;
        DO K=1 TO &CMPNUM1;
            SMEAN&J{K}=SERRV&J*SERRC1{K}*CORVAR&J{K}*norm{K}*nrmV&J;
        END;
        SEMV&J.&J=0;
         sewv&j= (nrmV&j**2)*SESQV&j;/** don't count in final standard error calculation **/
    %END;
    DROP K;
   ** multiply each item pair std. errors and correlation coefficients **;
   ** access to care composite                                         **;

    ARRAY SERRC2{&CMPNUM2} SERRV&START-SERRV&COMPNUM;
    %DO L = &START %TO &COMPNUM;
        ARRAY  SMEAN&L{&CMPNUM2} SEMV&L.&START-SEMV&L.&COMPNUM;
        ARRAY CORVAR&L{&CMPNUM2} CORV&L.&START-CORV&L.&COMPNUM;
        DO M=1 TO &CMPNUM2;
            SMEAN&L{M}=SERRV&L*SERRC2{M}*CORVAR&L{M};
        END;
        SEMV&L.&L=0;  /** don't coun't in final standard error calculation **/
    %END;
    DROP M;
   ** calculate composite t-statistic, pvalue, and whether significant **;
   ** for composites                                                   **;
  %DO P=1 %TO &COMPCNT;
        %IF &P=1 %THEN %DO;
        ** composite standard error comprised of two parts **;
            CP&P.SE1=SUM(OF SEwV1-SEwV&CMPNUM1);
            CP&P.SE2=SUM(OF SEMV11-SEMV&CMPNUM1.&CMPNUM1.);
            cpobs&p=sum(of nobsv1-nobsv&cmpnum1);
        %END;
        %ELSE %DO;
            CP&P.SE1=SUM(OF SESQV&START-SESQV&COMPNUM);
            CP&P.SE2=SUM(OF SEMV&START.&START.-SEMV&COMPNUM.&COMPNUM.);
            cpobs&p=sum(of nobsv&start-nobsv&compnum);
        %END;
   ** add the two parts of the composite standard error  **;
   ** calculate the composite t statistics and p-values  **;
   ** determine whether differences are sigificant       **;

        CP&P.SE=SQRT(CP&P.SE2+CP&P.SE1)/CPden&P;
        IF CP&P.SE > 0 THEN CP_T&P.=(COMP&P.-CPBMK&P.)/CP&P.SE;
        ELSE CP_T&P.= .;
        DF_CP&P.=CPOBS&P. - 1;
        CP_P&P.=(1-PROBT(ABS(CP_T&P.),DF_CP&P.))*2;
        IF CP_P&P GE .05 THEN CPSIG&P=0;
        ELSE IF CP_P&P < .05 THEN DO;
            IF COMP&P. > CPBMK&P THEN CPSIG&P= 1;
            ELSE IF COMP&P. < CPBMK&P THEN CPSIG&P=-1;
        END;
    %END;

    OUTPUT OUT.&PREF.FINAL;
 RUN;

%MEND GETSIG;

%GETSIG(CONUS);
%GETSIG(XTNEXREG);
%GETSIG(XSERVREG);
%GETSIG(XSERVAFF);
```

G.4.B Q4FY2007\PROGRAMS\REPORTCARDS\MPR_ADULTQ4FY2007\SMOKING_BMI.SAS - CALCULATES HEALTHY BEHAVIOR COMPOSITE SCORES - RUN QUARTERLY.

```
*************************************************************************
*
*  Project:   DoD Reporting and Analysis 6077-410
*  Program:   SMOKING_BMI.SAS
*  Purpose:   Calculate Smoking Rate and Smoking Cessation
*             for each region-service affiliation and
*             conus-service affiliation groups.
*
*  Date:      1/31/2005
*  Author:    Regina Gramss
*
*  Modified:  1) 04/2005 By Regina Gramss, Updated for Q1 2005.
*             2) 12/2005 By Regina Gramss, Updated for Q4 2005.
*             3) 01/2006 By Regina Gramss - Updated for 2005 annual data.  Normalize
*                with 2005 data and not 2000.  Standardize using age/sex and MPCSMPL
*                (military personnel category).  Update smoking cessation
*                calculation with new formula to correspond more to HEDIS.  Use new
*                weight (CFWT) and use STRATUM as TMP_CELL.
*             4) 03/24/2006 By Keith Rathbun, Updated for Q2 FY 2006.
*             5) 07/12/2006 By Justin Oh, Updated for Q3 FY 2006.
*             6) 08/24/2006 By Justin Oh, REGNUM changed from 16 to 24.
*                Changed XSERVREG for Overseas
*                Changed IF XINS_COV IN (3,4,5) THEN GROUP4 = 1 to
*                        IF XINS_COV IN (3)     THEN GROUP4 = 1
*                Since only XINS_COV IN (1,2,3,6) is kept.
*                Create XOCONUS for 2005 data.
*                Added/Moved LIBRARY Libname to use both Quarter/Annual Formats.
*             7) 10/04/2006 By Justin Oh, Updated %LET DSN and CURRENT.
*             8) 12/22/2006 By Justin Oh, Updated %LET DSN HCS071_1 and CURRENT October, 2006.
*             9) 02/02/2007 By Justin Oh, Added "s" to Healthy Behaviors
*            10) 04/05/2007 By Justin Oh, Updated %LET DSN HCS072_1 and CURRENT January, 2007.
*            11) 04/05/2007 By Justin Oh, Added conditions for RC types
*                           ReportCards OR PurchasedReportCards.
*            12) 05/10/2007 By Justin Oh, Added codes, variables for new reservists logic for
*                           both Norm and Quarter datasets.
*            13) 05/15/2007 By Justin Oh, Changed XINS_COV to NXNS_COV to assign
*                           Groups 1,3, and 4 for new reservists logic.
*            14) 07/30/2007 By Justin Oh, Added added DBENCAT conditions to assign
*                           Groups All, 4, 5, and 6.
*            15) 09/04/2007 By Justin Oh, Updated %LET DSN HCS074_1 and CURRENT July, 2007.
*
*   Inputs:   1) HCS05A_1.SD2 - Annual 2005 Survey data
*             2) HCS074_1.SD2 - Q4 fy 2007 Survey data
*             3) AC2005DB.sas7bdat - 2005 CAHPS Benchmark Data
*
*   Output:   1) SMOKE.SD2
*
*
*************************************************************************;

OPTIONS COMPRESS=YES NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMTERR
        MPRINT MLOGIC;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards                ***/
%LET RCTYPE = ReportCards;


LIBNAME BENCH  V612 "..\..\..\..\2005AdultChildNCBD\AC";
LIBNAME INDAT  v612 "..\..\..\Data\afinal";
LIBNAME INNORM v612 "..\..\..\..\2005\Data";
LIBNAME OUT    V612 ".";

%LET DSN=HCS074_1;
%LET DSN_NORM=HCS05A_1;                /*JSO 08/24/2006, Changed Regions, 16 to 15*/
%LET  REGNUM  =  15;                              /*RSG 01/2005 Number of Regions (with serv
affiliation)*/
%LET  CONNUM  =  4;                             /*RSG 01/2005 Number of Conus level (with serv
affiliation)*/
%LET CURRENT = July, 2007;
```

```
%LET WGT = FWRWT;
%LET NORMWGT = CFWT;
%LET CATCHNUM=9999;                    /*RSG 02/2005 number of catchment areas **/

DATA BENCHA01;
   SET BENCH.AC2005DB (RENAME=(BIRTHYY=YOB));
   if product in (7,9) then model=4;
   if product=3 then model=2;                    /*coded according to AC FORMATS.SAS*/
   if product=1 then model=1;
   if product=4 then model=6;
   if product=8 then model=5;
   if product=2 then model=3;
   product=planid;
if ^(model in (2,4));
if disp in ('M10','I10')  ;
if  ac52_05=1  &  (ac53_05  in  (1,2)  |(ac53_05=3  &  ac54_05=1))  &  ac55_05>=0  &  ac55_05<=4;
/*02/2006 RSG - REMOVED REQUIREMENT FOR ADDITIONAL VISIT (ACC22 FIELD)*/
cessbnch=0;
if ac55_05>0 then cessbnch=1;


proc summary nway; class product;
var cessbnch;
output out=tbench mean=;
proc print;
proc summary;
var cessbnch;
output out=tbench mean=;
proc print;
data _null_;
set tbench;
call symput('CNSLGOAL',cessbnch);
run;

%LET NSMKGOAL = 0.88;

%LET BMIGOAL  = 0.85;

%INCLUDE "..\..\LoadWeb\LOADCAHQ.INC";

PROC FORMAT;
VALUE AGEF
LOW - 34 = 1
 35 - 49 = 2
 50 - 64 = 3
 65 - HIGH = 4;

/* 08/22/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
LIBNAME LIBRARY '..\..\..\..\2005\Data\fmtlib';

DATA NORMDATA (KEEP=TMP_CELL AGE_GRP XTNEXREG XSERVREG XSERVAFF
                    SM_RATE SM_CESS SM_RTDN SM_CSDN  BMI_DN BMI
                    TOTCON GROUP XSEXA &WGT. age_n MPCSMPL NXNS_COV);
                    /* 05/10/2007 JSO Added NXNS_COV in the keep statement */
SET INNORM.&DSN_NORM.(DROP=&WGT.); /* 4/4/2006, KRR added drop so CFWT can renamed/used */
LENGTH AGE_N AGE_GRP TMP_CELL 8.;

IF      XREGION=13 THEN XOCONUS=1; /* 08/24/2006, JSO Create XOCONUS for 2005 data */
ELSE IF XREGION=14 THEN XOCONUS=2;
ELSE IF XREGION=15 THEN XOCONUS=3;

TMP_CELL=STRATUM;

AGE_N = FIELDAGE;

AGE_GRP = PUT(AGE_N, AGEF.);
IF AGE_GRP < 4;

IF SERVAFF = 'A' THEN XSERVAFF = 1;        *Army;
ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;   *Air Force;
ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;   *Navy;
ELSE XSERVAFF = 4;                         *Other/unknown;
```

```
     IF XTNEXREG = 1 THEN DO;
        IF XSERVAFF = 1 THEN XSERVREG = 1;
        ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
        ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
        ELSE XSERVREG = 4;
     END;

     IF XTNEXREG = 2 THEN DO;
        IF XSERVAFF = 1 THEN XSERVREG = 5;
        ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
        ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
        ELSE XSERVREG = 8;
     END;

     IF XTNEXREG = 3 THEN DO;
        IF XSERVAFF = 1 THEN XSERVREG = 9;
        ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
        ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
        ELSE XSERVREG = 12;
     END;

     IF XTNEXREG = 4 THEN DO; /*JSO 08/22/2006, Changed Overseas Regions*/
        IF      XOCONUS = 1 THEN XSERVREG = 13;
        ELSE IF XOCONUS = 2 THEN XSERVREG = 14;
        ELSE IF XOCONUS = 3 THEN XSERVREG = 15;
     END;

     IF HP_SMOKH IN (1,2) THEN DO;
        SM_RATE = 0;
        IF HP_SMOKH = 2 THEN SM_RATE=1;
        SM_RTDN=1;
     END;

     if hp_smokh=1 & H05055>0 then do;     /*RSG 02/2006 NEW SMOKING CESSATION FORMULA AS PER ERIC
SCHONE */
        if H05055>1 then sm_cess=1;
        else sm_cess=0;
        sm_csdn=1;
     end;

     IF xbmicat > 0  THEN DO;
         BMI = 0;
         BMI_DN=1;
        IF xbmicat <=3 THEN BMI=1;
     END;

     IF XTNEXREG IN (1,2,3) THEN TOTCON=1;

     ELSE IF XTNEXREG = 4 THEN TOTCON=2;

     IF MPCSMPL = 3 THEN MPCSMPL = 2;  /* RSG 02/2006 GROUP WARRANT OFFICER WITH OFFICER */

     RENAME &NORMWGT = &WGT;

     IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

     IF XTNEXREG = .    THEN DELETE;

     IF XINS_COV NOT IN(1,2,3,6,9) THEN DELETE;  /*JSO 07/30/2007, Added 9*/

     NXNS_COV = XINS_COV;              /*JSO 04/26/2007 added for reservists logic*/
                                       /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
     IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
     IF DBENCAT IN('GRD','IGR') AND H05006 = 3 THEN DO;
        NXNS_COV = 3;
        XENR_PCM = .;
     END;

     * prime enrollees;
     IF NXNS_COV IN (1,2,6) AND H05007>=2 THEN DO;
        GROUP=1;
        OUTPUT;
     END;
```

```
* enrollees with military pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
   XENR_PCM IN (1,2,6) AND H05007>=2 THEN DO;
   GROUP=2;
   OUTPUT;
END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
   XENR_PCM IN (1,2) AND H05007>=2 THEN DO;
   GROUP=2;
   OUTPUT;
END;

* enrollees with civilian pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
   XENR_PCM = 3 AND H05007>=2 THEN DO;
   GROUP=3;
   OUTPUT;
END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
   ((XENR_PCM = 3 AND H05007>=2) OR NXNS_COV IN (3,9)) THEN DO; /*JSO 07/30/2007, Added 9*/
   GROUP=3;
   OUTPUT;
END;

* nonenrollees;
IF NXNS_COV IN (3,9) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
   GROUP=4;                   /*JSO 07/30/2007, Added 9*/
   OUTPUT;
END;

* active duty;
IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
   GROUP=5;        /*JSO 07/30/2007, added DBENCAT conditions*/
   OUTPUT;
END;

* active duty dependents;
IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR')THEN DO;
   GROUP=6;        /*JSO 07/30/2007, added DBENCAT conditions*/
   OUTPUT;
END;

* retirees;
IF XBNFGRP IN (3,4) THEN DO;
   GROUP=7;
   OUTPUT;
END;

* all beneficiaries;
GROUP=8;
OUTPUT;

RUN;

/* 08/22/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
LIBNAME LIBRARY '..\..\..\Data\afinal\fmtlib';

DATA SMOKE (KEEP=TMP_CELL AGE_GRP XTNEXREG XSERVREG XSERVAFF TOTCON GROUP
                 SM_RATE SM_CESS SM_RTDN SM_CSDN XSEXA &WGT BMI_DN BMI
                 MPCSMPL NXNS_COV);/* 05/10/2007 JSO Added NXNS_COV in the keep statement */
SET INDAT.&DSN.;
LENGTH AGE_N AGE_GRP TMP_CELL 8.;

TMP_CELL=STRATUM;

AGE_N = FIELDAGE;

AGE_GRP = PUT(AGE_N, AGEF.);

IF AGE_GRP < 4;
IF SERVAFF='A' THEN XSERVAFF=1;              *Army;
   ELSE IF SERVAFF='F' THEN XSERVAFF=2;      *Air Force;
```

```
      ELSE IF SERVAFF='N' THEN XSERVAFF=3;      *Navy;
      ELSE XSERVAFF=4;

   IF XTNEXREG = 1 THEN DO;
      IF XSERVAFF = 1 THEN XSERVREG = 1;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
      ELSE XSERVREG = 4;
   END;

   IF XTNEXREG = 2 THEN DO;
      IF XSERVAFF = 1 THEN XSERVREG = 5;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
      ELSE XSERVREG = 8;
   END;

   IF XTNEXREG = 3 THEN DO;
      IF XSERVAFF = 1 THEN XSERVREG = 9;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
      ELSE XSERVREG = 12;
   END;

   IF XTNEXREG = 4 THEN DO; /*JSO 08/24/2006, Changed Overseas Regions*/
      IF      XOCONUS = 1 THEN XSERVREG = 13;
      ELSE IF XOCONUS = 2 THEN XSERVREG = 14;
      ELSE IF XOCONUS = 3 THEN XSERVREG = 15;
   END;

   IF XTNEXREG IN (1,2,3) THEN TOTCON=1;

   ELSE IF XTNEXREG=4 THEN TOTCON=2;

   IF MPCSMPL = 3 THEN MPCSMPL = 2;  /* RSG 02/2006 GROUP WARRANT OFFICER WITH OFFICER */

   IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

   IF XTNEXREG = . THEN DELETE;

   IF XINS_COV NOT IN(1,2,3,6,9) THEN DELETE;  /*JSO 07/30/2007, Added 9*/

   NXNS_COV = XINS_COV;              /*JSO 04/26/2007 added for reservists logic*/
                                     /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
   IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
   IF DBENCAT IN('GRD','IGR') AND H07006 = 3 THEN DO;
      NXNS_COV = 3;
      XENR_PCM = .;
   END;

   IF HP_SMOKH IN (1,2) THEN DO;
      SM_RATE = 0;
      IF HP_SMOKH = 2 THEN SM_RATE=1;
      SM_RTDN=1;
   END;

   if hp_smokh=1 & H07055>0 then do;     /*RSG 02/2006 NEW SMOKING CESSATION FORMULA AS PER ERIC
SCHONE */
      if H07055>1 then sm_cess=1;
      else sm_cess=0;
      sm_csdn=1;
   end;

   IF xbmicat > 0  THEN DO;
       BMI = 0;
       BMI_DN=1;
      IF xbmicat <=3 THEN BMI=1;
   END;

   * prime enrollees;
   IF NXNS_COV IN (1,2,6) AND H07007>=2 THEN DO;
      GROUP=1;
      OUTPUT;
```

```
END;

* enrollees with military pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
   XENR_PCM IN (1,2,6) AND H07007>=2 THEN DO;
   GROUP=2;
   OUTPUT;
END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
   XENR_PCM IN (1,2) AND H07007>=2 THEN DO;
   GROUP=2;
   OUTPUT;
END;

* enrollees with civilian pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
   XENR_PCM = 3 AND H07007>=2 THEN DO;
   GROUP=3;
   OUTPUT;
END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
   ((XENR_PCM = 3 AND H07007>=2) OR NXNS_COV IN (3,9)) THEN DO; /*JSO 07/30/2007, Added 9*/
   GROUP=3;
   OUTPUT;
END;

* nonenrollees;
IF NXNS_COV IN (3,9) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
   GROUP=4;                   /*JSO 07/30/2007, Added 9*/
   OUTPUT;
END;

* active duty;
IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
   GROUP=5;        /*JSO 07/30/2007, added DBENCAT conditions*/
   OUTPUT;
END;

* active duty dependents;
IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN DO;
   GROUP=6;        /*JSO 07/30/2007, added DBENCAT conditions*/
   OUTPUT;
END;

* retirees;
IF XBNFGRP IN (3,4) THEN DO;
   GROUP=7;
   OUTPUT;
END;

* all beneficiaries;
GROUP=8;
OUTPUT;

RUN;

PROC SORT DATA=SMOKE;
BY TMP_CELL;
PROC SORT DATA=NORMDATA;
BY TMP_CELL;
RUN;

%MACRO A_SUDAAN(TABLEVAR,SMOKE,SMOKEVAR,DEN);

%IF %UPCASE(&TABLEVAR)=XSERVREG %THEN %DO;
    %LET ENDNUM=&REGNUM;
   %LET PREF=R;
%END;
%ELSE %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
    %LET ENDNUM=&CONNUM;
   %LET PREF=M;
%END;
%ELSE %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
```

```
    %LET ENDNUM=&CONNUM;
   %LET PREF=S;
%END;

%ELSE %IF %UPCASE(&TABLEVAR)=TOTCON %THEN %LET PREF=C;

%DO I = 1 %TO 8;

    DATA INDAT&I.(KEEP=&WGT XSERVAFF XSERVREG AGE_GRP XSEXA MPCSMPL
                      &SMOKEVAR. &DEN. TMP_CELL XTNEXREG);
   SET SMOKE;
    WHERE XSERVREG > 0 AND GROUP=&I. AND &DEN. >= 0;
       %IF %UPCASE(&TABLEVAR) = XSERVAFF %THEN %DO;
           IF XSERVAFF > 4 OR XSERVAFF = . THEN DELETE;
       %END;
      %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
          IF TOTCON NE 1 THEN DELETE;
      %END;
      %IF %UPCASE(&TABLEVAR) = XTNEXREG %THEN %DO;
          IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
      %END;
    RUN;


       DATA NORMDAT&I.(KEEP=&WGT XSERVAFF XSERVREG AGE_GRP XSEXA &SMOKEVAR. &DEN.
                           TMP_CELL XTNEXREG MPCSMPL);
           SET NORMDATA;
                WHERE XSERVREG > 0 AND GROUP=&I.;

                %IF %UPCASE(&TABLEVAR) = XSERVAFF %THEN %DO;
                    IF XSERVAFF > 4 OR XSERVAFF = . THEN DELETE;
                %END;
           %IF %UPCASE(&TABLEVAR) = XTNEXREG %THEN %DO;
               IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
           %END;

            RUN;

          %IF %UPCASE(&SMOKE) NE CS AND %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
                    PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
                    WEIGHT &WGT;
                    SETENV DECWIDTH=4;
                    NEST TMP_CELL / missunit;
                    VAR &SMOKEVAR;
                    TABLES AGE_GRP*XSEXA*MPCSMPL*&TABLEVAR.;
                    SUBGROUP AGE_GRP XSEXA MPCSMPL &TABLEVAR.;
                    LEVELS 8 2 2 &ENDNUM.;
                    OUTPUT  SEMEAN MEAN wsum nsum
                            / TABLECELL=DEFAULT REPLACE
                              FILENAME=&PREF.GRP&I.&SMOKE.;
                    RUN;
          %END;
          %ELSE %IF %UPCASE(&SMOKE) NE CS AND %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
                    PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
                    WEIGHT &WGT;
                    SETENV DECWIDTH=4;
                    NEST TMP_CELL / missunit;
                    VAR &SMOKEVAR;
                    TABLES AGE_GRP*XSEXA*MPCSMPL;
                    SUBGROUP AGE_GRP XSEXA MPCSMPL;
                    LEVELS 3 2 2;
                    OUTPUT  SEMEAN MEAN wsum nsum
                            / TABLECELL=DEFAULT REPLACE
                              FILENAME=&PREF.GRP&I.&SMOKE.;
                    RUN;
          %END;

   %IF %UPCASE(&SMOKE) NE CS %THEN %DO;

              DATA &PREF.SER_&I.&SMOKE.;
              SET &PREF.GRP&I.&SMOKE.;
              GROUP=&I.;
              IF SEMEAN NE .;
```

```
                %IF %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
                    KEEP &TABLEVAR. GROUP AGE_GRP XSEXA MPCSMPL SEMEAN MEAN wsum nsum;
                %END;
                %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
                    TOTCON=1;
                    KEEP TOTCON GROUP AGE_GRP XSEXA MPCSMPL SEMEAN MEAN wsum nsum;
                %END;
            RUN;

            /* CREATE WEIGHTS FROM 2005 DATA*/
            proc summary data=normdat&i. nway;
                  var &WGT;
                  where &den>0;
                  class age_grp xsexa MPCSMPL;
                  output out=norm_&i. sum=normwt;

                  proc sort data=&pref.ser_&i.&smoke.;
                  by age_grp xsexa mpcsmpl;

                  data &pref.ser_&i.&smoke.;
                  merge &pref.ser_&i.&smoke.(in=gin) norm_&i.;
                  by age_grp xsexa mpcsmpl;
                  if gin;
                  wsum=wsum/normwt;
                  nsum=nsum/normwt;
                  sesq=normwt*semean**2;
                  run;

                  proc summary data=&pref.ser_&i.&smoke. nway;
                  var mean semean sesq wsum nsum;
                  class &tablevar.;
                  weight normwt;
                  output    out=&pref.sert&i.&smoke.    mean(mean    sesq)=    sum(wsum    nsum)=
sumwgt(semean)=;
                  run;

            data &pref.sert&i.&smoke;
               set &pref.sert&i.&smoke;
               group=&i.;
                     semean=sqrt(sesq/semean);
               drop _type_ _freq_;
            run;

            %IF &I. = 1 %THEN %DO;

                DATA &PREF._&SMOKE.;
                SET &PREF.SERT&I.&SMOKE.;
                RUN;
            %END;
            %ELSE %DO;

                DATA &PREF._&SMOKE.;
                      SET &PREF._&SMOKE. &PREF.SERT&I.&SMOKE.;
                RUN;

                PROC SORT DATA=&PREF._&SMOKE.;
                BY GROUP;
                RUN;

            %END;

        %END;
            %IF %UPCASE(&SMOKE) = CS AND %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
                      PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
                      WEIGHT &WGT;
                      SETENV DECWIDTH=4;
                      NEST TMP_CELL / missunit;
                      VAR &SMOKEVAR;
                      TABLES AGE_GRP*XSEXA*&TABLEVAR.;
                      SUBGROUP AGE_GRP XSEXA &TABLEVAR.;
                      LEVELS 3 2 &ENDNUM.;
                      OUTPUT  SEMEAN MEAN wsum nsum
                              / TABLECELL=DEFAULT REPLACE
```

```
                        FILENAME=&PREF.GRP&I.&SMOKE.;
                 RUN;
        %END;
        %ELSE %IF %UPCASE(&SMOKE) = CS AND %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
                 PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
                 WEIGHT &WGT;
                 SETENV DECWIDTH=4;
                 NEST TMP_CELL / missunit;
                 VAR &SMOKEVAR;
                 TABLES AGE_GRP*XSEXA;
                 SUBGROUP AGE_GRP XSEXA;
                 LEVELS 3 2 ;
                 OUTPUT  SEMEAN MEAN wsum nsum
                         / TABLECELL=DEFAULT REPLACE
                           FILENAME=&PREF.GRP&I.&SMOKE.;
                 RUN;
        %END;

%IF %UPCASE(&SMOKE) = CS %THEN %DO;

           DATA &PREF.SER_&I.&SMOKE.;
           SET &PREF.GRP&I.&SMOKE.;
           GROUP=&I.;
           IF SEMEAN NE .;
           %IF %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
               KEEP &TABLEVAR. GROUP AGE_GRP XSEXA SEMEAN MEAN wsum nsum;
           %END;
           %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
               TOTCON=1;
               KEEP TOTCON GROUP AGE_GRP XSEXA SEMEAN MEAN wsum nsum;
           %END;
        RUN;

        /* CREATE WEIGHTS FROM 2005 DATA*/
        proc summary data=normdat&i. nway;
              var &WGT;
              where &den>0;
              class age_grp xsexa;
              output out=norm_&i. sum=normwt;

              proc sort data=&pref.ser_&i.&smoke.;
              by age_grp xsexa;

              data &pref.ser_&i.&smoke.;
              merge &pref.ser_&i.&smoke.(in=gin) norm_&i.;
              by age_grp xsexa;
              if gin;
              wsum=wsum/normwt;
              nsum=nsum/normwt;
              sesq=normwt*semean**2;
              run;

              proc summary data=&pref.ser_&i.&smoke. nway;
              var mean semean sesq wsum nsum;
              class &tablevar.;
              weight normwt;
              output    out=&pref.sert&i.&smoke.    mean(mean    sesq)=    sum(wsum    nsum)=
sumwgt(semean)=;
              run;

        data &pref.sert&i.&smoke;
           set &pref.sert&i.&smoke;
           group=&i.;
                 semean=sqrt(sesq/semean);
           drop _type_ _freq_;
        run;
```

```
        %IF &I. = 1 %THEN %DO;

        DATA &PREF._CESS;
        SET &PREF.SERT&I.&SMOKE.;
        RUN;
        %END;
        %ELSE %DO;

        DATA &PREF._CESS;
               SET &PREF._CESS &PREF.SERT&I.&SMOKE.;
             RUN;

        PROC SORT DATA=&PREF._CESS;
        BY GROUP;
        RUN;

        %END;

     %END;
%END;

%MEND;

%A_SUDAAN(XSERVAFF,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(XSERVAFF,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(XSERVAFF,BM,BMI,BMI_DN);
%A_SUDAAN(XSERVREG,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(XSERVREG,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(XSERVREG,BM,BMI,BMI_DN);
%A_SUDAAN(XTNEXREG,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(XTNEXREG,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(XTNEXREG,BM,BMI,BMI_DN);
%A_SUDAAN(TOTCON,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(TOTCON,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(TOTCON,BM,BMI,BMI_DN);

%MACRO ADDIT(PREF, TYPE);

DATA &PREF._&TYPE;
SET &PREF._&TYPE;
LENGTH BENEFIT $34. BENTYPE $50.;

BENEFIT="Healthy Behaviors";
    %IF &TYPE=RT %THEN %DO;
        BENTYPE="Non-Smoking Rate";
    %END;
    %IF &TYPE=CESS %THEN %DO;
        BENTYPE="Counselled To Quit";
    %END;
    %IF &TYPE = BM %THEN %DO;
        BENTYPE = "Percent Not Obese";
    %END;
RUN;

%MEND;

%ADDIT(C,RT);
%ADDIT(C,CESS);
%ADDIT(C,BM);
%ADDIT(M,RT);
%ADDIT(M,CESS);
%ADDIT(M,BM);
%ADDIT(R,RT);
%ADDIT(R,CESS);
%ADDIT(R,BM);
%ADDIT(S,RT);
%ADDIT(S,CESS);
%ADDIT(S,BM);


%MACRO MAKEDATA(PREF, TABLEVAR);
  DATA &PREF._SMOKE;
   SET &PREF._RT
```

```
       &PREF._CESS
       &PREF._BM
;

   LENGTH MAJGRP $30. REGION REGCAT $25.;

    IF      GROUP=1 THEN MAJGRP="Prime Enrollees            ";
    ELSE IF GROUP=2 THEN MAJGRP="Enrollees with Military PCM";
    ELSE IF GROUP=3 THEN MAJGRP="Enrollees with Civilian PCM";
    ELSE IF GROUP=4 THEN MAJGRP="Non-enrolled Beneficiaries ";
    ELSE IF GROUP=5 THEN MAJGRP="Active Duty                ";
    ELSE IF GROUP=6 THEN MAJGRP="Active Duty Dependents     ";
    ELSE IF GROUP=7 THEN MAJGRP="Retirees and Dependents    ";
    ELSE IF GROUP=8 THEN MAJGRP="All Beneficiaries          ";

   %IF &TABLEVAR = XSERVAFF %THEN %DO;
       IF XSERVAFF = 1 THEN REGION = 'ARMY';
       IF XSERVAFF = 2 THEN REGION = 'AIR FORCE';
       IF XSERVAFF = 3 THEN REGION = 'NAVY';
       IF XSERVAFF = 4 THEN REGION = 'OTHER';
   %END;

   %IF &TABLEVAR = XSERVREG %THEN %DO;
           REGION = PUT(XSERVREG,SERVREGO.); /*JSO 08/24/2006, Create new format for Overseas*/
   %END;

   %IF &TABLEVAR = XTNEXREG %THEN %DO;
        IF XTNEXREG=1 THEN REGION="NORTH";
       ELSE IF XTNEXREG=2 THEN REGION="SOUTH";
       ELSE IF XTNEXREG=3 THEN REGION="WEST";
       ELSE IF XTNEXREG=4 THEN REGION="OVERSEAS";
   %END;

   %IF &TABLEVAR = TOTCON %THEN %DO;
        REGION = "CONUS MHS";
   %END;


        REGCAT=REGION;
        DROP GROUP &TABLEVAR;

   IF &TABLEVAR NE 0;

   RUN;


%MEND MAKEDATA;

%MAKEDATA(M,XSERVAFF);
%MAKEDATA(C,TOTCON);
%MAKEDATA(R,XSERVREG);
%MAKEDATA(S,XTNEXREG);


DATA SMOKE;
SET M_SMOKE R_SMOKE S_SMOKE C_SMOKE;
SESQ = SEMEAN**2;
RENAME MEAN=SCORE wsum=n_wgt nsum=n_obs;
RUN;

/* CALCULATE COMPOSITE SCORE - AVERAGE RATE AND CESSATION*/

PROC SORT DATA=SMOKE;
BY MAJGRP REGION REGCAT;
RUN;

PROC SUMMARY DATA=SMOKE SUM;
BY MAJGRP REGION REGCAT;
VAR SCORE SESQ N_WGT N_OBS;
OUTPUT SUM= OUT=PRECOMP;
RUN;

DATA COMP(RENAME=(S_MEAN=SCORE S_SE=SEMEAN));
```

```
SET PRECOMP;
IF _FREQ_ = 3 THEN DO;
   S_MEAN=SCORE/3;
   S_SE=SQRT(SESQ)/3;
   N_OBS=round(N_OBS/3);
END;
ELSE DO;
   S_MEAN=.;
   S_SE=.;
END;
BENTYPE="Composite";
BENEFIT="Healthy Behaviors";
DROP _TYPE_ _FREQ_ SCORE SESQ;
RUN;

PROC SORT DATA=SMOKE;
BY MAJGRP BENTYPE;
RUN;

DATA BENCH;
SET SMOKE;
BY MAJGRP BENTYPE;
IF LAST.BENTYPE AND BENTYPE="Counselled To Quit" THEN DO;
   SCORE=&CNSLGOAL;
   SEMEAN=.;
   REGION="Benchmark";
   REGCAT="Benchmark";
   DROP N_WGT N_OBS;
   OUTPUT;
END;
ELSE IF LAST.BENTYPE AND BENTYPE="Non-Smoking Rate" THEN DO;
   SCORE=&NSMKGOAL;
   SEMEAN=.;
   REGION="Benchmark";
   REGCAT="Benchmark";
   DROP N_WGT N_OBS;
   OUTPUT;
END;
ELSE IF LAST.BENTYPE AND BENTYPE="Percent Not Obese" THEN DO;
   SCORE=&BMIGOAL;
   SEMEAN=.;
   REGION="Benchmark";
   REGCAT="Benchmark";
   DROP N_WGT N_OBS;
   OUTPUT;
   SCORE=(SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3;
   SEMEAN=.;
   REGION="Benchmark";
   REGCAT="Benchmark";
   BENTYPE="Composite";
   DROP N_WGT;
   OUTPUT;
END;
RUN;

PROC SORT DATA=SMOKE;
BY REGION BENTYPE;
RUN;

DATA BENCH2;
SET SMOKE;
BY REGION BENTYPE;
IF LAST.BENTYPE AND BENTYPE="Counselled To Quit" THEN DO;
   SCORE=&CNSLGOAL;
   SEMEAN=.;
   MAJGRP="Benchmark";
   DROP N_WGT N_OBS;
   OUTPUT;
END;
IF LAST.BENTYPE AND BENTYPE="Non-Smoking Rate" THEN DO;
   SCORE=&NSMKGOAL;
   SEMEAN=.;
   MAJGRP="Benchmark";
```

```
   DROP N_WGT;
   OUTPUT;
END;
IF LAST.BENTYPE AND BENTYPE="Percent Not Obese" THEN DO;
   SCORE=&BMIGOAL;
   SEMEAN=.;
   MAJGRP="Benchmark";
   DROP N_WGT;
   OUTPUT;
   SCORE=(SUM(&CNSLGOAL, &NSMKGOAL, &BMIGOAL))/3;
   SEMEAN=.;
   MAJGRP="Benchmark";
   BENTYPE="Composite";
   DROP N_WGT N_OBS;
   OUTPUT;
END;
RUN;

DATA SIG1;
SET SMOKE COMP;
IF BENTYPE='Non-Smoking Rate' THEN DO;
   IF SEMEAN > 0 THEN TSTAT=(SCORE-&NSMKGOAL)/SEMEAN;
   ELSE TSTAT=.;
   IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
   ELSE PVAL=.;

   IF PVAL GE 0.05 THEN SIG=0;
   ELSE IF PVAL < 0.05 THEN DO;
      IF SCORE > &NSMKGOAL THEN SIG = 1;
     ELSE IF SCORE < &NSMKGOAL THEN SIG = -1;
   END;
END;
IF BENTYPE='Counselled To Quit' THEN DO;
   IF SEMEAN > 0 THEN TSTAT=(SCORE-&CNSLGOAL)/SEMEAN;
   ELSE TSTAT=.;
   IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
   ELSE PVAL=.;
   IF PVAL GE 0.05 THEN SIG=0;
   ELSE IF PVAL < 0.05 THEN DO;
      IF SCORE > &CNSLGOAL THEN SIG = 1;
     ELSE IF SCORE < &CNSLGOAL THEN SIG = -1;
   END;
END;
IF BENTYPE='Percent Not Obese' THEN DO;
   IF SEMEAN > 0 THEN TSTAT=(SCORE-&BMIGOAL)/SEMEAN;
   ELSE TSTAT=.;
   IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
   ELSE PVAL=.;
   IF PVAL GE 0.05 THEN SIG=0;
   ELSE IF PVAL < 0.05 THEN DO;
      IF SCORE > &BMIGOAL THEN SIG = 1;
     ELSE IF SCORE < &BMIGOAL THEN SIG = -1;
   END;
END;
IF BENTYPE='Composite' THEN DO;
   IF SEMEAN > 0 THEN TSTAT=(SCORE-((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3))/SEMEAN;
   ELSE TSTAT=.;
   IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
   ELSE PVAL=.;
   IF PVAL GE 0.05 THEN SIG=0;
   ELSE IF PVAL < 0.05 THEN DO;
      IF SCORE > ((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3) THEN SIG = 1;
     ELSE IF SCORE <((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3) THEN SIG = -1;
   END;
END;

DROP TSTAT PVAL;
RUN;

DATA SMOKE_ALL;
SET SIG1 BENCH BENCH2;
TIMEPD="&CURRENT.";
RUN;
```

```
PROC SORT DATA=SMOKE_ALL OUT=OUT.SMOKE;
BY MAJGRP REGION REGCAT BENTYPE;
RUN;
```

G.4.C Q4FY2007\PROGRAMS\REPORTCARDS\MPR_ADULTQ4FY2007\LOADMPRQ.SAS - CONVERT THE MPR SCORES DATABASE INTO THE WEB LAYOUT - RUN QUARTERLY.

```
***************************************************************************
*
*  Project:   DoD Reporting and Analysis 6077-410
*  Program:   LOADMPRQ.SAS
*  Purpose:   Calculate MPR Preventive Care Composites
*  Date:      4/07/2000
*  Author:    Chris Rankin
*
*  Modified:  1) 05-08-2001 By Keith Rathbun, Added SEMEAN to LOADMPRQ.SD2
*                to accommodate the Short Reports.  Condensed some code.
*             2) 07-15-2002 By Mike Scott, Changed PERIOD to = "April, 2001
*                to March, 2002".
*             3) 03-21-2003 By Mike Scott, Changed PERIOD to = "January, 2001
*                to December, 2002".
*             4) 04-30-2003 By Mike Scott, Changed CMPNUM1 from 4 to 5, and
*                changed the upper limits of both DO loops from 5 to 6 because
*                of the addition of Cholesterol Testing.
*             5) 06-23-2003 By Mike Scott, Changed setting BENTYPE from &PERIOD
*                to Composite.  Added TIMEPD variable.
*             6) 06-26-2003 By Mike Scott, Updated for Q2 2003.
*             7) 10-21-2003 By Mike Scott, Updated for Q3 2003.
*             8) 01-07-2004 By Mike Scott, Updated for Q4 2003.
*             9) 03-24-2004 By Mike Scott, Updated for Q1 2004.
*            10) 06-22-2004 By Regina Gramss, Updated for Q2 2004.
*            11) 09/2004    By Regina Gramss, Updated for Q3 2004.
*            12) 01/2005    By Regina Gramss, Replaced XTNEXREG with XSERVREG
*                to produce "last conus_q" for Q4 2005
*            13) 12/2005    By Regina Gramss, Updated for Q4 2005.
*            14) 03/24/2006 By Keith Rathbun, Updated for Q2 FY 2006.
*                %LET PERIOD = January, 2006 was the only change.
*            15) 07/12/2006 By Justin Oh, Updated for Q3 FY 2006.
*            16) 08/24/2006 By Justin Oh, change DO REG = 1 TO 15 from 1 TO 16.
*            17) 10/04/2006 By Justin Oh, Updated %LET PERIOD.
*            18) 12/20/2006 By Justin Oh, Updated %LET PERIOD October, 2006.
*            19) 04/05/2007 By Justin Oh, Updated %LET PERIOD January, 2007.
*            20) 06/22/2007 By Keith Rathbun, Updated %LET PERIOD April, 2007.
*            21) 09/04/2007 By Justin Oh, Updated %LET PERIOD July, 2007.
*
*   Input:    1) RFINAL.SD2
*             2) CFINAL.SD2
*             3) MFINAL.SD2
*             4) SFINAL.SD2
*             5) SMOKE.SD2
*
*   Output:   loadmprq.sd2
*
*   Note:     ***CHECK COMPNUM AND CMPNUM1 ASSIGNMENTS AND UPPER LIMIT OF DO LOOPS***
*
***************************************************************************;

OPTIONS COMPRESS=YES NOCENTER LS=124 PS=74 SOURCE SOURCE2;

LIBNAME INLIB V612 ".";
LIBNAME OUT   V612 ".";
LIBNAME LIBRARY    "..\..\..\Data\Afinal\fmtlib";

%LET CMPNUM1=4; /*** number of questions in first composite ***/ /*RSG 04/2005 Changed 5 to 4*/

%LET PERIOD = July, 2007;
%INCLUDE "..\..\LOADWEB\LOADCAHQ.INC";

*************************************************************;
*** Note -- take out access to care questions and composite ***;
*************************************************************;

data mfinal(keep=cpbmk1 compress=no);
  set inlib.mfinal(keep=majgrp cpbmk1) INLIB.CFINAL (KEEP=MAJGRP CPBMK1);
  where majgrp="All Beneficiaries";    /*RSG 02/2005 Include CONUS MHS data*/
run;
```

```
     data mfinal;
       if _n_=1 then set mfinal;
       set inlib.mfinal(drop=cpbmk1) INLIB.CFINAL(DROP=CPBMK1) ;
     run;

     proc sort data=mfinal;        /*RSG 01/2005 - Added code to select only 1 record per majgrp */
     by majgrp;                         /*using xservreg, there are now 4 conus areas which caused
duplicate benchmark calcs */
     data mfinal;
     set mfinal;
     by majgrp;
     if first.majgrp;
     run;

     *************************;
     ***** Benchmarks       **;
     *************************;

     DATA BENCHMKS(KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SIG);
          FORMAT   MAJGRP  $30. REGION  $25. REGCAT $26.    /** RSG 01/2005 Increase region format
to accommodate service affiliation **/
                   BENEFIT $34. BENTYPE $50. TIMEPD $35.;   ***MJS 06/23/03 Added TIMEPD;
       SET MFINAL;

       ARRAY BENCHMK{*} GOALVAR1-GOALVAR&CMPNUM1 CPBMK1;
       DO I = 1 TO 5;   ***RSG 04/2005 Changed 6 to 5;
          SCORE   = BENCHMK{I}*100;
          SIG     = .;
          REGION  = "Benchmark";
          REGCAT  = "Benchmark";
          BENEFIT = "Preventive Care";
          IF      I = 1 THEN BENTYPE = "Prenatal Care";
          ELSE IF I = 2 THEN BENTYPE = "Mammography";
          ELSE IF I = 3 THEN BENTYPE = "Pap Smear";
          ELSE IF I = 4 THEN BENTYPE = "Hypertension";
          /*RSG 04/2005 DELETED CHOLESTEROL*/
          ELSE IF I = 5 THEN BENTYPE = "Composite";   ***MJS 06/23/03 Changed &PERIOD to Composite;
          TIMEPD = "&PERIOD";   ***MJS 06/23/03 Added line;
          OUTPUT;
       END;
       DROP I;
     RUN;

     DATA BENCHMKS;
       SET BENCHMKS;
       OUTPUT;
       IF MAJGRP = "All Beneficiaries" THEN DO;
          DO REG = 1 TO 15; DROP REG; /*JSO 08/24/2006, Changed Regions, 16 to 15*/
                MAJGRP = "Benchmark";
                REGION = PUT(REG,SERVREGO.);
                REGCAT = PUT(REG,SERVREGO.);
                OUTPUT;
          END;
          DO SERV = 1 TO 4; DROP SERV;
              MAJGRP = "Benchmark";
              REGION = PUT(SERV,XSERVAFF.);
              REGCAT = PUT(SERV,XSERVAFF.);
              OUTPUT;
          END;

         MAJGRP = "Benchmark";
         REGION = 'CONUS MHS';
         REGCAT = 'CONUS MHS';
         OUTPUT;
         MAJGRP = "Benchmark";
         REGION = 'NORTH';
         REGCAT = 'NORTH';
         OUTPUT;
         MAJGRP = "Benchmark";
         REGION = 'SOUTH';
         REGCAT = 'SOUTH';
         OUTPUT;
```

```
        MAJGRP = "Benchmark";
        REGION = 'WEST';
        REGCAT = 'WEST';
        OUTPUT;
        MAJGRP = "Benchmark";
        REGION = 'OVERSEAS';
        REGCAT = 'OVERSEAS';
        OUTPUT;
      END;
    RUN;

    PROC FREQ DATA=BENCHMKS;
       TABLES MAJGRP/MISSING LIST;
    RUN;

    *************************;
    *****  Scores          **;
    *************************;

    DATA SCORES(KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SEMEAN SIG N_OBS N_WGT);
         FORMAT MAJGRP  $30. REGION  $25. REGCAT $26.    /** RSG 01/2005 Increase region format to
accommodate service affiliation **/
                BENEFIT $34. BENTYPE $50. TIMEPD $35.;   ***MJS 06/23/03 Added TIMEPD;
      SET INLIB.MFINAL INLIB.CFINAL
          INLIB.RFINAL INLIB.SFINAL;


      ARRAY SEMEANS{*} SERRV1-SERRV&CMPNUM1.  CP1SE ;
      ARRAY  SCORES{*} SCORV1-SCORV&CMPNUM1.  CSCOR1;
      ARRAY  SIGNIF{*} SIGV1-SIGV&CMPNUM1.    CPSIG1;
      ARRAY   NOBS {*} NOBSV1-NOBSV&CMPNUM1.  CPOBS1;
      ARRAY   NWGT {*} DENV1-DENV&CMPNUM1     CPDEN1;

      DO I = 1 TO 5;   ***RSG 04/2005 Changed 6 to 5;
         SCORE   = SCORES{I};
         SEMEAN  = SEMEANS{I};
         SIG     = SIGNIF{I};
         N_OBS   = NOBS{I};
         N_WGT   = NWGT{I};
         BENEFIT = "Preventive Care";
         IF      I = 1 THEN BENTYPE = "Prenatal Care";
         ELSE IF I = 2 THEN BENTYPE = "Mammography";
         ELSE IF I = 3 THEN BENTYPE = "Pap Smear";
         ELSE IF I = 4 THEN BENTYPE = "Hypertension";
         /*RSG 04/2005 DELETED CHOLESTEROL*/
         ELSE IF I = 5 THEN BENTYPE = "Composite";   ***MJS 06/23/03 Changed &PERIOD to Composite;
         TIMEPD = "&PERIOD";   ***MJS 06/23/03 Added line;
         OUTPUT;
      END;
    RUN;

    DATA LOADMPRQ (KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SEMEAN SIG
                           N_OBS N_WGT);
    SET BENCHMKS SCORES INLIB.SMOKE;
    RUN;

    PROC SORT DATA=LOADMPRQ OUT=OUT.LOADMPRQ;
    BY MAJGRP REGION;
    RUN;
```

G.5.A Q4FY2007\PROGRAMS\LOADWEB\FAKEQ.SAS - GENERATE THE WEB LAYOUT/TEMPLATE FILE - RUN QUARTERLY.

```
*************************************************************************
* PROJECT:  DOD Quarterly Survey, Consumer Reports (6077-410)
* PROGRAM:  FAKEQ.SAS
* PURPOSE:  Generate Fake Data for Report Cards
* AUTHOR:   Mark A. Brinkley
*
* MODIFIED: 1) July 2000 By Eric Schone to utilize CACRPT and CATREP
*              include files.
*           2) February 2001 By Keith Rathbun - More updates for
*              Quarterly report card format.  Made FAKE datastep into
*              a macro to handle multiple quarters.  Added QTR and
*              PERIOD parameters.
*           3) July 2001 By Mark Brinkley - Updated for
*              Quarterly 2 reports
*           4) April 2002 By Keith Rathbun - Updated DSN and %LET
*              statements for 2002 reports and added TREND records.
*              Removed Flu Shot.
*           5) July 2002 By Mike Scott - Updated DSN and %LET statements
*              for Q2 2002 reports.
*           6) March 2003 By Mike Scott - Updated for 2003 survey.
*           7) June 2003 By Mike Scott - Added TIMEPD variable to be set to the period
*              or 'Trend'.  Changed from setting BENTYPE to the period or 'Trend' to
*              setting to 'Composite'.  Updated for Q2 2003.
*           8) July 2003 BY Mike Scott - Above for K=7 through 10 in loop DO K=0 TO 11.
*              Added LOADCAHQ.INC.
*           9) October 2003 By Mike Scott - Updated for Q3 2003.
*          10) January 2004 By Mike Scott - Updated for Q4 2003.
*          11) March 2004 By Mike Scott - Updated for Q1 2004.
*          12) June 2004 By Regina Gramss - Updated for Q2 2004.
*             13) September 2004 By Regina Gramss - Updated for Q3 2004, to use XTNEXREG vs
XREGION
*          14) January 2005 By Regina Gramss - Prepare "Last Conus_q" for Q4 2005
*              replace XTNEXREG with XSERVREG
*          15) April 2005 By Regina Gramss - Update for Q1 2005, delete cholesterol
*              bentype and include Healthy Behaviors composite and BMI bentype.
*          16) July 2005 By Regina Gramss - Update for Q2 2005.
*          17) October 2005 By Regina Gramss - Updated for Q3 2005
*          18) December 2005 By Regina Gramss - Updated for Q4 2005
*          19) March 2006 By Keith Rathbun - Updated for Q2 FY 2006
*          20) July 2006 By Justin Oh - Updated for Q3 FY 2006
*          21) 08/22/2006 By Justin Oh - Changed XSERVREG for Overseas
*          22) 10/03/2006 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS063_1 to HCS064_1 for Q4FY2006 reports.
*          23) 02/02/2006 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS064_1 to HCS071_1 for Q4FY2006 reports.
*          24) 04/05/2007 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS071_1 to HCS072_1 for Q4FY2006 reports.
*          25) 06/22/2007 By Keith Rathbun - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS072_1 to HCS073_1 for Q3FY2007 reports.
*          26) 09/05/2007 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*              Changed input data HCS073_1 to HCS074_1 for Q4FY2007 reports.
*
* INCLUDES: 1) CACRPT.INC - Report Card Catchment Definitions
*           2) CATREP.INC - Report Card Catchment Format Defns
*
*************************************************************************;
%LET NUMQTR = 5;   ***MJS 06/18/03 Changed 4 to 5;

%LET PERIOD1 = October, 2006;
%LET PERIOD2 = January, 2007;
%LET PERIOD3 = April, 2007;
%LET PERIOD4 = July, 2007;

%LET PERIOD5 = Trend;   ***MJS 06/18/03 Added line;

%INCLUDE "LOADCAHQ.INC";   ***MJS 07/07/03 Added;

LIBNAME OUT V612 ".";
LIBNAME IN  V612 "..\..\Data\AFinal";
```

```
LIBNAME LIBRARY  "..\..\Data\AFinal\fmtlib";

OPTIONS COMPRESS=YES NOFMTERR;

*************************************************************************
* CREATE TEMPORARY DATASET FOR RECODING CACSMPL TO BE COLLAPSED FOR
* REPORT CARD PURPOSES
* FOR QUARTERLY REPORTS CATCHMENT LEVEL REPORTING IS NOT DONE
* AND THEREFORE THE VALUE OF CELLP IS SET TO 1
* FOR ANNUAL REPORTING PURPOSES
* CELLP WILL NEED TO BE ASSIGNED TO GEOCELL (KEEP GEOCELL ON INPUT)
*************************************************************************;

DATA TEMP;
  SET IN.HCS074_1;
   CELLP=1;
   ***********************************************************************
   * CODE FOR XSERVREG FROM XTNEXREG
   ***********************************************************************;
    IF SERVAFF='A' THEN XSERVAFF=1;              *Army;
       ELSE IF SERVAFF='F' THEN XSERVAFF=2;      *Air Force;
       ELSE IF SERVAFF='N' THEN XSERVAFF=3;      *Navy;
       ELSE XSERVAFF=4;


    IF XTNEXREG = 1 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 1;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
      ELSE XSERVREG = 4;
   END;

    IF XTNEXREG = 2 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 5;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
      ELSE XSERVREG = 8;
   END;

    IF XTNEXREG = 3 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 9;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
      ELSE XSERVREG = 12;
   END;


    IF XTNEXREG = . THEN DELETE;

RUN;

proc freq;
table xservreg*cacsmpl/ noprint out=temp;
run;

data temp2;
length cafmt $26;
set temp end=last;
by xservreg;
  caf=0;
where cacsmpl ne 9999;
  if first.xservreg then do; /* took out condition for xregion= 8 since useing xservreg now */
    cafmt=put(xservreg,servregf.);
    output;
  end;
  cafmt=put(cacsmpl,catrep.);
  caf=1;
  if count>60 & cafmt ne 'INV' then output;
  if last then do;
    xservreg=0;
    caf=0;
    cafmt='Benchmark';
   output;
```

```
        /** RSG 01/2005 Add in codes for service affiliation categories **/


   caf=1;

   xservreg=13;
   cafmt='Overseas Europe';
   output;
  xservreg=14;
   cafmt='Overseas Pacific';
   output;
  xservreg=15;
   cafmt='Overseas Latin America';
   output;
xservreg=16;
  cafmt = 'ARMY';
   output;
   xservreg=17;
   cafmt = 'AIR FORCE';
   output;
   xservreg=18;
   cafmt = 'NAVY';
   output;
   xservreg=19;
   cafmt = 'OTHER';
   output;
   xservreg=20;
   cafmt = 'NORTH';
   output;
   xservreg=21;
   cafmt = 'SOUTH';
   output;
   xservreg=22;
   cafmt = 'WEST';
   output;
   xservreg=23;
   cafmt = 'OVERSEAS';
   output;
   xservreg=24;
   cafmt = 'CONUS MHS';
   output;
   xservreg=25;
   cafmt = 'Europe Army';
   output;
   xservreg=26;
   cafmt = 'Europe Air Force';
   output;
   xservreg=27;
   cafmt = 'Europe Navy';
   output;
   xservreg=28;
   cafmt = 'Europe Other';
   output;
   xservreg=29;
   cafmt = 'Pacific Army';
   output;
   xservreg=30;
   cafmt = 'Pacific Air Force';
   output;
   xservreg=31;
   cafmt = 'Pacific Navy';
   output;
   xservreg=32;
   cafmt = 'Pacific Other';
   output;
   xservreg=33;
   cafmt = 'Latin America Army';
   output;
   xservreg=34;
   cafmt = 'Latin America Force';
   output;
   xservreg=35;
```

```
   cafmt = 'Latin America Navy';
   output;
   xservreg=36;
   cafmt = 'Latin America Other';
   output;
  end;
run;

/*RSG 04/2005 order region groups the way it should appear in reports*/
data temp3 (rename=(temp_r=xservreg));
   set temp2;
if      xservreg=0  then temp_r=1;
else if xservreg=24 then temp_r=2;
else if xservreg=16 then temp_r=3;
else if xservreg=18 then temp_r=4;
else if xservreg=17 then temp_r=5;
else if xservreg=19 then temp_r=6;
else if xservreg=20 then temp_r=7;
else if xservreg=1  then temp_r=8;
else if xservreg=3  then temp_r=9;
else if xservreg=2  then temp_r=10;
else if xservreg=4  then temp_r=11;
else if xservreg=21 then temp_r=12;
else if xservreg=5  then temp_r=13;
else if xservreg=7  then temp_r=14;
else if xservreg=6  then temp_r=15;
else if xservreg=8  then temp_r=16;
else if xservreg=22 then temp_r=17;
else if xservreg=9  then temp_r=18;
else if xservreg=11 then temp_r=19;
else if xservreg=10 then temp_r=20;
else if xservreg=12 then temp_r=21;
else if xservreg=23 then temp_r=22;
else if xservreg=13 then temp_r=23;
else if xservreg=14 then temp_r=24;
else if xservreg=25 then temp_r=25;
else if xservreg=26 then temp_r=26;
else if xservreg=27 then temp_r=27;
else if xservreg=28 then temp_r=28;
else if xservreg=29 then temp_r=29;
else if xservreg=30 then temp_r=30;
else if xservreg=31 then temp_r=31;
else if xservreg=32 then temp_r=32;
else if xservreg=33 then temp_r=33;
else if xservreg=34 then temp_r=34;
else if xservreg=35 then temp_r=35;
else if xservreg=36 then temp_r=36;
drop xservreg;
run;

proc sort;
by xservreg caf cafmt;
run;

data temp4;
set temp3 end=last;

start=_n_;
label=cafmt;
type='N';
fmtname='ROWMAT';
if last then call symput('x',_n_);

run;

proc format cntlin=temp4;

proc print data=temp4;
run;

%MACRO FAKE;
DATA FAKE;
```

```
      KEEP MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD I K;   ***MJS 06/18/03 Added TIMEPD;

      LENGTH MAJGRP  $ 30
             REGION  $ 25    /*RSG 01/2005 lengthen format to fit service affiliation*/
             REGCAT  $ 26
             BENTYPE $ 50
             TIMEPD  $ 35;   ***MJS 06/18/03 Added TIMEPD;



      DO I=1 TO 8;             ** 8 Major groups **;

         MAJGRP=PUT(I,MAJOR.);

         DO J=1 TO &x;        ** Region/catchment **;

         REGCAT=PUT(J,ROWMAT.);
         RETAIN REGION;

         **RSG 01/2005 Change code to fit XSERVREG values**;
         IF SUBSTR(REGCAT,1,8) IN ('Benchmar','Overseas','OVERSEAS') OR
           SUBSTR(REGCAT,1,5)       IN       ('Pacif','Europ','Latin','CONUS','North','South','West
','NORTH','SOUTH','WEST') OR
                REGCAT IN ('ARMY','AIR FORCE','NAVY','OTHER') THEN REGION=REGCAT;


            DO K=1 TO 12;      ** 12 Benefits **;  /*** 12-13 MAB ***/

              BENEFIT=PUT(K,BEN.);

              IF K=1 THEN DO;
                  DO L=1 TO 5;                   ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                      BENTYPE=PUT(L,GETNCARE.);   ***that replaced BENTYPE hard assignment;
                      %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                          TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                      %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                  END;
              END;
              ELSE IF K=2 THEN DO;
                  DO L=1 TO 5;                   ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                      BENTYPE=PUT(L,GETCAREQ.);   ***that replaced BENTYPE hard assignment;
                      %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                          TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                      %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                  END;
              END;
              ELSE IF K=3 THEN DO;
                  DO L=1 TO 3;                   ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                      BENTYPE=PUT(L,CRTSHELP.);   ***that replaced BENTYPE hard assignment;
                      %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                          TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                      %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                  END;
              END;
              ELSE IF K=4 THEN DO;
                  DO L=1 TO 5;                   ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                      BENTYPE=PUT(L,HOWWELL.);   ***that replaced BENTYPE hard assignment;
                      %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                          TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                      %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                  END;
              END;
              ELSE IF K=5 THEN DO;
                  DO L=1 TO 4;                   ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                      BENTYPE=PUT(L,CUSTSERV.);   ***that replaced BENTYPE hard assignment;
                      %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                          TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                      %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
```

```
                END;
            END;
            ELSE IF K=6 THEN DO;
                DO L=1 TO 3;                    ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                    BENTYPE=PUT(L,CLMSPROC.);   ***that replaced BENTYPE hard assignment;
                    %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                    %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                END;
            END;
            ELSE IF K=7 THEN DO;
                %DO Q = 1 %TO &NUMQTR;
                    BENTYPE = "Composite";   ***MJS 07/07/03 Added;
                    TIMEPD  = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/    ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
                %END;                        ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
            END;
            ELSE IF K=8 THEN DO;
                %DO Q = 1 %TO &NUMQTR;
                    BENTYPE = "Composite";   ***MJS 07/07/03 Added;
                    TIMEPD  = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/    ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
                %END;                        ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
            END;
            ELSE IF K=9 THEN DO;
                %DO Q = 1 %TO &NUMQTR;
                    BENTYPE = "Composite";   ***MJS 07/07/03 Added;
                    TIMEPD  = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/    ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
                %END;                        ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
            END;
            ELSE IF K=10 THEN DO;
                %DO Q = 1 %TO &NUMQTR;
                    BENTYPE = "Composite";   ***MJS 07/07/03 Added;
                    TIMEPD  = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/    ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
                %END;                        ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
            END;
            ELSE IF K=11 THEN DO;
                DO L=1 TO 5;                    ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                    BENTYPE=PUT(L,PREVCARE.);   ***that replaced BENTYPE hard assignment;
                    %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed
BENTYPE to TIMEPD;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                    %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                END;
        END;
            ELSE IF K=12 THEN DO;            ***RSG 02/2005 Added for smoking scores.;
                DO M=1 TO 4;
                    BENTYPE=PUT(M,SMOKEF.);
                    %DO Q = 1 %TO &NUMQTR;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT;
                    %END;
                END;
            END;
          END;
        END;
      END;
    RUN;
    %MEND FAKE;
    %FAKE;


    /*** 12-13 MAB ***/
    /*** Since quarterly files won't have catchment level data then delete ***/
    DATA FAKE;
      SET FAKE;
      IF REGION=REGCAT;
```

```
RUN;

/*** 12-13 MAB ***/
/*** Need to create single benchmarks for ALL major groups ***/
DATA EXTRA;
  SET FAKE;
  IF MAJGRP="Prime Enrollees" AND REGION=REGCAT AND REGION^="Benchmark";
  MAJGRP="Benchmark";
RUN;
/*** Combine extra data with fake ***/
DATA FAKE;
  SET EXTRA FAKE;
RUN;

/*** Need to clean up data ***/
DATA OUT.FAKEQ;
  SET FAKE;

  /*** Need to set oddball records to missing ***/
  IF REGION="Benchmark" THEN SIG=.;
  if region=''|compress(regcat)='.' then delete;

  /*** Don't populate catchment areas for 4 major groups ***/
  *IF I IN(3,4,6,7) AND REGION^=REGCAT THEN DELETE;         /*** 12-13 MAB ***/

  DROP I K;

RUN;


PROC FREQ;
  TABLES MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG;   ***MJS 07/21/03 Added TIMEPD;
RUN;


ENDSAS;
```

G.5.B Q4FY2007\PROGRAMS\LOADWEB\MERGFINQ.SAS - MERGE THE FINAL CAHPS AND MPR SCORES DATABASES INTO THE WEB LAYOUT - RUN QUARTERLY.

```
*************************************************************************
*
* PROGRAM:  MERGFINQ.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
* PURPOSE:  Merge the final CAHPS and MPR Scores Databases
*           into the WEB layout preserving the order of the FAKEQ.SD2.
*
* WRITTEN:  11/09/2000 BY KEITH RATHBUN, Adapted from MERGFINL.SAS.
*
* INPUTS:   1) MPR and CAHPS Individual and Composite data sets with adjusted
*              scores, and benchmark data for quarterly DoD HCS.
*              - LOADMPRQ.SD2 - MPR Scores Database
*              - LOADCAHQ.SD2 - CAHPS Scores Database
*              - BENCHA04.SD2 - CAHPS Benchmark Database
*              - FAKEQ.SD2    - WEB Layout in Column order
*
* OUTPUT:   1) MERGFINQ.SD2 - Combined Scores Database in WEB layout
*
* INCLUDES: 1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*              and composite data sets
*
* MODIFIED: 1) 07/15/2002 by Mike Scott: Updated libnames for Q2 2002.
*           2) 03/21/2003 by Mike Scott: Updated for 2003 survey.
*           3) 07/09/2003 by Mike Scott: Updated for Q2 2003.  Added TIMEPD to KEYs.
*           4) 07/23/2003 by Mike Scott: Added TIMEPD to FREQs and PRINT.
*           5) 10/21/2003 by Mike Scott: Updated for Q3 2003.
*           6) 01/07/2004 by Mike Scott: Updated for Q4 2003.
*           7) 03/24/2004 by Mike Scott: Updated for Q1 2004.
*           8) 06/22/2004 by Regina Gramss: Updated for Q2 2004.
*           9) 09/2004    by Regina Gramss: Updated for Q3 2004, Use XTNEXREG vs XREGION
*          10) 01/2005    by Regina Gramss: Changed XTNEXREG to XSERVREG to compile
*              "Last conus_q" for Q4 2005
*          11) 04/2005    by Regina Gramss: Updated for Q1 2005
*          12) 07/2005    by Regina Gramss: updated for Q2 2005
*          13) 10/2005    by Regina Gramss: Updated for Q3 2005
*          14) 12/2005    by Regina Gramss: Updated for Q4 2005
*          15) 07/2006    by Justin Oh: Updated for Q3 FY 2006
*          16) 08/22/2006 by Justin Oh: Change DO REG = 1 TO 15 from 1 TO 16
*          17) 10/03/2006 by Justin Oh - Changed libname in2 and in3 for Q4FY2006.
*          18) 12/20/2006 by Justin Oh - Changed libname in2 and in3 for Q1FY2007.
*          19) 04/05/2007 by Justin Oh - Changed libname in2 and in3 for Q2FY2007.
*          20) 04/05/2007 by Justin Oh - Added %LET RCTYPE to select RC types
*              ReportCards OR PurchasedReportCards.
*          21) 04/05/2007 by Justin Oh - Added %LET BCHTYPE to select BCH types
*              Benchmark OR PurchasedBenchmark.
*          22) 09/05/2007 by Justin Oh - Changed libname in2 and in3 for Q4FY2007.
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*  - STEP1Q.SAS      - Recode questions and generate CAHPS group files
*  - STEP2Q.SAS      - Calculate CAHPS individual adjusted scores for groups 1-7
*  - COMPOSIT.SAS    - Calculate composite adjusted scores for group 1-8
*  - PRVCOMPQ.SAS    - Calculate MPR individual and composite scores
*  - BENCHA01-04.SAS - Convert Benchmark Scores into WEB layout
*  - LOADCAHQ.SAS    - Convert Quarterly CAHPS Scores Database into WEB layout
*  - LOADMPRQ.SAS    - Convert Quarterly MPR Scores Database into WEB layout
*
* 2) The output file (MERGFINQ.SD2) will be run through the
*    MAKEHTMQ.SAS program to generate the WEB pages.
*
*************************************************************************
* Assign data libraries and options
*************************************************************************;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards                ***/
%LET RCTYPE = ReportCards;
/*** SELECT PROGRAM - Benchmark OR PurchasedBenchmark                    ***/
%LET BCHTYPE = Benchmark;
```

```
LIBNAME IN1 v612 ".";
LIBNAME IN2 v612 "CAHPS_ADULTQ4FY2007\Data";
LIBNAME IN3 v612 "..\&RCTYPE\MPR_AdultQ4FY2007";
LIBNAME IN4 v612 "..\&BCHTYPE\Data";
LIBNAME OUT v612 ".";
LIBNAME LIBRARY   "..\..\DATA\AFINAL\FMTLIB";

OPTIONS PS=79 LS=232 COMPRESS=YES NOCENTER;   ***MJS 07/23/03 Changed LS from 132;

%INCLUDE "LOADCAHQ.INC";

*************************************************************************
* Construct ORDERing variable from WEB layout
*************************************************************************;
DATA ORDER;
   SET IN1.FAKEQ;
   ORDER = _N_;
   LENGTH KEY $200;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/09/03 Added TIMEPD;
   KEEP KEY ORDER;
RUN;

PROC SORT DATA=ORDER; BY KEY; RUN;

*************************************************************************
* Merge the Scores Databases
*************************************************************************;
DATA MERGFINQ;
   SET IN2.LOADCAHQ(IN=INCAHPQ)
       IN3.LOADMPRQ(IN=INMPRQ )
       IN4.BENCHA04(IN=INBENQ );
   SVCAHPQ = INCAHPQ;
   SVMPRQ  = INMPRQ;
   SVBENQ  = INBENQ;
   LENGTH KEY $200;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/09/03 Added TIMEPD;
   KEYLEN=LENGTH(KEY);
   KEYTEST=LENGTH(BENEFIT)+LENGTH(BENTYPE)+LENGTH(MAJGRP)+LENGTH(REGION)+LENGTH(TIMEPD);
   OUTPUT;
   IF INBENQ THEN DO;
      IF MAJGRP = "All Beneficiaries" THEN DO;
         DO REG = 1 TO 24; DROP REG;  /*JSO 08/24/2006, Changed Regions, 16 to 24*/
               MAJGRP = "Benchmark";
               REGION = PUT(REG,SERVREGF.);
               REGCAT = PUT(REG,SERVREGF.);
               KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                     UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                     UPCASE(TRIM(REGION))   ||  UPCASE(TRIM(TIMEPD));     ***MJS  07/09/03  Added
TIMEPD;
               OUTPUT;
         END;
         DO SERV = 1 TO 4; DROP SERV;                              ****RSG 02/2005 Add in serv
affiliation;
               MAJGRP = "Benchmark";
               REGION = PUT(SERV,XSERVAFF.);
               REGCAT = PUT(SERV,XSERVAFF.);
               KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                     UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                     UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
               OUTPUT;
         END;

      MAJGRP = "Benchmark";
      REGION = 'NORTH';
      REGCAT = 'NORTH';
         KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
               UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
               UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
```

```
         OUTPUT;

    MAJGRP = "Benchmark";
    REGION = 'Overseas Europe';
    REGCAT = 'Overseas Europe';
         KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
               UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
               UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
         OUTPUT;

    MAJGRP = "Benchmark";
    REGION = 'Overseas Pacific';
    REGCAT = 'Overseas Pacific';
         KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
               UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
               UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
         OUTPUT;

    MAJGRP = "Benchmark";
    REGION = 'Overseas Latin America';
    REGCAT = 'Overseas Latin America';
         KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
               UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
               UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
         OUTPUT;

    MAJGRP = "Benchmark";
    REGION = 'SOUTH';
    REGCAT = 'SOUTH';
    KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
               UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
               UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
         OUTPUT;

         MAJGRP = "Benchmark";
         REGION = 'WEST';
         REGCAT = 'WEST';
    KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
               UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
               UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
         OUTPUT;

         MAJGRP = "Benchmark";
         REGION = 'OVERSEAS';
         REGCAT = 'OVERSEAS';
    KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
               UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
               UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
         OUTPUT;

         MAJGRP = "Benchmark";
         REGION = 'CONUS MHS';
         REGCAT = 'CONUS MHS';
    KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
               UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
               UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
         OUTPUT;

      END;
   END;
   IF SCORE = . THEN DELETE;

RUN;

PROC SORT DATA=MERGFINQ; BY KEY; RUN;

***************************************************************************
* Append ORDERing variable to the merged Scores database file
***************************************************************************;
DATA MERGFINQ MISSING;
   MERGE MERGFINQ(IN=IN1) ORDER(IN=IN2);
   BY KEY;
```

```
      LENGTH FLAG $30;
      IF IN1 AND IN2 THEN FLAG = "IN SCORES DB AND LAYOUT";
      ELSE IF    IN1 THEN FLAG = "IN SCORES DB ONLY";
      ELSE IF    IN2 THEN FLAG = "IN LAYOUT ONLY";

      LENGTH SOURCE $30;
      IF SVCAHPQ = 1 THEN SOURCE = "CAHPS     ";
      IF SVMPRQ  = 1 THEN SOURCE = "MPR       ";
      IF SVBENQ  = 1 THEN SOURCE = "BENCHMARK ";

      IF IN1 AND NOT IN2 THEN OUTPUT MISSING; *Missing from layout;
      IF IN1 THEN OUTPUT MERGFINQ;
   RUN;

   ***************************************************************************
   * Reorder file according to WEB layout
   ***************************************************************************;
   PROC SORT DATA=MERGFINQ OUT=OUT.MERGFINQ; BY ORDER; RUN;

   DATA FAKEQ;
      SET IN1.FAKEQ;
      ORDER = _N_;
   RUN;

   DATA LAYONLY;
      MERGE FAKEQ(IN=IN1) OUT.MERGFINQ(IN=IN2 KEEP=ORDER);
      BY ORDER;
      IF IN1 AND NOT IN2;
   RUN;

   TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6244-410)";   /*MJS 03/24/04 Updated
project number*/
   TITLE2 "Program Name: MERGFINQ.SAS By Keith Rathbun";
   TITLE3 "Program Inputs: MPR and CAHPS Combined Scores data sets and WEB Layout";
   TITLE4 "Program Outputs: MERGFINQ.SD2 - Merged Final Scores Database for input to
MAKEHTML.SAS";

   TITLE5 "MERGFINQ.SD2 Data source counts";
   PROC FREQ DATA=OUT.MERGFINQ;
   TABLES SOURCE FLAG SVCAHPQ SVMPRQ SVBENQ
                      SVCAHPQ*SVMPRQ*SVBENQ
         /MISSING LIST;
   RUN;

   TITLE5 "MERGFINQ.SD2 Data attribute counts";
   PROC FREQ DATA=OUT.MERGFINQ;
   TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT TIMEPD   /*MJS 07/23/03 Added TIMEPD*/
          REGION*REGCAT
         /MISSING LIST;
   RUN;

   TITLE5 "LAYONLY.SD2 Data attribute counts";
   PROC FREQ DATA=LAYONLY;
   TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT TIMEPD   /*MJS 07/23/03 Added TIMEPD*/
          REGION*REGCAT
         /MISSING LIST;
   RUN;

   TITLE5 "No matching record found in LAYOUT file (FAKEQ.SD2)";
   PROC PRINT DATA=MISSING;
   VAR MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD;   ***MJS 07/23/03 Added TIMEPD;
   RUN;
```

G.6 Q4FY2007\PROGRAMS\LOADWEB\CONUS_Q.SAS - GENERATE CAHPS CONUS SCORES AND PERFORM SIGNIFICANCE TESTS - RUN QUARTERLY.

```
*****************************************************************************
*
*  PROGRAM:  CONUS_Q.SAS
*  TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
*  PURPOSE:  Generate CAHPS CONUS scores and perform significance tests.
*
*  WRITTEN:  11/13/2000 BY KEITH RATHBUN, Adapted from CONUS_A.SAS.
*            Merged SIGNIF_A.SAS funtionality.
*
*  MODIFIED: 1) 04/10/2002 BY KEITH RATHBUN, Update for 2002 survey:
*               changed code to process 4 rolling quarters.
*            2) 04/30/2002 By Eric Schone, to calculate & test trend.
*            3) 07/17/2002 BY MIKE SCOTT, Updated %LET statements for
*               Q2 2002.
*            4) 03/21/2003 BY MIKE SCOTT, Updated for 2003 survey.
*            5) 07/08/2003 BY MIKE SCOTT, Updated for Q2 2003.  Changed BENTYPE="&PERIOD4"
*               to BENTYPE="Composite".  Added TIMEPD to KEY and FREQ.
*            6) 07/23/2003 BY MIKE SCOTT, Added TIMEPD constraint to DATA LASTQTR.
*            7) 10/21/2003 BY MIKE SCOTT, Updated for Q3 2003.
*            8) 01/07/2004 BY MIKE SCOTT, Updated for Q4 2003.
*            9) 01/28/2004 BY MIKE SCOTT, Updated LSTCONUS to point to Q3_2003t.
*           10) 03/23/2004 BY MIKE SCOTT, Updated for Q1 2004.
*           11) 06/22/2004 BY REGINA GRAMSS, Updated for Q2 2004, Added conditions
*               to avoid error messages in data sigtest2 step (ensure degree of freedom
*               is not zero for the probt function) and data trend steps (ensure division
*               by zero is not taking place).
*           12) 09/2004 BY REGINA GRAMSS, Updated for Q3, 2004.  Added in codes
*               for trend calculations (per Eric Schone). Revised to use XTNEXREG.
*           13) 01/2005 BY REGINA GRAMSS, Changed codes for XTNEXREG to XSERVREG
*               to incorporate service affiliation into regions.  Change
*               adjustments made to trend calculation to what was previous.
*           14) 06/2005 BY REGINA GRAMSS, Included relevant codes from TOTAL_Q.SAS
*               to consolidate both programs into one.  TOTAL_Q.SAS will no longer
*               be used. Also put in codes to set trend score to missing if any of the
*               previous scores are missing.
*           15) 10/2005 BY REGINA GRAMSS, Updated for Q3 2005
*           16) 12/2005 BY REGINA GRAMSS, Updated for Q4 2005
*           17) 07/2006 BY Justin Oh, Updated for Q3 FY 2006
*           18) 10/03/2006 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*               Changed %LET LSTCONUS.
*           19) 12/20/2006 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*               Changed %LET LSTCONUS.
*           20) 02/02/2007 By Justin Oh - Added "s" to Healthy Behaviors.
*           21) 02/16/2007 By Justin Oh - Added if statement to change BENEFIT
*               "Heathly Behavior" to Healthy "Behaviors" for the Last CONUS_Q.SD2 data
*           22) 04/05/2007 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*               Changed %LET LSTCONUS.
*           23) 04/05/2007 by Justin Oh - Added %LET BCHTYPE to select BCH types
*               Benchmark OR PurchasedBenchmark.
*           24) 04/05/2007 by Justin Oh - Added changes to select RC types
*               ReportCards OR PurchasedReportCards.
*           25) 10/03/2007 by Justin Oh - Removed code that removed Civilian PCM.
*               IF "&RCTYPE" = 'ReportCards' AND
*               MAJGRP="Enrollees with Civilian PCM" THEN DELETE;
*           26) 10/03/2007 by Justin Oh - Removed %LET BCHTYPE to select BCH types
*               Benchmark OR PurchasedBenchmark.
*           27) 09/05/2007 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*               Changed %LET LSTCONUS.
*
*   INPUTS:  1) MERGFINQ.SD2 - Scores Database in WEB Layout
*            2) FAKEQ.SD2 - Scores Database WEB Layout
*               3) CONUS_Q.SD2 - Previous Quarters Combined CAHPS/MPR Scores Database in WEB
layout
*
*   OUTPUT:  1) TOTAL_Q.SD2 - Combined CAHPS/MPR Scores Database in WEB layout
*            2) LT30Q.SD2 - Records with <= 30 observations
*            3) CONUS_Q.SD2 - Current Quarters Combined CAHPS/MPR Scores Database in WEB layout
*
*
```

```
*    NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - STEP1Q.SAS   - Recode questions and generate group files
*    - STEP2Q.SAS   - Calculate individual adjusted scores for group 1-7
*    - COMPOSIT.SAS - Calculate composite adjusted scores for group 1-8
*    - LOADCAHPQ.SAS - Combine all questionnaire (CAHPS) scores together
*    - PRVCOMPQ_NOCHOL.SAS - Calculate preventative measure scores for group1-8
*    - SMOKING_BMI.SAS     - Calculate healthy behaviors scores for group1-8
*    - LOADMPRQ_NEW.SAS    - Combined preventative and healthy behaviors scores
*    - MERGFINQ.SAS - Merge the final CAHPS and MPR Scores Databases
*
*************************************************************************
* Assign data libraries and options
*************************************************************************;

LIBNAME IN1 V612 ".";
LIBNAME OUT V612 ".";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER MPRINT MLOGIC;

*************************************************************************;
* Define GLOBAL parameters for last CONUSQ.SD2, rolling quarters, and
* input dataset name.
*
* IMPORTANT: Update these GLOBALS each quarter prior to rerunning program.
*************************************************************************;
%LET LSTCONUS = ..\..\..\Q3FY2007t\Programs\Loadweb;

%LET PERIOD1 = October, 2006;
%LET PERIOD2 = January, 2007;
%LET PERIOD3 = April, 2007;
%LET PERIOD4 = July, 2007;

%LET DSN     = MERGFINQ;

*************************************************************************;
* Set up empty template file for data merge purposes and set first time flag
*************************************************************************;
DATA INIT;
   SET IN1.&DSN;
   DELETE;
RUN;
%LET FLAG = 0;
*************************************************************************
*
* Process Macro Input Parameters:
*
* 1) BENTYPE = Benefit Type
* 2) MAJGRP = Major Group
* 3) TYPE = INDIVIDUAL or COMPOSITE
* 4) BENEFIT = COMPOSITE Benefit Type
*
*************************************************************************;
%MACRO PROCESS(BENTYPE=,MAJGRP=,TYPE=,BENEFIT=);
DATA TEMP;
   SET IN1.&DSN END=FINISHED;
   %IF "&TYPE" = "INDIVIDUAL" %THEN %DO;
       WHERE BENTYPE = "&BENTYPE" AND "&MAJGRP" = MAJGRP AND REGION = REGCAT AND
             SUBSTR(REGION,1,5) NOT IN("Bench","CONUS") AND
             SUBSTR(REGCAT,1,5) NOT IN("Bench","CONUS") AND
             REGION NOT IN ("ARMY","AIR FORCE","NAVY","OTHER");
   %END;
   %ELSE %IF "&TYPE" = "COMPOSITE" %THEN %DO;
       WHERE BENTYPE = &BENTYPE AND "&MAJGRP" = MAJGRP AND REGION = REGCAT AND
             BENEFIT = "&BENEFIT" AND
             SUBSTR(REGION,1,5) NOT IN("Bench","CONUS") AND
             SUBSTR(REGCAT,1,5) NOT IN("Bench","CONUS") AND
             REGION NOT IN ("ARMY","AIR FORCE","NAVY","OTHER");
   %END;
   %ELSE %DO;
       PUT "ERROR - Invalid Type = &TYPE";
   %END;
```

```
   IF SUBSTR(REGION,1,5) IN ('North','South') THEN DO;
      IF      SUBSTR(REGION,1,5)='North' THEN REGCON=1;
      ELSE IF SUBSTR(REGION,1,5)='South' THEN REGCON=2;
      TOTCON=1;
      IF      SUBSTR(REGION,7,4)='Army'       THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,7,9)='Air Force'  THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,7,4)='Navy'       THEN SERVICE=3;
      ELSE                                         SERVICE=4;
   END;
   ELSE IF SUBSTR(REGION,1,4)='West' THEN DO;
      REGCON=3;
      TOTCON=1;
      IF      SUBSTR(REGION,6,4)='Army'       THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,6,9)='Air Force'  THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,6,4)='Navy'       THEN SERVICE=3;
      ELSE                                         SERVICE=4;
   END;
   ELSE IF SUBSTR(REGION,1,6)='Europe' THEN DO;
      REGCON=4;
      TOTCON=2;
      IF      SUBSTR(REGION,8,4)='Army'       THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,8,9)='Air Force'  THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,8,4)='Navy'       THEN SERVICE=3;
      ELSE                                         SERVICE=4;
   END;
      ELSE IF SUBSTR(REGION,1,7)='Pacific' THEN DO;
      REGCON=5;
      TOTCON=2;
      IF      SUBSTR(REGION,9,4)='Army'       THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,9,9)='Air Force'  THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,9,4)='Navy'       THEN SERVICE=3;
      ELSE                                         SERVICE=4;
   END;
   ELSE IF SUBSTR(REGION,1,13)='Latin America' THEN DO;
      REGCON=6;
      TOTCON=2;
      IF      SUBSTR(REGION,15,4)='Army'      THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,15,9)='Air Force' THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,15,4)='Navy'      THEN SERVICE=3;
      ELSE                                         SERVICE=4;
   END;


RUN;

*********************************************************************;
* RSG 01/2005 Calc. total Service Affiliation Scores       *;
*********************************************************************;
PROC SORT DATA=TEMP;
BY SERVICE;

DATA TEMP2;
   SET TEMP;
   BY SERVICE;
      length key $200;
   IF FIRST.SERVICE THEN DO;
      SUMSCOR1 = 0;    RETAIN SUMSCOR1;
      SUMWGT1 = 0;     RETAIN SUMWGT1;
      SUMSE2 = 0;      RETAIN SUMSE2;
      SUMWGT2 = 0;     RETAIN SUMWGT2;
      N_OBS1 = 0;      RETAIN N_OBS1;
   END;

   IF SCORE  NE . AND N_WGT NE . THEN SUMSCOR1 = SUMSCOR1 + (SCORE*N_WGT);
   IF N_WGT  NE . THEN SUMWGT1  = SUMWGT1  + N_WGT;
   IF SEMEAN NE . AND N_WGT NE . THEN SUMSE2 = SUMSE2 + (SEMEAN*N_WGT)**2;
   IF N_OBS  NE . THEN N_OBS1 + N_OBS;


KEEP MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG SCORE SEMEAN N_OBS N_WGT
     FLAG SOURCE SUMSCOR1 SUMWGT1 SUMSE2 KEY;   ***MJS 07/08/03 Added TIMEPD;
```

```
   IF LAST.SERVICE THEN DO;

      IF SUMWGT1 NOTIN (.,0) THEN DO;
         SCORE   = SUMSCOR1/SUMWGT1;
         SEMEAN  = SQRT(SUMSE2)/SUMWGT1;
      END;
      ELSE DO;
         SCORE   = .;
         SEMEAN  = .;
      END;

      N_OBS   = N_OBS1;
      N_WGT   = SUMWGT1;
      SOURCE  = "CONUS";
      FLAG    = "CONUS";
      IF SERVICE=1 THEN REGION = "ARMY";
      IF SERVICE=2 THEN REGION = "AIR FORCE";
      IF SERVICE=3 THEN REGION = "NAVY";
      IF SERVICE=4 THEN REGION = "OTHER";
      REGCAT  = REGION;
      KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
            UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
            UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
      OUTPUT;
   END;
RUN;
*********************************************************************;
* RSG 01/2005 Calc. Total Region scores                             *;
*********************************************************************;
PROC SORT DATA=TEMP;
BY REGCON;
DATA TEMP3;
   SET TEMP;
   BY REGCON;
      length key $200;
   IF FIRST.REGCON THEN DO;
      SUMSCOR1 = 0;    RETAIN SUMSCOR1;
      SUMWGT1 = 0;     RETAIN SUMWGT1;
      SUMSE2 = 0;      RETAIN SUMSE2;
      SUMWGT2 = 0;     RETAIN SUMWGT2;
      N_OBS1 = 0;      RETAIN N_OBS1;
   END;

   IF SCORE  NE . AND N_WGT NE . THEN SUMSCOR1 = SUMSCOR1 + (SCORE*N_WGT);
   IF N_WGT  NE . THEN SUMWGT1  = SUMWGT1  + N_WGT;
   IF SEMEAN NE . AND N_WGT NE . THEN SUMSE2 = SUMSE2 + (SEMEAN*N_WGT)**2;
   IF N_OBS  NE . THEN N_OBS1 + N_OBS;

KEEP MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG SCORE SEMEAN N_OBS N_WGT
     FLAG SOURCE SUMSCOR1 SUMWGT1 SUMSE2 KEY;   ***MJS 07/08/03 Added TIMEPD;

   IF LAST.REGCON THEN DO;

      IF SUMWGT1 NOTIN (.,0) THEN DO;
         SCORE = SUMSCOR1/SUMWGT1;
         SEMEAN  = SQRT(SUMSE2)/SUMWGT1;
      END;
      ELSE DO;
         SCORE   = .;
         SEMEAN  = .;
      END;
      N_OBS   = N_OBS1;
      N_WGT   = SUMWGT1;
      SOURCE  = "REGION";
      FLAG    = "REGION";
      IF REGCON=1 THEN REGION = "NORTH";
      IF REGCON=2 THEN REGION = "SOUTH";
      IF REGCON=3 THEN REGION = "WEST";
      IF REGCON=4 THEN REGION = "Overseas Europe";
      IF REGCON=5 THEN REGION = "Overseas Pacific";
      IF REGCON=6 THEN REGION = "Overseas Latin America";

      REGCAT  = REGION;
```

```
      KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
            UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
            UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
      OUTPUT;
   END;
RUN;

*********************************************************************;
* RSG 01/2005 Calc. Total CONUS Scores                              *;
*********************************************************************;
PROC SORT DATA=TEMP;
BY TOTCON;
DATA TEMP4;
   SET TEMP END=FINISHED;
   BY TOTCON;
      length key $200;
   IF FIRST.TOTCON THEN DO;
      SUMSCOR1 = 0;    RETAIN SUMSCOR1;
      SUMWGT1 = 0;     RETAIN SUMWGT1;
      SUMSE2 = 0;      RETAIN SUMSE2;
      SUMWGT2 = 0;     RETAIN SUMWGT2;
      N_OBS1 = 0;      RETAIN N_OBS1;
   END;


      IF SCORE  NE . AND N_WGT NE . THEN SUMSCOR1 = SUMSCOR1 + (SCORE*N_WGT);
      IF N_WGT  NE . THEN SUMWGT1  = SUMWGT1  + N_WGT;
      IF SEMEAN NE . AND N_WGT NE . THEN SUMSE2 = SUMSE2 + (SEMEAN*N_WGT)**2;
      IF N_OBS  NE . THEN N_OBS1 + N_OBS;

   IF LAST.TOTCON THEN DO;




      IF SUMWGT1 NOTIN (.,0) THEN DO;
        SCORE   = SUMSCOR1/SUMWGT1;
        SEMEAN  = SQRT(SUMSE2)/SUMWGT1;
     END;
     ELSE DO;
       SCORE   = .;
       SEMEAN  = .;
     END;
      N_OBS   = N_OBS1;
      N_WGT   = SUMWGT1;
      SOURCE  = "CONUS";
      FLAG    = "CONUS";
   IF TOTCON=1 THEN REGION = "CONUS MHS";
   IF TOTCON=2 THEN REGION = "OVERSEAS";
      REGCAT  = REGION;
      KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
            UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
            UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
      OUTPUT;
END;
KEEP MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG SCORE SEMEAN N_OBS N_WGT
     FLAG SOURCE SUMSCOR1 SUMWGT1 SUMSE2 KEY;   ***MJS 07/08/03 Added TIMEPD;

RUN;

%IF &FLAG = 0 %THEN %DO;
   DATA FINAL;
      SET INIT TEMP2 TEMP3 TEMP4;
   RUN;
%END;
%ELSE %DO;
   DATA FINAL;
      SET FINAL TEMP2 TEMP3 TEMP4;
   RUN;
%END;
%LET FLAG = 1;

%MEND;
```

```
     ************************************************************************
     * Create CONUS for Active Duty - Individual
     ************************************************************************;
     %PROCESS(BENTYPE=Advice over Telephone                                  ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled Correctly                               ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled in a Reasonable Time                    ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Courteous and Respectful                               ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Delays in Care while Awaiting Approval                 ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Explains so You can Understand                         ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Helpful                                                ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Listens Carefully                                      ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Getting Help from Customer Service             ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem with Paperwork                                 ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Necessary Care                        ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse                 ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Referral to Specialist                ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Shows Respect                                          ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Spends Time with You                                   ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Urgent Care                                   ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment             ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Routine Visit                                 ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);


     ************************************************************************
     * Create CONUS for Active Duty Dependents - Individual
     ************************************************************************;
     %PROCESS(BENTYPE=Advice over Telephone                          ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled Correctly                       ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled in a Reasonable Time            ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Courteous and Respectful                       ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Delays in Care while Awaiting Approval         ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Explains so You can Understand                 ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Helpful                                        ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Listens Carefully                              ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Getting Help from Customer Service     ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem with Paperwork                         ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Necessary Care                ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse         ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
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     %PROCESS(BENTYPE=Problems Getting Referral to Specialist       ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Shows Respect                                 ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Spends Time with You                          ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Urgent Care                          ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment    ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Routine Visit                        ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);

     ***************************************************************************
     * Create CONUS for Enrollees with Civilian PCM - Individual
     ***************************************************************************;
     %PROCESS(BENTYPE=Advice over Telephone                         ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled Correctly                      ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled in a Reasonable Time           ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Courteous and Respectful                      ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Delays in Care while Awaiting Approval        ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Explains so You can Understand                ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Helpful                                       ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Listens Carefully                             ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Getting Help from Customer Service    ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem with Paperwork                        ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Necessary Care               ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse        ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Referral to Specialist       ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Shows Respect                                 ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Spends Time with You                          ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Urgent Care                          ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment    ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Routine Visit                        ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);

     ***************************************************************************
     * Create CONUS for Enrollees with Military PCM - Individual
     ***************************************************************************;
     %PROCESS(BENTYPE=Advice over Telephone                         ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled Correctly                      ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled in a Reasonable Time           ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Courteous and Respectful                      ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Delays in Care while Awaiting Approval        ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Explains so You can Understand                ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Helpful                                       ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
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     %PROCESS(BENTYPE=Listens Carefully                              ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Getting Help from Customer Service     ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem with Paperwork                         ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Necessary Care                ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse         ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Referral to Specialist        ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Shows Respect                                  ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Spends Time with You                           ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Urgent Care                           ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment     ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Routine Visit                         ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);

     ***************************************************************************
     * Create CONUS for Non-enrolled Beneficiaries - Individual
     ***************************************************************************;
     %PROCESS(BENTYPE=Advice over Telephone                                  ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled Correctly                               ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled in a Reasonable Time                    ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Courteous and Respectful                               ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Delays in Care while Awaiting Approval                 ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Explains so You can Understand                         ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Helpful                                                ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Listens Carefully                                      ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Getting Help from Customer Service             ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem with Paperwork                                 ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Necessary Care                        ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse                 ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Referral to Specialist                ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Shows Respect                                          ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Spends Time with You                                   ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Urgent Care                                   ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment             ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Routine Visit                                 ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);

     ***************************************************************************
     * Create CONUS for Prime Enrollees - Individual
     ***************************************************************************;
     %PROCESS(BENTYPE=Advice over Telephone                                  ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
```

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     %PROCESS(BENTYPE=Claims Handled Correctly                          ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled in a Reasonable Time               ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Courteous and Respectful                          ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Delays in Care while Awaiting Approval            ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Explains so You can Understand                    ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Helpful                                           ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Listens Carefully                                 ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem   Finding/Understanding   Written   Material,MAJGRP=Prime   Enrollees,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Getting Help from Customer Service       ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem with Paperwork                            ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Necessary Care                   ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse            ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Referral to Specialist           ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Shows Respect                                     ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Spends Time with You                              ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Urgent Care                              ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment       ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Routine Visit                            ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);

     ***************************************************************************
     * Create CONUS for Retirees and Dependents - Individual
     ***************************************************************************;
     %PROCESS(BENTYPE=Advice over Telephone                        ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled Correctly                     ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled in a Reasonable Time          ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Courteous and Respectful                     ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Delays in Care while Awaiting Approval       ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Explains so You can Understand               ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Helpful                                      ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Listens Carefully                            ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Getting Help from Customer Service   ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem with Paperwork                       ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Necessary Care              ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse       ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Referral to Specialist      ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Shows Respect                                ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Spends Time with You                         ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
```

```
     %PROCESS(BENTYPE=Wait for Urgent Care                         ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait  More  than  15  Minutes  Past  Appointment          ,MAJGRP=Retirees  and
Dependents, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Routine Visit                       ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);

     ************************************************************************
     * Create CONUS for All Beneficiaries - Individual
     ************************************************************************;
     %PROCESS(BENTYPE=Advice over Telephone                              ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled Correctly                           ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled in a Reasonable Time                ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Courteous and Respectful                           ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Delays in Care while Awaiting Approval             ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Explains so You can Understand                     ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Helpful                                            ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Listens Carefully                                  ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem  Finding/Understanding  Written  Material,MAJGRP=All  Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Getting Help from Customer Service       ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem with Paperwork                             ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Necessary Care                    ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse             ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Referral to Specialist            ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Shows Respect                                      ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Spends Time with You                               ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Urgent Care                               ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment        ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Routine Visit                             ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);

     ************************************************************************
     * Process Quarterly CONUS Composites
     ************************************************************************
     ************************************************************************
     * Create CONUS for Claims Processing - Quarterly
     ************************************************************************;
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                , TYPE=COMPOSITE,BENEFIT=Claims
Processing);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents     , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Claims
Processing);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Claims
Processing);
     %PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
     %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
     %PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
     %PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Claims
Processing);

     ************************************************************************
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```
     * Create CONUS for Courteous and Helpful Office Staff - Quarterly
     ************************************************************************;
     %PROCESS(BENTYPE="Composite",   MAJGRP=Active   Duty                                    ,
TYPE=COMPOSITE,BENEFIT=Courteous   and   Helpful   Office   Staff);        ***MJS   07/08/03   Changed
BENTYPE="&PERIOD4" to BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite",     MAJGRP=Active     Duty     Dependents                    ,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Civilian         PCM,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Military         PCM,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);
     %PROCESS(BENTYPE="Composite",           MAJGRP=Non-enrolled           Beneficiaries           ,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);
     %PROCESS(BENTYPE="Composite",   MAJGRP=Prime   Enrollees                                    ,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);
     %PROCESS(BENTYPE="Composite",     MAJGRP=Retirees     and     Dependents                    ,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);
     %PROCESS(BENTYPE="Composite",    MAJGRP=All    Beneficiaries                                ,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);

     ***************************************************************************
     * Create CONUS for Customer Service - Quarterly
     ************************************************************************;
     %PROCESS(BENTYPE="Composite",   MAJGRP=Active   Duty                                    ,
TYPE=COMPOSITE,BENEFIT=Customer   Service);       ***MJS   07/08/03   Changed   BENTYPE="&PERIOD4"   to
BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite",     MAJGRP=Active     Duty     Dependents                    ,
TYPE=COMPOSITE,BENEFIT=Customer Service);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Civilian         PCM,
TYPE=COMPOSITE,BENEFIT=Customer Service);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Military         PCM,
TYPE=COMPOSITE,BENEFIT=Customer Service);
     %PROCESS(BENTYPE="Composite",           MAJGRP=Non-enrolled           Beneficiaries           ,
TYPE=COMPOSITE,BENEFIT=Customer Service);
     %PROCESS(BENTYPE="Composite",   MAJGRP=Prime   Enrollees                                    ,
TYPE=COMPOSITE,BENEFIT=Customer Service);
     %PROCESS(BENTYPE="Composite",     MAJGRP=Retirees     and     Dependents                    ,
TYPE=COMPOSITE,BENEFIT=Customer Service);
     %PROCESS(BENTYPE="Composite",    MAJGRP=All    Beneficiaries                                ,
TYPE=COMPOSITE,BENEFIT=Customer Service);

     ***************************************************************************
     * Create CONUS for Getting Care Quickly - Quarterly
     ************************************************************************;
     %PROCESS(BENTYPE="Composite",   MAJGRP=Active   Duty                                    ,
TYPE=COMPOSITE,BENEFIT=Getting  Care  Quickly);     ***MJS  07/08/03  Changed  BENTYPE="&PERIOD4"  to
BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite",     MAJGRP=Active     Duty     Dependents                    ,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Civilian         PCM,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Military         PCM,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);
     %PROCESS(BENTYPE="Composite",           MAJGRP=Non-enrolled           Beneficiaries           ,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);
     %PROCESS(BENTYPE="Composite",   MAJGRP=Prime   Enrollees                                    ,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);
     %PROCESS(BENTYPE="Composite",     MAJGRP=Retirees     and     Dependents                    ,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);
     %PROCESS(BENTYPE="Composite",    MAJGRP=All    Beneficiaries                                ,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);

     ***************************************************************************
     * Create CONUS for Getting Needed Care - Quarterly
     ************************************************************************;
     %PROCESS(BENTYPE="Composite",   MAJGRP=Active   Duty                                    ,
TYPE=COMPOSITE,BENEFIT=Getting  Needed  Care);     ***MJS  07/08/03  Changed  BENTYPE="&PERIOD4"  to
BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite",     MAJGRP=Active     Duty     Dependents                    ,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Civilian         PCM,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);
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     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Military         PCM,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);
     %PROCESS(BENTYPE="Composite",           MAJGRP=Non-enrolled           Beneficiaries           ,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);
     %PROCESS(BENTYPE="Composite",   MAJGRP=Prime   Enrollees                                        ,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);
     %PROCESS(BENTYPE="Composite",     MAJGRP=Retirees     and     Dependents                        ,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);
     %PROCESS(BENTYPE="Composite",    MAJGRP=All    Beneficiaries                                    ,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);

     ***************************************************************************
     * Create CONUS for Health Care - Quarterly
     ***************************************************************************;
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                , TYPE=COMPOSITE,BENEFIT=Health
Care);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents     , TYPE=COMPOSITE,BENEFIT=Health
Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Health
Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Health
Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Health
Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Health
Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Health
Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Health
Care);

     ***************************************************************************
     * Create CONUS for Health Plan - Quarterly
     ***************************************************************************;
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                , TYPE=COMPOSITE,BENEFIT=Health
Plan);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents     , TYPE=COMPOSITE,BENEFIT=Health
Plan);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Health
Plan);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Health
Plan);
     %PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Health
Plan);
     %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Health
Plan);
     %PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Health
Plan);
     %PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Health
Plan);

     ***************************************************************************
     * Create CONUS for How Well Doctors Communicate - Quarterly
     ***************************************************************************;
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                  , TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents       , TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees              , TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents      , TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries            , TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);

     ***************************************************************************
     * Create CONUS for Primary Care Manager - Quarterly
```

```
     ************************************************************************;
     %PROCESS(BENTYPE="Composite",   MAJGRP=Active   Duty                                        ,
TYPE=COMPOSITE,BENEFIT=Primary  Care  Manager);     ***MJS  07/08/03  Changed  BENTYPE="&PERIOD4"  to
BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite",     MAJGRP=Active     Duty     Dependents                       ,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Civilian         PCM,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Military         PCM,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);
     %PROCESS(BENTYPE="Composite",           MAJGRP=Non-enrolled           Beneficiaries           ,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);
     %PROCESS(BENTYPE="Composite",   MAJGRP=Prime   Enrollees                                        ,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);
     %PROCESS(BENTYPE="Composite",     MAJGRP=Retirees     and     Dependents                      ,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);
     %PROCESS(BENTYPE="Composite",   MAJGRP=All   Beneficiaries                                      ,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);

     ***************************************************************************
     * Create CONUS for Specialty Care - Quarterly
     ************************************************************************;
     %PROCESS(BENTYPE="Composite",   MAJGRP=Active   Duty                                        ,
TYPE=COMPOSITE,BENEFIT=Specialty   Care);        ***MJS   07/08/03   Changed   BENTYPE="&PERIOD4"   to
BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite",     MAJGRP=Active     Duty     Dependents                       ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Civilian         PCM,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Military         PCM,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite",           MAJGRP=Non-enrolled           Beneficiaries           ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite",   MAJGRP=Prime   Enrollees                                        ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite",     MAJGRP=Retirees     and     Dependents                      ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite",   MAJGRP=All   Beneficiaries                                      ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);

     ***************************************************************************
     * Extract ORDER and KEY from the WEB Layout file.  TEMPQ will be used
     * as place holders for missing records.  FAKEQ will be used for adding
     * new records.
     ************************************************************************;
     DATA FAKEQ;
        SET IN1.FAKEQ;
          length key $200;
        SIG = .;
        SCORE = .;
        ORDER = _N_;
        KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
              UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
              UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;

     RUN;
     PROC SORT DATA=FAKEQ OUT=TEMPQ;       BY KEY; RUN;
     PROC SORT DATA=FAKEQ(KEEP=ORDER KEY); BY KEY; RUN;

     ***************************************************************************
     * Append BENCHMARK records to CAHPS records and perform significance tests
     ************************************************************************;
     DATA BENCHMRK(KEEP=MAJGRP BENEFIT BENTYPE SEMEAN SCORE);
        SET IN1.&DSN;
        WHERE SUBSTR(REGION,1,5) = "Bench" AND SVMPRQ = 0;
     RUN;
     Data abnchmrk(keep=benefit bentype ascore);
     set benchmrk;
     where upcase(majgrp)='ALL BENEFICIARIES';
     rename score=ascore;
     run;
     proc sort; by benefit bentype;
     proc sort data=benchmrk; by benefit bentype;
```

```
     data benchmrk;
     merge benchmrk abnchmrk; by benefit bentype;run;
     PROC SORT DATA=BENCHMRK; BY MAJGRP BENEFIT BENTYPE; RUN;

     PROC SORT DATA=FINAL; BY KEY; RUN;

     DATA CONUS_Q;
        MERGE FINAL(IN=IN1) FAKEQ(IN=IN2);
        BY KEY;
        IF IN1;
     RUN;
     PROC SORT DATA=CONUS_Q; BY MAJGRP BENEFIT BENTYPE; RUN;

     ***************************************************************************
     * Perform significance tests for CONUS scores
     ***************************************************************************;
     DATA SIGTEST1;
        MERGE CONUS_Q(IN=SIN) BENCHMRK(RENAME=(SCORE=BSCORE SEMEAN=BSEMEAN));
        BY MAJGRP BENEFIT BENTYPE;
        length key $200;
        TEMP = (SCORE-BSCORE)/SQRT(BSEMEAN**2+SEMEAN**2);
        IF N_OBS > 1 THEN TEST = 2*(1-PROBT(ABS(TEMP),N_OBS-1)); /** RSG 06/22/2004 - PUT CONDITION
TO AVOID DF=0 WHICH CAUSES ERROR FOR PROBT FUNCTION **/
        ELSE TEST = .; /** RSG 06/22/2004 - ADDED FOR CASES WITH N_OBS = 1 OR LESS SINCE PROBT CAN'T
BE PERFORMED AND WOULD RESULT IN TEST = MISSING ANYWAY **/
        SIG = 0;
        IF TEST < 0.05 AND TEST NE . THEN SIG = 1; /** RSG 06/22/2004 - ADDED CONDITION "TEST NE ."
IN CASE MISSING IS CONSIDERED LESS THAN 0.05 **/
        IF SCORE < BSCORE THEN SIG = -SIG;


        KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
              UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
              UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
        SOURCE = "CONUS_Q";
        FLAG   = "CONUS_Q";
        IF SIN;
        score=score+ascore-bscore;
     RUN;
     PROC SORT DATA=SIGTEST1; BY KEY; RUN;

     ***************************************************************************
     * Extract CAHPS scores to perform significance tests
     ***************************************************************************;
     DATA CAHPS MPR bench;
        SET IN1.&DSN;
        ************************************************************************
        * Significance tests have already been performed for MPR scores,
        * so remove from file.
        ************************************************************************;
        IF SVMPRQ = 1 THEN OUTPUT MPR;
        IF SVMPRQ = 0 THEN do;
         if majgrp ne 'Benchmark' then OUTPUT CAHPS;
         else output bench; end;
     RUN;


     PROC SORT DATA=CAHPS;
        BY MAJGRP BENEFIT BENTYPE;
     RUN;

     ***************************************************************************
     * Perform significance tests for CAHPS scores
     ***************************************************************************;
     DATA SIGTEST2;
        MERGE CAHPS(IN=SIN) BENCHMRK(RENAME=(SCORE=BSCORE SEMEAN=BSEMEAN));
        BY MAJGRP BENEFIT BENTYPE;
        TEMP = (SCORE-BSCORE)/SQRT(BSEMEAN**2+SEMEAN**2);
        IF N_OBS > 1 THEN TEST = 2*(1-PROBT(ABS(TEMP),N_OBS-1));  /** RSG 06/22/2004 PUT N_OBS > 1
CONDITION TO AVOID ERRORS BECAUSE PROBT CAN NOT HANDLE DF=0 **/
        ELSE TEST = .;
        SIG = 0;
        IF N_OBS >= 30 AND TEST < 0.05 THEN SIG = 1;
```

```
   IF SCORE < BSCORE THEN SIG = -SIG;
   IF SIN;
   score=score+ascore-bscore;
   RUN;
proc sort data=bench; by majgrp benefit bentype;
data sigtest2;
set sigtest2 bench; by majgrp benefit bentype;
PROC SORT DATA=SIGTEST2; BY KEY; RUN;

*************************************************************************
* When NOT 1st quarter: Get records from previous quarters
*************************************************************************;
%MACRO LASTQTR;
   ************************************************************************
   * Input composite records from previous quarters.
   ************************************************************************;
   LIBNAME IN2 "&LSTCONUS";
   DATA LASTQTR (drop=key2); /*RSG 10/2005 - KEY2 WAS CREATED AT END OF PROG TO HELP
                              SET TREND TO MISSING FOR SCORES MISSING IN ANY QUARTERS
                              THIS SHOULD BE DROPPED AND RESET AT THE END OF PROG*/
      SET IN2.CONUS_Q (DROP=KEY);

/*** Change BENEFIT "Heathly Behavior" to Healthy "Behaviors" JSO 02/16/2007 ***/
      IF BENEFIT = 'Healthy Behavior' THEN BENEFIT = 'Healthy Behaviors';

      IF timepd IN ("&PERIOD1","&PERIOD2","&PERIOD3") AND
        (REGION = REGCAT) AND
         BENEFIT IN ("Getting Needed Care",
                     "Getting Care Quickly",
                     "How Well Doctors Communicate",
                     "Courteous and Helpful Office Staff",
                     "Customer Service",
                     "Claims Processing",
                     "Health Care",
                     "Health Plan",
                     "Primary Care Manager",
                     "Specialty Care",
                     "Preventive Care",
                     "Healthy Behaviors") & TIMEPD NE "Trend";



    KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
            UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
            UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));

   RUN;
%MEND LASTQTR;
%LASTQTR;

PROC SORT DATA=LASTQTR(DROP=ORDER); BY KEY; RUN;

DATA LASTQTR;
   MERGE TEMPQ(IN=IN1) LASTQTR(IN=IN2);
   BY KEY;
   IF IN1 AND IN2;
RUN;

PROC SORT DATA=MPR; BY KEY; RUN;

*************************************************************************
* Combine previously created records with the new file
*************************************************************************;
DATA COMBINE OUT.LT30Q;
   SET SIGTEST1 SIGTEST2 LASTQTR MPR;
   BY KEY;
   if timepd="&period1" then period=1;   ***MJS 07/08/03 Changed from bentype="&period1";
   if timepd="&period2" then period=2;   ***MJS 07/08/03 Changed from bentype="&period2";
   if timepd="&period3" then period=3;   ***MJS 07/08/03 Changed from bentype="&period3";
   if timepd="&period4" then period=4;   ***MJS 07/08/03 Changed from bentype="&period4";
   ************************************************************************
   * Remove N_OBS < 30 OR N_WGT < 200
   ************************************************************************;
```

```
   IF (N_OBS < 30 OR N_WGT < 200) AND (MAJGRP NE "Benchmark") AND
      (REGION NE "Benchmark")
      THEN OUTPUT OUT.LT30Q;
   ELSE OUTPUT COMBINE;
RUN;

data trend;
set combine;
where period ne . ;
if period<4|benefit="Preventive Care" then score=score/100;

proc sort data=trend;
by majgrp region regcat benefit bentype period;
run;

data avg(keep=majgrp region regcat benefit t_obs a_period a_score twgt bentype) ;
set trend;   by majgrp region regcat benefit bentype period;
if majgrp="Benchmark"|region="Benchmark" then n_wgt=1;
if first.majgrp|first.region|first.regcat|first.benefit|first.bentype then do;
t_obs=0;
t_score=0;
twgt=0;
t_period=0;
end;
t_obs+n_obs;
t_Score+n_wgt*score;
twgt+n_wgt;
t_period+period*n_wgt;
 if last.majgrp|last.region|last.regcat|last.benefit|last.bentype then do;
    if twgt notin (.,0) then do;
       a_score=t_score/twgt;
       a_period=t_period/twgt;
    end;
    else do;
       a_score=.;
       a_period=.;
    end;
    output;
 end;
RUN;

data trend2(drop=score) btrend(keep=majgrp benefit bentype trend serr);
merge trend avg;  by majgrp region regcat benefit bentype;
if majgrp="Benchmark"|region="Benchmark" then n_wgt=1;
if first.majgrp|first.region|first.regcat|first.benefit|first.bentype then do;
t_score=0;
t_se=0;
t_period=0;
end;
t_se+((n_wgt**2)*(semean**2));
t_score+n_wgt*(score-a_score)*(period-a_period);
t_period+n_wgt*(period-a_period)**2;
if last.majgrp|last.region|last.regcat|last.benefit|last.bentype then do;
if t_period ne 0 then do;   /* RSG 06/22/2004 Added to avoid division by zero*/
   trend=t_score/t_period;
   serr=sqrt(t_se/(t_period*twgt));
end;
else do;
   trend=.;
   serr=.;
end;
if region="Benchmark"|majgrp="Benchmark" then output btrend;
output trend2;
end;
proc sort data=trend2; by majgrp benefit bentype;RUN;
proc sort data=btrend; by majgrp benefit bentype;
data trend3(rename=(trend=score));
merge trend2 btrend(rename=(trend=btrend serr=bserr));
by majgrp benefit bentype;
   length key $200;
if ^(region="Benchmark"|majgrp="Benchmark") then do;
ttrend=trend-btrend;
serr=sqrt((serr**2)+(bserr**2));
```

```
     sig=0;
     if serr > 0 and t_obs notin (.,0) then test= 2*(1-probt(abs(ttrend/serr),t_obs));   /* RSG
06/22/2004 Added to avoid division by zero*/
     else test = .;
     if test<.05 & test ne . then sig=1;
     if sig=1 & ttrend<0 then sig=-1;
     end;
     timepd="Trend";
        KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
              UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
              UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
     run;

     proc sort data=trend3(drop=t_obs twgt a_score a_period t_score t_se t_period serr
      bserr btrend ttrend order); by key;
      data trend4 ;
      merge trend3(in=din) fakeq(in=cin); by key;
      if din;
      RUN;


     data combine2;
     set combine trend4;RUN;

     proc sort; by key;
     data combine3 dupe;
     set combine2; by key;
     if ^(first.key & last.key) then output dupe;
     output combine3;
     proc print data=dupe;run;

     /* RSG 06/2005 - set trend to missing for component/composite
        scores with missing scores in any of the quarter*/
     data misses (keep=key2) all;
     set combine3;
     length key2 $200.;
     KEY2 = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                UPCASE(TRIM(REGION));
     if score = . then output misses;
     output all;
     run;
     proc sort data=misses;
     by key2;
     proc sort data=all;
     by key2;
     run;

     data combine4;
     merge all (in=a) misses (in=b);
     by key2;
     if a and b then do;
       if timepd = "Trend" then score = .;
     end;
     run;

     ***************************************************************************
     * Create place holders for missing records
     ***************************************************************************;
     DATA FAKEONLY;
        MERGE COMBINE4(IN=IN1) TEMPQ(IN=IN2);
        BY KEY;
        SOURCE = "FAKE ONLY";
        FLAG   = "FAKE ONLY";
        IF IN2 AND NOT IN1;

     RUN;

     ***************************************************************************
     * Combine all of the missing records with the existing records to generate
     * the complete WEB layout file.
     ***************************************************************************;
     DATA CONUS_Q;
```

```
   SET FAKEONLY COMBINE4;
   BY KEY;
   ************************************************************************
   * Convert CAHPS Composites and Individual to 1-100 scale
   ************************************************************************;
   IF timepd="Trend" OR (timepd="&PERIOD4" & benefit ne "Preventive Care")
      then
        SCORE = SCORE*100;
RUN;

PROC SORT DATA=CONUS_Q; BY ORDER; RUN;

DATA FAKEQ;
   SET IN1.FAKEQ;
   SIG = .;
   SCORE = .;
   ORDER = _N_;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/31/03 Added TIMEPD;

RUN;
PROC SORT DATA=FAKEQ OUT=TEMPQ;       BY KEY; RUN;
PROC SORT DATA=FAKEQ(KEEP=ORDER KEY); BY KEY; RUN;

PROC SORT DATA=CONUS_Q out=OUT.CONUS_Q;
BY KEY;
RUN;

DATA FAKEONLY;
   MERGE OUT.CONUS_Q(IN=IN1) TEMPQ(IN=IN2);
   BY KEY;
   SOURCE = "FAKE ONLY";
   FLAG   = "FAKE ONLY";
   IF IN2 AND NOT IN1;
RUN;

DATA TOTAL_Q;
   SET FAKEONLY OUT.CONUS_Q;
   BY KEY;
   IF MAJGRP="All Beneficiaries" then MAJGRP="All Users";
   IF MAJGRP="Non-enrolled Beneficiaries" then MAJGRP="Standard/Extra Users";
   IF BENEFIT="Primary Care Manager" THEN BENEFIT="Personal Doctor";   /*MJS 02/05/2003*/
   /* 11/14/2005 RSG - ADDED IN THESE CODE TO CAPITALIZE ALL WORDS IN TITLE */
   IF BENTYPE = "Problems Getting Referral to Specialist       "
      THEN BENTYPE = "Problems Getting Referral To Specialist  ";
   IF BENTYPE = "Delays in Care while Awaiting Approval        "
      THEN BENTYPE = "Delays In Care While Awaiting Approval   ";
   IF BENTYPE = "Advice over Telephone                        "
      THEN BENTYPE = "Advice Over Telephone                    ";
   IF BENTYPE = "Wait for Routine Visit                        "
      THEN BENTYPE = "Wait For Routine Visit                   ";
   IF BENTYPE = "Wait for Urgent Care                          "
      THEN BENTYPE = "Wait For Urgent Care                     ";
   IF BENTYPE = "Wait More than 15 Minutes Past Appointment    "
      THEN BENTYPE = "Wait More Than 15 Minutes Past Appointment";
   IF BENTYPE = "Explains so You can Understand                "
      THEN BENTYPE = "Explains So You Can Understand           ";
   IF BENTYPE = "Spends Time with You                          "
      THEN BENTYPE = "Spends Time With You                     ";
   IF BENTYPE = "Courteous and Respectful                      "
      THEN BENTYPE = "Courteous And Respectful                 ";
   IF BENTYPE = "Problem Getting Help from Customer Service    "
      THEN BENTYPE = "Problem Getting Help From Customer Service";
   IF BENTYPE = "Problem with Paperwork                        "
      THEN BENTYPE = "Problem With Paperwork                   ";
   IF BENTYPE = "Claims Handled in a Reasonable Time           "
      THEN BENTYPE = "Claims Handled In A Reasonable Time      ";
   IF substr(region,1,5) in ('Latin','Europ','Pacif')|Region='Overseas Latin America'
    then delete;

RUN;
```

```
    PROC SORT DATA=TOTAL_Q OUT=OUT.TOTAL_Q; BY ORDER; RUN;

    TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6244-410)";    /*MJS 03/23/04 Updated
project number*/
    TITLE2 "Program Name: CONUS_Q.SAS By Keith Rathbun";
    TITLE3 "Program Inputs: MERGFINQ.SD2 - Scores Database in WEB Layout";
    TITLE4 "Program Outputs: TOTAL_Q.SD2 - CONUS Scores Database in WEB layout";

    PROC FREQ;
    TABLES SIG FLAG SOURCE BENEFIT BENTYPE MAJGRP REGION REGCAT TIMEPD    /*MJS 07/08/03 Added
TIMEPD*/
           REGION*REGCAT
          /MISSING LIST;
    RUN;
```

G.7 Q4FY2007\PROGRAMS\LOADWEB\MAKEHTMQ.SAS - GENERATE HTML AND XLS FILES FOR TRICARE BENEFICIARY REPORTS - RUN QUARTERLY.

```
*=====================================================================;
*   Programmer:  Mark A. Brinkley                                     ;
*        Title:  MAKEHTMQ.SAS                                         ;
*       Client:  6077-410                                             ;
*         Date:  06-01-2001                                           ;
*                                                                     ;
*      Purpose:  This program is designed to create                   ;
*                 report cards for the 2000 DOD project               ;
*                                                                     ;
*                                                                     ;
*  Input files:  TOTAL_QR.SD2                                         ;
* Output files:  HTML\                                                ;
*                  1269*3 F*.HTM Files (Frame version)                ;
*                  1269  P*.HTM Files (Printer friendly - no frames)  ;
*                    P*.XLS Files (Excel files)                       ;
*                 -------------------                                 ;
*                                                                     ;
*                                                                     ;
*                                                                     ;
*   ÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!   ;
*                                                                     ;
*     IF YOU MODIFY THIS PROGRAM THEN PLEASE INITIAL AND DOCUMENT     ;
*     YOUR CHANGES.  THOSE FAILING TO DO THIS WILL BE SEVERELY        ;
*     BEATEN.                                                         ;
*                                                                     ;
*   ÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!   ;
*                                                                     ;
*                                                                     ;
*                                                                     ;
* Modifications:                                                      ;
* 11-01-2000 - JSykes added pieces to create Excel Spreadsheets       ;
* 07-01-2001 - MAB modified for qtr 2                                 ;
* 10-25-2001 - C.Rankin moved link to printer friendly version        ;
*              from frame, created macro variable to include          ;
*              third row of subbenefit heading                        ;
* 11-01-2001 - D.Beahm changed splitpercent to splitpixel and adjusted;
*              the pixel size of the top frame to prevent scrolling   ;
*              she also added a <BR> before the printer icon to make  ;
*              sure it appears on it's own line                       ;
* 12-21-2001 - D.Beahm changed column widths for frame page a so that ;
*              the column headers would line up with the data in frame;
*              page b. Also revised Excel code so benchmarks for the  ;
*              majorgrp are shaded dark red instead of blue           ;
* 04-18-2002 - Quarterly report cards will now show a rolling 4       ;
*              quarters of data for the trend. DKB updated the period ;
*              BENTYPE references to account for this, this will need ;
*              to be done each quarter. Also revised footnote         ;
*              to indicate that this is the 2002 Survey of Health Care;
*              Beneficiaries. This reflects a change from previous    ;
*              years, the survey year now refers to the processing    ;
*              year instead of the year for which data was collected. ;
*              Also changed image reference from QTR to COL, these    ;
*              new names for the qtr images reflects the column they  ;
*              are in instead of the quarter they represent           ;
* 06-19-2002 - Mark Brinkley                                          ;
*                 Updated for Q2_2002                                 ;
*                 Changed macro var PERIOD to CURRENTPERIOD           ;
*                 Added macro vars PERIOD1-PERIOD3                    ;
* 07-29-2002 - Daniele Beahm                                          ;
*                 Added links to trend pages. Clicking on the fielding;
*                 Period now takes you to the component page for that ;
*                 period and clicking on the Trend column header now  ;
*                 takes you to the Trend section of the help file     ;
* 02-04-2003 - Mike Scott                                             ;
*                 Changed "Primary Care Manager" to "Personal Doctor" ;
* 02-10-2003 - Mike Scott                                             ;
*                 Inserted LENGTH HREF $ 250 statements before        ;
*                 href = "string" statements so that href wouldn't be ;
*                 set by default                                      ;
```

```
* 02-14-2003 - Mike Scott                                          ;
*                Added code to avoid scores > 100                   ;
* 04-30-2003 - Mike Scott                                          ;
*                Changed Preventive Care columns from 5 to 6 to     ;
*                accommodate Cholesterol Testing.                   ;
* 05-01-2003 - Mike Scott                                          ;
*                Updated periods for Q1 2003, and changed "2001 and ;
*                2002" to "2002 and 2003" and "2002 Health Care     ;
*                Survey" to "2003 Health Care Survey".              ;
* 05-04-2003 - Mike Scott                                          ;
*                Removed Civilian PCM (var1=3 or majgrp=3), and     ;
*                changed 4-8 references to 3-7.                     ;
* 05-06-2003 - Mike Scott                                          ;
*                Changed 7-0-0 to 8-0-0.                            ;
* 05-13-2003 - Mike Scott                                          ;
*                Changed two widths.                                ;
* 05-14-2003 - Mike Scott                                          ;
*                Changed columns from 2-12 to 1-11 which is         ;
*                controlled by var3 - decreased var3's by 1 and     ;
*                decreased K loops by 1.                            ;
* 07-03-2003 - Mike Scott                                          ;
*                Incorporated TIMEPD variable into program to run   ;
*                with Q1 2003 TOTAL_Q rerun to include TIMEPD       ;
*                variable.                                          ;
* 07-30-2003 - Mike Scott                                          ;
*                Added else do section to correct header.           ;
* 07-31-2003 - Mike Scott                                          ;
*                Updated periods for Q2 2003.                       ;
* 08-01-2003 - Mike Scott                                          ;
*                Added code so periods would print on var3=7,8,9,10. ;
* 08-07-2003 - Regina Gramss                                       ;
*                Changed program to create additional trend pages   ;
*                for each sub-benefit: pages are now named with 4   ;
*                numbers (var4 has been added to all file name      ;
*                references) to compensate for additional layer     ;
*                of pages. All file references have been changed    ;
*                to include var4.                                   ;
* 01-28-2004 - Mike Scott                                          ;
*                Changed back to html being generated in HTML       ;
*                directory below directory where MAKEHTMQ is being  ;
*                run.                                               ;
* 01-29-2004 - Mike Scott                                          ;
*                Commented out LENGTH HREF $ 250 statements, since  ;
*                HREF was already declared.                         ;
* 02-11-2004 - Mike Scott                                          ;
*                Changed all lengths to 100 that were less than 100. ;
* 03-24-2004 - Mike Scott                                          ;
*                Updated for Q1 2004.  Changed hard-coded years in  ;
*                footnotes stating source to macro variables.       ;
* 05-07-2004 - Mike Scott - Changed "Wait More than 15 Minutes Past ;
*              Appointment" to "Wait in Doctor's Office" and        ;
*              "Problems Getting Referral to Specialist" to "Problems ;
*              Getting to See Specialist".  NAed out trends for the ;
*              composites Getting Needed Care, Getting Care Quickly, ;
*              and Customer Service and for the questions Problems  ;
*              Getting Personal Doctor/Nurse (GNC), Wait in Doctor's ;
*              Office (GCQ), and Problem with Paperwork (CS).       ;
* 02-16-2004 - Mike Scott - Moved initial data read-in outside macro ;
*              loop to speed up program.                            ;
* 06-22-2004 - Regina Gramss - Updated for Q2 2004 run.             ;
* 08-02-2004 - Regina Gramss - removed lines that replaced trend    ;
*              with NA                                              ;
* 10-07-2004 - Regina Gramss - Adjusted for XTNEXREG                ;
* 02-14-2005 - Mark Brinkley - added 12th benefit SMOKING           ;
* 05-10-2005 - Regina Gramss - deleted chol testing under Prevention ;
*              and added BMI for Healthy Behaviors (which replaced  ;
*              Smoking Cessation)                                   ;
* 07-29-2005 - Regina Gramss - updated for Q2 2005 - changed period ;
*              values to quarter, cy values (vs. dates)             ;
* 10-31-2005 - Regina Gramss - updated for Q3 2005                  ;
* 12-28-2005 - Regina Gramss - updated for Q4 2005                  ;
* 05-11-2006 - Lucy Lu - updated for Q2 FY 2006                     ;
*              change made:  change macro variables SRCYR1 to SRFYR1 ;
```

```
*                                                SRCYR2 to SRFYR2  ;
* 02-09-2007 - Justin Oh - condensed %if statement for bottom_notes   ;
*                          macro.                                     ;
* 02-15-2007 - Justin Oh - added bottom_notes_xls to condensed %if    :
*              statements for xls outputs in three places             ;
*                                                                     ;
* NOTE: Update only SRFYR1, SRFYR2, PERIOD1/2/3, and CURRENTPERIOD.   ;
*=====================================================================;

%LET SRFYR1 = 2006;   *** Previous year;   /*MJS 03/24/04 Added macro variables*/
%LET SRFYR2 = 2007;   *** Current year;

/*** Added macro variables for previous periods (MAB 6-19-2002) ***/
%LET PERIOD1 = October, 2006;
%LET PERIOD2 = January, 2007;
%LET PERIOD3 = April, 2007;

/*** Change name of macro variable from PERIOD (MAB 6-19-2002) ***/
%LET CURRENTPERIOD = July, 2007;   /** Current Period of these reports **/
%LET QTRS=4; /** Qtr of these reports    **/
%LET QTRNO=1;    /**LLU 5/15/06. ne 1 indicates the data is from cuerrent year and proceeding
year, 1 is from current year only*/


OPTIONS NOXWAIT;        /* 2000/11: added noxwait*/


%LET HTMLSP=%NRSTR( );     /**DANIELE CHANGED %STR( ) TO %NRSTR( )**/
%LET QUOTE=%STR("");
%LET OUTDIR=HTML;                   /** Directory to put HTML files **/  /*MJS 01/28/04 Set to
HTML*/
/*%LET OUTDIR=L:\Q4_2005\PROGRAMS\LOADWEB\TEST;*/
%LET IMGDIR=images;                /** Directory with images **/
%LET TARGET=target='_parent';      /** HTML code for frames targeting **/
%LET OUTXLS=1;                     /** 1=Make XLS file/0=Don't   Added 1-24 MAB **/
%LET fontface=%STR(Arial,Helvetica,Swiss,Geneva);
%LET hdcolr=%STR('white');
%LET BLUE=%STR('#663300');         /** This is really dark red **/
%LET GREEN=%STR('#009933');
%LET RED=%STR('#cc0000');
%LET GRAY=%STR('white');
%LET LOGO=%STR('images\tricare_side_35_new.gif');
%LET HELP_BUT=%STR('images\help75.gif');
%LET HOME_BUT=%STR('images\home75.gif');
%LET BACK_BUT=%STR('images\back75.gif');
%LET NUMBER_HTML_FILES=0;          /** Keep count of HTML files created **/

%LET SUB_HEAD=0;                   /** Macro variable for sub-benfit heading **/
                                   /** 1=headings, 0=no headings             **/

/*********************************************************/
/***** Macro for putting notes at bottom of table   *****/
/*********************************************************/
%MACRO BOTTOM_NOTES();               /** Modified %if condition at the QTRNO level to minimize
duplicate codes **/
                                   /** Deleted previously commented out per page bottom notes.
JSO 02/09/07  **/
          PUT "<tr>";

       %IF &QTRNO NE 1 %THEN %DO;
          PUT   "            <td   colspan='&columns.'><font   face='Arial,Helvetica,Swiss,Geneva'
size='2'>Source:   Health   Care   Surveys   of   DoD   Beneficiaries   conducted   in   &SRFYR1   and
&SRFYR2.</font>";   ***MJS 03/24/04
       %END;
       %ELSE %DO;
          PUT   "            <td   colspan='&columns.'><font   face='Arial,Helvetica,Swiss,Geneva'
size='2'>Source: &SRFYR2 Health Care Survey of DOD Beneficiaries</font>";   ***MJS 03/24/04 Changed
hard-coded year to
       %END;

          PUT "    <font face='Arial,Helvetica,Swiss,Geneva' size='2' color='#009933'><br>";
          PUT "    <b>Indicates score significantly exceeds benchmark</b></font><b>&htmlsp.<br>";
```

```
          PUT     "                   </b><font     face='Arial,Helvetica,Swiss,Geneva'     size='2'
color='#cc0000'><i>Indicates score significantly falls short of benchmark</i></font><br>";
          PUT   "          <font   face='Arial,Helvetica,Swiss,Geneva'   size='2'>NA   Indicates   not
applicable</font><br>";

       %if &var3 = 12 and &seppage = 2 and (&var4 = 0 or &var4 = 3) %then %do;
          PUT  "       <font  face='Arial,Helvetica,Swiss,Geneva'  size='2'>*  Indicates  scores  not
available for that quarter</font><br>";
       %end;

          PUT "     <font face='Arial,Helvetica,Swiss,Geneva' size='2'>*** Indicates suppressed due
to small sample size</font><br>";
          PUT  "       <center><a  href='&hrefxls.'><img  src='&imgdir.\excel.gif'  border=0>Download
Page</a></center>";
          PUT "</td></tr>";

    %MEND BOTTOM_NOTES;

    %MACRO BOTTOM_NOTES_XLS();          /** Added BOTTOM_NOTES_XLS macro to substitute 3 separate
duplicate codes.        **/
                                       /** Big difference between BOTTOM_NOTES macro is the special
fonts. JSO 02/15/07  **/
         %if &outxls.=1 %then %do;
            FILE XLSDATA;
            PUT; PUT;
            %if &var3.=0 %then %do;
               PUT "Source: &SRFYR2 Health Care Survey of DOD Beneficiaries";
            %end;
            %else %if (&var3.=5 and (&var4.=3 or &var4.=0) and &seppage.=2) or
                      (&var3.=1 and (&var4.=1 or &var4.=0) and &seppage.=2) or
                      (&var3.=2 and (&var4.=4 or &var4.=0) and &seppage.=2) %then %do;
               %IF &QTRNO NE 1 %THEN %DO;
                  PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRFYR1 and
&SRFYR2";
               %END;
               %ELSE %DO;
                  PUT "Source: &SRFYR2 Health Care Survey of DOD Beneficiaries";
               %END;
            %end;
            %else %if &var3.ne 0 %then %do;
               %IF &QTRNO NE 1 %THEN %DO;
                  PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRFYR1 and
&SRFYR2";
               %END;
               %ELSE %DO;
                  PUT "Source: &SRFYR2 Health Care Survey of DOD Beneficiaries";
               %END;
            %end;
               PUT "Indicates score significantly exceeds benchmark";
               PUT "Indicates score significantly falls short of benchmark";
               PUT "NA Indicates not applicable";
            %if &var3 = 12 and &seppage = 2 and (&var4 = 0 or &var4 = 3) %then %do;
               PUT "* Indicates scores were not available that quarter";
            %end;
            PUT "*** Indicates suppressed due to small sample size";
         %end;

    %MEND BOTTOM_NOTES_XLS;

    /*******************************************************/
    /***** Macro for adding in link row to trends data  *****/
    /*******************************************************/

    /*** Macro variable with Javascript to go back ***/
    %LET        GOBACK=%STR(<script>document.write(&quote.<a        href='javascript:history.go(-1)'
target='_parent'>&quote.);
    document.write(&quote.<img    src='images\\back75.gif'    border='0'    alt='Go    to    previous
page'>&quote.);document.write(&quote.</a>&quote.);</script>);


    LIBNAME SRC1 V612 '.'  ACCESS=READONLY;
    *LIBNAME SRC1 V612 'L:\Q4_2005\Programs\LoadWeb'  ACCESS=READONLY;
```

```
OPTIONS LS=210;


/*******************************************************************/
/****   Macro to create html pages                                 ****/
/****          var1=major group                                    ****/
/****          var2=region                                         ****/
/****          var3=benefit                                        ****/
/****          var4=trend                                          ****/
/****       seppage=0/no separate pages for qtrly trends           ****/
/****               1/1st separate page                            ****/
/****               2/2nd separate page                            ****/
/*******************************************************************/
/** RSG 08/07/03 - added var4 to add extra dimension of page numbers for
    sub benefit trend pages**/

/** Load in data **/   ***MJS 05/13/04;
DATA PRE_SUBSET;
  SET SRC1.TOTAL_Q;


  IF BENEFIT="Total" THEN DELETE;  /*** MAB testing 2/11/2005 ***/



  IF SCORE>100 then SCORE=100;                                        ***MJS ADDED 2/14/2003 to
avoid scores > 100;
  IF (TIMEPD="Trend" and -.5<SCORE<0) THEN SCORE=ABS(SCORE);        ***DKB ADDED 8/13/2002 to
avoid negative zero values;
  IF TIMEPD="Trend" THEN TIMEPD="Est. Quarterly Rate of Change";    ***DKB ADDED 8/12/2002 to
rename Trend column;

  IF BENTYPE="Wait More Than 15 Minutes Past Appointment" THEN     /*MJS 5/7/04 Changed label*/
    BENTYPE="Wait In Doctor`s Office";
  IF BENTYPE="Problems Getting Referral To Specialist" THEN        /*MJS 5/7/04 Changed label*/
    BENTYPE="Problems Getting To See Specialist";
  IF BENTYPE="Percent Normal Weight" THEN
    BENTYPE="Percent Not Obese";                                       /* RSG 09/20/2005 Changed
label*/

  /**RSG 01/2005 CREATE SERVICE FIELD TO ORDER REGION BY SERVICE AFFILIATION, ALSO
     CHANGE CONUS SERVICE AFFILIATION TO LOWER CASE*/

     IF MAJGRP = "Benchmark" THEN LINEUP=1;
    ELSE IF MAJGRP = "Prime Enrollees" THEN LINEUP=2;
    ELSE IF MAJGRP = "Enrollees with Military PCM" THEN LINEUP=3;
    ELSE  IF  MAJGRP  =  "Enrollees  with  Civilian  PCM"  THEN  LINEUP=4;  ***JSO  11/07/07  Added
Civilian PCM;
    ELSE IF MAJGRP = "Standard/Extra Users" THEN LINEUP=5;
    ELSE IF MAJGRP = "Active Duty" THEN LINEUP=6;
    ELSE IF MAJGRP = "Active Duty Dependents" THEN LINEUP=7;
    ELSE IF MAJGRP = "Retirees and Dependents" THEN LINEUP=8;
    ELSE IF MAJGRP = "All Users" THEN LINEUP=9;

     IF REGION = "Benchmark" THEN LINEUP2=1;
     ELSE IF UPCASE(REGION) = 'CONUS MHS' THEN LINEUP2=2;
     ELSE IF UPCASE(REGION) = 'ARMY' THEN LINEUP2=3;
     ELSE IF UPCASE(REGION) = 'NAVY' THEN LINEUP2=4;
     ELSE IF UPCASE(REGION) = 'AIR FORCE' THEN LINEUP2=5;
     ELSE IF UPCASE(REGION) = 'OTHER' THEN LINEUP2=6;
     ELSE IF UPCASE(REGION) = 'NORTH' THEN LINEUP2=7;
     ELSE IF UPCASE(REGION) = 'NORTH ARMY' THEN LINEUP2=8;
     ELSE IF UPCASE(REGION) = 'NORTH NAVY' THEN LINEUP2=9;
     ELSE IF UPCASE(REGION) = 'NORTH AIR FORCE' THEN LINEUP2=10;
     ELSE IF UPCASE(REGION) = 'NORTH OTHER' THEN LINEUP2=11;
     ELSE IF UPCASE(REGION) = 'SOUTH' THEN LINEUP2=12;
     ELSE IF UPCASE(REGION) = 'SOUTH ARMY' THEN LINEUP2=13;
     ELSE IF UPCASE(REGION) = 'SOUTH NAVY' THEN LINEUP2=14;
     ELSE IF UPCASE(REGION) = 'SOUTH AIR FORCE' THEN LINEUP2=15;
     ELSE IF UPCASE(REGION) = 'SOUTH OTHER' THEN LINEUP2=16;
     ELSE IF UPCASE(REGION) = 'WEST' THEN LINEUP2=17;
     ELSE IF UPCASE(REGION) = 'WEST ARMY' THEN LINEUP2=18;
```

```
        ELSE IF UPCASE(REGION) = 'WEST NAVY' THEN LINEUP2=19;
        ELSE IF UPCASE(REGION) = 'WEST AIR FORCE' THEN LINEUP2=20;
        ELSE IF UPCASE(REGION) = 'WEST OTHER' THEN LINEUP2=21;
        ELSE IF UPCASE(REGION) = 'OVERSEAS' THEN LINEUP2=22;
        ELSE IF UPCASE(REGION) = 'OVERSEAS EUROPE' THEN LINEUP2=23;
        ELSE IF UPCASE(REGION) = 'OVERSEAS PACIFIC' THEN LINEUP2=24;


    RUN;   ***MJS 07/03/03 Changed BENTYPE to TIMEPD;

    PROC SORT;
    BY LINEUP LINEUP2;
    RUN;

    %MACRO MKHTML(var1,var2,var3,seppage,var4);


    /*** Determine some macro variables ***/
    %if &prefix=f %then %do;
      %let width1=640;
      %let width2=640;
      %let border=0;
    %end;
    %else %do;
      %let width1=90%;
      %let width2=85%;
      %let border=1;
    %end;



    %let number_html_files=%EVAL(1+&number_html_files.);


    /** Load in data **/
    DATA SUBSET;
      SET PRE_SUBSET;
      LENGTH FILEOUT1 $ 100;   /*MJS 02/11/04*/
      LENGTH FILEOUT2 $ 100;
      LENGTH FILEOUT3 $ 100;


      /*** VAR1 indicated major group ***/
      %if &var1.=0 %then %let major=%STR();
      %if &var1.=1 %then %let major=%STR(Prime Enrollees);
      %if &var1.=2 %then %let major=%STR(Enrollees with Military PCM);
      %if  &var1.=3  %then  %let  major=%STR(Enrollees  with  Civilian  PCM);    ***JSO  10/31/07  Added
Civilian PCM;
      %if &var1.=4 %then %let major=%STR(Standard/Extra Users);          ***(var1.=3), and changed
3-7 back to 4-8;
      %if &var1.=5 %then %let major=%STR(Active Duty);
      %if &var1.=6 %then %let major=%STR(Active Duty Dependents);
      %if &var1.=7 %then %let major=%STR(Retirees and Dependents);
      %if &var1.=8 %then %let major=%STR(All Users);


      %if &var1.=0 %then %do;
         /* RSG 02/2005 - CONUS WILL NOW BE PART OF REGION LIST SO COMMENT OUT NEXT SECTION*/
         /* %if &var2.^=99 %then %do;
            IF SUBSTR(REGION,1,5)="CONUS" THEN DELETE;
         %end;*/

         %let comma=%STR();
         %let grpmsg=%STR();
      %end;
      %else %do;
         IF MAJGRP="&major.";    /*** Subset data by major group ***/
         %let comma=%STR(,);
         %let grpmsg=%STR(Click below to view this table by other groups);
      %end;
```

```
       /*** Create macro variables to refer to Component or Trend pages ***/
       %if &seppage.=2 %then %do;
          %let q=q;
          %let unq=;
          %let click_alt=Click for Component data;
          %let click_image=component.gif;
       %end;
       %else %do;
          %let q=;
          %let unq=q;
          %let click_alt=Click for Trend data;
          %let click_image=trend.gif;
       %end;


       FILEOUT1=COMPRESS("&outdir.\&prefix.&var1.-&var2.-&var3.-&var4.&q..htm");      /** Main html
**/
       FILEOUT2=COMPRESS("&outdir.\&prefix.&var1.-&var2.-&var3.-&var4.&q.a.htm");   /** Header html
**/
       FILEOUT3=COMPRESS("&outdir.\&prefix.&var1.-&var2.-&var3.-&var4.&q.b.htm");     /** Data html
**/
       /*** Added &var4 to all file names for additional sub-benefit trend pages
             08-07-2003 RSG ***/
          /*MJS 01/28/04 Added &outdir.\ to above filenames*/

        /*** Added 07-12-2001 MAB  If creating Excel then don't create HTML ***/
        %if &outxls.=1 %then %do;
          %let fileout1= NUL;
          %let fileout2= NUL;
          %let fileout3= NUL;
        %end;
        %else %do;
          call symput('fileout1',FILEOUT1);
          call symput('fileout2',FILEOUT2);
          call symput('fileout3',FILEOUT3);
        %end;



      /*-------------------------*/
      /* 2000/11: begin xls code */
      /*-------------------------*/

      /*MJS 01/28/04 Added &outdir.\ to filename*/
      FILEOUTX=COMPRESS("&outdir.\p&var1.-&var2.-&var3.-&var4.&q..xls");            /* create run-
specific xls file */
      CALL SYMPUT('fileoutX',FILEOUTX);                                     /* via global macro vars
*/
      %if &seppage. ne 2 %then %do;
      TEMPLATE=COMPRESS("Templates\Template&var3..xls");
      %end;
      %else %if &var3 = 12 and &seppage = 2 and (&var4 = 0 or &var4 = 3) %then %do;
                  TEMPLATE=COMPRESS("Templates\Template_trend2.xls");
      %end;
      %else %do;
               TEMPLATE=COMPRESS("Templates\Template_trend.xls");
      %end;
      CALL SYMPUT('template',TEMPLATE);                                    /* identify which template
xls file */
      /*-------------------------*/
      /* 2000/11: end xls code   */
      /*-------------------------*/


      /*** VAR3 dictates type of benefit heading ***/
      %if &var3=0 %then %do;
        %let headvar=BENEFIT;
      %end;
      %else %do;           /*MJS 07/30/03 Added else do - was %else %let headvar=BENTYPE;*/
        %if &seppage.=2 or &var3=7 or &var3=8 or &var3=9 or &var3=10 %then %let headvar=TIMEPD;
/*MJS 08/01/03 Added &var3 code*/
        %else %let headvar=BENTYPE;
      %end;
```

```
  /*** clean up headvar variable ***/
  /***IF BENTYPE="Trend" THEN BENTYPE="Trend<BR>% change";***/

  /*** Link to XLS file ***/
  HREFXLS=COMPRESS("p&var1.-&var2.-&var3.-&var4.&q..xls");
  call symput('hrefxls',HREFXLS);
RUN;


/*** Subset data by region ***/
DATA SUBSET2;
  SET SUBSET;

  %if &var2.=0 %then %do;    /** 0 = All regions **/
     IF REGION=REGCAT;       /** Just do All Region table **/
      %let sub_regs=%STR(All Regions);
  %end;

  %else %if &var2.=1 %then %do;
     IF UPCASE(REGION)="CONUS MHS";
      %let sub_regs=%STR(CONUS MHS);
  %end;
  %else %if &var2.=2 %then %do;
     IF UPCASE(REGION)="ARMY";
      %let sub_regs=%STR(ARMY);
  %end;
  %else %if &var2.=3 %then %do;
     IF UPCASE(REGION)="NAVY";
      %let sub_regs=%STR(NAVY);
  %end;
  %else %if &var2.=4 %then %do;
     IF UPCASE(REGION)="AIR FORCE";
      %let sub_regs=%STR(AIR FORCE);
  %end;

  %else %if &var2.=5 %then %do;
     IF UPCASE(REGION)="OTHER";
      %let sub_regs=%STR(OTHER);
  %end;
  %else %if &var2.=6 %then %do;
     IF UPCASE(REGION)="NORTH";
      %let sub_regs=%STR(NORTH);
  %end;
  %else %if &var2.=7 %then %do;
     IF UPCASE(REGION)="NORTH ARMY";
      %let sub_regs=%STR(North Army);
  %end;
  %else %if &var2.=8 %then %do;
     IF UPCASE(REGION)="NORTH NAVY";
      %let sub_regs=%STR(North Navy);
  %end;

  %else %if &var2.=9 %then %do;
     IF UPCASE(REGION)="NORTH AIR FORCE";
      %let sub_regs=%STR(North Air Force);
  %end;
  %else %if &var2.=10 %then %do;
     IF UPCASE(REGION)="NORTH OTHER";
      %let sub_regs=%STR(North Other);
  %end;
  %else %if &var2.=11 %then %do;
     IF UPCASE(REGION)="SOUTH";
      %let sub_regs=%STR(SOUTH);
  %end;
  %else %if &var2.=12 %then %do;
     IF UPCASE(REGION)="SOUTH ARMY";
      %let sub_regs=%STR(South Army);
  %end;

 %else %if &var2.=13 %then %do;
     IF UPCASE(REGION)="SOUTH NAVY";
      %let sub_regs=%STR(South Navy);
```

```
      %end;
      %else %if &var2.=14 %then %do;
          IF UPCASE(REGION)="SOUTH AIR FORCE";
           %let sub_regs=%STR(South Air Force);
      %end;
      %else %if &var2.=15 %then %do;
          IF UPCASE(REGION)="SOUTH OTHER";
           %let sub_regs=%STR(South Other);
      %end;
      %else %if &var2.=16 %then %do;
          IF UPCASE(REGION)="WEST";
           %let sub_regs=%STR(WEST);
      %end;

      %else %if &var2.=17 %then %do;
          IF UPCASE(REGION) = "WEST ARMY";
           %let sub_regs=%STR(West Army);
      %end;
      %else %if &var2.=18 %then %do;
          IF UPCASE(REGION) = "WEST NAVY";
           %let sub_regs=%STR(West Navy);
      %end;
      %else %if &var2.=19 %then %do;
          IF UPCASE(REGION) = "WEST AIR FORCE";
           %let sub_regs=%STR(West Air Force);
      %end;
      %else %if &var2.=20 %then %do;
          IF UPCASE(REGION) = "WEST OTHER";
           %let sub_regs=%STR(West Other);
      %end;
      %else %if &var2.=21 %then %do;
          IF UPCASE(REGION) = "OVERSEAS";
           %let sub_regs=%STR(OVERSEAS);
      %end;
      %else %if &var2.=22 %then %do;
          IF UPCASE(REGION) = "OVERSEAS EUROPE";
           %let sub_regs=%STR(Overseas Europe);
      %end;
      %else %if &var2.=23 %then %do;
          IF UPCASE(REGION) = "OVERSEAS PACIFIC";
           %let sub_regs=%STR(Overseas Pacific);
      %end;

     RUN;


     /*** Subset data by Benefit ***/
     DATA SUBSET3;
       SET SUBSET2;

       %if &var3.=0 %then %do;   /** 0=All Benefits **/
          IF BENTYPE="Composite" and TIMEPD="&currentperiod.";    ***MJS 07/03/03 Changed from IF
BENTYPE="&currentperiod.";
       %end;
       %else %if &var3.=1 %then %do;   ***MJS 4/23/03 Changed 2 to 1;
          IF BENEFIT="Getting Needed Care";

          /*** # of columns for this benefit table ***/
          %let columns=%EVAL(5+&qtrs.);
       %end;
       %else %if &var3.=2 %then %do;   ***MJS 4/23/03 Changed 3 to 2;
          IF BENEFIT="Getting Care Quickly";
          %let columns=%EVAL(5+&qtrs.);
       %end;
       %else %if &var3.=3 %then %do;   ***MJS 4/23/03 Changed 4 to 3;
          IF BENEFIT="Courteous and Helpful Office Staff";
          %let columns=%EVAL(3+&qtrs.);
       %end;
       %else %if &var3.=4 %then %do;   ***MJS 4/23/03 Changed 5 to 4;
          IF BENEFIT="How Well Doctors Communicate";
          %let columns=%EVAL(5+&qtrs.);
       %end;
       %else %if &var3.=5 %then %do;   ***MJS 4/23/03 Changed 6 to 5;
```

```
         IF BENEFIT="Customer Service";
         %let columns=%EVAL(4+&qtrs.);
      %end;
      %else %if &var3.=6 %then %do;   ***MJS 4/23/03 Changed 7 to 6;
         IF BENEFIT="Claims Processing";
         %let columns=%EVAL(3+&qtrs.);
      %end;
      %else %if &var3.=7 %then %do;   ***MJS 4/23/03 Changed 8 to 7;
         IF BENEFIT="Health Plan";
         %let columns=%EVAL(2+&qtrs.);      ***DKB ADDED 2+ instead of 1+ for Trend 5/3/2002;
      %end;
      %else %if &var3.=8 %then %do;   ***MJS 4/23/03 Changed 9 to 8;
         IF BENEFIT="Health Care";
         %let columns=%EVAL(2+&qtrs.);      ***DKB ADDED 2+ instead of 1+ for Trend 5/3/2002;
      %end;
      %else %if &var3.=9 %then %do;   ***MJS 4/23/03 Changed 10 to 9;
         IF BENEFIT="Personal Doctor";      ***MJS 02/04/2003;
         %let columns=%EVAL(2+&qtrs.);      ***DKB ADDED 2+ instead of 1+ for Trend 5/3/2002;
      %end;
      %else %if &var3.=10 %then %do;   ***MJS 4/23/03 Changed 11 to 10;
         IF BENEFIT="Specialty Care";
         %let columns=%EVAL(2+&qtrs.);      ***DKB ADDED 2+ instead of 1+ for Trend 5/3/2002;
      %end;
      %else %if &var3.=11 %then %do;   ***MJS 4/23/03 Changed 12 to 11;
         IF BENEFIT="Preventive Care";   ***MJS 04/30/03 Changed from 5+ to 6+ because Cholesterol
Testing was added;
         %let columns=%EVAL(5+&qtrs.);    ***DKB CHANGED FROM 6+ to 5+ because removed flu shot
5/7/02;
      %end;
      %else %if &var3.=12 %then %do;     /*** MAB Added 2/11/2005 ***/
         IF BENEFIT="Healthy Behaviors";
         %let columns=%EVAL(4+&qtrs.);
      %end;

      /*** Set macro variable ***/
      %if &var3.=0 %then %do;
          %let sub_ben=%STR(&currentperiod. Composite Scores);
          %let columns=13;
      %end;
      %else %do;
        call symput('sub_ben',BENEFIT);
      %end;


      /*** Determine number of columns for sub-benefits  ***/
      /*** Equals cols - (x for qtrs  - 1 for stub column) ***/
      %let subcols=%EVAL(&columns.-&qtrs.-2);               ***DKB CHANGED FROM -1 to -2 5/3/2002;

      /*** Determine number of columns less 1st (stub) column ***/
      %let columns_less1=%EVAL(&columns.-1);

    RUN;



    /*** Added 4-3-01 MAB ***/
    DATA SUBSET4;
      SET SUBSET3;

      WIDTH_COL1=120; /** Set width of column 1 **/

      IF BENTYPE="Composite" THEN WIDTH3=90;  ***DKB ADDED TREND and changed width3 from 120 to 90
4/30/2002***;
      ELSE WIDTH3=90;                          ***MJS 07/03/03 Changed from BENTYPE IN any period
and Est. Quarterly Rate of Change;

      /** Deal with some special cases **/
      IF BENEFIT="Preventive Care" THEN DO;
          IF BENTYPE="Composite" THEN WIDTH3=.;    ***DKB ADDED TREND 4/30/2002***;
          ELSE WIDTH3=80;                              ***MJS 07/03/03 Changed from BENTYPE IN any
period and Est. Quarterly Rate of Change;
      END;
      IF BENEFIT="Courteous and Helpful Office Staff" AND
```

```
              BENTYPE="Composite" THEN WIDTH3=70;   ***DKB ADDED TREND 4/30/2002***;
                                                    ***MJS  07/03/03  Changed  from  BENTYPE  IN  any
period and Est. Quarterly Rate of Change;
       %if &prefix.=p %then %do;
          WIDTH3=.;
       %end;

       %else %if &var3.=0 %then %do;
          WIDTH_COL1=.;
          WIDTH3=40;
       %end;


             /*** Added 5-7-2001 mab ***/

     RUN;

     /*************************************************************/
     /****  Put out Header rows of table                        ****/
     /*************************************************************/
     DATA HTML;
       SET SUBSET4;
       LENGTH HREFBACK $100;   /*MJS 02/11/04*/

       IF REGION IN("Benchmark") OR MAJGRP IN("Benchmark");

       /** Determine where back button should link to **/
       %if &var1.=0 %then %do;
          HREFBACK=COMPRESS("&prefix.8-0-0-0.htm");   ***MJS 05/06/03 Changed 8-0-0 to 7-0-0;
                                                      ***JSO 11/12/07 Changed 7-0-0 to 8-0-0;
       %end;
       %else %do;
          HREFBACK=COMPRESS("&prefix.&var1.-0-0-0.htm");
       %end;

       /*** Create macro variable date with today's date ***/
       DATETIME=DATETIME();
       CALL SYMPUT ('DATETIME',left(put(datetime,datetime20.)));
       DROP DATETIME;

     RUN;

     /*** ÛÛ FRAMES SECTION ÛÛ ***/
     %if &prefix=f %then %do;

         /*** Make frameset page split frames smaller on all ratings pages ***/

        %if &var3.=0 %then %do;
              %let splitpixel=228;
         %end;
         %else %if &var3.=1 OR &var3.=2 %then %do;   ***MJS 4/23/03 Changed 2&3 to 1&2;
              %let splitpixel=211;
         %end;
         %else %if &var3.=3 OR &var3.=6 OR &var3.=12 %then %do;   ***MJS 4/23/03 Changed 4&7 to 3&6;
***RSG 02/2005 Added var3=12;
              %let splitpixel=181;
         %end;
         %else %if &var3.=4 %then %do;   ***MJS 4/23/03 Changed 5 to 4;
              %let splitpixel=196;
         %end;
         %else %if &var3.=5 %then %do;   ***MJS 4/23/03 Changed 6 to 5;
              %let splitpixel=221;
         %end;
         %else %if &var3.=7 OR &var3.=8 OR &var3.=9 OR &var3.=10 %then %do;
              %let splitpixel=158;   ***MJS 4/23/03 Changed 8/9/10/11 to 7/8/9/10;
         %end;
         %else %if &var3.=11 %then %do;   ***MJS 4/23/03 Changed 12 to 11;
              %let splitpixel=192;
         %end;

         %if &SEPPAGE.=2 %then %do;
              %let splitpixel=157;
         %end;
```

```
        /*** Create frameset page HTML page ***/
        DATA _NULL_;
          FILE "&FILEOUT1.";
          PUT "<html>";
          PUT "<frameset rows='&splitpixel.,*'>";
           %if &seppage.=2 %then %do;
             PUT   "         <frame   src='f&var1.-&var2.-&var3.-&var4.qa.htm'      MARGINHEIGHT='0'
MARGINWIDTH='0'>";
             PUT   "         <frame   src='f&var1.-&var2.-&var3.-&var4.qb.htm'      MARGINHEIGHT='0'
MARGINWIDTH='0'>";
           %end;
           %else %do;
             PUT   "         <frame   src='f&var1.-&var2.-&var3.-&var4.a.htm'      MARGINHEIGHT='0'
MARGINWIDTH='0'>";
             PUT   "         <frame   src='f&var1.-&var2.-&var3.-&var4.b.htm'      MARGINHEIGHT='0'
MARGINWIDTH='0'>";
           %end;


          PUT "</frameset></html>";
        RUN;


        /*** Since done making frameset page then assign fileout1 = frame 1 ***/
        %let fileout1=&fileout2.;
        %if &seppage.=1 %then %do;
            %let fileout1=&fileout2.;
         %end;
         %else %if &seppage.=2 %then %do;
            %let fileout1=&fileout2.;
         %end;

     %end;


     /*** Initialize HTML page ***/
     DATA _NULL_;
       FILE "&FILEOUT1.";

       PUT "<! Created &datetime.>";
       PUT "<html><head><title>";
       PUT "&major. &comma. &sub_ben., &sub_regs.";
       PUT "</title></head>";
       PUT "<body bgcolor='#999999' text='#000099' link='#660066' alink='#660066' vlink='#996699'>";

       /*** link to printer friendly version moved, 10/25/2001 C.Rankin ***/


     RUN;

     /*-------------------------*/
     /* 2000/11: begin xls code */
     /*-------------------------*/
     %if &outxls.=1 %then %do;
       X "COPY &template. &fileoutX.";                                  /* copy template xls to run-
specific xls file */
       X "START &fileoutX.";                                           /* open run-specific xls file
*/
       FILENAME XLSTITLE DDE 'excel|Sheet1!R1C1:R2C20' NOTAB;           /* xls rows 1 & 2 (titles)
*/
       FILENAME XLSDATA DDE 'excel|Sheet1!R6C1:R100C20' NOTAB;        /* xls rows 6+ (body of table)
*/
     %end;
     /*-------------------------*/
     /* 2000/11: end xls code   */
     /*-------------------------*/



     /*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
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```
     /*** If ALL benefits (VAR3=0) then do special column headers ***/
     %if &var3.=0 %then %do;
     DATA _NULL_;
       SET HTML END=EOF;
       *LENGTH HREF $ 250;   /*MJS 01/29/04 Commented out statement*/

       IF _N_=1 THEN DO;

             FILE "&FILEOUT1." MOD;      /* 2000/11: moved file stmt inside if stmt */

              /*** put table title ***/
              /**PUT   "<h2><center><font   face='&fontface.'>&major.,   &sub_regs.   <br>   &sub_ben.
</font></center></h2>"**/

              /** MF Changes ROW 1 **/
              PUT     "<center><table     border='&border.'     cellpadding='2'     cellspacing='0'
bgcolor='#D8D8D8' colspan=13 width='&width1.'>";
              PUT "<tr bgcolor='white'>";
              PUT "     <td colspan='6' valign='top' bgcolor='#999999'><img border='0' height='25'
width='242' src=&logo.></td>";
              PUT "    <td colspan='7' align='right' valign='bottom' bgcolor='#999999'>";
              PUT "          <div align='right'>";
              PUT "             <a href='..\html\index.htm' &target.><img src=&home_but. border='0'
alt='Return to Main Page'></a>&htmlsp. &htmlsp.";

              /*** 4-17 MAB added JS code to go back ***/
              PUT "&goback.";

              PUT "           <noscript><a href=""" HREFBACK  +(-1) """ &target.><img src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";
              PUT "          &htmlsp. &htmlsp.";
              PUT "             <a href='..\html\help.htm' &target.><img src=&help_but. border='0'
alt='Help'></a></div>";
              PUT "    </td>";
              PUT "</tr>";

              /** MF Changes ROW 2 **/
              /** Modified 2-2 MAB to better align title **/
              PUT "<tr>";
              PUT "        <td valign='center' align='center' colspan='13' bgcolor='#D8D8D8'>";
              PUT "                     <font face='&fontface.' color='#3333cc' size='5'><b>&major.
&comma.  &sub_regs.<br>";
              PUT "                 &sub_ben.</b></font>";
              PUT "        </td>";
              PUT "</tr>";


              /*** Print out 3rd row ***/
              /*** ÛÛ FRAMES SECTION ÛÛ ***/


               /***here***/

              %if &prefix=f %then %do;
                   PUT "<tr bgcolor= &hdcolr.>";
                         /**RSG 02/2005 add in a dummy gif to align titles and comment out extra
cell**/
                   /**PUT "<td width=70>&htmlsp.</td>";**/
                   PUT  "<td  width=40  colspan=1><IMG  SRC='&imgdir.\dummy.gif'  ALT='Total  Score'
BORDER=0></td>";
                   PUT  "<td  width=80  colspan=2><IMG  SRC='&imgdir.\eoa.gif'ALT='Ease  of  Access'
BORDER=0></td>";
                   PUT     "<td     width=185     colspan=4><IMG     SRC='&imgdir.\com_cus_ser.gif'
ALT='Communication and Customer Service' BORDER=0></td>";
                   PUT  "<td  width=160  colspan=4><IMG  SRC='&imgdir.\ratings0.gif'  ALT='Ratings'
BORDER=0></td>";
                   PUT  "<td  width=50  colspan=1><IMG  SRC='&imgdir.\prevention.gif'  ALT='Prevention'
BORDER=0></td>";
                   PUT   "<td   width=80   colspan=2><IMG   SRC='&imgdir.\healthy.gif'   ALT='Healthy
Behaviors' BORDER=0></td>";
                   PUT "</tr>";
                   PUT "<tr bgcolor= &hdcolr.>";
               %end;
```

```
               %else %do;
                   PUT "<tr bgcolor= &hdcolr.>";
                   PUT "<td>&htmlsp.</td>";

                   /*** MAB rearranged 2/11/2005 ***/
                   PUT   "<td   align='center'   valign='bottom'   colspan=2><font   face='&fontface.'
size='2'><b>Ease of Access</b></font></td>";
                   PUT   "<td   align='center'   valign='bottom'   colspan=4><font   face='&fontface.'
size='2'><b>Communication and Customer Service</b></font></td>";
                   PUT   "<td   align='center'   valign='bottom'   colspan=4><font   face='&fontface.'
size='2'><b>Ratings</b></font></td>";
                   PUT   "<td   align='center'   valign='bottom'   colspan=1><font   face='&fontface.'
size='2'><b>Prevention</b></font></td>";
                   PUT   "<td   align='center'   valign='bottom'   colspan=1><font   face='&fontface.'
size='2'><b>Behaviors</b></font></td>";
                   PUT "</tr>";
                   PUT "<tr bgcolor= &hdcolr.>";
               %end;


              /*** Print out 1st column of 4th row ***/
              /*** ÛÛ FRAMES SECTION ÛÛ ***/
              %if &prefix=f %then %do;
                  PUT "<td width=80>&htmlsp.</td>";
                  /**RSG 02/2005 Added in dummy gif to align title**/
              /*      PUT  "<td  align='center'  valign='bottom'><IMG  SRC='&imgdir.\dummy.gif'ALT='  '
BORDER=0>";*/
              %end;
              %else %do;
                  PUT "<td width='7%'><font face='&fontface.'>&htmlsp.</font></td>";
              %end;



              /*** MAB 2/11/2005 ***/
              bennum=1;  /** index to all 12 benefits **/



              /*-------------------------*/
              /* 2000/11: begin xls code */
              /*-------------------------*/
              %if &outxls.=1 %then %do;
                FILE XLSTITLE;
                PUT "&major. &comma. &sub_regs.";
                PUT "%cmpres('&sub_ben.')";
              %end;
              /*-------------------------*/
              /* 2000/11: begin xls code */
              /*-------------------------*/
       END;

        FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */

        /*** Put Benefits across columns (Continuation of 4th row) ***/
        HREF=COMPRESS("..\html\&prefix.&var1.-&var2.-"||bennum||"-&var4..htm");


        /** If TOTAL benefit then don't have HREF **/
        /*** ÛÛ FRAMES SECTION ÛÛ ***/
        %if &prefix=f %then %do;
          IMAGE=COMPRESS("&imgdir.\image0_"||bennum||".gif");
          IF BENNUM=0 THEN PUT "<td align='center' valign='bottom'><IMG SRC='&imgdir.\image0_0.gif'
alt='Total' BORDER=0></td>";
          ELSE  PUT  "<td  align='center'  valign='bottom'><a  href="""  HREF  +(-1)  """  &target.><IMG
SRC='" IMAGE "' alt='" BENEFIT "' BORDER=0></a></td>";

        %end;
        %else %do;
          IF   BENNUM=0   THEN   PUT   "<td   width='7%'   align='center'   valign='bottom'><font
face='&fontface.'size='1'>" &HEADVAR. "</font></td>";
          ELSE PUT "<td width='7%' align='center' valign='bottom'><font face='&fontface.'size='1'><a
href="""  HREF +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
```

```
       %end;


      bennum+1;


      IF EOF THEN DO;
        PUT "</tr>";
        /***  2-2 MAB removed scale row ***/
      END;

    RUN;
    %end;

    /*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
    /*** If Sub-benefit (VAR3^=0) then do differently ***/
    /*** If not separate page (SEPPAGE=0) for quarterly info then do as before ***/
    %else %if &seppage.=0 OR &var3.=7 OR &var3.=8 OR &var3.=9 OR &var3.=10 %then %do;
                                    ***MJS 4/23/03 Changed 8/9/10/11 to 7/8/9/10;

    DATA _NULL_;
      SET HTML END=EOF;
      *LENGTH HREF $ 250;   /*MJS 01/29/04 Commented out statement*/

      COLUMNS=&columns.;
      SPAN1=ROUND(COLUMNS/2,1);
      SPAN2=COLUMNS-SPAN1;


      IF _N_=1 THEN DO;

            FILE "&FILEOUT1." MOD ;   /* 2000/11: moved inside if stmt */


             /** MF Changes ROW 1 **/
             PUT     "<center><table     border='&border.'     cellpadding='2'     cellspacing='0'
bgcolor='#D8D8D8' width='&width2.'>";
             PUT "<tr bgcolor='white'>";
             PUT  "        <td  colspan="""  SPAN1  +(-1)  """  valign='top'  bgcolor='#999999'><img
border='0' height='25' width='242' src=&logo.></td>";
             PUT   "          <td   colspan="""   SPAN2   +(-1)   """   align='right'   valign='bottom'
bgcolor='#999999'>";
             PUT "          <div align='right'>";
             PUT "             <a  href='..\html\index.htm'  &target.><img  src=&home_but.  border='0'
alt='Return to Main Page'></a>&htmlsp. &htmlsp.";

             /*** 4-17 MAB added JS code to go back ***/
             PUT "&goback.";

             PUT "           <noscript><a href=""" HREFBACK  +(-1) """ &target.><img src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";
             PUT "          &htmlsp. &htmlsp.";
             PUT "             <a  href='..\html\help.htm'  &target.><img  src=&help_but.  border='0'
alt='Help'></a></div>";
             PUT "    </td>";
             PUT "</tr>";

             /** MF Changes ROW 2 **/
             /** Modified 2-2 MAB to better align title **/
             PUT "<tr>";
             PUT  "             <td  valign='center'  align='center'  colspan="""  COLUMNS  +(-1)  """
bgcolor='#D8D8D8'>";
             PUT  "                     <font  face='&fontface.'  color='#3333cc'  size='5'><b>&major.
&comma.  &sub_regs. <br>";

             /*** If ratings then don't display reference period ***/
             %if &var3.=7 OR &var3.=8 OR &var3.=9 OR &var3.=10 %then %do;
                             ***MJS 4/23/03 Changed 8/9/10/11 to 7/8/9/10;
                   PUT "                 &sub_ben.</b></font>";
             %end;
             %else %do;
                   PUT "                 &sub_ben.<BR>&currentperiod.</b></font>";
             %end;
```

```
              PUT "        </td>";
              PUT "</tr>";


              /*** Sub_head macro variable added C.Rankin 10/25/2001  ***/

              %if &sub_head.=1 %then %do;
                 /** 3rd Row ***/
                 /** ÛÛ FRAMES SECTION ÛÛ ***/
                 %if &prefix=f %then %do;
                      PUT "<tr bgcolor= &hdcolr.><td>&htmlsp.</td>";   /** Column 1 **/
                      /*** If sub-benefits then output sub-benefit columns ***/
                      %if &subcols.^=0 %then %do;
                        IMAGE=COMPRESS("&imgdir.\span_image&var3..gif");
                        PUT "<td align='center' valign='bottom' colspan=&subcols.><IMG SRC=" IMAGE "
alt='" BENEFIT "' BORDER=0></td>";
                        PUT     "<td     align='center'     valign='bottom'     colspan=&qtrs.><IMG
SRC='&imgdir.\composite.gif' ALT='Composite' BORDER=0></td></tr>";
                      %end;
                      %else %do;
                        PUT     "<td     align='center'     valign='bottom'     colspan=&qtrs.><IMG
SRC='&imgdir.\border_rating.gif' ALT='Ratings' BORDER=0></td></tr>";
                      %end;
                 %end;
                 %else %do;
                      PUT "<tr bgcolor= &hdcolr.><td>&htmlsp.</td>";   /** Column 1 **/
                      /*** If sub-benefits then output sub-benefit columns ***/
                      %if &subcols.^=0 %then %do;
                        PUT    "<td    align='center'    valign='bottom'    colspan=&subcols.><font
face='&fontface.'><b>&sub_ben.<br>components</b></font></td>";
                        PUT     "<td     align='center'     valign='bottom'     colspan=&qtrs.><font
face='&fontface.'><b>Composite</b></font></td></tr>";
                      %end;
                      %else %do;
                        PUT     "<td     align='center'     valign='bottom'     colspan=&qtrs.><font
face='&fontface.'><b>Ratings</b></font></td></tr>";
                      %end;
                 %end;
              %end;


              /*** 4th Row start (column 1) ***/
              /*** ÛÛ FRAMES SECTION ÛÛ ***/
              %if &prefix=f %then %do;
                PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
                PUT   "<td   align='center'   valign='bottom'><img   src='&imgdir.\blank_120_50.gif'
border=0></td>";
              %end;
              %else %do;
                PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
                PUT "<td width='10%'>&htmlsp.</td>";
              %end;



              /*-------------------------*/
              /* 2000/11: begin xls code */
              /*-------------------------*/
              %if &outxls.=1 %then %do;
                FILE XLSTITLE;
                PUT "&major. &comma. &sub_regs.";
                PUT "%cmpres('&sub_ben.')";
              %end;
              /*-------------------------*/
              /* 2000/11: begin xls code */
              /*-------------------------*/
       END;

       FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */
       /*** Print out column headings ***/
```

```
           HREF=COMPRESS("..\html\help.htm#q&var3.");
           HREF1=COMPRESS("..\html\help.htm#trend"); /*7-29-2002 DKB ADDED LINK FOR TREND SECTION
OF HELP FILE*/




       /*** 4th Row (columns 2+) ***/
       /*** If quarter column then HREF link is different ****/
       /*** ÛÛ FRAMES SECTION ÛÛ ***/
       %if &prefix=f %then %do;
          IF _N_>&subcols. THEN IMAGE=COMPRESS("&imgdir.\col"||_N_-&subcols.||".gif");
*DKB CHANGED IMAGE NAME FROM QTR TO COL;
          ELSE IMAGE=COMPRESS("&imgdir.\image&var3._"||_N_||".gif");

          /*7-29-2002 DKB ADDED LINK TO TREND SECTION OF HELP FILE */ ***MJS 07/03/03 Changed
BENTYPE to TIMEPD;
          IF TIMEPD NE "Est. Quarterly Rate of Change" THEN PUT "<td align='center'
valign='bottom'><a href=""" HREF +(-1) """ &target.><IMG SRC='" IMAGE "' alt='" TIMEPD "'
BORDER=0></a></td>";
          ELSE PUT "<td align='center' valign='bottom'><a href=""" HREF1 +(-1) """ &target.><IMG
SRC='" IMAGE "' alt='" TIMEPD "' BORDER=0></a></td>";
       %end;
       %else %do;
          /*7-29-2002 DKB ADDED LINK TO TREND SECTION OF HELP FILE */ ***MJS 07/03/03 Changed
BENTYPE to TIMEPD;
         IF TIMEPD NE "Est. Quarterly Rate of Change" THEN PUT "<td width='10%' align='center'
valign='bottom'><font face='&fontface.' size='1'><a href=""" HREF +(-1) """ &target.>" &HEADVAR.
"</a></font><
          ELSE PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.'
size='1'><a href=""" HREF1 +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
       %end;


       IF EOF THEN DO;
         PUT "</font></tr>";
         /***  2-2 MAB removed scale row ***/
       END;

     RUN;
     %end;

     /*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
     /*** Added MAB 11-20-2000 ***/
     /*** If Sub-benefit then do differently ***/
     /*** If separate page (SEPPAGE=1) then create 1st of 2 HTML files ***/
     /*** 1 for data without qtrly info and 1 for just qtrly info ***/
     %else %if &seppage.=1 %then %do;

     /*** 8-7-2003 Mark Brinkley ***/
     DATA HTML2;
       SET HTML;
       IF TIMEPD="&currentperiod.";
     RUN;

     /*** Remove qtrs from column counts ***/
     %let columns=%EVAL(&columns.-&qtrs.);

     /*** Do sub-benefit page without any qtrly info ***/
     DATA _NULL_;
       SET HTML2 END=EOF;


       /*** Since spliting up table need to delete some records ***/
       /*** Modified 2-2 MAB to deal with new period values **/
       IF BENTYPE="Composite" THEN DELETE; ***DKB ADDED TREND 4/30/2002***;
                                            ***MJS 07/03/03 Changed from BENTYPE IN any period and
Est. Quarterly Rate of Change;

       FILE "&FILEOUT1." MOD ;

       COLUMNS=&columns.;
       SPAN2=ROUND(COLUMNS/2,1);
```

```
      SPAN1=COLUMNS-SPAN2;


      IF _N_=1 THEN DO;

            FILE "&FILEOUT1." MOD ;   /* 2000/11: moved inside if stmt */


            /** MF Changes ROW 1 **/
            PUT     "<center><table     border='&border.'     cellpadding='2'     cellspacing='0'
bgcolor='#D8D8D8' width='&width2.'>";
            PUT "<tr bgcolor='white'>";
            PUT  "        <td  colspan="""  SPAN1  +(-1)  """  valign='top'  bgcolor='#999999'><img
border='0' height='25' width='242' src=&logo.></td>";
            PUT   "          <td   colspan="""   SPAN2   +(-1)   """   align='right'   valign='bottom'
bgcolor='#999999'>";
            PUT "          <div align='right'>";
              /** RSG - 09/02/03 Second set of trend pages need to refer to var4=0 pages **/
            PUT "          <a href='..\html\&prefix.&var1.-&var2.-&var3.-0&unq..htm' &target.><img
src='&imgdir.\&click_image.' alt='&click_alt.' border=0></a>&htmlsp.";
            PUT "             <a  href='..\html\index.htm'  &target.><img  src=&home_but.  border='0'
alt='Return to Main Page'></a>&htmlsp. ";

                        /*** 4-17 MAB added JS code to go back ***/
            PUT "&goback.";
            PUT "           <noscript><a href="""  HREFBACK  +(-1)  """  &target.><img  src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";
            PUT "          &htmlsp. ";
            PUT "             <a  href='..\html\help.htm'  &target.><img  src=&help_but.  border='0'
alt='Help'></a></div>";
              PUT "    </td>";
            PUT "</tr>";

            /** MF Changes ROW 2 **/
            /** Modified 2-2 MAB to better align title **/
            PUT "<tr>";
            PUT  "             <td  valign='center'  align='center'  colspan="""  COLUMNS  +(-1)  """
bgcolor='#D8D8D8'>";
            PUT "                     <font  face='&fontface.'  color='#3333cc'  size='5'><b>&major.
&comma.  &sub_regs. <br>";


            PUT "                 &sub_ben.<BR>&currentperiod.</b></font>";



            PUT "        </td>";
            PUT "</tr>";

            /*** Sub_head macro variable added C.Rankin 10/25/2001  ***/

            %if &sub_head.=1 %then %do;
               /*** 3rd Row ***/
               /*** ÛÛ FRAMES SECTION ÛÛ ***/
               %if &prefix=f %then %do;
                  PUT "<tr bgcolor= &hdcolr.><td>&htmlsp.</td>";   /** Column 1 **/
                  IMAGE=COMPRESS("&imgdir.\span_image&var3..gif");
IMAGE=COMPRESS("&imgdir.\span_image&var3..gif");
                  PUT  "<td  align='center'  valign='bottom'  colspan=&subcols.><IMG  SRC="  IMAGE  "
alt='" BENEFIT "' BORDER=0></td>";
               %end;
               %else %do;
                  PUT "<tr bgcolor= &hdcolr.><td>&htmlsp.</td>";   /** Column 1 **/
                  PUT     "<td     align='center'     valign='bottom'     colspan=&subcols.><font
face='&fontface.'><b>&sub_ben.<br>components</b></font></td>";
               %end;
            %end;

            /*** 4th Row start (column 1) ***/
            /*** ÛÛ FRAMES SECTION ÛÛ ***/
            %if &prefix=f %then %do;
              PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
```

```
                PUT   "<td   align='center'   valign='bottom'><img   src='&imgdir.\blank_130_50.gif'
border=0></td>";
              %end;
              %else %do;
                PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
                PUT "<td width='10%'>&htmlsp.</td>";
              %end;


       qnum=1; /**RSG 08/07/03 Added as counter to use to for link to the trend pages**/

              /*-------------------------*/
              /* 2000/11: begin xls code */
              /*-------------------------*/
              %if &outxls.=1 %then %do;
                FILE XLSTITLE;
                PUT "&major. &comma. &sub_regs.";
                PUT "%cmpres('&sub_ben.')";
              %end;
              /*-------------------------*/
              /* 2000/11: begin xls code */
              /*-------------------------*/
       END;

       FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */
       /*** Print out column headings ***/

       /*HREF=COMPRESS("help.htm#q&var3.");   */

       HREF=COMPRESS("..\html\&prefix.&var1.-&var2.-&var3.-"||qnum||"&unq..htm");
        *** RSG 08/07/03 Use qnum counter to refer to subbenefit trend pages;

     ***************************************;
       /*** 4th Row (columns 2+) ***/
       /*** If quarter column then HREF link is different ****/
       /*** ÛÛ FRAMES SECTION ÛÛ ***/
       %if &prefix=f %then %do;
        IMAGE=COMPRESS("&imgdir.\image&var3._"||_N_||".gif");
             PUT "<td align='center' valign='bottom'><a href=""" HREF +(-1) """ &target.><IMG SRC='"
IMAGE "' alt='" BENTYPE "' BORDER=0></a></td>";
       %end;
       %else %do;
          PUT  "<td  width='10%'  align='center'  valign='bottom'><font  face='&fontface.'  size='1'><a
href=""" HREF +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
       %end;

       qnum+1; *** RSG 08/07/03 Added to increase the counter;

       IF EOF THEN DO;
         PUT "</font></tr>";
         /***  2-2 MAB removed scale row ***/
       END;


     RUN;
     %end;

     /*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
     /*** If separate page (SEPPAGE=2) then create 2nd of 2 HTML files ***/
     /*** 1 for data without qtrly info and 1 for just qtrly info ***/
     %else %if &seppage.=2 %then %do;


     /*** Keep only qtrs in column counts ***/
     /**DKB CHANGED FROM +1 to +3 on 4/29/2002 ***/
     %let columns=%EVAL(&qtrs.+2);  /** MAB changed to 2   6-19-2002 **/


     /*** Then do sub-benefit page with just qtrly info ***/
     DATA JUSTQTR;
       SET HTML;
       /*** Since spliting up table need to delete some records ***/
       /*** Modified 2-2 MAB to deal with new period values **/
```

```
*  IF BENTYPE="Composite";   ***DKB ADDED TREND on 4/29/2002 to account for trend col;
%if &var4. = 0 %then %do;  **RSG ADDED TREND FOR BENTYPES on 8/7/2003 - select
                                 records appropriate for bentype;
        IF BENTYPE="Composite";
%end;
%else %if &var4. ne 0 and BENTYPE ne "Composite" %then %do;
        %if &var3. = 1 %then %do;
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Problems Getting Personal Doctor/Nurse";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Problems Getting To See Specialist";
                %end;
                %else %if &var4. = 3 %then %do;
                        IF BENTYPE = "Problems Getting Necessary Care";
                %end;
                %else %if &var4. = 4 %then %do;
                        IF BENTYPE = "Delays In Care While Awaiting Approval";
                %end;
        %end;
        %else %if &var3. = 2 %then %do;
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Advice Over Telephone";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Wait For Routine Visit";
                %end;
                %else %if &var4. = 3 %then %do;
                        IF BENTYPE = "Wait For Urgent Care";
                %end;
                %else %if &var4. = 4 %then %do;
                        IF BENTYPE = "Wait In Doctor`s Office";
                %end;
        %end;
        %else %if &var3. = 3 %then %do;
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Courteous And Respectful";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Helpful";
                %end;
        %end;
        %else %if &var3. = 4 %then %do;
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Listens Carefully";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Explains So You Can Understand";
                %end;
                %else %if &var4. = 3 %then %do;
                        IF BENTYPE = "Shows Respect";
                %end;
                %else %if &var4. = 4 %then %do;
                        IF BENTYPE = "Spends Time With You";
                %end;
        %end;
        %else %if &var3. = 5 %then %do;
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Problem Finding/Understanding Written Material";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Problem Getting Help From Customer Service";
                %end;
                %else %if &var4. = 3 %then %do;
                        IF BENTYPE = "Problem With Paperwork";
                %end;
        %end;
        %else %if &var3. = 6 %then %do;
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Claims Handled In A Reasonable Time";
                %end;
                %else %if &var4. = 2 %then %do;
```

```
                        IF BENTYPE = "Claims Handled Correctly";
                %end;
            %end;
            %else %if &var3. = 11 %then %do;
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Mammography";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Pap Smear";
                %end;
                %else %if &var4. = 3 %then %do;
                        IF BENTYPE = "Hypertension";
                %end;
                %else %if &var4. = 4 %then %do;
                        IF BENTYPE = "Prenatal Care";
                %end;
            %end;
            %else %if &var3. = 12 %then %do;    /*** MAB Added 2/11/2005 ***/
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Non-Smoking Rate";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Counselled To Quit";
                %end;
              %else %if &var4. = 3 %then %do;
                  IF BENTYPE = "Percent Not Obese";
              %end;
            %end;
            call symput('sub2_ben',BENTYPE); **create macro var to use in sub-benefit
                                                trend pages (below) - RSG 08/07/03;
    %end;


    RUN;                            ***MJS 07/03/03 Changed from BENTYPE IN any period and Est.
Quarterly Rate of Change;

    DATA _NULL_;
      SET JUSTQTR END=EOF;
      *LENGTH HREF $ 250;   /*MJS 01/29/04 Commented out statement*/

      FILE "&FILEOUT1." MOD ;

      COLUMNS=&columns.;
      SPAN2=ROUND(COLUMNS/2,1);
      SPAN1=COLUMNS-SPAN2;

      IF _N_=1 THEN DO;

            FILE "&FILEOUT1." MOD ;   /* 2000/11: moved inside if stmt */

             /** MF Changes ROW 1 **/
             PUT     "<center><table     border='&border.'     cellpadding='2'     cellspacing='0'
bgcolor='#D8D8D8' width='&width2.'>";
             PUT "<tr bgcolor='white'>";
             PUT  "        <td  colspan="""  SPAN1  +(-1)  """  valign='top'  bgcolor='#999999'><img
border='0' height='25' width='242' src=&logo.></td>";
             PUT   "          <td   colspan="""   SPAN2   +(-1)   """   align='right'   valign='bottom'
bgcolor='#999999'>";
             PUT "          <div align='right'>";
             PUT "           <a href='..\html\&prefix.&var1.-&var2.-&var3.-0&unq..htm' &target.><img
src='&imgdir.\&click_image.' alt='&click_alt.' border=0></a>&htmlsp.";
             PUT "              <a href='..\html\index.htm' &target.><img src=&home_but. border='0'
alt='Return to Main Page'></a>&htmlsp. &htmlsp.";

             /*** 4-17 MAB added JS code to go back ***/
             PUT "&goback.";

             PUT "           <noscript><a href="""  HREFBACK  +(-1)  """  &target.><img src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";
             PUT "          &htmlsp.";
             PUT  "             <a  href='..\html\help.htm'  &target.><img  src=&help_but.  border='0'
alt='Help'></a></div>";
             PUT "    </td>";
```

```
            PUT "</tr>";

            /** MF Changes ROW 2 **/
            /** Modified 2-2 MAB to better align title **/
            PUT "<tr>";
            PUT  "             <td  valign='center'  align='center'  colspan="""  COLUMNS  +(-1)  """
bgcolor='#D8D8D8'>";
            PUT  "                     <font  face='&fontface.'  color='#3333cc'  size='5'><b>&major.
&comma.  &sub_regs. <br>";

            /*** Since trend data don't display reference period ***/
            PUT "                 &sub_ben.</b></font><br>";
            /*** For trend data for each benefit type, display benefit type - RSG 08/07/03***/
              %if &var4. ne 0 %then %do;
            PUT "                <font face='&fontface.' color='#3333cc' size='4'><b>";
              PUT "                 &sub2_ben.</b></font>";
              %end;
            PUT "        </td>";
            PUT "</tr>";


            /*** 3rd Row ***/
            /*** ÛÛ FRAMES SECTION ÛÛ ***/
            /**PUT "<td></td>"**/



            /*** 4th Row start (column 1) ***/
            /*** ÛÛ FRAMES SECTION ÛÛ ***/
            %if &prefix=f %then %do;
              PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
              PUT   "<td   align='center'   valign='bottom'><img   src='&imgdir.\blank_130_50.gif'
border=0></td>";
            %end;
            %else %do;
              PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
              PUT "<td width='10%'>&htmlsp.</td>";
            %end;



            /*-------------------------*/
            /* 2000/11: begin xls code */
            /*-------------------------*/
            %if &outxls.=1 %then %do;
              FILE XLSTITLE;
              PUT "&major. &comma. &sub_regs.";
                %if &var4. = 0 %then %do;
                     PUT "%cmpres('&sub_ben.')";
                %end;
                %else %do;
                     PUT "%CMPRES('&sub_ben. &comma. &sub2_ben.')";
                %end;
            %end;
            /*-------------------------*/
            /* 2000/11: begin xls code */
            /*-------------------------*/
      END;

      FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */
      /*** Print out column headings ***/


          LENGTH HREFf1 $250;
          LENGTH HREFf2 $250;
          LENGTH HREFf3 $250;
          LENGTH HREFf4 $250;

          LENGTH HREFp1 $250;
          LENGTH HREFp2 $250;
          LENGTH HREFp3 $250;
          LENGTH HREFp4 $250;
```

```
         LENGTH HREF5  $250;


          ****7-29-2002  DKB  ADDED  LINKS  TO  COMPONENT  PAGES  OF  PREVIOUS  QUARTERS  FROM  TREND
PAGE****;
          ************************THIS WILL NEED TO BE UPDATED EACH QUARTER**********************;
           ***FRAMES***;
           HREFf1=COMPRESS("..\Period1\f&var1.-&var2.-&var3.-0.htm");
           HREFf2=COMPRESS("..\Period2\f&var1.-&var2.-&var3.-0.htm");
           HREFf3=COMPRESS("..\Period3\f&var1.-&var2.-&var3.-0.htm");
           HREFf4=COMPRESS("f&var1.-&var2.-&var3.-0.htm");

           ***NO FRAMES***;
           HREFp1=COMPRESS("..\Period1\p&var1.-&var2.-&var3.-0.htm");
           HREFp2=COMPRESS("..\Period2\p&var1.-&var2.-&var3.-0.htm");
           HREFp3=COMPRESS("..\Period3\p&var1.-&var2.-&var3.-0.htm");
           HREFp4=COMPRESS("p&var1.-&var2.-&var3.-0.htm");

          ****HELP FILE FOR TREND COLUMN***;
           HREF5=COMPRESS("..\html\help.htm#trend");       /*7-29-2002  DKB  ADDED  LINK  FOR  TREND
SECTION OF HELP FILE*/

        ****************************************************;

      /*** 4th Row (columns 2+) ***/
      /*** If quarter column then HREF link is different ****/
      /*** ÛÛ FRAMES SECTION ÛÛ ***/

           *LENGTH HREF $250;

      %if &prefix=f %then %do;
        %if &var3.=12 and &seppage.=2 and (&var4. = 0 or &var4. = 3) %then %do;
            IF TIMEPD = "April, 2003 to March, 2004" THEN DO;
               IMAGE=COMPRESS("&imgdir.\col"||_N_||"_R.gif");
              END;
              ELSE DO;
                 IMAGE=COMPRESS("&imgdir.\col"||_N_||".gif");
            END;
       %end;
       %else %do;
            IMAGE=COMPRESS("&imgdir.\col"||_N_||".gif");          *DKB CHANGED IMAGE NAME FROM QTR
TO COL;
       %end;

        IF _N_=1 THEN HREF=HREFf1;
        ELSE IF _N_=2 THEN HREF=HREFf2;
        ELSE IF _N_=3 THEN HREF=HREFf3;
        ELSE IF _N_=4 THEN HREF=HREFf4;
        ELSE IF _N_=5 THEN HREF=HREF5;
          if timepd ne "Est. Quarterly Rate of Change*" then
               PUT  "<td  align='center'  valign='bottom'><a  href="""  HREF  +(-1)  """  &target.><IMG
SRC='" IMAGE "' alt='" TIMEPD "' BORDER=0></a></td>";
         else do;
           IMAGE=COMPRESS("&imgdir.\col"||_N_||"_R.gif");
           PUT "<td align='center' valign='bottom'><a href="""  HREF +(-1)  """  &target.><IMG SRC='"
IMAGE "' alt='" TIMEPD "' BORDER=0></a></td>";
          end;
      %end;
      %else %do;
        IF _N_=1 THEN HREF=HREFp1;
        ELSE IF _N_=2 THEN HREF=HREFp2;
        ELSE IF _N_=3 THEN HREF=HREFp3;
        ELSE IF _N_=4 THEN HREF=HREFp4;
        ELSE IF _N_=5 THEN HREF=HREF5;

        /*7-29-2002 DKB ADDED LINK TO TREND SECTION OF HELP FILE*/

       %if &var3.=12 and &seppage.=2 and (&var4. = 0 or &var4. = 3) %then %do;
            IF TIMEPD = "April, 2003 to March, 2004" THEN DO;
               PUT   "<td   width='10%'   align='center'   valign='bottom'><font   face='&fontface.'
size='1'><a href="""  HREF +(-1)  """  &target.>" &HEADVAR. "<b>*</b></a></font></td>";
              END;
              ELSE DO;
```

```
                PUT   "<td   width='10%'   align='center'   valign='bottom'><font   face='&fontface.'
size='1'><a href=""" HREF +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
               END;
        %end;
        %else %do;
             PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.' size='1'><a
href=""" HREF +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
        %end;

     %end;


       IF EOF THEN DO;
         PUT "</font></tr>";
         /***  2-2 MAB removed scale row ***/
       END;

     RUN;

     %end;

     /*** ÛÛ FRAMES SECTION ÛÛ ***/
     %if &prefix=f %then %do;
       /*** Close out header HTML page ***/
       DATA _NULL_;
         FILE "&FILEOUT1." MOD;

         PUT "</center></table>";
         PUT "</body></html>";
       RUN;


       /*** Since done making frame 1 page then assign fileout1 = frame 2 ***/
       %let fileout1=&fileout3.;

       /*** Initialize out data HTML page ***/
       DATA _NULL_;
         FILE "&FILEOUT3.";

         PUT "<! Created &datetime.>";
         PUT "<html>";
         PUT    "<body    bgcolor='#999999'    text='#000099'    link='#660066'    alink='#660066'
vlink='#996699'>";
         PUT   "<center><table   border='1'   cellpadding='2'   cellspacing='0'   bgcolor='#D8D8D8'
cols=&columns. width=640>";
       RUN;



     %end;




     /*************************************/
     /****  Put out rest of table      ****/
     /****  Colored scores and Stub    ****/
     /*************************************/
     %if &seppage.=0 OR &var3.=7 OR &var3.=8 OR &var3.=9 OR &var3.=10 %then %do;
                                    ***MJS 4/23/03 Changed 8/9/10/11 to 7/8/9/10;
     DATA HTML3;
       SET SUBSET4;
     RUN;
     %end;
     %else %if &seppage.=1 %then %do;
     DATA HTML3;
       SET SUBSET4;

       /*** 8-7-2003 Mark Brinkley ***/
       IF TIMEPD="&currentperiod.";

       /*** Since spliting up table need to delete some records ***/
```

```
      /*** Modified 2-2 MAB to deal with new period values **/
      IF BENTYPE="Composite" THEN DELETE;   ***DKB ADDED TREND 5/2/2002***;
    RUN;                                     ***MJS 07/03/03 Changed from BENTYPE IN any period and
Est. Quarterly Rate of Change;
    %end;
    %else %if &seppage.=2 %then %do;

    DATA HTML3;
      SET SUBSET4;
      /*** Since spliting up table need to delete some records ***/
      /*** Modified 2-2 MAB to deal with new period values **/
    *  IF BENTYPE="Composite";   ***DKB ADDED TREND 5/2/2002***;

      *** RSG ADDED VAR4 CONDITIONS FOR SUB-BENEFIT TREND PAGES 08/07/03;
      %if &var4. = 0 %then %do;
               IF BENTYPE="Composite";
      %end;
      %else %if &var4. ne 0 and BENTYPE ne "Composite" %then %do;
               %if &var3. = 1 %then %do;
                       %if &var4. = 1 %then %do;
                               IF BENTYPE = "Problems Getting Personal Doctor/Nurse";
                       %end;
                       %else %if &var4. = 2 %then %do;
                               IF BENTYPE = "Problems Getting To See Specialist";    ***MJS 5/7/04
Changed label;
                       %end;
                       %else %if &var4. = 3 %then %do;
                               IF BENTYPE = "Problems Getting Necessary Care";
                       %end;
                       %else %if &var4. = 4 %then %do;
                               IF BENTYPE = "Delays In Care While Awaiting Approval";
                       %end;
               %end;
               %else %if &var3. = 2 %then %do;
                       %if &var4. = 1 %then %do;
                               IF BENTYPE = "Advice Over Telephone";
                       %end;
                       %else %if &var4. = 2 %then %do;
                               IF BENTYPE = "Wait For Routine Visit";
                       %end;
                       %else %if &var4. = 3 %then %do;
                               IF BENTYPE = "Wait For Urgent Care";
                       %end;
                       %else %if &var4. = 4 %then %do;
                               IF BENTYPE = "Wait In Doctor`s Office";     ***MJS 5/7/04 Changed
label;
                       %end;
               %end;
               %else %if &var3. = 3 %then %do;
                       %if &var4. = 1 %then %do;
                               IF BENTYPE = "Courteous And Respectful";
                       %end;
                       %else %if &var4. = 2 %then %do;
                               IF BENTYPE = "Helpful";
                       %end;
               %end;
               %else %if &var3. = 4 %then %do;
                       %if &var4. = 1 %then %do;
                               IF BENTYPE = "Listens Carefully";
                       %end;
                       %else %if &var4. = 2 %then %do;
                               IF BENTYPE = "Explains So You Can Understand";
                       %end;
                       %else %if &var4. = 3 %then %do;
                               IF BENTYPE = "Shows Respect";
                       %end;
                       %else %if &var4. = 4 %then %do;
                               IF BENTYPE = "Spends Time With You";
                       %end;
               %end;
               %else %if &var3. = 5 %then %do;
                       %if &var4. = 1 %then %do;
                               IF BENTYPE = "Problem Finding/Understanding Written Material";
```

```
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Problem Getting Help From Customer Service";
                %end;
                %else %if &var4. = 3 %then %do;
                        IF BENTYPE = "Problem With Paperwork";
                %end;
        %end;
        %else %if &var3. = 6 %then %do;
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Claims Handled In A Reasonable Time";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Claims Handled Correctly";
                %end;
        %end;
        %else %if &var3. = 11 %then %do;
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Mammography";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Pap Smear";
                %end;
                %else %if &var4. = 3 %then %do;
                        IF BENTYPE = "Hypertension";
                %end;
                %else %if &var4. = 4 %then %do;
                        IF BENTYPE = "Prenatal Care";
                %end;
                %else %if &var4. = 5 %then %do;
                        IF BENTYPE = "Cholesterol Testing";
                %end;
        %end;
        %else %if &var3. = 12 %then %do;    /*** MAB Added 2/11/2005 ***/
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Non-Smoking Rate";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Counselled To Quit";
                %end;
                %else %if &var4. = 3 %then %do;
                    IF BENTYPE = "Percent Not Obese";
                %end;
        %end;
  %end;

RUN;                            ***MJS 07/03/03 Changed from BENTYPE IN any period and Est.
Quarterly Rate of Change;
%end;

/*ÛÛÛÛ ALL MAJGRPS ÛÛÛÛ*/
%if &var1.=0 %then %do;

DATA HTML4;
  SET HTML3 END=EOF;
  *LENGTH HREF $ 250;   /*MJS 01/29/04 Commented out statement*/


  IF MAJGRP="Prime Enrollees" THEN MAJNUM=1;
  IF MAJGRP="Enrollees with Military PCM"  THEN MAJNUM=2;
  IF MAJGRP="Enrollees with Civilian PCM" THEN MAJNUM=3;
  IF MAJGRP="Standard/Extra Users" THEN MAJNUM=4;   ***JSO 10/31/07  Added Civilian PCM;
  IF MAJGRP="Active Duty" THEN MAJNUM=5;            ***(MAJNUM=3), and changed 3-7 bacl to 4-8;
  IF MAJGRP="Active Duty Dependents" THEN MAJNUM=6;
  IF MAJGRP="Retirees and Dependents" THEN MAJNUM=7;
  IF MAJGRP="All Users" THEN MAJNUM=8;


  /*** HREF link to another page ***/
/*  HREF=COMPRESS("..\html\&prefix."||MAJNUM||"-0-&var3.-&var4.&q..htm");
    RSG 02/2005 - changed for period1-3, link goes to that period component page*/
    HREF=COMPRESS("&prefix."||MAJNUM||"-0-&var3.-&var4.&q..htm");
  /*** MAB 7-12-2001 updated to reference trend page if needed ***/
```

```
      /**RSG 02/2005 - CONUS TREATED AS REGION, COMMENT OUT CODE**/
      /*%if &var2.^=17 and &var2.^=18 and &var2.^=19 and &var2.^=20 %then %do;
         IF SUBSTR(REGION,1,5)="CONUS" THEN DELETE;
      %end;*/


      LENGTH HREFQ LMAJGRP $ 100;   /*MJS 02/11/04*/
      RETAIN LMAJGRP;

      IF _N_=1 THEN DO;
         LMAJGRP=" ";
         ROW=0;


        /*** Add links to trend data 7.6.2001 MAB ***/
        %let columns_less1=%EVAL(&columns.-1);
        %if &seppage.=0 %then %do;
              FILE "&FILEOUT1." MOD ;   /* 2000/11: moved inside if stmt */
              PUT  "<tr  bgcolor=  &gray.><td  width='"  WIDTH_COL1  "'><font  face='&fontface.'
size='2'><b>Trends</b></font></td>";
                /**RSG 02/2005 Comment out next line because total score is removed **/
    /*          PUT "<td width='" WIDTH3 "'>&htmlsp.</td>";          */

              %do i=1 %to 12;   ***RSG 02/2005 Changed 11 to 12 for 12 Benefits;
                 %if &i.^=7 AND &i.^=8 AND &i.^=9 AND &i.^=10 %then %do;   ***MJS 04/14/03 Changed
8,9,10,11 to 7,8,9,10;
                     HREFQ=COMPRESS("..\html\&prefix.&var1.-&var2.-&i.-0q.htm");   /*** href to 2nd
html file ***/
                 %end;
                 %else %do;
                     HREFQ=COMPRESS("..\html\&prefix.&var1.-&var2.-&i.-0.htm");   /*** href to 2nd
html file ***/
                 %end;

                 PUT  "<td  width='"  WIDTH3  "'><a  href='"  HREFQ  "'  &target.><CENTER><img
src='&imgdir.\trend_row.gif' border=0></CENTER></a></td>";
              %end;
              PUT "</tr>";
        %end;

      END;



      IF LMAJGRP^=MAJGRP THEN DO;             /*** Start new row ***/
            FILE "&FILEOUT1." MOD ;   /* 2000/11: moved inside if stmt */
            ROW+1;
            IF LMAJGRP^=" " THEN PUT "</tr>";  /*** terminate previous row ***/


            /*** Column 1 / Row 1 ***/
            /*** ÛÛ FRAMES SECTION ÛÛ ***/
            %if &prefix=f %then %do;
                IF  MAJGRP  IN("Benchmark")  THEN  PUT  "<tr><td  width='"  WIDTH_COL1  "'><b><font
face='&fontface.' size='2'>" MAJGRP "</font></b></td>";    /*** no HREF links ***/
            %end;
            %else %do;
                IF MAJGRP IN("Benchmark") THEN PUT "<tr><td><b><font face='&fontface.' size='2'>"
MAJGRP "</font></b></td>";                          /*** no HREF links ***/
            %end;

            /*** Column 1 / Row 2+ ***/

            ELSE  IF  MOD(ROW,2)=0  THEN  PUT  "<tr  bgcolor=  &gray.><td><font  face='&fontface.'
size='2'><a href="" HREF +(-1) "" &target.> " MAJGRP " </a></font></td>";   /** Shade row **/
            ELSE PUT "<tr><td><font face='&fontface.' size='2'><a href="" HREF +(-1) "" &target.>
" MAJGRP " </a></font></td>";


            /*-------------------------*/
            /* 2000/11: begin xls code */
```

```
            /*-------------------------*/
             %if &outxls.=1 %then %do;
               FILE XLSDATA;
               IF LMAJGRP^=" " THEN           PUT " ";
               IF REGION IN("Benchmark") THEN PUT REGION '09'x @@;    /* '09'x ensures text string
is put into one cell */
               ELSE IF MOD(ROW,2)=0 THEN      PUT MAJGRP '09'x @@;   /* rather than spanning across
cells              */
               ELSE                           PUT MAJGRP '09'x @@;
             %end;
            /*-------------------------*/
            /* 2000/11: end xls code   */
            /*-------------------------*/

            LMAJGRP=MAJGRP;
      END;


      /*** Column 2+ ***/
      /*********************************************/
      /**** Need to output different formats    ****/
      /*********************************************/
      FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */


      IF MAJGRP IN("Benchmark") THEN DO;
           IF SCORE=. THEN PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
           ELSE IF SCORE=.A THEN PUT "<td width='" WIDTH3 "' align='center'
valign='bottom'><b><font face='&fontface.' color=&blue. size='2'>NA<!CODE= " +(-1) ORDER Z5.
"></font></b></td>";
           ELSE PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>" SCORE 3.0 "<!CODE= " +(-1) ORDER Z5.
"></font></b></td>";
      END;
      ELSE DO;
        IF SCORE=. THEN DO;
            PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>***<!CODE=
" +(-1) ORDER Z5.  "></font></b></td>";
        END;
        ELSE IF SCORE=.A THEN DO;
            PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>NA<!CODE= "
+(-1) ORDER Z5.  "></font></b></td>";
        END;
        ELSE DO;
            IF SIG=1 THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2' color=&green.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
            ELSE IF SIG=. THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
            ELSE IF SIG=.A THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
            ELSE IF SIG=-1 THEN PUT "<td align='center' valign='bottom'><i><font face='&fontface.'
size='2' color=&red.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></i></td>";
            ELSE PUT "<td align='center' valign='bottom'><font face='&fontface.' size='2'>" SCORE
3.0 "<!CODE= " +(-1) ORDER Z5.  "></font></td>";
        END;
      END;



      /*-------------------------*/
      /* 2000/11: begin xls code */
      /*-------------------------*/
      %if &outxls.=1 %then %do;
        FILE XLSDATA;
        IF MAJGRP IN("Benchmark") THEN DO;   /** Replaced 1-22 mab **/
             IF SCORE=. THEN        PUT "***" '09'x @@;
             ELSE IF SCORE=.A THEN  PUT "NA"  '09'x @@;
             ELSE                   PUT SCORE '09'x @@;
        END;
        ELSE DO;
          IF SCORE=. THEN DO;
              PUT "***" '09'x @@;
```

```
          END;
          ELSE IF SCORE=.A THEN DO;
              PUT "NA" '09'x @@;
          END;
          ELSE DO;
              IF SIG=1 THEN       PUT SCORE '09'x @@;
              ELSE IF SIG=. THEN  PUT "***" '09'x @@;
              ELSE IF SIG=.A THEN PUT "NA"  '09'x @@;
              ELSE IF SIG=-1 THEN PUT SCORE '09'x @@;
              ELSE                PUT SCORE '09'x @@;
          END;
        END;
      %end;
      /*-------------------------*/
      /* 2000/11: end xls code   */
      /*-------------------------*/

      IF EOF THEN DO;
         FILE "&FILEOUT1." MOD ;                        /* 2000/11: to refer back to htm file */
         PUT "</tr>";  /*** terminate last row ***/

         %BOTTOM_NOTES;  /** Macro with bottom notes **/


        /*-------------------------*/
        /* 2000/11: begin xls code */
        /*-------------------------*/

         %BOTTOM_NOTES_XLS;  /** Macro with bottom notes for XLS **/

        /*-------------------------*/
        /* 2000/11: end xls code   */
        /*-------------------------*/

      END;
    RUN;
    %end;





    /*ÛÛÛÛ All Regions ÛÛÛÛ*/
    %if &var2.=0 %then %do;
    DATA HTML4;
      SET HTML3 END=EOF;
      *LENGTH HREF $ 250;   /*MJS 01/29/04 Commented out statement*/

      LENGTH LREGION HREFQ $ 100;   /*MJS 02/11/04*/
      RETAIN LREGION;

      IF _N_=1 THEN DO;
         LREGION=" ";
         REGNUM=1;
         ROW=0;


        /*** Add links to trend data 7.6.2001 MAB ***/
        %let columns_less1=%EVAL(&columns.-1);
        %if &seppage.=0 %then %do;
              FILE "&FILEOUT1." MOD ;   /* 2000/11: moved inside if stmt */
              PUT   "<tr   bgcolor=   &gray.><td   width='"   WIDTH_COL1   "'><font   face='&fontface.'
size='2'><b>Trends</b></font></td>";
                /**RSG 02/2005 Commented out next line because no longer have TOTAL score**/
    /*          PUT "<td width='" WIDTH3 "'>&htmlsp.</td>";          */

               %do i=1 %to 12;   ***RSG 02/2005 changed 11 to 12 since we now have 12 benefits;
                 %if &i.^=7 AND &i.^=8 AND &i.^=9 AND &i.^=10 %then %do;   ***MJS 04/14/03 Changed
from 8,9,10,11 to 7,8,9,10;
                     HREFQ=COMPRESS("..\html\&prefix.&var1.-&var2.-&i.-0q.htm");   /*** href to 2nd
html file ***/
```

```
                %end;

                %else %do;
                    HREFQ=COMPRESS("..\html\&prefix.&var1.-&var2.-&i.-0.htm");   /*** href to 2nd
html file ***/
                %end;

                PUT   "<td   width='"   WIDTH3   "'><a   href='"   HREFQ   "'   &target.><CENTER><img
src='&imgdir.\trend_row.gif' border=0></CENTER></a></td>";
              %end;
              PUT "</tr>";
        %end;


    END;


      IF LREGION^=REGION THEN DO;              /*** Start new row ***/
            FILE "&FILEOUT1." MOD ;   /* 2000/11: moved inside if stmt */
            ROW+1;
            IF LREGION^=" " THEN PUT "</tr>";  /*** terminate previous row ***/


            /*-------------------------*/
            /* 2000/11: begin xls code */
            /*-------------------------*/
            %if &outxls.=1 %then %do;
              FILE XLSDATA;
              IF LREGION^=" " THEN PUT " ";          /*** terminate previous row ***/
              FILE "&FILEOUT1." MOD ;                /* 2000/11: to refer back to htm file */
            %end;
            /*-------------------------*/
            /* 2000/11: end xls code   */
            /*-------------------------*/


            /*** Column 1 / Row 1 ***/
            /*** ÛÛ FRAMES SECTION ÛÛ ***/
            %if &prefix=f %then %do;
               IF  REGION  IN("Benchmark")  THEN  PUT  "<tr><td  width='"  WIDTH_COL1  "'><b><font
face='&fontface.' size='2'>" REGCAT "</font></b></td>";  /*** no HREF links ***/
            %end;
            %else %do;
               IF REGION IN("Benchmark") THEN PUT "<tr><td><b><font face='&fontface.' size='2'>"
REGCAT "</font></b></td>";  /*** no HREF links ***/
            %end;
            ELSE DO;   /*** HREF links for each region ***/


              /*HREF=COMPRESS("..\html\&prefix.0-"||REGNUM||"-&var3.-&var4.&q..htm");
                RSG 02/2005 - Changed link so period1-3 will link to appropriate component page*/
                HREF=COMPRESS("&prefix.0-"||REGNUM||"-&var3.-&var4.&q..htm");

              /*** MAB 7-12-2001 updated to reference trend page if needed ***/



              /*** Certain major groups are not large enough to show ***/
              /*** catchment level detail. so don't add HREF link here  ***/
              /*** Remove since qtrs not going down to catchment level ***/
              /**%if  &var1.=3  or  &var1.=5  or  &var1.=6   %then  %do;     ***MJS  05/04/03  Removed
Civilian PCM (&var1.=3), and changed 4,6,7 to 3,5,6;
                IF  MOD(ROW,2)=0  THEN  PUT  "<tr  bgcolor=  &gray.><td><font    face='&fontface.'
size='2'> " REGCAT " </font></td>";    Shade row
                ELSE PUT "<tr><td><font  face='&fontface.' size='2'> " REGCAT " </font></td>";
                %end;
                %else %do;
                IF  MOD(ROW,2)=0  THEN  PUT  "<tr  bgcolor=  &gray.><td><font    face='&fontface.'
size='2'><a href="""  HREF +(-1)  """> " REGCAT " </a></font></td>";   Shade row
                ELSE  PUT  "<tr><td><font  face='&fontface.'  size='2'><a  href="""  HREF  +(-1)  """>  "
REGCAT " </a></font></td>";
                %end;**/
```

```
              /*** Column 1 / Row 2+ ***/
              %if &prefix=f %then %do;
                 if regcat = "NORTH" or regcat = "SOUTH" or regcat="WEST" or
                     regcat = "OVERSEAS" or regcat="CONUS MHS" then do;
                     IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><b><font face='&fontface.'
size='2'><a href="""  HREF +(-1) """ &target.> " REGCAT " </a></b></font></td>"; /** Shade row **/
                     ELSE PUT "<tr><td><b><font face='&fontface.' size='2'><a href="""  HREF +(-1)
""" &target.> " REGCAT " </a></b></font></td>";
                 end;
                       else do;
                     IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font face='&fontface.'
size='2'><a href="""  HREF +(-1) """ &target.> " REGCAT " </a></font></td>"; /** Shade row **/
                     ELSE PUT "<tr><td><font face='&fontface.' size='2'><a href="""  HREF +(-1) """
&target.> " REGCAT " </a></font></td>";
                       end;
              %end;
              %else %do;
                 if regcat = "NORTH" or regcat = "SOUTH" or regcat="WEST" or
                     regcat = "OVERSEAS" or regcat="CONUS MHS" then do;
                     IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><b><font  face='&fontface.'
size='2'><a href="""  HREF +(-1) """ &target.> " REGCAT " </a></b></font></td>"; /** Shade row **/
                     ELSE PUT "<tr><td><b><font face='&fontface.' size='2'><a href="""  HREF +(-1)
""" &target.> " REGCAT " </a></b></font></td>";
                 end;
                       else do;
                     IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font  face='&fontface.'
size='2'><a href="""  HREF +(-1) """ &target.> " REGCAT " </a></font></td>"; /** Shade row **/
                     ELSE PUT "<tr><td><font face='&fontface.' size='2'><a href="""  HREF +(-1) """
&target.> " REGCAT " </a></font></td>";
                 end;
              %end;


              REGNUM+1;

                /**RSG 02/2005 Conus treated as Region, comment out code**/
              /**IF SUBSTR(REGION,1,5) = "CONUS" THEN DO;
                 REGNUM=ORIGNUM;
              END;**/

            END;

            /*-------------------------*/
            /* 2000/11: begin xls code */
            /*-------------------------*/
            %if &outxls.=1 %then %do;
              FILE XLSDATA;
              IF REGION IN("Benchmark") THEN  PUT REGCAT '09'x @@;   /* no logic difference */
              ELSE DO;
                IF MOD(ROW,2)=0 THEN              PUT REGCAT '09'x @@;    /* just presentation
difference in htm */
                ELSE                          PUT REGCAT '09'x @@;   /* keeping as is to preserve
htm code structure */
              END;
            %end;
            /*-------------------------*/
            /* 2000/11: end xls code   */
            /*-------------------------*/

            LREGION=REGION;
      END;


      /*** Column 2+ ***/
      /*********************************************/
      /**** Need to output different formats    ****/
      /*********************************************/
      FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */
      IF REGION IN("Benchmark") THEN DO;     /*** no significance ***/
           IF SCORE=. THEN PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
```

```
            ELSE    IF    SCORE=.A    THEN    PUT    "<td    width='"    WIDTH3    "'    align='center'
valign='bottom'><b><font  face='&fontface.'  color=&blue.  size='2'>NA<!CODE=  "  +(-1)  ORDER  Z5.
"></font></b></td>";
            ELSE   PUT   "<td   width='"   WIDTH3   "'   align='center'   valign='bottom'><b><font
face='&fontface.'   color=&blue.   size='2'>"   SCORE   3.0   "<!CODE=   "   +(-1)   ORDER   Z5.
"></font></b></td>";
       END;
       ELSE DO;
         IF SCORE=. THEN DO;
             PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>***<!CODE=
" +(-1) ORDER Z5.  "></font></b></td>";
         END;
         ELSE IF SCORE=.A THEN DO;
             PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>NA<!CODE= "
+(-1) ORDER Z5.  "></font></b></td>";
         END;
         ELSE DO;
             IF  SIG=1  THEN  PUT  "<td  align='center'  valign='bottom'><b><font  face='&fontface.'
size='2' color=&green.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
             ELSE IF SIG=. THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
             ELSE IF SIG=.A THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
             ELSE IF SIG=-1 THEN PUT "<td align='center' valign='bottom'><i><font face='&fontface.'
size='2' color=&red.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></i></td>";
             ELSE PUT "<td align='center' valign='bottom'><font face='&fontface.' size='2'>" SCORE
3.0 "<!CODE= " +(-1) ORDER Z5.  "></font></td>";
         END;
       END;


       /*-------------------------*/
       /* 2000/11: begin xls code */
       /*-------------------------*/
       %if &outxls.=1 %then %do;
         FILE XLSDATA;
         IF REGION IN("Benchmark") THEN DO;
              IF SCORE=. THEN       PUT "***" '09'x @@;
              ELSE IF SCORE=.A THEN PUT "NA"  '09'x @@;
              ELSE                  PUT SCORE '09'x @@;
         END;
         ELSE DO;
           IF SCORE=. THEN DO;
               PUT "***" '09'x @@;
           END;
           ELSE IF SCORE=.A THEN DO;
               PUT "NA" '09'x @@;
           END;
           ELSE DO;
               IF SIG=1 THEN       PUT SCORE '09'x @@;
               ELSE IF SIG=. THEN  PUT "***" '09'x @@;
               ELSE IF SIG=.A THEN PUT "NA"  '09'x @@;
               ELSE IF SIG=-1 THEN PUT SCORE '09'x @@;
               ELSE                PUT SCORE '09'x @@;
           END;
         END;
       %end;
       /*-------------------------*/
       /* 2000/11: end xls code   */
       /*-------------------------*/



       IF EOF THEN DO;
          FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */
          PUT "</tr>";  /*** terminate last row ***/


          %BOTTOM_NOTES;  /** Macro with bottom notes **/


          /*-------------------------*/
          /* 2000/11: begin xls code */
```

```
        /*-------------------------*/

        %BOTTOM_NOTES_XLS;  /** Macro with bottom notes for XLS **/

        /*-------------------------*/
        /* 2000/11: end xls code   */
        /*-------------------------*/

      END;

    RUN;

    %end;





    /*ÛÛÛÛ Single Regions ÛÛÛÛ*/
    /* This code is not applicable for the 2000 report cards */
    /*  since not enough data to display sub-region info. */
    /*  Will leave in code in case this changes */
    %if &var2.^=0 AND &var1.^=0 %then %do;
    DATA HTML4;
      SET HTML3 END=EOF;

      LENGTH LREGCAT $ 100 /*HREF $ 250*/;   /*MJS 01/29/04 Commented out HREF statement*/
      RETAIN LREGCAT;                        /*MJS 02/11/04*/

      IF _N_=1 THEN DO;
         LREGCAT=" ";
         ROW=0;
      END;


      IF LREGCAT^=REGCAT THEN DO;              /*** Start new row ***/
            FILE "&FILEOUT1." MOD ;   /* 2000/11: moved inside if stmt */
            ROW+1;
            IF LREGCAT^=" " THEN PUT "</tr>";  /*** terminate previous row ***/
            IF  REGCAT  IN("Benchmark")  THEN  PUT  "<tr><td><b><font  face='&fontface.'  size='2'>"
REGCAT "</font></b></td>";
            ELSE  IF  SUBSTR(REGCAT,1,5)  =  "CONUS"  THEN  PUT  "<tr  bgcolor=  &gray.><td><b><font
face='&fontface.' size='2'>" REGCAT "</font></b></td>";
            ELSE  IF  MOD(ROW,2)=0  THEN  PUT  "<tr  bgcolor=  &gray.><td><font  face='&fontface.'
size='2'>" REGCAT "</font></td>";   /** Shade row **/
            ELSE PUT "<tr><td><font face='&fontface.' size='2'>" REGCAT "</font></td>";

            /*-------------------------*/
            /* 2000/11: begin xls code */
            /*-------------------------*/
            %if &outxls.=1 %then %do;
              FILE XLSDATA;
              IF LREGCAT^=" " THEN PUT " ";
              IF  REGCAT  IN("Benchmark")  THEN        PUT  REGCAT  '09'x  @@;            /*  no  logic
difference */
              ELSE IF SUBSTR(REGCAT,1,5) = "CONUS") THEN PUT REGCAT '09'x @@;
              ELSE IF MOD(ROW,2)=0 THEN           PUT REGCAT '09'x @@;         /* just presentation
difference in htm */
              ELSE                                 PUT REGCAT '09'x @@;         /* keeping as is to
preserve htm code structure */
            %end;
            /*-------------------------*/
            /* 2000/11: end xls code   */
            /*-------------------------*/


            LREGCAT=REGCAT;

      END;
```

```
      /*********************************************/
      /**** Need to output different formats    ****/
      /*********************************************/
      FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */
      IF REGION IN("Benchmark") THEN DO;     /*** no significance ***/
           IF  SCORE=.  THEN  PUT  "<td  align='center'  valign='bottom'><b><font  face='&fontface.'
color=&blue. size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
           ELSE IF SCORE=.A THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
color=&blue. size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
           ELSE  PUT  "<td  align='center'  valign='bottom'><b><font  face='&fontface.'  color=&blue.
size='2'>" SCORE 3.0 "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
      END;
      ELSE DO;
        IF SCORE=. THEN DO;
            PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>***<!CODE=
" +(-1) ORDER Z5.  "></font></b></td>";
        END;
        ELSE IF SCORE=.A THEN DO;
            PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>NA<!CODE= "
+(-1) ORDER Z5.  "></font></b></td>";
        END;
        ELSE DO;
            IF  SIG=1  THEN  PUT  "<td  align='center'  valign='bottom'><b><font  face='&fontface.'
size='2' color=&green.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
            ELSE IF SIG=. THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
            ELSE IF SIG=.A THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
            ELSE IF SIG=-1 THEN PUT "<td align='center' valign='bottom'><i><font face='&fontface.'
size='2' color=&red.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></i></td>";
            ELSE PUT "<td align='center' valign='bottom'><font face='&fontface.' size='2'>" SCORE
3.0 "<!CODE= " +(-1) ORDER Z5.  "></font></td>";
        END;
      END;

      /*-------------------------*/
      /* 2000/11: begin xls code */
      /*-------------------------*/
      %if &outxls.=1 %then %do;
        FILE XLSDATA;
        IF REGION IN("Benchmark") THEN DO;
             IF SCORE=. THEN        PUT "***" '09'x @@;
             ELSE IF SCORE=.A THEN  PUT "NA"  '09'x @@;
             ELSE                   PUT SCORE '09'x @@;
        END;
        ELSE DO;
          IF SCORE=. THEN DO;
              PUT "***" '09'x @@;
          END;
          ELSE IF SCORE=.A THEN DO;
              PUT "NA" '09'x @@;
          END;
          ELSE DO;
              IF SIG=1 THEN       PUT SCORE '09'x @@;
              ELSE IF SIG=. THEN  PUT "***" '09'x @@;
              ELSE IF SIG=.A THEN PUT "NA"  '09'x @@;
              ELSE IF SIG=-1 THEN PUT SCORE '09'x @@;
              ELSE                PUT SCORE '09'x @@;
          END;
        END;
      %end;
      /*-------------------------*/
      /* 2000/11: end xls code   */
      /*-------------------------*/


      IF EOF THEN DO;
         FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */
         PUT "</tr>";  /*** terminate last row ***/

         %BOTTOM_NOTES;  /** Macro with bottom notes **/
```

```
         /*-------------------------*/
         /* 2000/11: begin xls code */
         /*-------------------------*/

         %BOTTOM_NOTES_XLS;  /** Macro with bottom notes for XLS **/

         /*-------------------------*/
         /* 2000/11: end xls code   */
         /*-------------------------*/

      END;

    RUN;
    %end;



    /*************************************/
    /****  Print out footer info      ****/
    /*************************************/
    DATA _NULL_;
        FILE "&FILEOUT1." MOD ;
        LENGTH HREF $250;


        /** Determine where back button should link to **/
        %if &var1.=0 %then %do;
           HREFBACK=COMPRESS("&prefix.8-0-0-0.htm");   ***MJS 05/14/03 Changed 8 to 7;
        %end;
        %else %do;
           HREFBACK=COMPRESS("&prefix.&var1.-0-0-0.htm");
        %end;

       /*HERE!*/

        /** MF Changes **/
        PUT "<tr>";
        PUT "   <td colspan='&columns.'>";
        PUT "      <center>";
        PUT  "               <a  href='..\html\index.htm'  &target.><img  src=&home_but.  border='0'
alt='Return to Main Page'></a>&htmlsp.&htmlsp.";
                 /*** 7-17 MAB added JS code to go back ***/
        PUT "&goback.";
        PUT "             <noscript><a href=""" HREFBACK   +(-1)  """ &target.><img src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";

        PUT  "                <a  href='..\html\help.htm'  &target.><img  src=&help_but.  border='0'
alt='Help'></a><br>";
        PUT "         <font face='Arial,Helvetica,Swiss,Geneva' size='2'><b>&grpmsg.<br>";
        PUT "         </b></font>";



        majgrp1=COMPRESS("&prefix.1-&var2.-&var3.-&var4.&q..htm");
        majgrp2=COMPRESS("&prefix.2-&var2.-&var3.-&var4.&q..htm");
        majgrp3=COMPRESS("&prefix.3-&var2.-&var3.-&var4.&q..htm");   ***JSO 10/31/07 Added Civilian
PCM;
        majgrp4=COMPRESS("&prefix.4-&var2.-&var3.-&var4.&q..htm");    ***(majgrp3), and changed 3-7
back to 4-8;
        majgrp5=COMPRESS("&prefix.5-&var2.-&var3.-&var4.&q..htm");
        majgrp6=COMPRESS("&prefix.6-&var2.-&var3.-&var4.&q..htm");
        majgrp7=COMPRESS("&prefix.7-&var2.-&var3.-&var4.&q..htm");
        majgrp8=COMPRESS("&prefix.8-&var2.-&var3.-&var4.&q..htm");


         /*** Certain major groups are not large enough to show ***/
         /*** catchment level detail. So if we are in html file ***/
         /*** which has this detail then don't link to a html   ***/
         /*** file which doesn't exist                          ***/

        %if &var1.^=0 %then %do;
          %if  &var1.^=4  and  &var1.^=6  and  &var1.^=7  and  &var2.^=0  %then  %do;    ***JSO 10/31/07
Added Civilian PCM (&var1.^=3), changed 3,5,6 back to 4,6,7;
```

```
    ***and changed MAJGRP 4&7 below back to 5&8;
             PUT "<a href="""  MAJGRP1  +(-1)  """  &target.><font  face='&fontface.'  size='2'>Prime
Enrollees</font></a>&htmlsp.&htmlsp.";
             PUT "<a href="""  MAJGRP2  +(-1)  """  &target.><font  face='&fontface.'  size='2'>Enrollees
with Military PCM</font></a>&htmlsp.&htmlsp.";
             PUT "<a  href="""  MAJGRP5  +(-1)  """  &target.><font  face='&fontface.'  size='2'>Active
Duty</font></a>&htmlsp.&htmlsp.";
             PUT  "<a  href="""  MAJGRP8  +(-1)  """  &target.><font  face='&fontface.'  size='2'>All
Users</font></a>";

          %end;
          %else %do;

            PUT  "<a  href="""  MAJGRP1  +(-1)  """  &target.><font  face='&fontface.'  size='2'>Prime
Enrollees</font></a>&htmlsp.&htmlsp.";
            PUT "<a  href="""  MAJGRP2  +(-1)  """  &target.><font  face='&fontface.'  size='2'>Enrollees
with Military PCM</font></a>&htmlsp.&htmlsp.";
            PUT "<a  href="""  MAJGRP3  +(-1)  """  &target.><font  face='&fontface.'  size='2'>Enrollees
with Civilian PCM</font></a>&htmlsp.&htmlsp.";   ***JSO 10/31/07 Added Civilian PCM;
            PUT    "<a    href="""    MAJGRP4    +(-1)    """    &target.><font    face='&fontface.'
size='2'>Standard/Extra Users</font></a>&htmlsp.&htmlsp.";            ***(MAJGRP5), and changed 3-7
back to 4-8;
            PUT "<br>";
            PUT  "<a  href="""  MAJGRP5  +(-1)  """  &target.><font  face='&fontface.'  size='2'>Active
Duty</font></a>&htmlsp.&htmlsp.";
            PUT  "<a  href="""  MAJGRP6  +(-1)  """  &target.><font  face='&fontface.'  size='2'>Active
Duty Dependents</font></a>&htmlsp.&htmlsp.";
            PUT "<a  href="""  MAJGRP7  +(-1)  """  &target.><font  face='&fontface.'  size='2'>Retirees
and Dependents</font></a>&htmlsp.&htmlsp.";
            PUT  "<a  href="""  MAJGRP8  +(-1)  """  &target.><font  face='&fontface.'  size='2'>All
Users</font></a>";

          %end;
        %end;

       /*** link to printer friendly version moved C.Rankin 10/25/2001 ***/

       /*** 4-17 MAB added  ***/
       /*** If creating frames need link to printer friendly version of file ***/
       /***DANIELE ADDED BR STATEMENT ON 11/1/01 SO PRINTER ICON WOULD SHOW UP ON SEPARATE LINE
***/
       %if &prefix=f %then %do;
          HREFP=COMPRESS("p&var1.-&var2.-&var3.-&var4.&q..htm");
          PUT  "      <BR><font  face='Arial,Helvetica,Swiss,Geneva'  size='1'><a  href='"  HREFP  "'
&target.><img  src='&imgdir.\printer.gif'  alt='Printer  Friendly  Page'  border=0>Printer  Friendly
Page</a></font>
       %end;



    RUN;


    /*** Close HTML page ***/
    DATA _NULL_;
      FILE "&FILEOUT1." MOD ;

      PUT "</center></td></tr></table>";
      PUT "</body></html>";

    RUN;



    /*--------------------------------*/
    /* 2000/12: begin xls color code */
    /*--------------------------------*/
    %if &outxls.=1 %then %do;
      FILENAME CMDS DDE 'excel|system';

      /* Align 2 titles */
      DATA _NULL_;
         FILE CMDS;
```

```
         CELL=COMPRESS("[SELECT(""R1C1:R1C"||&columns.||""")]"); PUT CELL;
         PUT '[ALIGNMENT(3, False, 3,0, False,,,True)]';  /** Merges titles across columns **/
         CELL=COMPRESS("[SELECT(""R2C1:R2C"||&columns.||""")]"); PUT CELL;
         PUT '[ALIGNMENT(3, False, 3,0, False,,,True)]';  /** Merges titles across columns **/
      RUN;

      DATA _NULL_;
        FILE CMDS;
        SET HTML4(DROP=ROW) END=EOF;

        RETAIN ROW COLUMN;


        /*** Need to initialize row and column pointers ***/
        IF _N_=1 THEN DO;
          ROW=6;
          COLUMN=1;
        END;

        /*** Increment Row and Column pointers ***/
    /*    COLUMN=COLUMN+1;
        IF &var3.in (0,7,8,9,10) and COLUMN>&columns. THEN DO;    ***MJS 4/23/03 Changed 8/9/10/11
to 7/8/9/10;
           ROW=ROW+1;
           COLUMN=2;
        END;
        ELSE IF COLUMN>&columns.+1 THEN DO;
           ROW=ROW+1;
           COLUMN=2;
        END;
    *** RSG/MAB - 10/13/03 - changes for new template format */

       COLUMN=COLUMN+1;
        IF COLUMN>&columns. THEN DO;
           ROW=ROW+1;
           COLUMN=2;
        END;


        CELL=COMPRESS("[SELECT(""R"||ROW||"C"||COLUMN||":R"||ROW||"C"||COLUMN||""")]");
        PUT CELL;

        /** Before color cell center data **/
        PUT '[ALIGNMENT(3, False, 3,0, False)]';


        IF     REGION     IN("Benchmark")     OR     MAJGRP     IN("Benchmark")     THEN     PUT
'[FORMAT.FONT("Arial",10,True,False,False,False,9)]';  /*** BOLD & DARK RED ***/
        ELSE IF SCORE NOT IN(.,.A) THEN DO;
          IF SIG=1 THEN PUT '[FORMAT.FONT("Arial",10,True,False,False,False,10)]';            /***
BOLD & GREEN ***/
          ELSE IF SIG=-1 THEN PUT '[FORMAT.FONT("Arial",10,False,True,False,False,3)]';       /***
RED ***/
          ELSE PUT '[FORMAT.FONT("Arial",10,False,False,False,False,5)]';    /*** BLUE ***/
        END;


        /*** If last record then output footer ***/
        IF EOF THEN DO;
           ROW=ROW+3; COLUMN=1;
           CELL=COMPRESS("[SELECT(""R"||ROW||"C"||COLUMN||":R"||ROW||"C"||COLUMN||""")]");
           PUT CELL;
           PUT '[FORMAT.FONT("Arial",10,True,False,False,False,10)]';            /*** BOLD & GREEN
***/
           ROW=ROW+1;
           CELL=COMPRESS("[SELECT(""R"||ROW||"C"||COLUMN||":R"||ROW||"C"||COLUMN||""")]");
           PUT CELL;
           PUT '[FORMAT.FONT("Arial",10,False,True,False,False,3)]';     /*** RED ***/
        END;
      RUN;
      FILENAME CMDS DDE 'excel|system';
      DATA _NULL_;
        FILE CMDS;
```

```
        PUT '[SAVE()]';
        PUT '[CLOSE()]';
      RUN;
    %end;
    /*-------------------------------*/
    /* 2000/12: end xls color code   */
    /*-------------------------------*/




    %MEND MKHTML;
    /*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
    /*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
    /*

    %LET PREFIX=p;
    %LET OUTXLS=0;

    %MKHTML(0,21,2,2,0);
    %MKHTML(1,0,1,2,0);
    %MKHTML(1,0,2,2,0);
    %MKHTML(1,0,4,2,0);
    %MKHTML(2,0,2,2,0);
    %MKHTML(2,0,4,2,0);
    %MKHTML(3,0,11,2,0);
    %MKHTML(3,0,2,2,0);
    %MKHTML(3,0,4,2,0);
    %MKHTML(4,0,1,2,0);
    %MKHTML(4,0,2,2,0);
    %MKHTML(6,0,11,2,0);
    */



    *********************************************;
    **** Create macros to call MKHTML macro  ****;
    *********************************************;

    /*** Create 8 HTML pages (8 Majgrps / All Regions / All Benefits)***/
    %MACRO DOALL1();
                %MKHTML(1,0,0,0,0);
                %MKHTML(2,0,0,0,0);
                %MKHTML(5,0,0,0,0);
                %MKHTML(8,0,0,0,0);
                %MKHTML(3,0,0,0,0);   ***JSO 10/31/07 Added Civilian PCM (Majgrp 3), and changed 3-
7 back to 4-8;
                %MKHTML(4,0,0,0,0);
                %MKHTML(6,0,0,0,0);
                %MKHTML(7,0,0,0,0);
    %MEND DOALL1;



    /*** Create 322 HTML pages (8 Majgrps / All Regions / 12 Benefits)***/
    %MACRO DOALL2();
              %DO J=1 %TO 8;                                                /*** JSO Changed 7 to 8
11/05/2007 ***/
                      %DO K=1 %TO 12;       * 12 Sub-benefits ;             /*** MAB Changed to 12
2/11/2005 ***/
                      %MKHTML(&J.,0,&K.,1,0);  ***RSG 08/07/03 Add var4 part of new page numbers;

                      /*** Call macro for 2nd page (except for ratings benefits) ***/
                      %if &k.^=7 AND &k.^=8 AND &k.^=9 AND &k.^=10 %then %do;
                                      %IF &K. = 1 OR &K. = 2 OR &K. = 4 OR &K. = 11 %THEN %DO L= 0
%TO 4; ***RSG 08/07/03 There are different number of
                                                                                                  of
sub-benefits trend pages for each benefit so need a counter "L"
                                                                                                  to
do different number of pages for each benefit;
                                         %MKHTML(&J.,0,&K.,2,&L.);
                                      %END;
                                      %ELSE %IF &K. = 3 OR &K. = 6 %THEN %DO L = 0 %TO 2;
```

```
                                        %MKHTML(&J.,0,&K.,2,&L.);
                                     %END;
                                     %ELSE %IF &K. = 5 OR &K.=12 %THEN %DO L = 0 %TO 3;
                                        %MKHTML(&J.,0,&K.,2,&L.);
                                     %END;
                        %END;
                         %END;

               %END;
     %MEND DOALL2;



      /*** Create 25 HTML pages (All Majgrps / 23 Regions / All Benefits) ***/
     %MACRO DOALL3();
           %DO J=1 %TO 23;
                %MKHTML(0,&J.,0,0,0);
           %END;
     %MEND DOALL3;



      /*** Need to populate new table for all majgrps ***/
     /*** Create 1150 HTML pages (All Majgrps / 23 Regions / 12 Benefits) ***/
     %MACRO DOALL4();
           %DO J=1 %TO 23;
              %DO K=1 %TO 12;
                 %MKHTML(0,&J.,&K.,1,0);
                 /*** Call macro for 2nd page (except for ratings benefits) ***/
                 %if &k.^=7 AND &k.^=8 AND &k.^=9 AND &k.^=10 %then %do;
                                %IF &K. = 1 OR &K. = 2 OR &K. = 4 OR &K. = 11 %THEN %DO L = 0 %TO 4;
***RSG 08/07/03 Counter "L" for different number;
                                     %MKHTML(0,&J.,&K.,2,&L.);
                *number of sub-benefit trend pages for each benefit;
                                %END;
                                %ELSE %IF &K. = 3 OR &K. = 6 %THEN %DO L = 0 %TO 2;
                                        %MKHTML(0,&J.,&K.,2,&L.);
                                %END;
                                %ELSE %IF &K. = 5 OR &K.=12 %THEN %DO L = 0 %TO 3;
                                        %MKHTML(0,&J.,&K.,2,&L.);
                                %END;
                 %end;
              %END;
           %END;
     %MEND DOALL4;



     /*** Create 4 HTML pages (All Majgrps / 4 Region-ConusMHS / All Benefits) ***/
     /** RSG 02/2005 - CONUS TREATED AS ANOTHER REGION**/
     /*%MACRO DOALL5();
              %DO K=17 %TO 20;
                 %MKHTML(0,&K.,0,0,0);
              %END;
     %MEND DOALL5;


     %MACRO DOALL6();
            %DO J = 17 %TO 20;
              %DO K=1 %TO 12;   ***MJS 4/23/03 Changed 2 to 1 and 12 to 11;
                       %MKHTML(0,&J.,&K.,1,0);
                 /*** Call macro for 2nd page (except for ratings benefits) ***/
     /*            %if &k.^=7 AND &k.^=8 AND &k.^=9 AND &k.^=10 %then %do;
                                %IF &K. = 1 OR &K. = 2 OR &K. = 4 %THEN %DO L = 0 %TO 4; ***RSG
08/07/03 counter for sub-benefit trend pages;
                                     %MKHTML(0,&J.,&K.,2,&L.);               ***MJS 4/23/03 Changed
8/9/10/11 to 7/8/9/10;
                                %END;
                                %ELSE %IF &K. = 3 OR &K. = 6 OR &K.=12 %THEN %DO L = 0 %TO 2;
                                        %MKHTML(0,&J.,&K.,2,&L.);
                                %END;
                                %ELSE %IF &K. = 5 %THEN %DO L = 0 %TO 3;
                                        %MKHTML(0,&J.,&K.,2,&L.);
```

```
                        %END;
                        %ELSE %IF &K. = 11 %THEN %DO L = 0 %TO 5;
                                %MKHTML(0,&J.,&K.,2,&L.);
                        %END;
            %end;
           %END;
     %end;

%MEND DOALL6;
*/


/*** Run macro to create Printer Friendly HTML files (non-frames) ***/


%LET PREFIX=p;
%LET OUTXLS=0;
%DOALL1;
%DOALL2;
%DOALL3;
%DOALL4;


/*** Run macro to create Excel files ONLY ***/

%LET PREFIX=p;
%LET OUTXLS=1;
%DOALL1;
%DOALL2;
%DOALL3;
%DOALL4;


/*** Run macro to create Frame HTML files ***/

%LET PREFIX=f;
%LET OUTXLS=0;
%DOALL1;
%DOALL2;
%DOALL3;
%DOALL4;







%PUT "&number_html_files. HTML files created.";



*************************************************************************;
*************************************************************************;
*************************************************************************;
*************************************************************************;
*************************************************************************;
*************************************************************************;
*************************************************************************;
```

G.8.A REPORTCARDS\CAHPS_ADULT2007\STEP1Q.SAS - CREATE AND RECODE VARIABLES USED IN ADULT BENEFICIARY REPORTS - ANNUAL.

```
*****************************************************************************
*
*  PROJECT:  DoD - Quarterly Adult Report Cards
*  PROGRAM:  STEP1Q.SAS
*  PURPOSE:  Create Dummy and Recode Variables used in Adult Report Card
*                  Create a Female dummy variable
*                  Create an Education dummy variable
*                  Create 15 region dummies combining regions.
*                         7 & 8 into region 8. That is, there
*                         isn't a region 7 dummy.
*                  Create 7 age dummy variables.
*
*            We require the most desired code to be the highest value.
*            Recode the dependent variables into:
*                  1 - the least desirable value
*                  2 - the 2nd least desirable value
*                  3 - the most desirable value
*                  . - missing
*
*            Create 7 variables GROUP1 - GROUP7
*                 IF (XINS_COV IN (1,2,6) AND H07007>=2) THEN GROUP1 = 1
*                 IF (XENR_PCM IN (1,2,6) AND H07007>=2) THEN GROUP2 = 1
*                 IF (XENR_PCM = 3,7      AND H07007>=2) THEN GROUP3 = 1
*                 IF XINS_COV IN (3)                     THEN GROUP4 = 1
*                          /*JSO 08/24/2006, Deleted 4,5*/
*                 IF XBNFGRP = 1                         THEN GROUP5 = 1
*                 IF XBNFGRP = 2                         THEN GROUP6 = 1
*                 IF XBNFGRP IN (3,4)                    THEN GROUP7 = 1
*                 GROUP8 is output for all beneficiaries
*
*  MODIFIED: 1) February 2001 By Keith Rathbun, Update for quarterly
*               adult report cards.  Removed permanent dataset ENTIRE.SD2.
*            2) August 2001 By Keith Rathbun, Updated DSN and LIBNAME
*               for 3rd quarter adult report cards.
*            3) OCTOBER 2001 BY DANIELE BEAHM, Because there was no post-
*               stratification done in Q3, changed all references of the
*               POSTSTR variable to ADJ_CELL
*            4) JANUARY 2002 BY DANIELE BEAHM, Modified group3 to include
*               XENR_PCM
*            5) April 2002 By Mike Scott, Updated variable names for 2002
*               survey.
*            6) July 2002 By Mike Scott: See Note #2.  Replaced variable
*               S02S01 with H04075 (new health status variable), deleted
*               code to recode S02S01 to H00077, and changed H00077/R00077
*               rename/recode to H04075/R04075 rename/recode.  The Hispanic/
*               Latino variable is not present.
*            7) January 2003 By Mike Scott, Changed ADJ_CELL to COM_SAMP.
*            8) March 2003 By Mike Scott, Updated variable names for 2003
*               survey.
*            9) June 2003 By Mike Scott, Updated for Q2 2003.
*           10) July 2003 By Mike Scott, Changed COM_SAMP to ADJ_CELL.
*           11) October 2003 By Mike Scott, Updated for Q3 2003.
*           12) January 2004 By Mike Scott, Updated for Q4 2003, and changed
*               DAGEQY to FIELDAGE.
*           13) March 2004 By Mike Scott, Updated for Q1 2004.
*           14) April 2004 By Keith Rathbun, Removed reverse coding for
*               H04031.  2004 survey question wording is 'Within 15 minutes'
*               instead of "More than 15 Minutes".  Added service affiliation
*               variables so only one version of this program is needed to
*               handle the consumer watch processing.
*           15) June 2004 by Regina Gramss, Updated for Q2 2004.
*           16) Sept 2004 by Regina Gramss, changed XRegion to xtenxreg, updated for Q3 2004.
*           17) Jan 2005 by Regina Gramss, changed XTENXREG to XSERVREG to include
*               service affiliation.  Regions have been changed from 4 categories to 16.
*           18) Apr 2005 by Regina Gramss, updated field names for 2005 data.
*           19) Jul 2005 by Regina Gramss, updated for Q2 2005
*           20) Oct 2005 by Regina Gramss, updated for Q3 2005
*           21) Dec 2005 by Regina Gramss, updated for Q4 2005
*           22) March 21, 2006 by Keith Rathbun, updated variable names
```

```
*               for Q2 FY 2006.  Changed references to ADJ_CELL to be STRATUM.
*           23) July 12, 2006 by Justin Oh, updated for Q3 FY 2006
*           24) Aug 22, 2006 by Justin Oh, changed overseas to 3 regions.
*               Regions have been changed from 16 categories to 24.
*               Added XOCONUS to the Keep statement for Overseas classifications.
*               Changed XSERVREG for Overseas (Europe,Pacific,Latin America).
*               Changed IF XINS_COV IN (3,4,5) THEN GROUP4 = 1 to
*                       IF XINS_COV IN (3)     THEN GROUP4 = 1
*               Since only XINS_COV IN (1,2,3,6) is kept, (4,5) not needed.
*           25) Oct 03, 2006 by Justin Oh, changed input data HCS063_1 to HCS064_1
*               for Q4FY2006 reports.
*           26) Apr 05, 2007 by Justin Oh, Added %LET BCHTYPE to select BCH types
*               Benchmark OR PurchasedBenchmark.
*           27) Apr 05, 2007 by Justin Oh, Added changes to select RC types
*               ReportCards OR PurchasedReportCards.
*           28) Apr 26, 2007 by Justin Oh, Added codes, variables for new
*               reservists logic.
*           29) May 15, 2007 by Justin Oh, Changed XINS_COV to NXNS_COV to assign
*               Groups 1,3, and 4 for new reservists logic.
*           30) Jul 30, 2007 by Justin Oh, Added added DBENCAT conditions to assign
*               Groups All, 4, 5, and 6.
*           31) Oct 02, 2007 by Justin Oh, changed input data HCS073_1 to HCS074_1
*               for Q4FY2007 reports.
*           32) November 9, 2007 by Keith Rathbun, added in annual code.
*
*
*  INPUTS:   1) HCSyyA_1 - DoD Annual HCS Database
*
*  OUTPUTS:  1) GROUP1-8.SD2 - DoD Quarterly GROUP files as defined above
*
*  INCLUDES: 1) CONVERT.SAS - Convert item responses to proportional
*                             values for consistency w/ TOPS
*
*  NOTES:    1) Groups 1-3 modified 10/09/2000
*
*            2) In Q1_2002, S02S01 was renamed and recoded to H00077 (health
*               status variable for 2000).  H02077 was the Hispanic/Latino
*               variable.  In Q2_2002, H02077 is health status, and H02079
*               is the Hispanic/Latino variable.  To make the Quarter 2 data
*               file (HSC022_1.sd2) more consistent with the Quarter 1 file,
*               the health status variable which was H02077 is now H04075,
*               and the Hispanic/Latino variable which was H02079 is now
*               H02077.
*
*************************************************************************;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards                ***/
%LET RCTYPE = ReportCards;

OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMTERR NOOVP COMPRESS=YES;
LIBNAME OUT V612 "DATA";
LIBNAME IN1 V612 "..\..\..\Data";
LIBNAME LIBRARY  "..\..\..\Data\fmtlib";

TITLE1    'Program Saved as: STEP1Q.SAS';

%LET WGT = FWRWT;

proc format;
     value servreg 1 = 'North Army'
                   2 = 'North Air Force'
                   3 = 'North Navy'
                   4 = 'North Other'
                   5 = 'South Army'
                   6 = 'South Air Force'
                   7 = 'South Navy'
                   8 = 'South Other'
                   9 = 'West Army'
                  10 = 'West Air Force'
                  11 = 'West Navy'
                  12 = 'West Other'
                  13 = 'Europe Army'
                  14 = 'Europe Air Force'
```

```
                    15 = 'Europe Navy'
                    16 = 'Europe Other'
                    17 = 'Pacific Army'
                    18 = 'Pacific Air Force'
                    19 = 'Pacific Navy'
                    20 = 'Pacific Other'
                    21 = 'Latin America Army'
                    22 = 'Latin America Air Force'
                    23 = 'Latin America Navy'
                    24 = 'Latin America Other';

    DATA ENTIRE;
       SET IN1.HCS07A_1(KEEP=
                   MPRID
                   FIELDAGE   /*MJS 01/26/04*/
                   XTNEXREG
                   SERVAFF    /*KRR 04/09/04*/
                   XCATCH     /*KRR 11/09/07*/
                   QUARTER    /*KRR 11/09/07*/
                   DBENCAT    /*JSO 04/26/2007, added for reservists logic*/
                   CONUS
                   ENBGSMPL
                   SREDA
                   XSEXA
                   XBNFGRP
                   STRATUM    /*KRR 04/03/2006, changed from ADJ_CELL*/
                   XINS_COV
                   XENR_PCM
                   XOCONUS    /*JSO 08/24/2006, Overseas Region Indicator*/
                   &WGT.
                   H07028
                   /* Getting Needed Care */
                   H07011
                   H07013
                   H07027
                   H07029
                   /* Getting Care Quickly */
                   H07017
                   H07022
                   H07019
                   H07030
                   /* How Well Doctors Communicate */
                   H07033
                   H07034
                   H07035
                   H07036
                   /* Courteous and Helpful Office Staff */
                   H07031
                   H07032
                   /* Customer Service */
                   H07043
                   H07045
                   H07047
                   /* Claims Processing */
                   H07040
                   H07041 /****************************/
                   H07066 /* Health Status            */
                   H07037 /* Health Care Rating       */
                   H07048 /* Health Plan Rating       */
                   H07009 /* Personal Doctor Rating   */
                   H07015 /* Specialist Rating        */
                   H07006 /* Health Plan Used           *//*JSO 04/26/2007, added for reservists
logic*/
                   H07007 /* How Long in Health Plan   */
                          /****************************/
                  );
        FORMAT _ALL_;
        IF SERVAFF='A' THEN XSERVAFF=1;              *Army;
           ELSE IF SERVAFF='F' THEN XSERVAFF=2;      *Air Force;
           ELSE IF SERVAFF='N' THEN XSERVAFF=3;      *Navy;
           ELSE XSERVAFF=4;                          *Other;

        IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/
```

```
    IF XTNEXREG = . THEN DELETE;  /* RSG 02/2005 USE CACSMPL TO DELETE MISSING FIELDS*/

    IF XINS_COV NOT IN(1,2,3,6,9) THEN DELETE;  /*JSO 07/30/2007, Added 9*/

    NXNS_COV = XINS_COV;              /*JSO 04/26/2007 added for reservists logic*/
                                      /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
    IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
    IF DBENCAT IN('GRD','IGR') AND H07006 = 3 THEN DO;
       NXNS_COV = 3;
       XENR_PCM = .;
    END;
                       /* Note:  use tmp_cell in step2q.sas */
    LENGTH TMP_CELL XSERVREG 8;
    TMP_CELL = STRATUM; /*KRR 04/03/2006, changed from ADJ_CELL*/

    IF XTNEXREG = 1 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 1;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
       ELSE XSERVREG = 4;
    END;

    IF XTNEXREG = 2 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 5;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
       ELSE XSERVREG = 8;
    END;

    IF XTNEXREG = 3 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 9;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
       ELSE XSERVREG = 12;
    END;

    IF XTNEXREG = 4 THEN DO; /*JSO 08/24/2006, Changed Overseas Regions*/
       IF XOCONUS = 1 THEN DO;
          IF      XSERVAFF = 1 THEN XSERVREG = 13;
          ELSE IF XSERVAFF = 2 THEN XSERVREG = 14;
          ELSE IF XSERVAFF = 3 THEN XSERVREG = 15;
          ELSE                      XSERVREG = 16;
       END;
       IF XOCONUS = 2 THEN DO;
          IF      XSERVAFF = 1 THEN XSERVREG = 17;
          ELSE IF XSERVAFF = 2 THEN XSERVREG = 18;
          ELSE IF XSERVAFF = 3 THEN XSERVREG = 19;
          ELSE                      XSERVREG = 20;
       END;
       IF XOCONUS = 3 THEN DO;
          IF      XSERVAFF = 1 THEN XSERVREG = 21;
          ELSE IF XSERVAFF = 2 THEN XSERVREG = 22;
          ELSE IF XSERVAFF = 3 THEN XSERVREG = 23;
          ELSE                      XSERVREG = 24;
       END;
    END;
    RENAME XCATCH=CACSMPL;
    WRWT=&WGT;
RUN;

*--------------------------------------------------;
* create variable names for catchment area dummies ;
*--------------------------------------------------;

*  create a file of catchment areas (UNIQUE) using the sort to drop;
*  all duplicate catchment areas leaving one record per;
*  unique catctment area code;
PROC SORT DATA=ENTIRE OUT=UNIQUE(KEEP=CACSMPL) NODUPKEY;
   BY CACSMPL;
RUN;

*  create a file (FILEA) with catchment areas codes and a catchment;
```

```
*  name consisting of "CAT" concatenated with a 4 digit number;
*  created by ting of "CAT" concatenated with a 4 digit number;
DATA FILEA (RENAME=(CACSMPL=START SERIAL=LABEL));
   SET UNIQUE;
   SERIAL+1;
   LENGTH FMTNAME $7 DUMNAME $7;
   FMTNAME='CACLOOK';
   DUMNAME= 'CAT' || PUT(CACSMPL, Z4.);
RUN;

PROC PRINT DATA=FILEA;
     TITLE2 '1 record per catchment area (use this file to create a format)';
RUN;

* create a format statement to be used to create CATINDX;
PROC FORMAT CNTLIN=FILEA;  RUN;

* create an include file for a complete set of catchment areas.
* Write out to a file (CDUMFILE.INC) of the catchment dummy variables;
DATA _NULL_;
   SET FILEA END=EOF;
   FILE 'CDUMFILE.INC';
   IF _N_ = 1 THEN DO;
      PUT @10  "ARRAY CATDUMS(*) 4";
   END;
   PUT    @15   DUMNAME $7.;

   IF EOF  THEN  PUT @10 ";";
RUN;

*************************************************************************
* Create AGE, FEMALE and GROUP (Beneficiary/Enrollment)
* subsets. Create the region dummies.  Recode region 7 to region 8.
*************************************************************************;
DATA ENTIRE;
   SET ENTIRE;
   LENGTH DEFAULT = 4;
   IF FIELDAGE NE "  " THEN DO;   /*MJS 01/26/04*/
      AGE1824=0;
      AGE2534=0;
      AGE3544=0;
      AGE4554=0;
      AGE5564=0;
      AGE6574=0;
      AGE75UP=0;
      IF      ( '018' <= FIELDAGE <= '024' ) THEN AGE1824=1;   /*MJS 01/26/04*/
      ELSE IF ( '025' <= FIELDAGE <= '034' ) THEN AGE2534=1;
      ELSE IF ( '035' <= FIELDAGE <= '044' ) THEN AGE3544=1;
      ELSE IF ( '045' <= FIELDAGE <= '054' ) THEN AGE4554=1;
      ELSE IF ( '055' <= FIELDAGE <= '064' ) THEN AGE5564=1;
      ELSE IF ( '065' <= FIELDAGE <= '074' ) THEN AGE6574=1;
      ELSE IF (          FIELDAGE  > '074' ) THEN AGE75UP=1;
   END;

   ************************************************************************
   * Create the FEMALE dummy variable.
   ************************************************************************;
   IF XSEXA = 2 THEN
      FEMALE = 1;
   ELSE
      FEMALE = 0;

   ************************************************************************
   * Create the beneficiary group/enrollment group subsets.
   ************************************************************************;
   GROUP1 = 0;
   GROUP2 = 0;
   GROUP3 = 0;
   GROUP4 = 0;
   GROUP5 = 0;
   GROUP6 = 0;
   GROUP7 = 0;
   GROUP8 = 1;     * EVERYONE;
```

```
        IF (NXNS_COV IN (1,2,6)  AND H07007>=2) THEN GROUP1 = 1;
        IF (XENR_PCM IN (1,2,6)  AND H07007>=2) THEN GROUP2 = 1;
        /* JSO 04/05/2007 conditions to run RC type */
        IF "&RCTYPE" = 'ReportCards' AND (XENR_PCM IN (3,7) AND H07007>=2) THEN GROUP3 = 1;
        ELSE  IF  "&RCTYPE"  =  'PurchasedReportCards'  AND  ((XENR_PCM  IN  (3,7)  AND  H07007>=2)  OR
NXNS_COV IN (3,9)) THEN GROUP3 = 1;
        IF NXNS_COV IN  (3,9)     THEN GROUP4 = 1; /*JSO 08/24/2006, Deleted 4,5*//*JSO 07/30/2007,
Added 9*/
        IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN GROUP5 = 1;
                                                  /*JSO 07/30/2007, added DBENCAT conditions*/
        IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN GROUP6 = 1;
                                                  /*JSO 07/30/2007, added DBENCAT conditions*/
        IF XBNFGRP IN (3,4)      THEN GROUP7 = 1;

        ************************************************************************
        * Recode variables with Never, Sometimes, Usually and Always:
        *    Recode Never & Sometimes (1 & 2) to 1.
        *    Recode Usually (3) to 2.
        *    Recode Always (4) to 3.
        ************************************************************************;
        IF H07028 = 2 THEN H07029=3; /* ES 4/28/04 - Change in scoring method*/

        IF H07017 = 1      THEN R07017 = 1;
        ELSE IF H07017 = 2 THEN R07017 = 1;
        ELSE IF H07017 = 3 THEN R07017 = 2;
        ELSE IF H07017 = 4 THEN R07017 = 3;
        ELSE IF H07017 < 0 THEN R07017 = .;

        IF H07022 = 1      THEN R07022 = 1;
        ELSE IF H07022 = 2 THEN R07022 = 1;
        ELSE IF H07022 = 3 THEN R07022 = 2;
        ELSE IF H07022 = 4 THEN R07022 = 3;
        ELSE IF H07022 < 0 THEN R07022 = .;

        IF H07019 = 1      THEN R07019 = 1;
        ELSE IF H07019 = 2 THEN R07019 = 1;
        ELSE IF H07019 = 3 THEN R07019 = 2;
        ELSE IF H07019 = 4 THEN R07019 = 3;
        ELSE IF H07019 < 0 THEN R07019 = .;

        IF H07030 = 1      THEN R07030 = 1;
        ELSE IF H07030 = 2 THEN R07030 = 1;
        ELSE IF H07030 = 3 THEN R07030 = 2;
        ELSE IF H07030 = 4 THEN R07030 = 3;
        ELSE IF H07030 < 0 THEN R07030 = .;

        IF H07031 = 1      THEN R07031 = 1;
        ELSE IF H07031 = 2 THEN R07031 = 1;
        ELSE IF H07031 = 3 THEN R07031 = 2;
        ELSE IF H07031 = 4 THEN R07031 = 3;
        ELSE IF H07031 < 0 THEN R07031 = .;

        IF H07032 = 1      THEN R07032 = 1;
        ELSE IF H07032 = 2 THEN R07032 = 1;
        ELSE IF H07032 = 3 THEN R07032 = 2;
        ELSE IF H07032 = 4 THEN R07032 = 3;
        ELSE IF H07032 < 0 THEN R07032 = .;

        IF H07033 = 1      THEN R07033 = 1;
        ELSE IF H07033 = 2 THEN R07033 = 1;
        ELSE IF H07033 = 3 THEN R07033 = 2;
        ELSE IF H07033 = 4 THEN R07033 = 3;
        ELSE IF H07033 < 0 THEN R07033 = .;

        IF H07034 = 1      THEN R07034 = 1;
        ELSE IF H07034 = 2 THEN R07034 = 1;
        ELSE IF H07034 = 3 THEN R07034 = 2;
        ELSE IF H07034 = 4 THEN R07034 = 3;
        ELSE IF H07034 < 0 THEN R07034 = .;

        IF H07035 = 1      THEN R07035 = 1;
        ELSE IF H07035 = 2 THEN R07035 = 1;
```

```
ELSE IF H07035 = 3 THEN R07035 = 2;
ELSE IF H07035 = 4 THEN R07035 = 3;
ELSE IF H07035 < 0 THEN R07035 = .;

IF H07036 = 1      THEN R07036 = 1;
ELSE IF H07036 = 2 THEN R07036 = 1;
ELSE IF H07036 = 3 THEN R07036 = 2;
ELSE IF H07036 = 4 THEN R07036 = 3;
ELSE IF H07036 < 0 THEN R07036 = .;

IF H07040 = 1      THEN R07040 = 1;
ELSE IF H07040 = 2 THEN R07040 = 1;
ELSE IF H07040 = 3 THEN R07040 = 2;
ELSE IF H07040 = 4 THEN R07040 = 3;
ELSE IF H07040 < 0 THEN R07040 = .;

IF H07041 = 1      THEN R07041 = 1;
ELSE IF H07041 = 2 THEN R07041 = 1;
ELSE IF H07041 = 3 THEN R07041 = 2;
ELSE IF H07041 = 4 THEN R07041 = 3;
ELSE IF H07041 < 0 THEN R07041 = .;

************************************************************************
* Recode variables to one missing condition ".".
* This also renames all the "H0xxxx" to "R0xxxx".
************************************************************************;
R07011 = H07011;  IF R07011 < 0 THEN R07011 = .;
R07009 = H07009;  IF R07009 < 0 THEN R07009 = .;
R07013 = H07013;  IF R07013 < 0 THEN R07013 = .;
R07015 = H07015;  IF R07015 < 0 THEN R07015 = .;
R07027 = H07027;  IF R07027 < 0 THEN R07027 = .;
R07029 = H07029;  IF R07029 < 0 THEN R07029 = .;
R07037 = H07037;  IF R07037 < 0 THEN R07037 = .;
R07043 = H07043;  IF R07043 < 0 THEN R07043 = .;
R07045 = H07045;  IF R07045 < 0 THEN R07045 = .;
R07047 = H07047;  IF R07047 < 0 THEN R07047 = .;
R07048 = H07048;  IF R07048 < 0 THEN R07048 = .;
R07066 = H07066;  IF R07066 < 0 THEN R07066 = .;

************************************************************************
* Create region and service affiliation dummies.
************************************************************************;
IF XSERVREG NE . THEN DO;  /*JSO 08/24/2006, Changed 16 to 24*/
   ARRAY REGDUMS (24) REG01 REG02 REG03 REG04 REG05 REG06
                      REG07 REG08 REG09 REG10 REG11 REG12
                      REG13 REG14 REG15 REG16 REG17 REG18
                      REG19 REG20 REG21 REG22 REG23 REG24;
   DO I = 1 TO 24;
      REGDUMS(I)=0;
   END;
   IF       XSERVREG= 1  THEN REG01  =1;
   ELSE IF  XSERVREG= 2  THEN REG02  =1;
   ELSE IF  XSERVREG= 3  THEN REG03  =1;
   ELSE IF  XSERVREG= 4  THEN REG04  =1;
   ELSE IF  XSERVREG= 5  THEN REG05  =1;
   ELSE IF  XSERVREG= 6  THEN REG06  =1;
   ELSE IF  XSERVREG= 7  THEN REG07  =1;
   ELSE IF  XSERVREG= 8  THEN REG08  =1;
   ELSE IF  XSERVREG= 9  THEN REG09  =1;
   ELSE IF  XSERVREG= 10 THEN REG10  =1;
   ELSE IF  XSERVREG= 11 THEN REG11  =1;
   ELSE IF  XSERVREG= 12 THEN REG12  =1;
   ELSE IF  XSERVREG= 13 THEN REG13  =1;
   ELSE IF  XSERVREG= 14 THEN REG14  =1;
   ELSE IF  XSERVREG= 15 THEN REG15  =1;
   ELSE IF  XSERVREG= 16 THEN REG16  =1;
   ELSE IF  XSERVREG= 17 THEN REG17  =1;
   ELSE IF  XSERVREG= 18 THEN REG18  =1;
   ELSE IF  XSERVREG= 19 THEN REG19  =1;
   ELSE IF  XSERVREG= 20 THEN REG20  =1;
   ELSE IF  XSERVREG= 21 THEN REG21  =1;
   ELSE IF  XSERVREG= 22 THEN REG22  =1;
   ELSE IF  XSERVREG= 23 THEN REG23  =1;
```

```
      ELSE IF  XSERVREG= 24 THEN REG24  =1;

      ARRAY SRVDUMS (4) SRV01 SRV02 SRV03 SRV04;
      DO I = 1 TO 4;    /*Needed for consumer watch ONLY */
         SRVDUMS(I)=0;
      END;
      IF       XSERVAFF = 1 THEN SRV01 = 1;
      ELSE IF  XSERVAFF = 2 THEN SRV02 = 1;
      ELSE IF  XSERVAFF = 3 THEN SRV03 = 1;
      ELSE IF  XSERVAFF = 4 THEN SRV04 = 1;
   END;
   *-------------------------;
   * Create catchment dummies;
   *-------------------------;
   %INCLUDE 'CDUMFILE.INC';   * this is array statement;
   CATINDX = INPUT(PUT(CACSMPL, CACLOOK.), 3.);
   DO I = 1 TO DIM(CATDUMS);
     CATDUMS(I) = 0;
   END;
   CATDUMS(CATINDX)=1;
RUN;

*************************************************************************
* Recode item responses to proportional values using CONVERT.SAS.
*************************************************************************;
%INCLUDE "CONVERT.SAS";

%CONT1(DSN=ENTIRE, NUM=7,  Y=R07011 R07013 R07027 R07029
                             R07043 R07045 R07047);
%CONT2(DSN=ENTIRE, NUM=4,  Y=R07037 R07048 R07009 R07015);
%CONT3(DSN=ENTIRE, NUM=12, Y=R07017 R07022 R07019 R07030
                             R07033 R07034 R07035 R07036
                             R07031 R07032 R07040 R07041);

*************************************************************************
* Sort the main file to reorder it by MPRID.
*************************************************************************;
PROC SORT DATA=ENTIRE; BY MPRID; RUN;

*************************************************************************
* Print the contents of ENTIRE dataset.
*************************************************************************;
PROC CONTENTS DATA=ENTIRE;
   TITLE2 'Contents of ENTIRE';
RUN;


*************************************************************************
* Print some of the recoded records.
*************************************************************************;
PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of AGE and SEX dummies';
   VAR MPRID
       FIELDAGE   /*MJS 01/26/04*/
       XTNEXREG
       XSERVAFF
       XSERVREG
       CONUS
       ENBGSMPL
       XSEXA
       STRATUM   /*KRR 04/03/2006 Changed from ADJ_CELL*/
       XINS_COV
       NXNS_COV  /*JSO 04/26/2007, added for reservists logic*/
       DBENCAT   /*JSO 04/26/2007, added for reservists logic*/
       XENR_PCM
       &WGT.
      ;
RUN;

*************************************************************************
* Print some of the recoded records.
*************************************************************************;
PROC PRINT DATA=ENTIRE(OBS=60);
```

```
   TITLE2 'Print of AGE and SEX dummies';
   VAR FIELDAGE   /*MJS 01/26/04*/
       AGE1824
       AGE2534
       AGE3544
       AGE4554
       AGE5564
       AGE6574
       AGE75UP

       XSEXA
       FEMALE

       ENBGSMPL
       XINS_COV
       NXNS_COV
       XENR_PCM
       XBNFGRP
       GROUP1
       GROUP2
       GROUP3
       GROUP4
       GROUP5
       GROUP6
       GROUP7
      ;
RUN;

PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of recoded question variables';
   VAR H07011  R07011   /*MJS 03/24/04 Changed 2003 to 2004 variable names*/
       H07009  R07009
       H07013  R07013
       H07015  R07015
       H07017  R07017
       H07022  R07022
       H07019  R07019
       H07027  R07027
       H07029  R07029
       H07030  R07030
       H07031  R07031
       H07032  R07032
       H07033  R07033
       H07034  R07034
      ;
RUN;


PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of recoded question variables';
   VAR H07035  R07035
       H07036  R07036
       H07037  R07037
       H07040  R07040
       H07041  R07041
       H07043  R07043
       H07045  R07045
       H07047  R07047
       H07048  R07048
       H07066  R07066
      ;
RUN;

/*JSO 08/24/2006, Changed 16 to 24*/
PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of recoded REGION variables';
   VAR XSERVREG
       REG01
       REG02
       REG03
       REG04
       REG05
       REG06
```

```
       REG07
       REG08
       REG09
       REG10
       REG11
       REG12
       REG13
       REG14
       REG15
       REG16
       REG17
       REG18
       REG19
       REG20
       REG21
       REG22
       REG23
       REG24;
RUN;


PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of recoded service affiliation variables';
   VAR XSERVREG
       XSERVAFF
       XOCONUS /*JSO 08/24/2006, Changed Overseas Regions*/
       SRV01
       SRV02
       SRV03
       SRV04
      ;
RUN;
proc freq data=entire;
table xservreg*cacsmpl/noprint out=temp;
proc sort; by cacsmpl count;
data out.xservind(keep=cacsmpl xservind);
set temp; by cacsmpl;
if last.cacsmpl;
if xservreg in (13,14,15,16) then xservreg=13;
if xservreg in (17,18,19,20) then xservreg=14;
if xservreg in (21,22,23,24) then xservreg=15;

rename xservreg=xservind;
proc sort data=entire;
by cacsmpl;
data entire;
merge entire out.xservind; by cacsmpl;
***************************************************************************
* Create the 7 subgroups for processing by STEP2.SAS.
***************************************************************************;
DATA OUT.GROUP1
     OUT.GROUP2
     OUT.GROUP3
     OUT.GROUP4
     OUT.GROUP5
     OUT.GROUP6
     OUT.GROUP7
     OUT.GROUP8;

     SET ENTIRE;

     DROP
        H07011
        H07009
        H07013
        H07015
        H07017
        H07022
        H07019
        H07027
        H07029
        H07030
        H07031
```

```
        H07032
        H07033
        H07034
        H07035
        H07036
        H07037
        H07040
        H07041
        H07043
        H07045
        H07047
        H07048
        H07066
        ;
      IF GROUP1 = 1 THEN OUTPUT OUT.GROUP1;
      IF GROUP2 = 1 THEN OUTPUT OUT.GROUP2;
      IF GROUP3 = 1 THEN OUTPUT OUT.GROUP3;
      IF GROUP4 = 1 THEN OUTPUT OUT.GROUP4;
      IF GROUP5 = 1 THEN OUTPUT OUT.GROUP5;
      IF GROUP6 = 1 THEN OUTPUT OUT.GROUP6;
      IF GROUP7 = 1 THEN OUTPUT OUT.GROUP7;
      OUTPUT OUT.GROUP8;
RUN;
```

G.8.B REPORTCARDS\CAHPS_ADULT2007\CONVERT.SAS - CONVERT ITEM RESPONSES TO PROPORTIONAL VALUES.

```
***************************************************************************
*
* PROGRAM:  CONVERT.SAS
* TASK:     DOD HEALTH CARE SURVEY ANALYSIS (8687-330)
* PURPOSE:  CONVERT ITEM RESPONSES TO PROPORTIONAL VALUES FOR CONSISTENCY
*           WITH THE TOPS SURVEY.
* WRITTEN:  October 2000 BY ERIC SCHONE
*
* MODIFIED: October 2000 BY KEITH RATHBUN, Added PROLOG.  Also, added DSN
*           to argument lists.
*
* INPUTS:  1) User-specified SAS Dataset
*
* OUTPUTS: 1) User-specified SAS Dataset with recoded values
*
* NOTES:
*
* 1) Arguments for the CONT1-CONT3 macros are as follows:
*    a) SAS dataset name (dsn)
*    b) Number of variables to be converted (num)
*    c) List of variables to be converted (y)
* 2) These macros assume that the response items have already been
*    converted/recoded to CAHPS scales.
*
***************************************************************************
* CONT1 - Convert big problem, small problem, not a problem questions to
*         proportional values.
***************************************************************************;
%macro cont1(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i = 1 to &num;
      if vars(i) ne . and vars(i) ne 3 then vars(i) = 0;
      if vars(i) = 3 then vars(i) = 1;
   end;
run;
%mend cont1;

***************************************************************************
* CONT2 - Convert rating questions to proportional values.
***************************************************************************;
%macro cont2(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i=1 to &num;
      if vars(i) ne . and vars(i) < 8 then vars(i) = 0;
      if vars(i) in (8,9,10) then vars(i) = 1;
   end;
run;
%mend cont2;

***************************************************************************
* CONT3 - Convert Never, Sometimes, Usually, Always questions to
*         proportional values.
***************************************************************************;
%macro cont3(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i=1 to &num;
      if vars(i) ne . and vars(i) >= 2 then vars(i) = 2;
      vars(i) = vars(i) - 1;
   end;
run;
%mend cont3;
```

G.8.C REPORTCARDS\CAHPS_ADULT2007\STEP2.SAS - CALCULATE CAHPS ADJUSTED SCORES - ANNUAL.

```
/*******************************************************************************
/*  Project:  DoD - 2004 Adult Report Cards
/*  Program:  STEP2Q.SAS
/*  Purpose:  Draft Adult Report Card
/*  Requires program STEP1.SAS to have been run
/*  Programming specifications for adult report card
/*  The adult report card contains a large number of
/*  risk-adjusted scores.  Some scores are
/*  calculated from responses to individual survey questions.
/*  Composite scores are calculated by
/*  combining scores from individual questions.
/*  The scores then are compared with external civilian
/*  benchmarks.  The programming tasks involved in building
/*  the report card are:
/*       1)   preparing data for analyses
/*       2)   estimating risk adjustment models
/*       3)   calculating risk-adjusted values and variances
/*       4)   calculating benchmarks
/*       5)   comparing risk-adjusted values to benchmarks
/*            and hypothesis testing
/*
/*  Modified: 1) December 2001 By Mike Scott: Updated parameters for 2000 survey,
/*               added V612 to support SUDAAN with Version 8 SAS, changed STRATUM to
/*               TMP_CELL, and changed INTERCEP to INTERCEPT to support Version 8 SAS.
/*            2) January 2003 By Keith Rathbun: Added output files for SKELCAT and
/*               SKELREG (No longer permanent datasets... only needed by this program).
/*            3) January 2004 By Mike Scott: Updated for 2003 survey.
/*            4) February 2005 By Regina Gramss: Updated for 2004 survey
/*               changed codes to use XSERVREG for region.  Changed field
/*               names to use macro for year change.
/*               Adjustments were made By Eric Schone because of catchment
/*               areas lining up to multiple regions.
/*            5) January 2006 By Regina Gramss: Updated for 2005 survey.
/*            6) October 2006 By Keith Rathbun: Updated to accomodate the Overseas
/*               reporting updates done by Justin Oh in the quarterly version.
/*            7) November 9, 2007 By Keith Rathbun: Updated parameters for
/*               the 2007 survey.
/*
/* SUBGROUPS
/* ____________________________________________________________________________
/*    Seven subgroups          Definitions                        Reg or Catch   Macro
/* ____________________________________________________________________________
/* 1. Prime enrollees          XINS_COV IN(1,2,6) AND H06007>=4   Catchment      SCORE1
/* 2. Enrollees w/mil PCM      XENR_PCM IN(1,2,6) AND H06007>=4   Catchment      SCORE1
/* 3. Enrollees w/civ PCM      XENR_PCM = 3       AND H06007>=4   Region         SCORE2
/* 4. Nonenrollees             XINS_COV IN(3)                     Region         SCORE2
/* 5. Active duty              XBNFGRP=1                          Catchment      SCORE1
/* 6. Active duty dependents   XBNFGRP=2                          Region         SCORE2
/* 7. Retirees and dependents  XBNFGRP IN (3,4)                   Region         SCORE2
/*
/*  PREV PGM:  STEP1.SAS
/*  NEXT PGM:  COMPOSIT.SAS
/*******************************************************************************/
OPTIONS NOCENTER LS=132 PS=78 SOURCE NOOVP STIMER COMPRESS=YES;
LIBNAME   IN1  V612 "DATA";
LIBNAME   OUT  V612 "DATA";
LIBNAME   OUT2 V612 "DATA\ADULTHATFILES";

*--------------------------------------;
*-       set the parameters here      -;
*--------------------------------------;
* set the number of Dependent variables to process;
* One does not need to start at 1, but the max must be >= min;
%LET MIN_VAR =  1;
%LET MAX_VAR =  23;

* set the number of subgroups to process;
%LET MIN_GRP = 1;
%LET MAX_GRP = 8;
```

```
*************************************************************************
* These are expected to remain the same for a particular dependent
* variable run.
*************************************************************************;
%LET WGT      = FWRWT;
%LET IND_VAR1 = R07066;
%LET IND_VAR2 =  ;  * FEMALE;
%LET IND_VAR3 =  ;  * SREDHIGH;
%LET DEBUGFLG = 0;  * Set to 1 if you want extra printout;

%LET TITL1 = Prime Enrollees;
%LET TITL2 = Enrollees w/military PCM;
%LET TITL3 = Enrollees w/civilian PCM;
%LET TITL4 = Nonenrollees;
%LET TITL5 = Active Duty;
%LET TITL6 = Active Duty Dependents;
%LET TITL7 = Retirees and Dependents;
%LET TITL8 = All Beneficiaries;

*************************************************************************
* GETTING NEEDED CARE.
*************************************************************************;
%LET DEPVAR1 = R07011;
%LET DEPVAR2 = R07013;
%LET DEPVAR3 = R07027;
%LET DEPVAR4 = R07029;

*************************************************************************
* GETTING NEEDED CARE QUICKLY.
*************************************************************************;
%LET DEPVAR5 = R07017;
%LET DEPVAR6 = R07022;
%LET DEPVAR7 = R07019;
%LET DEPVAR8 = R07030;

*************************************************************************
* HOW WELL DOCTORS COMMUNICATE.
*************************************************************************;
%LET DEPVAR9  = R07033;
%LET DEPVAR10 = R07034;
%LET DEPVAR11 = R07035;
%LET DEPVAR12 = R07036;

*************************************************************************
* COURTEOUS AND HELPFUL OFFICE STAFF.
*************************************************************************;
%LET DEPVAR13 = R07031;
%LET DEPVAR14 = R07032;

*************************************************************************
* CUSTOMER SERVICE.
*************************************************************************;
%LET DEPVAR15 = R07043;
%LET DEPVAR16 = R07045;
%LET DEPVAR17 = R07047;

*************************************************************************
* CLAIMS PROCESSING.
*************************************************************************;
%LET DEPVAR18 = R07040;
%LET DEPVAR19 = R07041;

*************************************************************************
* RATING ALL HEALTH CARE: 0 - 10.
*************************************************************************;
%LET DEPVAR20 = R07037;

*************************************************************************
* RATING OF HEALTH PLAN: 0 - 10.
*************************************************************************;
%LET DEPVAR21 = R07048;

*************************************************************************
```

```
* RATING OF PERSONAL DR: 0 - 10.
*************************************************************************;
%LET DEPVAR22 = R07009;

*************************************************************************
* SPECIALITY CARE: 0 - 10.
*************************************************************************;
%LET DEPVAR23 = R07015;


proc freq data=in1.group8;   /*MJS 01/23/04 Changed data set*/
   tables cacsmpl /missing list out=skelcat(keep=cacsmpl);
run;
data skelcat;
   set skelcat;
   if cacsmpl = " " then delete;
run;

/*RSG 02/2005 - put in hard code for skelreg vs. doing freq on data
                since xservreg is not in data and must be coded*/

DATA SKELREG;
   INPUT XSERVREG;
   DATALINES;
      1
      2
      3
      4
      5
      6
      7
      8
      9
      10
      11
      12
      13
      14
      15
      16
      17
      18
      19
      20
      21
      22
      23
      24
;
RUN;


 %MACRO SCORE1;
 *********************************************;
 *     use this macro for groups 1, 2 & 5    *;
 *     catchment variables are to be used    *;
 *********************************************;
 %PUT ****************************************;
 %PUT STARTING MACRO SCORE1;
 %PUT "GROUP    = " GROUP&IGRP;
 %PUT "TITLE    = " &&DEPVAR&IVAR  &&TITL&IGRP;
 %PUT "DEP_VAR  = " &&DEPVAR&IVAR;
 %PUT "IND_VAR1 = " &IND_VAR1;
 %PUT "IND_VAR2 = " &IND_VAR2;
 %PUT "IND_VAR3 = " &IND_VAR3;
 %PUT "WGT      = " &WGT;
 %PUT ****************************************;

*----------------------------------------------------;
* If the current group is 1 use the skeleton files;
* else used the previous groups output file;
* The mrgfile is added to by each subgroup;
*----------------------------------------------------;
```

```
 %LET CMRGFILE = OUT.C_&&DEPVAR&IVAR;
 %IF "&IGRP" = "1" %THEN %LET CMRGFILE = SKELCAT;


* run regression using the catchment level variables;
* output a BETA file (1 record) and the subgroup;
* file with residuals attached (many records);
PROC REG DATA = GROUP&IGRP OUTEST=BETAS;
     TITLE2 "Regression Model on catchment areas";
     TITLE3 "Beneficiary group&igrp: &&TITL&IGRP";
     WEIGHT &WGT;
     %INCLUDE 'REGRSCAT.INC';
     OUTPUT OUT = OUT2.H&IGRP&&DEPVAR&IVAR(KEEP=MPRID &WGT TMP_CELL
                      PRED&IGRP RESID&IGRP CACSMPL XSERVREG &&DEPVAR&IVAR)
              P = PRED&IGRP
              R = RESID&IGRP;
RUN;


* print of HCSDB file with the residuals and predicted values;
%IF &DEBUGFLG > 0  %THEN %DO;
   PROC PRINT DATA=OUT2.H&IGRP&&DEPVAR&IVAR (OBS=70);
        TITLE2 "OUT2.H&IGRP&&DEPVAR&IVAR:  file with PRED&IGRP and RESID&IGRP";
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
        VAR MPRID XSERVREG CACSMPL &&DEPVAR&IVAR RESID&IGRP PRED&IGRP;
   RUN;

    PROC PRINT DATA=BETAS;
         TITLE2 "BETAS:  file with coefficients";
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;
%END;


*-----------------------------------;
*-- get the standard err/variance;
*-----------------------------------;
%LET DEP = &&DEPVAR&IVAR;
%C_SUDAAN(OUT2.H&IGRP&&DEPVAR&IVAR);


* calculate prelim adjusted scores for the risk-adjusters;
* merge adjuster means with the adjuster coefficients;
* then sum their products. Finally add in the intercept;
DATA ADJUST;
     SET MEANFILE;    * CREATED IN THE MACRO  MAKE_DAT;
     IF _N_ = 1 THEN SET BETAS(DROP = _TYPE_);
     %INCLUDE 'RISKARRY.INC';
     %INCLUDE 'RISKMEAN.INC';
     DO I = 1 TO DIM(COEFFS);
       IF COEFFS(I) = . THEN COEFFS(I) = 0;
       IF MEANS(I) = . THEN MEANS(I) = 0;
       ADJUST + ( COEFFS(I) * MEANS(I) );
     END;
     ADJUST = ADJUST + INTERCEPT;
 RUN;


%IF &DEBUGFLG > 0  %THEN %DO;
   PROC PRINT DATA=ADJUST;
        TITLE2 'Print of ADJUST';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;


* add the catchment coefficients to the adjusted value from above;
* output one record per catchment area with the catchment;
* level adjusted scores;
DATA COEFFCAC(KEEP=CATAREA NEWADJST);
   SET ADJUST;
   %INCLUDE 'CATARRAY.INC';
   LENGTH NAME $8;
```

```
   DO I=1 TO DIM(CATRHS);
     CALL VNAME(CATRHS(I),NAME);
     CATAREA=INPUT(SUBSTR(NAME,4,4),4.);
     IF CATRHS(I) = . THEN CATRHS(I) = 0;
     NEWADJST=ADJUST + CATRHS(I);
     OUTPUT;
   END;
RUN;


%IF &DEBUGFLG > 0  %THEN %DO;
    PROC PRINT DATA=COEFFCAC;
         TITLE2 'COEFFCAC: Catchment Area Adjusted Scores';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;
%END;


 * sum of wgts per catchment areas;
 * attach the region id to the output file so;
 * so we can create wgts for each region later;
 PROC MEANS DATA=GROUP&IGRP NWAY NOPRINT ;
   ID    XSERVind ;  * important ;
   CLASS CACSMPL ;
   VAR   &WGT;
   OUTPUT OUT=CAT_WGTS(RENAME=(CACSMPL=CATAREA)) N=CATCNT SUM=CATWGT;
 RUN;


* merge the Coeffcac file with the catchment;
* adjusted scores to the catchment level weight;
* merge by the catchment area. creates a;
* catchment level file with catchment weights;
 DATA COEFFCAC;
   MERGE COEFFCAC(IN=IN1)
         CAT_WGTS(IN=IN2 KEEP=CATAREA XSERVind CATWGT CATCNT);
   BY CATAREA;
   IF IN1;
 RUN;



%IF &DEBUGFLG > 0  %THEN %DO;
    PROC PRINT DATA=CAT_WGTS(OBS=70);
         TITLE2 'CAT_WGTS: Catchment Area Sum of WGTS';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=COEFFCAC(OBS=70);
         TITLE2 'Catchment Area Adjusted Scores - with sum of wgts and region';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

%END;


* merge the previous groups catchment results (if any);
* with the catchment level std err and the catchment;
* level results from the current groups and dependent var;
%PUT "&CMRGFILE: " &CMRGFILE;
DATA OUT.C_&&DEPVAR&IVAR(RENAME=(NEWADJST=ADJ&IGRP));
     MERGE &CMRGFILE(IN=INS)
           C&IGRP&&DEPVAR&IVAR
           COEFFCAC(RENAME=(CATAREA=CACSMPL CATWGT=CATWGT&IGRP CATCNT=CATCNT&IGRP));
     BY CACSMPL;
     DEPENDNT = "&&DEPVAR&IVAR";
     IF INS;
RUN;

PROC PRINT DATA=OUT.C_&&DEPVAR&IVAR;
     TITLE2 "Print of Catchment variables in C_&&DEPVAR&IVAR";
     TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
RUN;
```

```
%MEND SCORE1;



%MACRO SCORE2;
 ************************************;
 * use this macro for groups 3, 4, 6, 7;
 * region variables are to be used     ;
 ************************************;
 %PUT ****************************************;
 %PUT STARTING MACRO SCORE2;
 %PUT "GROUP    = " GROUP&IGRP;
 %PUT "TITLE    = " &&DEPVAR&IVAR  &&TITL&IGRP;
 %PUT "DEP_VAR  = " &&DEPVAR&IVAR;
 %PUT "IND_VAR1 = " &IND_VAR1;
 %PUT "IND_VAR2 = " &IND_VAR2;
 %PUT "IND_VAR3 = " &IND_VAR3;
 %PUT "WGT      = " &WGT;
 %PUT ****************************************;

 %LET RMRGFILE = OUT.R_&&DEPVAR&IVAR;
 %IF "&IGRP" = "1" %THEN %LET RMRGFILE = SKELREG;

* run regression using the region level variables;
* output a BETA file (1 record) and the subgroup;
* file with residuals attached (many records);
PROC REG DATA = GROUP&IGRP OUTEST=BETAS;
     TITLE2 "Regression Model for GROUP&igrp for regions";
     TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
     WEIGHT &WGT;
     %INCLUDE 'REGRSREG.INC';
     OUTPUT OUT = OUT2.H&IGRP&&DEPVAR&IVAR(KEEP=MPRID &WGT TMP_CELL
                       PRED&IGRP RESID&IGRP CACSMPL XSERVREG &&DEPVAR&IVAR)
              P = PRED&IGRP
              R = RESID&IGRP;

RUN;

* print of HCSDB file with the residuals and predicted values;
%IF &DEBUGFLG > 0  %THEN %DO;
    PROC PRINT DATA=OUT2.H&IGRP&&DEPVAR&IVAR (OBS=70);
         TITLE2 "OUT2.H&IGRP&&DEPVAR&IVAR:  file with predicted values and the RESID&IGRP";
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
         VAR MPRID XSERVREG CACSMPL &&DEPVAR&IVAR RESID&IGRP PRED&IGRP;
    RUN;

    PROC PRINT DATA=BETAS;
         TITLE2 "BETAS:  file with coefficients";
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;
%END;


*-----------------------------------------;
*----- get the standard err/variance ----;
*-----------------------------------------;
%LET DEP = &&DEPVAR&IVAR;
%R_SUDAAN(OUT2.H&IGRP&&DEPVAR&IVAR);


* calculate prelim adjusted scores for the risk-adjusters;
* merge adjuster means with the adjuster coefficients;
* then sum their products. Finally add in the intercept;
 DATA ADJUST;
    SET MEANFILE;
    IF _N_ = 1 THEN SET BETAS(DROP = _TYPE_);
    %INCLUDE 'RISKARRY.INC';
    %INCLUDE 'RISKMEAN.INC';
    DO I = 1 TO DIM(COEFFS);
```

```
       IF COEFFS(I) = . THEN COEFFS(I) = 0;
       IF MEANS(I) = .  THEN MEANS(I)  = 0;
       ADJUST + ( COEFFS(I) * MEANS(I) );
    END;
    ADJUST = ADJUST + INTERCEPT;
 RUN;


* add the region coefficients to the adjusted value from above;
* output one record per region with the region;
* level adjusted scores;
 DATA COEFFREG(KEEP=XSERVREG NEWADJST);
    SET ADJUST;
    %INCLUDE 'REGARRAY.INC';
    LENGTH NAME $8;
    DO I=1 TO DIM(REGRHS);
       CALL VNAME(REGRHS(I),NAME);
       XSERVREG=INPUT(SUBSTR(NAME,4,2),2.);
       IF REGRHS(I) = . THEN REGRHS(I) = 0;
       NEWADJST=ADJUST + REGRHS(I);
       OUTPUT;
    END;
RUN;


* sum of wgts for each region;
PROC MEANS DATA=GROUP&IGRP NWAY NOPRINT ;
  CLASS XSERVREG;
  VAR   &WGT;
  OUTPUT OUT=REG_WGTS (DROP = _TYPE_ _FREQ_) N=REGCNT SUM=REGWGT;
RUN;


* merge the COEFFREG file with the region;
* adjusted scores to the region level total weight;
* merge by the region.  Creates a region level;
* file with the total sample weight of the region;
DATA COEFFREG;
      MERGE COEFFREG(IN=IN1)
            REG_WGTS(IN=IN2   KEEP=XSERVREG REGCNT REGWGT);
      BY XSERVREG;
      IF IN1;
RUN;


%IF &DEBUGFLG > 0  %THEN %DO;
    PROC PRINT DATA=MEANFILE;
         TITLE2 'Print of MEANFILE';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=ADJUST;
         TITLE2 'Print of ADJUST';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=COEFFREG;
         TITLE2 'Print of COEFFREG: Region Adjusted Scores';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=REG_WGTS;
         TITLE2 'Print of REG_WGTS: Region Area Sum of WGTS';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=COEFFREG;
         TITLE2 'Print of COEFFREG: Regions Adjusted Scores - with sum of wgts and region';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;
%END;
```

```
* Calculate region level adjusted scores from the;
* region level adjusted scores in COEFFREG;
/*PROC MEANS DATA=COEFFREG NWAY NOPRINT;
  WEIGHT REGWGT;
  CLASS  XSERVREG;
  VAR    NEWADJST;
  OUTPUT OUT=REGFILE1 (DROP = _TYPE_ _FREQ_) MEAN=ADJ&IGRP;
RUN;
*/

%IF &DEBUGFLG > 0  %THEN %DO;
   PROC PRINT DATA=REGFILE1;
        TITLE2 'Print of REGFILE1: Region Scores';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;


* merge the previous groups regional results (if any);
* with the region level std err and the region;
* level results from the current group/dependent var;
%PUT "&RMRGFILE: " &RMRGFILE;
DATA OUT.R_&&DEPVAR&IVAR;
    MERGE &RMRGFILE(IN=INS)
          R&IGRP&&DEPVAR&IVAR    /*KRR - removed perm dataset ref to OUT2 */
          coeffreg(rename=(newadjst=adj&igrp));
    BY XSERVREG;
    RENAME REGCNT = REGCNT&IGRP;
    RENAME REGWGT = REGWGT&IGRP;
    DEPENDNT = "&&DEPVAR&IVAR";
    IF INS;
RUN;

PROC PRINT DATA=OUT.R_&&DEPVAR&IVAR;
     TITLE2 "Print of REGION variables in &&DEPVAR&IVAR";
     TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
RUN;



 %MEND SCORE2;


 *
;
 %MACRO MAKE_INC;
 ****************************************;
 * creates include files for later Procs;
 * Needs to be run each time.  Called   ;
 * in the outer (beneficiary loop).     ;
 * I chose this method because it was   ;
 * clearer(to me at least).             ;
 * This macro needs to be run once per  ;
 * Dep var per subgroup.                ;
 ****************************************;

* Drop records where the dependent var is missing;
* Drop records with missing catchment or region values;



  DATA GROUP&IGRP;
       SET IN1.GROUP&IGRP;
       IF &&DEPVAR&IVAR NOT = .;

  RUN;

 DATA _NULL_;
      SET GROUP&IGRP END = EOF;
      IF &&DEPVAR&IVAR NOT = .;

      ARRAY AGECNT(7) 8 aCNT1 - aCNT7;
      RETAIN AGECNT 0;
```

```
      RETAIN CNT 0;
      ARRAY AGENAM(7)  $8 AGENAM1 - AGENAM7;
      ARRAY AGENAMX(7) $8 AGENAMX1 - AGENAMX7;
      RETAIN AGENAM;
      RETAIN AGENAMX;
      ARRAY CATCNT(9998) 8 CCNT0001 - CCNT9998;
      ARRAY REGCNT(24)   8 REGCNT01 - REGCNT24; *KRR 10/24/2006 - Changed from 16 to 24;
      RETAIN CATCNT 0;
      RETAIN REGCNT 0;

      * create a name array for the age dummies;
      IF _N_ = 1 THEN DO;
         AGENAM(1) = "AGE1824";
         AGENAM(2) = "AGE2534";
         AGENAM(3) = "AGE3544";
         AGENAM(4) = "AGE4554";
         AGENAM(5) = "AGE5564";
         AGENAM(6) = "AGE6574";
         AGENAM(7) = "AGE75UP";
      END;

      * total record count;
      CNT + 1;

      * count records in each age group;
      * we will use only age groups with more;
      * than 2 obs;
      IF AGE1824 = 1 THEN AGECNT(1) + 1;
      IF AGE2534 = 1 THEN AGECNT(2) + 1;
      IF AGE3544 = 1 THEN AGECNT(3) + 1;
      IF AGE4554 = 1 THEN AGECNT(4) + 1;
      IF AGE5564 = 1 THEN AGECNT(5) + 1;
      IF AGE6574 = 1 THEN AGECNT(6) + 1;
      IF AGE75UP = 1 THEN AGECNT(7) + 1;

      * count records in each catchment group;
      * we will only use catchment areas ;
      * with more than than 2 obs;
      * I am using the catchment area as the subscript;
      * to make the code simpler and more readable;
      IF CACSMPL >= 1 AND CACSMPL <= 9998 THEN DO;
         CATCNT(CACSMPL) = CATCNT(CACSMPL) + 1;
      END;

      * count records in each REGION group;
      * we will only use REGIONS ;
      * with more than than 2 obs;
      * I am using the region value as the subscript;
      * to make the code simpler and more readable;
      IF XSERVREG >= 1 AND XSERVREG <=24  THEN DO; *KRR 10/24/2006 - Changed from 16 to 24;
         REGCNT(XSERVREG) = REGCNT(XSERVREG) + 1;
      END;

      IF EOF THEN GOTO ENDFILE;
      RETURN;


ENDFILE:
     * create a title common to all procs in the current group;
     TITLE  " &&DEPVAR&IVAR  &&TITL&IGRP";

     * display counts in the log;
     %IF &DEBUGFLG > 0  %THEN %DO;
        PUT ' ';
        PUT 'AT EOF:';
        PUT "TOTAL CNT = "    CNT;
        PUT AGENAM(1) "  " AGECNT(1)=;
        PUT AGENAM(2) "  " AGECNT(2)=;
        PUT AGENAM(3) "  " AGECNT(3)=;
        PUT AGENAM(4) "  " AGECNT(4)=;
        PUT AGENAM(5) "  " AGECNT(5)=;
        PUT AGENAM(6) "  " AGECNT(6)=;
        PUT AGENAM(7) "  " AGECNT(7)=;
```

```
   PUT " ";

   DO I = 1 TO 24; *KRR 10/24/2006 - Changed from 16 to 24;
      IF(REGCNT(I) > 0) THEN DO;
         PUT  'REG' I Z2. REGCNT(I) 6.;
      END;
   END;
   PUT ' ';

   DO I = 1 TO 9998;
      IF(CATCNT(I) > 0) THEN DO;
         PUT  'CAT' I Z4. CATCNT(I) 6.;
      END;
   END;
   PUT ' ';
%END;    *** of debug test;


*-------------------------------------------------------;
* create an include file for the regression model;
* it is inconvient, but SAS requires that the;
* include file start after a complete statement;
* i.e. after a semicolon;
* This include is for the regression using catchment areas;
FILE 'REGRSCAT.INC';
PUT @6  "MODEL &&DEPVAR&IVAR = ";
IF "&IND_VAR1" NE "" THEN PUT @12 "&IND_VAR1"; /* KRR - only output when present */
IF "&IND_VAR2" NE "" THEN PUT @12 "&IND_VAR2"; /* KRR - only output when present */
IF "&IND_VAR3" NE "" THEN PUT @12 "&IND_VAR3"; /* KRR - only output when present */

CNT2 = 0;
* setup an array of those age groups that have > 1 obs;
DO I = 1 TO 7;
   IF AGECNT(I) > 1 THEN DO;
      CNT2 +1;
      AGENAMX(CNT2) = AGENAM(I);
   END;
END;
* drop the last category to create;
* an omitted category which is required;
* to solve the regression properly;
DO I = 1 TO CNT2-1;
   PUT @12 AGENAMX(I);
END;


* ditto for the catchment areas with > 0 obs;
* in this case we drop the last non-zero cnt;
* this is not consistent with Portias code which;
* unintentionally omitted several catchment area codes;
LAST_REC = 0;
DO I = 1 TO 9998;
   IF CATCNT(I) > 0 THEN LAST_REC = I;
END;

* skip the last cacsmpl with > 1 obs;
DO I = 1 TO LAST_REC-1;
   IF CATCNT(I) > 0 THEN DO;
      PUT @12 'CAT' I Z4.;
   END;
END;
PUT @11 ';';


*-------------------------------------------------------;
* This include is for the regression using regions;
* in this case we drop the last REGION;
FILE 'REGRSREG.INC';
PUT @6  "MODEL  &&DEPVAR&IVAR = ";
IF "&IND_VAR1" NE "" THEN PUT @12 "&IND_VAR1"; /* KRR - only output when present */
IF "&IND_VAR2" NE "" THEN PUT @12 "&IND_VAR2"; /* KRR - only output when present */
IF "&IND_VAR3" NE "" THEN PUT @12 "&IND_VAR3"; /* KRR - only output when present */
```

```
CNT2 = 0;
* setup an array of those age groups that have > 1 obs;
DO I = 1 TO 7;
   IF AGECNT(I) > 1 THEN DO;
      CNT2 +1;
      AGENAMX(CNT2) = AGENAM(I);
   END;
END;

* now drop the last category to create;
* an omitted category which is required;
* to solve the regression properly;
DO I = 1 TO CNT2-1;
   PUT @12 AGENAMX(I);
END;

* ditto for the catchment areas with > 0 obs;
* in this case we drop the the first USABLE category;
* this is not consistent with the catchment area code;
* but this is the method that Portia used;
FIRST = 0;        *KRR 10/24/2006 - Changed from 16 to 24;
DO I = 1 TO 24;   * skip the 1st region with 1+ obs;
   IF REGCNT(I) > 0 THEN DO;
      IF FIRST = 1 THEN PUT @12 'REG' I Z2.;
      FIRST = 1;
   END;
END;
PUT @11 ';';


*-------------------------------------------------------;
* now create the complete var statement;
* for the Proc MEANS used to replace the;
* independent variables missing values;
* we assume the age groups will always be used;
* These are also called the RISK FACTORS;
FILE 'RISKVARS.INC';
PUT @10  "VAR";
DO I = 1 TO CNT2;
   PUT @12 AGENAMX(I);
END;

* not all the other dependent variables will be used;
* only write them out if they are not null;
CNT3 = 0;
IF "&IND_VAR1" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR1";
END;

IF "&IND_VAR2" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR2";
END;

IF "&IND_VAR3" NE "" THEN DO;
    CNT3 + 1;
    PUT @12 "&IND_VAR3";
END;
PUT @11 ';';


*-------------------------------------------------------;
* create an ARRAY statement of the desired risk factors;
* called adjusters in the specs and in the code;
FILE 'RISKARRY.INC';
PUT @10  "ARRAY COEFFS(*) $8";
DO I = 1 TO CNT2;
   PUT @12 AGENAMX(I);
END;

CNT3 = 0;
IF "&IND_VAR1" NE "" THEN DO;
```

```
        CNT3 + 1;
        PUT @12 "&IND_VAR1";
    END;

    IF "&IND_VAR2" NE "" THEN DO;
        CNT3 + 1;
        PUT @12 "&IND_VAR2";
    END;

    IF "&IND_VAR3" NE "" THEN DO;
        CNT3 + 1;
        PUT @12 "&IND_VAR3";
    END;
    PUT @11 ';';


    *-------------------------------------------------------;
    * create an ARRAY of mean names for the output;
    * from a proc MEANS of the Risk Factors in RISKARRY;
    FILE 'RISKMEAN.INC';
    IND_CNT = CNT2 + CNT3;
    PUT @6 "ARRAY MEANS(*) $8";
    DO I = 1 TO IND_CNT;
       PUT @12 "MEAN" I Z2.;
    END;
    PUT @11 ';';

*   ----------------------------------------------------;
*   create the equivalent of the following statement;
*   OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN=MEAN1-MEAN&MEAN_CNT;
     FILE 'MEANFILE.INC';
     PUT @6 "OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN = ";
     DO I = 1 TO IND_CNT;
        PUT @12 "MEAN" I Z2.;
     END;
     PUT @11 ';';

     *-------------------------------------------------------;
     * create a catchment area array for all catchment areas;
     * with 1+ obs.
     * the missing value = 9999 was dropped in STEP1;  ** rlc 4/29/00;
     FILE 'CATARRAY.INC';
     PUT @10  "ARRAY CATRHS(*) $8";
     DO I = 1 TO 9998;            *** rlc 4/29/00 changed "9999" to "9998";
        IF CATCNT(I) > 0 THEN DO; *** ems 7/12/00 changed "> 1" to "> 0";
           PUT  @16 'CAT' I Z4.;
        END;
     END;
     PUT @11 ';';

     *-------------------------------------------------------;
     * create a region area array;
     * with at least ONE obs;
     FILE 'REGARRAY.INC';
     PUT @10  "ARRAY REGRHS(*) $8";
     DO I = 1 TO 24; *KRR 10/24/2006 - Changed from 16 to 24;
        IF REGCNT(I) > 0 THEN DO; *** ems 7/12/00 changed "> 1" to "> 0";
           PUT  @16 'REG' I Z2.;
        END;
     END;
     PUT @11 ';';
 file print;
 RUN;

 * Create the means of the adjuster variables;
 * They will be used to replace missing adjuster variables;
 * calculate weighted means;
 PROC MEANS DATA=group&igrp;

   WEIGHT &WGT;
   %INCLUDE 'RISKVARS.INC';
   %INCLUDE 'MEANFILE.INC';
    RUN;
```

```
DATA GROUP&IGRP;
     SET GROUP&IGRP;
     IF _N_ = 1 THEN SET MEANFILE;
     %INCLUDE 'RISKARRY.INC';
     %INCLUDE 'RISKMEAN.INC';
     DO I = 1 TO DIM(COEFFS);
        IF COEFFS(I) = . THEN DO;
           COEFFS(I) = MEANS(I);
        END;
     END;
RUN;

%IF &DEBUGFLG > 0  %THEN %DO;
   PROC PRINT DATA=MEANFILE;
        TITLE2 "Print of MEANFILE for Risk Adjuster variables";
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;




 %MEND MAKE_INC;



 *
;
 %MACRO R_SUDAAN(INFILE);
 ******************************************************;
 * use this macro to create standard err (variances);
 * FOR: REGIONS                                       ;
 ******************************************************;
 %PUT ****************************************;
 %PUT STARTING MACRO R_SUDAAN (REGIONS);
 %PUT ****************************************;



DATA &INFILE;
   SET &INFILE;
   IF XSERVREG > 0;
RUN;


* Sort data by TMP_CELL;
PROC SORT DATA=&INFILE;
   BY TMP_CELL;
RUN;

%IF &DEBUGFLG > 5  %THEN %DO;
   PROC PRINT DATA=&INFILE(OBS=5);
        TITLE2 'Print of the input file to SUDAAN (REGION)';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;


* Calculate values for regions;
PROC DESCRIPT DATA=&INFILE DESIGN=STRWR NOPRINT;
   WEIGHT &WGT;
   SETENV DECWIDTH=4;
   NEST TMP_CELL / missunit;
   VAR RESID&IGRP;
   TABLES XSERVREG;
   SUBGROUP XSERVREG;
   LEVELS 24; *KRR 10/24/2006 - Changed from 16 to 24;
   OUTPUT  SEMEAN
         / TABLECELL=DEFAULT REPLACE
           FILENAME=RS&DEP;
   RUN;
```

```
   DATA R&IGRP&&DEPVAR&IVAR;
        SET RS&DEP;
        KEEP XSERVREG SEMEAN;
        IF SEMEAN NE .;
        RENAME SEMEAN = SEMEAN&IGRP;
   RUN;


   PROC PRINT DATA=R&IGRP&&DEPVAR&IVAR;
      TITLE2 "Print REGION DESCRIPT DATA=R&IGRP&&DEPVAR&IVAR";
      TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;

 %MEND  R_SUDAAN;


 %MACRO C_SUDAAN(INFILE);
 ******************************************************;
 * use this macro to create standard err (variances);
 * FOR: CATCHMENT AREAS                               ;
 ******************************************************;
 %PUT ****************************************;
 %PUT STARTING MACRO C_SUDAAN (CATCHMENT);
 %PUT ****************************************;

DATA &INFILE;
   SET &INFILE;
   IF CACSMPL > 0;
RUN;


* Sort data by TMP_CELL;
PROC SORT DATA=&INFILE;
   BY TMP_CELL;
RUN;

%IF &DEBUGFLG > 5  %THEN %DO;
   PROC PRINT DATA=&INFILE(OBS=5);
        TITLE2 'Print of the input file to SUDAAN for CATCHMENT';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;


* Calculate values for regions;
PROC DESCRIPT DATA=&INFILE DESIGN=STRWR NOPRINT;
   WEIGHT &WGT;
   SETENV DECWIDTH=4;
   NEST TMP_CELL / missunit;
   VAR RESID&IGRP;
   TABLES CACSMPL;
   SUBGROUP CACSMPL;
   LEVELS 9998;
   OUTPUT  SEMEAN
         / TABLECELL=DEFAULT REPLACE
           FILENAME=CS&DEP;
   RUN;

   DATA C&IGRP&&DEPVAR&IVAR;
        SET CS&DEP;
        IF SEMEAN NE .;
        KEEP CACSMPL SEMEAN;
        RENAME SEMEAN = SEMEAN&IGRP;
   RUN;


   PROC PRINT DATA=C&IGRP&&DEPVAR&IVAR;
      TITLE2 "Print CATCHMENT DESCRIPT DATA=C&IGRP&&DEPVAR&IVAR";
      TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;

 %MEND  C_SUDAAN;
```

```
 *
;
%***********************************;
%*  call the macros;
%***********************************;

%MACRO MAINLOOP(MIN_VAR,MAX_VAR,MIN_GRP,MAX_GRP);
    %* loop over the set of dependent variables;
       %DO IVAR = &MIN_VAR %TO &MAX_VAR;
          %DO IGRP = &MIN_GRP %TO &MAX_GRP;
             %MAKE_INC;
             %IF &IGRP = 1 OR &IGRP = 2 OR &IGRP = 5 or &igrp = 8 %THEN %do;
                %SCORE1;
                %SCORE2; %end;
             %ELSE
                %SCORE2;
          %END;
       %END;

%MEND;

%MAINLOOP(&MIN_VAR,&MAX_VAR,&MIN_GRP,&MAX_GRP);
```

G.8.D REPORTCARDS\CAHPS_ADULT2007\REGRSREG.INC - INCLUDE FILE1 IN STEP2.SAS.

```
MODEL  R07015 =
      R07066
      AGE1824
      AGE2534
      AGE3544
      AGE4554
      REG02
      REG03
      REG04
      REG05
      REG06
      REG07
      REG08
      REG09
      REG10
      REG11
      REG12
      REG13
      REG14
      REG15
      REG16
      REG17
      REG18
      REG19
      REG20
      REG21
      REG22
      REG23
      REG24
     ;
```

G.8.E REPORTCARDS\CAHPS_ADULT2007\RISKARRY.INC - INCLUDE FILE2 IN STEP2.SAS.

```
ARRAY COEFFS(*) $8
  AGE1824
  AGE2534
  AGE3544
  AGE4554
  AGE5564
  R07066
 ;
```

G.8.F REPORTCARDS\CAHPS_ADULT2007\RISKMEAN.INC - INCLUDE FILE3 IN STEP2.SAS.

```
ARRAY MEANS(*) $8
      MEAN01
      MEAN02
      MEAN03
      MEAN04
      MEAN05
      MEAN06
     ;
```

G.8.G REPORTCARDS\CAHPS_ADULT2007\REGARRAY.INC - INCLUDE FILE4 IN STEP2.SAS.

```
ARRAY REGRHS(*) $8
      REG01
      REG02
      REG03
      REG04
      REG05
      REG06
      REG07
      REG08
      REG09
      REG10
      REG11
      REG12
      REG13
      REG14
      REG15
      REG16
      REG17
      REG18
      REG19
      REG20
      REG21
      REG22
      REG23
      REG24
 ;
```

G.8.H REPORTCARDS\CAHPS_ADULT2007\RISKVARS.INC - INCLUDE FILE5 IN STEP2.SAS.

```
VAR
  AGE1824
  AGE2534
  AGE3544
  AGE4554
  AGE5564
  R07066
 ;
```

G.8.I REPORTCARDS\CAHPS_ADULT2007\MEANFILE.INC - INCLUDE FILE6 IN STEP2.SAS.

```
OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN =
      MEAN01
      MEAN02
      MEAN03
      MEAN04
      MEAN05
      MEAN06
     ;
```

G.8.J REPORTCARDS\CAHPS_ADULT2007\COMPOSIT.SAS - CALCULATE CAHPS COMPOSITE SCORES - ANNUAL.

```
***************************************************************************
* Project:  DoD - Quarterly Adult Report Cards
* Program:  COMPOSIT.SAS
* Purpose:  Generate Quarterly Adult Report Card composite scores
* Requires: Programs STEP1Q.SAS and STEP2Q.SAS must be run prior
*           to this program.
*
* Modified: 1) 02/27/2001 By Keith Rathbun, Small changes to input DSNs to
*              accommodate the move of ALLSCORE.SAS functionality into the
*              STEP2Q.SAS program.
*           2) 01/08/2002 By Daniele Beahm, Changed versions in libname statements
*              so program can be run with SAS v8 and still produce SAS v612 datasets.
*           3) 04/10/2002 By Mike Scott, Updated variable names for 2002
*              survey.
*           4) 02/04/2004 By Mike Scott, Updated for the 2003 Annual Report.
*           5) 02/2004 By Regina Gramss, Updated for 2004 Annual Report.  Added
*              in conditions to avoid exponential of negative numbers.  In case
*              of negative trend, error list is printed out - composit.lst file
*              should be evaluated (search for "ERROR") to make sure number of
*              obs is less than 30 for those with negative trend (field: tv).
*           6) 01/2006 By Regina Gramss, updated for 2005.
*           7) 10/2006 By Keith Rathbun, updated for 2006. Use FWRWT.
***************************************************************************;
OPTIONS NOCENTER NOFMTERR LS=132 PS=78 SOURCE SOURCE2 NOOVP COMPRESS=YES;
libname in v612  "data";
libname in2 v612 "data\adulthatfiles";
libname out v612 "data";


 %MACRO COMPOSIT (TYPE=,COMPOS=,VAR1=,VAR2=,VAR3=,VAR4=,QCOUNT=);

  DATA _NULL_;
   %IF "&TYPE" = "R" %THEN %DO;
       CALL SYMPUT ('BYVAR','XSERVREG');
   %END; %ELSE
   %IF "&TYPE" = "C" %THEN %DO;
       CALL SYMPUT ('BYVAR','CACSMPL');
   %END;

 ****************************************;
 *   Create a Composite Score           ;
 ****************************************;
 DATA _NULL_;
     FILE 'FILES.INC';
     PUT @6 'SET';
     IF "&VAR1" NE '' THEN PUT @8 "IN.&TYPE._&VAR1";
     IF "&VAR2" NE '' THEN PUT @8 "IN.&TYPE._&VAR2";
     IF "&VAR3" NE '' THEN PUT @8 "IN.&TYPE._&VAR3";
     IF "&VAR4" NE '' THEN PUT @8 "IN.&TYPE._&VAR4";
     PUT @8 ';';
 RUN;


 DATA COMPOS&COMPOS;
      LENGTH DEPENDNT $ 8;
      %INCLUDE 'FILES.INC';
      DEPENDNT = "&TYPE.COMPOS&COMPOS";
 RUN;

 PROC SORT DATA=COMPOS&COMPOS;
      BY &BYVAR;
 RUN;

 PROC PRINT DATA=COMPOS&COMPOS(OBS=60);
      TITLE "Print of COMPOS&COMPOS after sort";
 RUN;

 DATA COMPOS&COMPOS;
      SET COMPOS&COMPOS;
      BY &BYVAR;
```

```
   %IF "&TYPE" = "R" %THEN %DO;
       ARRAY N(*) REGCNT1 - REGCNT8;
       ARRAY W(*) REGWGT1 - REGWGT8;
       ARRAY TN(*) TOTCNT1 - TOTCNT8;
       ARRAY TW(*) TOTWGT1 - TOTWGT8;
   %END; %ELSE
   %IF "&TYPE" = "C" %THEN %DO;
       ARRAY N(*) CATCNT1 - CATCNT8;
       ARRAY W(*) CATWGT1 - CATWGT8;
       ARRAY TN(*) TOTCNT1 - TOTCNT8;
       ARRAY TW(*) TOTWGT1 - TOTWGT8;
   %END;
      ARRAY ADJ(*)    ADJ1 - ADJ8;
      ARRAY TOTADJ(*) TOTADJ1 - TOTADJ8;
      ARRAY AVGADJ(*) AVJADJ1 - AVJADJ8;
      RETAIN TOTADJ TN TW;
      RETAIN AVGADJ;

      IF FIRST.&BYVAR THEN DO;
         DO I = 1 TO DIM(TOTADJ);
            TOTADJ(I) = 0; TN(I)=0; TW(I)=0;
         END;
      END; DROP I;

      PUT ' ';
      PUT ' --- STARTING LOOP1: ' &BYVAR=;
      DO I = 1 TO DIM(TOTADJ);
         PUT I= ADJ(I)=;
         IF ADJ(I) NE . THEN DO;
            TOTADJ(I) = TOTADJ(I) + ADJ(I);
            TN(I)=TN(I)+N(I);
            TW(I)=TW(I)+W(I);
         END;
         PUT I= ADJ(I)= TOTADJ(I)=;
      END;


      PUT ' ';
      PUT ' --- STARTING LOOP2: ' &BYVAR=;
      IF LAST.&BYVAR THEN DO;
         DO I = 1 TO DIM(TOTADJ);
            PUT I= ADJ(I)= TOTADJ(I)= AVGADJ(I)=;
            AVGADJ(I) = TOTADJ(I)/&QCOUNT;
            adj(i)=avgadj(i);
            N(I)=TN(I)/&QCOUNT;
            W(I)=TW(I)/&QCOUNT;
         END;
         OUTPUT;
      END;

 RUN;

%do i=1 %to 8;
/* Collect Standard Errors and residuals from variables in composite */
 %if &type=R|(&i=1|&i=2|&i=5|&i=8) %then %do;
  %if &var1~= %then %do;
   %let n=r_&var1;
   %let m=s_&var1;

   data s_&var1(rename=(semean&i=s_&var1));
   set in.&type._&var1(keep=semean&i &byvar);
   proc sort; by &byvar;
   data r_&var1;

   set in2.h&i.&var1(rename=(resid&i=r_&var1));

   proc sort data=r_&var1; by mprid;
  %end;
  %if &var2~= %then %do;
   %let n=%str(&n r_&var2);
   %let m=%str(&m s_&var2);
   data s_&var2(rename=(semean&i=s_&var2));
   set in.&type._&var2(keep=semean&i &byvar);
```

```
        proc sort; by &byvar;
        data r_&var2;

        set in2.h&i.&var2(rename=(resid&i=r_&var2));

        proc sort data=r_&var2; by mprid;
       %end;
       %if &var3~= %then %do;
        %let n=%str(&n r_&var3);
        data s_&var3(rename=(semean&i=s_&var3));
        set in.&type._&var3(keep=semean&i &byvar);
        proc sort; by &byvar;
        data r_&var3;

        set in2.h&i.&var3(rename=(resid&i=r_&var3));

        proc sort data=r_&var3; by mprid;
        %let m=%str(&m s_&var3); %end;

       %if &var4~= %then %do;
        %let n=%str(&n r_&var4);
        data s_&var4(rename=(semean&i=s_&var4));
        set in.&type._&var4(keep=semean&i &byvar);
        proc sort; by &byvar;
        data r_&var4;

        set in2.h&i.&var4(rename=(resid&i=r_&var4));


        %let m=%str(&m s_&var4);
        proc sort data=r_&var4; by mprid;
       %end;
     /* Merge residual files and estimate correlations */
       data infile;
       merge &n; by mprid;
       proc sort; by &byvar;
       proc corr  outp=outf noprint;
       by &byvar;
       var &n;
       weight fwrwt;
       data outf;
       set outf; by &byvar;
       where _type_='CORR';
     /*  sum standard error of a row variable times correlation times standard error of each column
variable, then sum sums and take square root, divide by number of variables */
       data final;
       merge &m outf; by &byvar;
       data final;
       set final; by &byvar;
       array r_val &n;
       array s_val &m;
       sde=0;
       do i=1 to dim(s_val);
        %do j=1 %to &qcount;
         if _name_="R_&&var&j" then
         sde=sum(sde,r_val(i)*s_&&var&j*s_val(i));
        %end;
       end;
       run;

       data sefin&compos._&i errd;
       set final; by &byvar;
       if first.&byvar then tv=0;
       tv+sde;
       if last.&byvar then do;
     /**RSG 02/2005 Changed to only do exponential if tv value is non-negative -
        those with negative trend is set aside to print out and determine whether from
        nonmissing data of 30 or more*/
        if tv >= 0 then sde&i=(tv**.5)/&qcount;
        else if tv <= 0 then do;
         output errd;
         sde&i=.;
        end;
```

```
   output sefin&compos._&i;
  end;
  run;
/**RSG 02/2005 Count how many nonmissing values are in the trend dataa
   to determine if negative trend is something to be concerned about*/
  proc means data=infile noprint;
  by &byvar;
  var &n;
  output out=missing (drop=_type_ _freq_) n=;
  data errd2;
  merge errd(in=a drop=&n) missing (in=b);
  by &byvar;
  if a;
  run;
  proc print data=errd2;
  var &byvar tv &n;
title "ERROR: NEGATIVE TREND FOR &N IN GROUP=&I. AND COMPOSE=&COMPOS";
  run;
title ' '; /*RSG 02/2005 blank out title for next loop*/

  %if &i=1 %then %do;
   data sefin&compos;
   set sefin&compos._1(keep=&byvar sde&i); by &byvar;
   rename sde&i=semean&i;
   run;
  %end;
  %else %do;
   data sefin&compos;
   merge sefin&compos sefin&compos._&i(keep=&byvar sde&i); by &byvar;
   rename sde&i=semean&i;
   run;
  %end;


 %end;
%end;

data out.&type.compos&compos;
merge compos&compos sefin&compos; by &byvar;
run;
PROC PRINT DATA=OUT.&TYPE.COMPOS&COMPOS;
      TITLE1 COMPTITL;
 RUN;
%MEND COMPOSIT;

*-------------------------------------;
*-       set the parameters here      -;
*-------------------------------------;
************************************;
*  call the macro for each composite;
************************************;   /*MJS 02/04/04*/
%COMPOSIT (type=R,compos=1,var1=R07011,var2=R07013,var3=R07027,var4=R07029,qcount=4);
%COMPOSIT (type=R,compos=2,var1=R07017,var2=R07022,var3=R07019,var4=R07030,qcount=4);
%COMPOSIT (type=R,compos=3,var1=R07033,var2=R07034,var3=R07035,var4=R07036,qcount=4);
%COMPOSIT (type=R,compos=4,var1=R07031,var2=R07032,qcount=2);
%COMPOSIT (type=R,compos=5,var1=R07043,var2=R07045,var3=R07047,qcount=3);
%COMPOSIT (type=R,compos=6,var1=R07040,var2=R07041,qcount=2);

%COMPOSIT (type=C,compos=1,var1=R07011,var2=R07013,var3=R07027,var4=R07029,qcount=4);
%COMPOSIT (type=C,compos=2,var1=R07017,var2=R07022,var3=R07019,var4=R07030,qcount=4);
%COMPOSIT (type=C,compos=3,var1=R07033,var2=R07034,var3=R07035,var4=R07036,qcount=4);
%COMPOSIT (type=C,compos=4,var1=R07031,var2=R07032,qcount=2);
%COMPOSIT (type=C,compos=5,var1=R07043,var2=R07045,var3=R07047,qcount=3);
%COMPOSIT (type=C,compos=6,var1=R07040,var2=R07041,qcount=2);
```

G.8.K REPORTCARDS\CAHPS_ADULT2007\FILES.INC - INCLUDE FILE IN COMPOSIT.SAS.

```
SET
  IN.C_R07040
  IN.C_R07041
  ;
```

G.9.A LOADWEB\LOADCAHP.SAS - CONVERT CAHPS SCORES INTO WEB LAYOUT - ANNUAL.

```
***************************************************************************
*
* PROGRAM:  LOADCAHP.SAS
* TASK:     2007 DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Convert the CAHPS Scores Database into the WEB layout
*
* WRITTEN:  06/01/2000 BY KEITH RATHBUN
*
* MODIFIED: 1) 01/28/2002 BY KEITH RATHBUN, Updated to support the 2000 survey.
*           2) 01/07/2003 BY KEITH RATHBUN, Updated to support the 2002 survey.
*           3) 02/06/2004 BY MIKE SCOTT, Updated for the 2003 Annual Report.
*           4) 02/2005    BY REGINA GRAMSS, Updated for 2004 Annual Report. Change
*                         region variable to XSERVREG
*           5) 11/01/2006 BY KEITH RATHBUN, Updated for 2006 Annual Report.
*           6) 11/09/2007 BY KEITH RATHBUN, Updated for 2007 Annual Report.
*
* INPUTS:   1) CAHPS Individual and Composite data sets with adjusted scores
*
* OUTPUT:   1) LOADCAHP.SD2 - Combined CAHPS Scores Database in WEB layout
*
* INCLUDES: 1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*              and composite data sets
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - STEP1.SAS - Recode questions and generate group files
*    - STEP2.SAS - Calculate individual adjusted scores for group 1-8
*    - COMPOSIT.SAS - Calculate composite adjusted scores for group 1-8
*
* 2) The output file (LOADCAHP.SD2) will be run through the
*    MAKEHTML.SAS program to generate the WEB pages.
*
***************************************************************************
* Assign data libraries and options
***************************************************************************;
LIBNAME IN  V612 "..\REPORTCARDS\CAHPS_ADULT2007\DATA";
LIBNAME OUT V612 ".";
LIBNAME LIBRARY "..\..\DATA\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER NOFMTERR;

***************************************************************************
* Load Format definitions for CAHPS Individual and composite data sets.
***************************************************************************;
%INCLUDE "LOADCAHQ.INC";

***************************************************************************
***************************************************************************
*
* Process Macro Input Parameters:
*
* 1) QUESTION = Variable Question Name (DSN).
*    - For individual Questions it is the variable name
*    - For composite Questions it is called xCOMPOSn
*      where n = a predefined composite # and
*            x = R (Region) or C (Catchment)
* 2) TYPE = Type of Score (COMPOSITE or INDIVIDUAL)
* 3) REGCAT = Region/Catchment Area
*
***************************************************************************
***************************************************************************;
%MACRO PROCESS(QUESTION=,TYPE=,REGCAT=);
***************************************************************************
* Assign value for BENTYPE composite year
***************************************************************************;
%LET YEAR = 2007;

***************************************************************************
* Assign prefix for weighted/unweighted count variables.
```

```
* Unweighted counts are REGCNTn or CATCNTn where n=group number.
* Weighted counts are REGWGTn or CATWGTn where n=group number.
*************************************************************************;
%IF "&REGCAT" = "Region" %THEN %DO;
   %LET PREFIX = REG;
%END;
%ELSE %IF "&REGCAT" = "Catchment" %THEN %DO;
   %LET PREFIX = CAT;
%END;
%ELSE %DO;
   %PUT "ERROR: Invalid Type = &TYPE";
%END;

*************************************************************************
*
* Convert the CAHPS individual Scores Record into WEB layout.
* There are 8 logical records (adjusted scores) per physical record:
*
* ____________________________________________________________
*    Adjusted Score           Definitions
*    Group Number
* ____________________________________________________________
* 1. Prime enrollees          XINS_COV IN (1,2,6) AND H06007>=2
* 2. Enrollees w/mil PCM      XENR_PCM IN (1,2,6) AND H06007>=2
* 3. Enrollees w/civ PCM      XENR_PCM = 3  AND H06007>=2
* 4. Nonenrollees             XINS_COV IN (3)
* 5. Active duty              BFGROUPP=1
* 6. Active duty dependents   BFGROUPP=2
* 7. Retirees and dependents  BFGROUPP IN (3,4)
* 8. All beneficiaries        All beneficiaries
*
*************************************************************************;
DATA &QUESTION;
   SET IN.&QUESTION;

   LENGTH MAJGRP  $30;
   LENGTH REGION  $25;  /*RSG 02/2005 Increased length to accommodate new region*/
   LENGTH REGCAT  $42;
   LENGTH BENTYPE $50;
   LENGTH BENEFIT $34;
   LENGTH TIMEPD  $5;  /*RSG 02/2005*/
   ********************************************************************;
   * Assign Region;
   ********************************************************************;
   %IF &REGCAT = Region %THEN %DO;
       REGION  = PUT(XSERVREG,SERVREGF.);
   %END;
   %ELSE %IF &REGCAT = Catchment %THEN %DO;
       REGION  = PUT(XSERVIND,SERVREGo.);
   %END;
   ********************************************************************;
   * Assign benefit and benefit type;
   ********************************************************************;
   IF "&TYPE" = "INDIVIDUAL" THEN DO;
      IF DEPENDNT IN("R07037","R07048","R07009","R07015") THEN
         BENTYPE = "Composite";
      ELSE
            BENTYPE = PUT(DEPENDNT,$BENTYPF.);
      BENEFIT = PUT(DEPENDNT,$BENEF.);
      TIMEPD = "&YEAR";
   END;
   ELSE IF "&TYPE" = "COMPOSITE" THEN DO;
      BENTYPE = "Composite";   ***MJS 07/03/03 Changed from BENTYPE = PUT(&YEAR,$BENTYPF.);
      BENEFIT = PUT(DEPENDNT,$BENEF.);
      TIMEPD = "&YEAR";
   END;
   ELSE PUT "ERROR: Invalid TYPE = &TYPE";
   ********************************************************************;
   * For now, Initialize Significance test to zero.;
   ********************************************************************;
   SIG = 0;
   ********************************************************************;
   * Assign Region/Catchment Area;
```

```
*********************************************************************;
%IF &REGCAT = Region %THEN %DO;
   REGCAT = PUT(XSERVREG,SERVREGF.);
%END;
%ELSE %IF &REGCAT = Catchment %THEN %DO;
   REGCAT = PUT(CACSMPL,CACR.);
%END;
%ELSE %DO;
   PUT "ERROR: Invalid REGCAT = &REGCAT";
%END;
*********************************************************************;
* 1 = Prime Enrollees  ;
*********************************************************************;
MAJGRP = PUT(1,MAJGRPF.);
SCORE = ADJ1;
SEMEAN = SEMEAN1;
N_OBS = &PREFIX.CNT1;
N_WGT = &PREFIX.WGT1;
OUTPUT;
*********************************************************************;
* 2 = Enrollees with military PCM  ;
*********************************************************************;
MAJGRP = PUT(2,MAJGRPF.);
SCORE = ADJ2;
SEMEAN = SEMEAN2;
N_OBS = &PREFIX.CNT2;
N_WGT = &PREFIX.WGT2;
OUTPUT;
*********************************************************************;
* 3 = Enrollees with civilian PCM  ;
*********************************************************************;
%IF &REGCAT = Region %THEN %DO;
   MAJGRP = PUT(3,MAJGRPF.);
   SCORE = ADJ3;
   SEMEAN = SEMEAN3;
   N_OBS = &PREFIX.CNT3;
   N_WGT = &PREFIX.WGT3;
   OUTPUT;
%END;
*********************************************************************;
* 4 = Non-enrolled beneficiaries   ;
*********************************************************************;
%IF &REGCAT = Region %THEN %DO;
   MAJGRP = PUT(4,MAJGRPF.);
   SCORE = ADJ4;
   SEMEAN = SEMEAN4;
   N_OBS = &PREFIX.CNT4;
   N_WGT = &PREFIX.WGT4;
   OUTPUT;
%END;
*********************************************************************;
* 5 = Active duty;
*********************************************************************;
MAJGRP = PUT(5,MAJGRPF.);
SCORE = ADJ5;
SEMEAN = SEMEAN5;
N_OBS = &PREFIX.CNT5;
N_WGT = &PREFIX.WGT5;
OUTPUT;
*********************************************************************;
* 6 = Active duty dependents;
*********************************************************************;
%IF &REGCAT = Region %THEN %DO;
   MAJGRP = PUT(6,MAJGRPF.);
   SCORE = ADJ6;
   SEMEAN = SEMEAN6;
   N_OBS = &PREFIX.CNT6;
   N_WGT = &PREFIX.WGT6;
   OUTPUT;
%END;
*********************************************************************;
* 7 = Retirees and dependents;
*********************************************************************;
```

```
   %IF &REGCAT = Region %THEN %DO;
      MAJGRP = PUT(7,MAJGRPF.);
      SCORE = ADJ7;
      SEMEAN = SEMEAN7;
      N_OBS = &PREFIX.CNT7;
      N_WGT = &PREFIX.WGT7;
      OUTPUT;
   %END;
   ********************************************************************;
   * 8 = All Beneficiaries ;
   ********************************************************************;
   MAJGRP = PUT(8,MAJGRPF.);
   SCORE  = ADJ8;
   SEMEAN = SEMEAN8;
   N_OBS = &PREFIX.CNT8;
   N_WGT = &PREFIX.WGT8;
   OUTPUT;

KEEP MAJGRP
     REGION
     REGCAT
     BENTYPE
     BENEFIT
     TIMEPD
     SCORE
     SEMEAN
     N_OBS
     N_WGT
     SIG
   ;
RUN;

%MEND;

***************************************************************************;
* COMPOSITE # 1.;
* GETTING NEEDED CARE VARIABLES.;
***************************************************************************;
%PROCESS(QUESTION=RCOMPOS1,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R07011,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R07013,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R07027,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R07029,TYPE=INDIVIDUAL,REGCAT=Region);

%PROCESS(QUESTION=CCOMPOS1,TYPE=COMPOSITE, REGCAT=Catchment);
%PROCESS(QUESTION=C_R07011,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R07013,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R07027,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R07029,TYPE=INDIVIDUAL,REGCAT=Catchment);

***************************************************************************;
* COMPOSITE # 2.;
* GETTING CARE QUICKLY VARIABLES.;
***************************************************************************;
%PROCESS(QUESTION=RCOMPOS2,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R07017,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R07019,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R07022,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R07030,TYPE=INDIVIDUAL,REGCAT=Region);

%PROCESS(QUESTION=CCOMPOS2,TYPE=COMPOSITE, REGCAT=Catchment);
%PROCESS(QUESTION=C_R07017,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R07019,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R07022,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R07030,TYPE=INDIVIDUAL,REGCAT=Catchment);

***************************************************************************;
* COMPOSITE # 3.;
* HOW WELL DOCTORS COMMUNICATE.;
***************************************************************************;
%PROCESS(QUESTION=RCOMPOS3,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R07033,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R07034,TYPE=INDIVIDUAL,REGCAT=Region);
```

```
%PROCESS(QUESTION=R_R07035,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R07036,TYPE=INDIVIDUAL,REGCAT=Region);

%PROCESS(QUESTION=CCOMPOS3,TYPE=COMPOSITE, REGCAT=Catchment);
%PROCESS(QUESTION=C_R07033,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R07034,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R07035,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R07036,TYPE=INDIVIDUAL,REGCAT=Catchment);

*************************************************************************;
* COMPOSITE # 4.;
* COURTEOUS AND HELPFUL OFFICE STAFF.;
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS4,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R07031,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R07032,TYPE=INDIVIDUAL,REGCAT=Region);

%PROCESS(QUESTION=CCOMPOS4,TYPE=COMPOSITE, REGCAT=Catchment);
%PROCESS(QUESTION=C_R07031,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R07032,TYPE=INDIVIDUAL,REGCAT=Catchment);

*************************************************************************;
* COMPOSITE # 5.;
* CUSTOMER SERVICE.;
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS5,TYPE=COMPOSITE, REGCAT=Region );
%PROCESS(QUESTION=R_R07043,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R07045,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R07047,TYPE=INDIVIDUAL,REGCAT=Region);

%PROCESS(QUESTION=CCOMPOS5,TYPE=COMPOSITE, REGCAT=Catchment);
%PROCESS(QUESTION=C_R07043,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R07045,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R07047,TYPE=INDIVIDUAL,REGCAT=Catchment);

*************************************************************************;
* COMPOSITE # 6.;
* CLAIMS PROCESSING.;
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS6,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R07040,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R07041,TYPE=INDIVIDUAL,REGCAT=Region);

%PROCESS(QUESTION=CCOMPOS6,TYPE=COMPOSITE, REGCAT=Catchment);
%PROCESS(QUESTION=C_R07040,TYPE=INDIVIDUAL,REGCAT=Catchment);
%PROCESS(QUESTION=C_R07041,TYPE=INDIVIDUAL,REGCAT=Catchment);

*************************************************************************;
* INDIVIDUAL # 1.;
* RATING OF ALL HEALTH CARE: 0 - 10.;
*************************************************************************;
%PROCESS(QUESTION=R_R07037,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=C_R07037,TYPE=INDIVIDUAL,REGCAT=Catchment);

*************************************************************************;
* INDIVIDUAL # 2.;
* RATING OF HEALTH PLAN: 0 - 10.;
*************************************************************************;
%PROCESS(QUESTION=R_R07048,TYPE=INDIVIDUAL,REGCAT=Region)
%PROCESS(QUESTION=C_R07048,TYPE=INDIVIDUAL,REGCAT=Catchment)

*************************************************************************;
* INDIVIDUAL # 3.;
* RATING OF PERSONAL DOCTOR: 0 - 10.;
*************************************************************************;
%PROCESS(QUESTION=R_R07009,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=C_R07009,TYPE=INDIVIDUAL,REGCAT=Catchment);

*************************************************************************;
* INDIVIDUAL # 4.;
* SPECIALTY CARE: 0 - 10.;
*************************************************************************;
%PROCESS(QUESTION=R_R07015,TYPE=INDIVIDUAL,REGCAT=Region);
```

```
%PROCESS(QUESTION=C_R07015,TYPE=INDIVIDUAL,REGCAT=Catchment);

*****************************************************************************;
*****************************************************************************;
* STACK up all of the files into one final output dataset.;
*****************************************************************************;
*****************************************************************************;
DATA OUT.LOADCAHP;
   SET R_R07011 C_R07011
       R_R07013 C_R07013
       R_R07027 C_R07027
       R_R07029 C_R07029
       R_R07017 C_R07017
       R_R07019 C_R07019
       R_R07022 C_R07022
       R_R07030 C_R07030
       R_R07033 C_R07033
       R_R07034 C_R07034
       R_R07035 C_R07035
       R_R07036 C_R07036
       R_R07031 C_R07031
       R_R07032 C_R07032
       R_R07043 C_R07043
       R_R07045 C_R07045
       R_R07047 C_R07047
       R_R07040 C_R07040
       R_R07041 C_R07041
       R_R07037 C_R07037
       R_R07048 C_R07048
       R_R07009 C_R07009
       R_R07015 C_R07015
       RCOMPOS1 CCOMPOS1
       RCOMPOS2 CCOMPOS2
       RCOMPOS3 CCOMPOS3
       RCOMPOS4 CCOMPOS4
       RCOMPOS5 CCOMPOS5
       RCOMPOS6 CCOMPOS6
    ;
    IF SCORE = . THEN DELETE;
RUN;

TITLE1 "2006 DOD Health Survey Scores/Report Cards (6244-410)";
TITLE2 "Program Name: LOADCAHP.SAS By Keith Rathbun";
TITLE3 "Program Inputs: CAHPS Individual and Composite data sets with adjusted scores";
TITLE4 "Program Outputs: LOADCAHP.SD2 - Combined CAHPS Scores Database in WEB layout";

PROC FREQ;
TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT
       REGION*REGCAT
      /MISSING LIST;
RUN;
```

G.9.B LOADWEB\LOADCAHQ.INC - FORMAT DEFINITIONS FOR CONVERTING THE SCORES DATABASE INTO THE WEB LAYOUT - ANNUAL.

```
*****************************************************************************
*
* PROGRAM:  LOADCAHQ.INC
* TASK:     QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (8860-410)
* PURPOSE:  Format definitions for converting the CAHPS Scores Database
*           into the WEB layout.
*
* WRITTEN:  11/09/2000 BY KEITH RATHBUN, Adapted from LOADCAHP.INC.
*
* MODIFIED: 1) 08/13/2001 BY KEITH RATHBUN, Added XSERVAFF format to
*              accommodate the short reports.
*           2) 01/24/2002 BY KEITH RATHBUN, Added BENTYPF = 1998,1999,2000
*              added catchment composites.
*           3) 04/10/2002 BY KEITH RATHBUN, Added parameters for 2002 survey.
*           4) 04/03/2003 BY MIKE SCOTT, Added parameters for 2003 survey.
*           5) 07/08/2003 BY MIKE SCOTT, Added formats GETNCARE, GETCAREQ,
*              CRTSHELP, HOWWELL, CUSTSERV, CLMSPROC, and PREVCARE.
*           6) 03/22/2004 BY KEITH RATHBUN, Added parameters for 2004 survey.
*              Changed R04031 to be "Wait Less than 15 Minutes For Appointment".
*           7) 05/06/2004 BY MIKE SCOTT, Changed R04031 back to 2003 version of
*              the label ("Wait More than 15 Minutes Past Appointment") so that
*              the Q1 2004 version of the question is consistent with past
*              versions.  The label will be changed to the new version ("Waiting
*              in the Doctor's Office") in Makehtmq.sas.
*           8) 02/2006 BY REGINA GRAMSS, Changed date format to fielding dates.
*           9) 03/21/2006 BY KEITH RATHBUN, Added parameters for 2006 survey.
*          10) 08/22/2006 BY JUSTIN OH, Changed SERVREGF format for Overseas.
*          11) 12/15/2006 BY JUSTIN OH, Added parameters for 2007 survey.
*          12) 02/02/2007 BY JUSTIN OH, Added "s" in Healthy Behaviors in VALUE BEN.
*
* INPUTS:   No direct input
*
* OUTPUT:   No direct output
*
* NOTES:    1) Under the new contract (8860), the survey year was changed
*              to be based on the year the survey is administered (2002)
*              as opposed to the questioning reference frame (2001).  This
*              include file contains variable names for both the 2001
*              survey administration year and the the 2002 administration
*              year surveys.
*
*****************************************************************************
;
*****************************************************************************
* FORMAT Definitions
*****************************************************************************;
PROC FORMAT;
   VALUE MAJGRPF
      1 = "Prime Enrollees            "
      2 = "Enrollees with Military PCM"
      3 = "Enrollees with Civilian PCM"
      4 = "Non-enrolled Beneficiaries "
      5 = "Active Duty                "
      6 = "Active Duty Dependents     "
      7 = "Retirees and Dependents    "
      8 = "All Beneficiaries          "
   ;
   VALUE XSERVAFF
      1 = "ARMY"
      2 = "AIR FORCE"
      3 = "NAVY"
      4 = "OTHER"
   ;
   VALUE REGIONF
      0 = "CONUS MHS "
      1 = "North"
      2 = "South"
      3 = "West"
      4 = "Overseas"
```

```
   ;

/*JSO 08/24/2006, Changed Overseas to Service for Europe,Pacific,Latin*/
   VALUE SERVREGF
      1 = "North Army"
      2 = "North Air Force"
      3 = "North Navy"
      4 = "North Other"
      5 = "South Army"
      6 = "South Air Force"
      7 = "South Navy"
      8 = "South Other"
      9 = "West Army"
     10 = "West Air Force"
     11 = "West Navy"
     12 = "West Other"
     13 = "Europe Army"
     14 = "Europe Air Force"
     15 = "Europe Navy"
     16 = "Europe Other"
     17 = "Pacific Army"
     18 = "Pacific Air Force"
     19 = "Pacific Navy"
     20 = "Pacific Other"
     21 = "Latin America Army"
     22 = "Latin America Air Force"
     23 = "Latin America Navy"
     24 = "Latin America Other"
     25 = "CONUS ARMY"
     26 = "CONUS AIR FORCE"
     27 = "CONUS NAVY"
     28 = "CONUS OTHER";

/*JSO 08/24/2006, Changed Overseas to Europe,Pacific,Latin*/
   VALUE SERVREGO
      1 = "North Army"
      2 = "North Air Force"
      3 = "North Navy"
      4 = "North Other"
      5 = "South Army"
      6 = "South Air Force"
      7 = "South Navy"
      8 = "South Other"
      9 = "West Army"
     10 = "West Air Force"
     11 = "West Navy"
     12 = "West Other"
     13 = "Overseas Europe"
     14 = "Overseas Pacific"
     15 = "Overseas Latin America";

   VALUE $BENTYPF
    "1998    " = "1998                                        "
    "1999    " = "1999                                        "
    "2000    " = "2000                                        "
    "2001    " = "2001                                        "
    "2002    " = "2002                                        "
    "2003    " = "2003                                        "
    "2004    " = "2004                                        "
    "2005    " = "2005                                        "
    "2006    " = "2006                                        "
    "2000 Q1 " = "January, 2000 to December, 2000            "
    "2000 Q2 " = "April, 2000 to March, 2001                 "
    "2000 Q3 " = "July, 2000 to June, 2001                   "
    "2000 Q4 " = "October, 2000 to September, 2001           "
    "2002 Q1 " = "January, 2001 to December, 2001            "
    "2002 Q2 " = "April, 2001 to March, 2002                 "
    "2002 Q3 " = "July, 2001 to June, 2002                   "
    "2002 Q4 " = "October, 2001 to September, 2002           "
    "2003 Q1 " = "January, 2002 to December, 2002            "
    "2003 Q2 " = "April, 2002 to March, 2003                 "
    "2003 Q3 " = "July, 2002 to June, 2003                   "
    "2003 Q4 " = "October, 2002 to September, 2003           "
```

```
        "2004 Q1 " = "January, 2003 to December, 2003               "
        "2004 Q2 " = "April, 2003 to March, 2004                    "
        "2004 Q3 " = "Quarter 3, CY 2004                            "
        "2004 Q4 " = "Quarter 4, CY 2004                            "
        "2005 Q1 " = "January, 2005                                 "
        "2005 Q2 " = "April, 2005                                   "
        "2005 Q3 " = "July, 2005                                    "
        "2005 Q4 " = "October, 2005                                 "
        "2006 Q1 " = "January, 2006                                 "
        "2006 Q2 " = "April, 2006                                   "
        "2006 Q3 " = "July, 2006                                    "
        "2006 Q4 " = "October, 2006                                 "
        "2007 Q1 " = "January, 2007                                 "
        "2007 Q2 " = "April, 2007                                   "
        "2007 Q3 " = "July, 2007                                    "
        "2007 Q4 " = "October, 2007                                 "
        /*****************************************************************************/
        /* Admin. Year Defn.                                                         */
        /* 2001        2002        2003       2004      2005      2006      2007    */
        /*****************************************************************************/
        "R00007   ", "R02009   ", "R03009   ", "R04011", "R05011", "R06011", "R07011" = "Problems
Getting Personal Doctor/Nurse         "
        "R00014   ", "R02016   ", "R03013   ", "R04013", "R05013", "R06013", "R07013" = "Problems
Getting Referral to Specialist        "
        "R00028   ", "R02030   ", "R03027   ", "R04028", "R05027", "R06027", "R07027" = "Problems
Getting Necessary Care                "
        "R00029   ", "R02031   ", "R03028   ", "R04030", "R05029", "R06029", "R07029" = "Delays in
Care while Awaiting Approval          "
        "R00019   ", "R02021   ", "R03018   ", "R04018", "R05017", "R06017", "R07017" = "Advice over
Telephone                             "
        "R00021   ", "R02023   ", "R03020   ", "R04023", "R05022", "R06022", "R07022" = "Wait for
Routine Visit                         "
        "R00024   ", "R02026   ", "R03023   ", "R04020", "R05019", "R06019", "R07019" = "Wait for
Urgent Care                           "
        "R00030   ", "R02032   ", "R03029   ", "R04031", "R05030", "R06030", "R07030" = "Wait More
than 15 Minutes Past Appointment      "
        "R00033   ", "R02035   ", "R03032   ", "R04034", "R05033", "R06033", "R07033" = "Listens
Carefully                             "
        "R00034   ", "R02036   ", "R03033   ", "R04035", "R05034", "R06034", "R07034" = "Explains so
You can Understand                    "
        "R00035   ", "R02037   ", "R03034   ", "R04036", "R05035", "R06035", "R07035" = "Shows Respect
"
        "R00036   ", "R02038   ", "R03035   ", "R04037", "R05036", "R06036", "R07036" = "Spends Time
with You                              "
        "R00031   ", "R02033   ", "R03030   ", "R04032", "R05031", "R06031", "R07031" = "Courteous and
Respectful                            "
        "R00032   ", "R02034   ", "R03031   ", "R04033", "R05032", "R06032", "R07032" = "Helpful
"
        "R00048   ", "R02048   ", "R03044   ", "R04045", "R05043", "R06043", "R07043" = "Problem
Finding/Understanding Written Material"
        "R00050   ", "R02050   ", "R03046   ", "R04047", "R05045", "R06045", "R07045" = "Problem
Getting Help from Customer Service    "
        "R00055   ", "R02055   ", "R03051   ", "R04053", "R05047", "R06047", "R07047" = "Problem with
Paperwork                             "
        "R00044   ", "R02044   ", "R03040   ", "R04041", "R05040", "R06040", "R07040" = "Claims
Handled in a Reasonable Time          "
        "R00045   ", "R02045   ", "R03041   ", "R04042", "R05041", "R06041", "R07041" = "Claims
Handled Correctly                     "
        "R00037   ", "R02039   ", "R03036   ", "R04038", "R05037", "R06037", "R07037" = "Health Care
"
        "R00056   ", "R02056   ", "R03052   ", "R04054", "R05048", "R06048", "R07048" = "Health Plan
"
        "R00009   ", "R02011   ", "R03011   ", "R04009", "R05009", "R06009", "R07009" = "Primary Care
Manager                               "
        "R00016   ", "R02018   ", "R03015   ", "R04015", "R05015", "R06015", "R07015" = "Specialty
Care                                  "
                                    "PHYSIC  " = "Physical                                    "
                                    "MENTAL  " = "Mental                                      "
       ;
       VALUE $BENEF
        "RCOMPOS1","CCOMPOS1","R00007","R00014","R00028","R00029",
                              "R02009","R02016","R02030","R02031",
                              "R03009","R03013","R03027","R03028",
```

```
                          "R04011","R04013","R04028","R04030",
                          "R05011","R05013","R05027","R05029",
                          "R06011","R06013","R06027","R06029",
                          "R07011","R07013","R07027","R07029"
        = "Getting Needed Care  "

        "RCOMPOS2","CCOMPOS2","R00019","R00021","R00024","R00030",
                          "R02021","R02023","R02026","R02032",
                          "R03018","R03020","R03023","R03029",
                          "R04018","R04023","R04020","R04031",
                          "R05017","R05022","R05019","R05030",
                          "R06017","R06022","R06019","R06030",
                          "R07017","R07022","R07019","R07030"
        = "Getting Care Quickly "

        "RCOMPOS3","CCOMPOS3","R00033","R00034","R00035","R00036",
                          "R02035","R02036","R02037","R02038",
                          "R03032","R03033","R03034","R03035",
                          "R04034","R04035","R04036","R04037",
                          "R05033","R05034","R05035","R05036",
                          "R06033","R06034","R06035","R06036",
                          "R07033","R07034","R07035","R07036"
        = "How Well Doctors Communicate "

        "RCOMPOS4","CCOMPOS4","R00031","R00032",
                          "R02033","R02034",
                          "R03030","R03031",
                          "R04032","R04033",
                          "R05031","R05032",
                          "R06031","R06032",
                          "R07031","R07032"
        = "Courteous and Helpful Office Staff "

        "RCOMPOS5","CCOMPOS5","R00048","R00050","R00055",
                          "R02048","R02050","R02055",
                          "R03044","R03046","R03051",
                          "R04045","R04047","R04053",
                          "R05043","R05045","R05047",
                          "R06043","R06045","R06047",
                          "R07043","R07045","R07047"
        = "Customer Service          "

        "RCOMPOS6","CCOMPOS6","R00044","R00045",
                          "R02044","R02045",
                          "R03040","R03041",
                          "R04041","R04042",
                          "R05040","R05041",
                          "R06040","R06041",
                          "R07040","R07041"
        = "Claims Processing                    "
        "RCOMPOS11","COMPOS11","MENTAL","PHYS"
        = "Health Status                        "
        /*************************************************************************/
        /* Admin. Year Defn.                                                     */
        /* 2001      2002      2003      2004      2005      2006      2007      */
        /*************************************************************************/
        "R00037",  "R02039",  "R03036",  "R04038",  "R05037",  "R06037",  "R07037"  =  "Health  Care
"
        "R00056",  "R02056",  "R03052",  "R04054",  "R05048",  "R06048",  "R07048"  =  "Health  Plan
"
        "R00009",  "R02011",  "R03011",  "R04009",  "R05009",  "R06009",  "R07009"  =  "Primary  Care
Manager                    "
        "R00016",  "R02018",  "R03015",  "R04015",  "R05015",  "R06015",  "R07015"  =  "Specialty  Care
"
       ;
    VALUE BEN
    /*  0 = 'Total'  deleted no longer calculating total 04/2005 RSG ***/
      1 = 'Getting Needed Care'
      2 = 'Getting Care Quickly'
      3 = 'Courteous and Helpful Office Staff'
      4 = 'How Well Doctors Communicate'
      5 = 'Customer Service'
      6 = 'Claims Processing'
```

```
  7 = 'Health Plan'
  8 = 'Health Care'
  9 = 'Primary Care Manager'
 10 = 'Specialty Care'
 11 = 'Preventive Care'
 12 = 'Healthy Behaviors';

  VALUE MAJOR
  1 = "Prime Enrollees            "
  2 = "Enrollees with Military PCM"
  3 = "Enrollees with Civilian PCM"
  4 = "Non-enrolled Beneficiaries "
  5 = "Active Duty                "
  6 = "Active Duty Dependents     "
  7 = "Retirees and Dependents    "
  8 = "All Beneficiaries          ";

  VALUE GETNCARE
  1 = "Problems Getting Personal Doctor/Nurse"
  2 = "Problems Getting Referral to Specialist"
  3 = "Problems Getting Necessary Care"
  4 = "Delays in Care while Awaiting Approval"
  5 = "Composite";

  VALUE GETCAREQ
  1 = "Advice over Telephone"
  2 = "Wait for Routine Visit"
  3 = "Wait for Urgent Care"
  4 = "Wait More than 15 Minutes Past Appointment"
  5 = "Composite";

  VALUE CRTSHELP
  1 = "Courteous and Respectful"
  2 = "Helpful"
  3 = "Composite";

  VALUE HOWWELL
  1 = "Listens Carefully"
  2 = "Explains so You can Understand"
  3 = "Shows Respect"
  4 = "Spends Time with You"
  5 = "Composite";

  VALUE CUSTSERV
  1 = "Problem Finding/Understanding Written Material"
  2 = "Problem Getting Help from Customer Service"
  3 = "Problem with Paperwork"
  4 = "Composite";

  VALUE CLMSPROC
  1 = "Claims Handled in a Reasonable Time"
  2 = "Claims Handled Correctly"
  3 = "Composite";

  VALUE PREVCARE
  1 = "Mammography"
  2 = "Pap Smear"
  3 = "Hypertension"
  4 = "Prenatal Care"
  5 = "Composite";

  VALUE SMOKEF
  1 = "Non-Smoking Rate"
  2 = "Counselled To Quit"
  3 = "Percent Not Obese"
  4 = "Composite";
RUN;
```

G.10.A BENCHMARK\BENCHA03.SAS - CALCULATE CAHPS BENCHMARK DATA FOR HCSDB - ANNUAL.

```
*****************************************************************************
*
* PROGRAM:  BENCHA03.SAS
* TASK:     2006 DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Adjust Adult CAHPS Benchmarks
*
* WRITTEN:  June 2000 BY ERIC SCHONE
*
* INPUTS:   1) BENCHA02.SD2 - 2005 Adult CAHPS Questions Renamed to be
*              consistent with the 2006 MPR DOD Survey.
*           2) GROUP8.SD2 - CAHPS Group8 (all beneficiaries) Dataset
*
* OUTPUTS:  1) Benchmark Composite Scores Data Sets
*
* MODIFIED: 1) Nov 2000 BY ERIC SCHONE - Output permanent datasets with
*              scores and standard errors and process the rest of the
*              composites and ratings.
*           2) Dec 2000 BY KEITH RATHBUN - Update variable names for
*              Q1 2000 Survey.
*           3) Jan 2002 BY KEITH RATHBUN - Updated to run under SAS
*              version 8 (changed INTERCEP to INTERCEPT).
*           4) Apr 2002 BY MIKE SCOTT - Updated variable names for Q1
*              2002 Survey.
*           5) Jul 2002 BY MIKE SCOTT - Changed R00077 to R04075, since
*              H02077 (health status) is back and was renamed to R04075
*              in HSC022_1.sd2.
*           6) Mar 2003 BY MIKE SCOTT - Updated for 2003 survey.
*           7) May 2003 BY MIKE SCOTT - Changed ac03_01 to ac03_02.
*           8) Jun 2003 BY MIKE SCOTT - Updated for Q2 2003.
*           9) Oct 2003 BY MIKE SCOTT - Updated for Q3 2003.
*          10) Mar 2004 BY MIKE SCOTT - Updated for Q1 2004.
*          11) April 2004 BY KEITH RATHBUN - Updated to use the CAHPS 2003
*              variable ac03_03.
*          12) June 2004 BY REGINA GRAMSS - Updated to use for Q2 2004
*          13) Sept 2004 BY REGINA GRAMSS - Update for Q3 2004
*          14) May 2005 BY REGINA GRAMSS - Updated for Q1 2005
*          15) Jul 2005 BY REGINA GRAMSS - Updated for Q2 2005
*          16) Oct 2005 BY REGINA GRAMSS - Updated for Q3 2005
*          17) Dec 2005 BY REGINA GRAMSS - Updated for Q4 2005
*          18) 03/24/2006 BY KEITH RATHBUN, Updated for Q2 FY 2006.
*              Changed variable names to match the 2006 HCSDB survey.
*          19) 07/12/2006 by Justin Oh - Updated for Q3 FY 2006.
*          20) 10/03/2006 by Justin Oh - Changed libname in2 for Q4FY2006.
*              Change the INCLUDE path to CONVERT.sas file.
*          21) 12/18/2006 by Justin Oh - Changed libname in2 for Q1FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          22) 04/05/2007 by Justin Oh - Changed libname in2 for Q2FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          23) 04/05/2007 by Justin Oh - Added %LET RCTYPE to select RC types
*              ReportCards OR PurchasedReportCards.
*          24) 04/05/2007 by Keith Rathbun - Changed libname in2 for Q3FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*          25) 09/04/2007 by Justin Oh - Changed libname in2 for Q4FY2007.
*              Change the INCLUDE path to CONVERT.sas file.
*
* NOTES:
*
* 1) Run this program after BENCHA01.SAS and BENCHA02.SAS.
* 2) This program will generate the input for BENCHA04.SAS.
*
*****************************************************************************
* Assign data libraries and options
*****************************************************************************;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards                ***/
%LET RCTYPE = ReportCards;

libname in  V612 '..\..\..\Q1FY2007\Programs\Benchmark\Data';     /*Use BENCHA02.SD2 from Q1*/
libname in2 V612 "..\&RCTYPE\CAHPS_Adult2007\Data";
libname out V612 'Data';
```

```
LIBNAME LIBRARY   "..\..\DATA\AFINAL\FMTLIB";

%let wgt=fwrwt;

OPTIONS MLOGIC MPRINT NOCENTER LS=132 PS=79;


%macro comb(f,t,q,l);

proc summary data=&f;
 var &t;
 where &q~=.;
 weight &wgt;
 output out=temp mean=&t;
run;

data temp;
 set temp;
 array old &t;
 call symput('z',left(dim(old)));
run;

data temp(drop=_type_ &t);
 set temp;
 array old &t;
 array new var1-var&z;
  do i=1 to &z;
   new(i)=old(i);
  end;
run;

data &q._&l;
 merge temp c_&q;
 array coeffs &t;
 array means var1-var&z;
  DO I = 1 TO DIM(COEFFS);
   IF COEFFS(I) = . THEN COEFFS(I) = 0;
   IF MEANS(I) = . THEN MEANS(I) = 0;
   ADJUST + ( COEFFS(I) * MEANS(I) );
  END;

 ADJUST = ADJUST + intercept;
 &q._&l=adjust;

run;

%mend comb;

%macro adjust(x,y);



proc summary data=setup;
where &x>.;
 class product;

 output out=count;
run;

data count count2(rename=(_freq_=denom));
 set count;
 if _type_=0 then output count2;
 else output count;
run;

data count(keep=pweight product);
 if _n_=1 then set count2;
 set count;
 pweight=denom/_freq_;
run;

data temp;
 merge count  setup; by product;
```

```
run;
proc summary data=temp;
where &x>.;
weight pweight;
var &y;
output out=temp2 mean=&y;
data temp2;
 set temp2;
 array old &y;
 call symput('z',left(dim(old)));
run;
data temp2(keep=var1-var&z);
 set temp2;
 array old &y;
 array new var1-var&z;
  do i=1 to &z;
   new(i)=old(i);
  end;
run;
data temp;
set temp;
if _n_=1 then set temp2;
 array old &y;
 array new var1-var&z;
  do i=1 to &z;
  if old(i)=. then
   old(i)=new(i);
  end;
run;
proc reg data=temp outest=c_&x noprint;
 model &x=&y;
 weight pweight;
 output out=r_&x r=r_&x;
run;

proc sort data=r_&x; by product;
run;

PROC DESCRIPT DATA=r_&x DESIGN=STRWR NOPRINT;
 WEIGHT pweight;
 SETENV DECWIDTH=4;
 NEST product / missunit;
 VAR R_&x;
 OUTPUT  SEMEAN / TABLECELL=DEFAULT
 FILENAME=s_&x;
RUN;

data s_&x(rename=(semean=s_&x));
 set s_&x(keep=semean);
 %do i=1 %to 8;
  %if &i=8 %then %do;

   data group8;
    set in2.group5 in2.group6 in2.group7;
   run;
   %comb(group8,&y,&x,8);
  %end;
  %else %do;
   %comb(in2.group&i,&y,&x,&i);
  %end;
 %end;


%mend adjust;

/* adjust all the variables */

%macro comp(compno,a,b,c,d);
 %if &a~= %then %do;
  %let n=r_&a;
  %let m=s_&a;
  %do i=1 %to 8;
```

```
   %let p&i=&a._&i;
  %end;
  %let grpnum=1;
   proc sort data=r_&a;
    by mpid;
   run;
 %end;
 %if &b~= %then %do;
  %let n=%str(&n r_&b);
  %let m=%str(&m s_&b);
  %do i=1 %to 8;
   %let p&i=%str(&&p&i &b._&i);
  %end;
  %let grpnum=2;
   proc sort data=r_&b;
    by mpid;
   run;
 %end;
 %if &c~= %then %do;
  proc sort data=r_&c;
   by mpid;
  run;
  %let grpnum=3;
  %let n=%str(&n r_&c);
  %do i=1 %to 8;
   %let p&i=%str(&&p&i &c._&i);
  %end;
  %let m=%str(&m s_&c); %end;

  %if &d~= %then %do;
   proc sort data=r_&d;
    by mpid;
   run;
   %let grpnum=4;
   %let n=%str(&n r_&d);
    %do i=1 %to 8;
     %let p&i=%str(&&p&i &d._&i);
    %end;

    %let m=%str(&m s_&d);
  %end;

data infile;
 merge &n;
 by mpid;
run;

proc corr outp=outf noprint;
 var &n;
 weight pweight;
run;

data final;
 if _n_=1 then do;
  %if &a~= %then %do;
   set s_&a;
  %end;
  %if &b~= %then %do;
   set s_&b;
  %end;
  %if &c~= %then %do;
   set s_&c;
  %end;
  %if &d~= %then %do;
   set s_&d;
  %end;
 end;
 set  outf;
 call symput('s'||compress(_n_),substr(_name_,3));
 where _type_='CORR';
run;

data final;
```

```
 set final;
 array r_val &n;
 array s_val &m;
 sde=0;
 do i=1 to dim(s_val);
  %do i=1 %to &grpnum;
   if _name_="r_&&s&i" then
   sde=sde+r_val(i)*s_&&s&i*s_val(i);
  %end;
 end;
run;

data sefin&compno;
 set final end=last;
 tv+sde;
 if last then do;
 sde=(tv**.5)/&grpnum;
 output;
end;

%do i=1 %to 8;
 data temp(keep=&&p&i);
  merge &&p&i;
 run;

data output;
 set &&p&i;
 totadj+adjust;
run;

data output(keep=totadj);
 set output end=last;
 if last then do;
  totadj=totadj/&grpnum;
  output;
 end;
run;

data out&compno._&i;
 merge output temp;
run;

data out.comp&compno._&i;
   merge out&compno._&i
         sefin&compno;
run;

%end;

%mend comp;

/* create composites */
proc sort data=in.bencha02 out=setup;
 by product;
run;
data setup;
set setup;
if ^(model in (2,4));
if disp in ('M10','I10')  ;   ***KRR 04/19/04 Changed _02 to _03;
data setup;
 set setup; by product;
 mpid=_n_;
 if agegroup ne . then do;
 age1824=0; age2534=0; age3544=0; age4554=0; age5564=0; age6574=0;

      if agegroup=1 then age1824=1;
 else if agegroup=2 then age2534=1;
 else if agegroup=3 then age3544=1;
 else if agegroup=4 then age4554=1;
 else if agegroup=5 then age5564=1;
 else if agegroup=6 then age6574=1;
 end;
 if agegroup<6;
```

```
run;
%INCLUDE "..\REPORTCARDS\CAHPS_Adult2007\CONVERT.SAS";

%CONT1(DSN=SETUP, NUM=7,  Y=R07011 R07013 R07027 R07029
                            R07043 R07045 R07047);
%CONT2(DSN=SETUP, NUM=4,  Y=R07037 R07048 R07009 R07015);
%CONT3(DSN=SETUP, NUM=12, Y=R07017 R07022 R07019 R07030
                            R07033 R07034 R07035 R07036
                            R07031 R07032 R07040 R07041);
/* GETTING NEEDED CARE */
%adjust(R07011,age1824 age2534 age3544 age4554  R07066);
%adjust(R07013,age1824 age2534 age3544 age4554  R07066);
%adjust(R07027,age1824 age2534 age3544 age4554  R07066);
%adjust(R07029,age1824 age2534 age3544 age4554  R07066);
%comp(1,R07011,R07013,R07027,R07029);

/* GETTING NEEDED CARE QUICKLY */
%adjust(R07017,age1824 age2534 age3544 age4554  R07066);
%adjust(R07022,age1824 age2534 age3544 age4554  R07066);
%adjust(R07019,age1824 age2534 age3544 age4554  R07066);
%adjust(R07030,age1824 age2534 age3544 age4554  R07066);
%comp(2,R07017,R07022,R07019,R07030);

/* HOW WELL DOCTORS COMMUNICATE */
%adjust(R07033,age1824 age2534 age3544 age4554  R07066);
%adjust(R07034,age1824 age2534 age3544 age4554  R07066);
%adjust(R07035,age1824 age2534 age3544 age4554  R07066);
%adjust(R07036,age1824 age2534 age3544 age4554  R07066);
%comp(3,R07033,R07034,R07035,R07036);

/* COURTEOUS AND HELPFUL OFFICE STAFF */
%adjust(R07031,age1824 age2534 age3544 age4554  R07066);
%adjust(R07032,age1824 age2534 age3544 age4554  R07066);
%comp(4,R07031,R07032);

/* CUSTOMER SERVICE */
%adjust(R07043,age1824 age2534 age3544 age4554  R07066);
%adjust(R07045,age1824 age2534 age3544 age4554  R07066);
%adjust(R07047,age1824 age2534 age3544 age4554  R07066);
%comp(5,R07043,R07045,R07047);

/* CLAIMS PROCESSING */
%adjust(R07040,age1824 age2534 age3544 age4554  R07066);
%adjust(R07041,age1824 age2534 age3544 age4554  R07066);
%comp(6,R07040,R07041);

/* RATING ALL HEALTH CARE: 0 - 10 */
%adjust(R07037,age1824 age2534 age3544 age4554  R07066);
%comp(7,R07037);

/* RATING OF HEALTH PLAN: 0 - 10 */
%adjust(R07048,age1824 age2534 age3544 age4554  R07066);
%comp(8,R07048);

/* RATING OF PERSONAL DR: 0 - 10 */
%adjust(R07009,age1824 age2534 age3544 age4554  R07066);
%comp(9,R07009);

/* SPECIALTY CARE */
%adjust(R07015,age1824 age2534 age3544 age4554  R07066);
%comp(10,R07015);
```

G.10.B BENCHMARK\BENCHA04.SAS - CONVERT THE BENCHMARK SCORES DATABASE INTO THE WEB LAYOUT - ANNUAL.

```
*************************************************************************
*
* PROGRAM:  BENCHA04.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Convert the Benchmark Scores Database into the WEB layout
*
* WRITTEN:  06/01/2000 BY KEITH RATHBUN
*
* INPUTS:   1) Benchmark data sets with adjusted scores
*              (COMPn_i.SD2 where n = composite number and i = group number)
*
* OUTPUT:   1) BENCHA04.SD2 - Combined Benchmark Scores Database in WEB layout
*
* INCLUDES: 1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*              and composite data sets
*
* MODIFIED: 1) Dec 2000 bY Keith Rathbun: Updated variable names for
*              Q1 2000 Survey.  For the quarterly survey group 8 (all benes)
*              is being used as the benchmark for all groups (1-8).  Thus,
*              this group is copied and output to each of the other 7 groups.
*           2) 01/23/2002 by Mike Scott: Updated variable names to be consistent
*              with 2000 survey.
*           4) 04/15/2002 by Mike Scott - Updated variable names for
*              Q1 2002 Survey.
*           5) 03/21/2003 by Mike Scott - Updated for 2003 survey.
*           6) 06/26/2003 by Mike Scott - Updated for Q2 2003.
*           7) 07/03/2003 by Mike Scott - Added TIMEPD variable to be set to the period
*              or 'Trend'.  Changed from setting BENTYPE to the period or 'Trend' to
*              setting to 'Composite'.
*           8) 07/18/2003 by Mike Scott - Added TIMEPD to FREQ.
*           9) 10/21/2003 by Mike Scott - Updated for Q3 2003.
*          10) 03/23/2004 by Mike Scott - Updated for Q1 2004.
*          11) 06/15/2004 by Regina Gramss - Updated for Q2 2004.
*          12) 09/2004    by Regina Gramss - Updated for Q3 2004.
*          13) 05/2005    by Regina Gramss - Updated for Q1 2005.
*          14) 10/2005    by Regina Gramss - Updated for Q3 2005.
*          15) 03/24/2006 by Keith Rathbun - Updated for Q2 FY 2006.
*              Added MACRO loop to process the 8 groups.
*          16) 10/03/2006 by Justin Oh - Updated BENTYPE composite year to 2006 Q3.
*          17) 12/18/2007 by Justin Oh - Updated BENTYPE composite year to 2006 Q4.
*          18) 04/05/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q1.
*              19) 04/05/2007 by Justin Oh - Updated LIBNAME IN2 to be used for purchase RC
programs.
*          20) 09/04/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q3.
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - BENCHA01.SAS - Extract Benchmark variables
*    - BENCHA02.SAS - Recode Benchmark variables
*    - BENCHA03.SAS - Construct Scores and SEMEAN datasets
*
* 2) The output file (BENCHA04.SD2) will be run through the
*    MAKEHTML.SAS program to generate the WEB pages.
*
*************************************************************************
* Assign data libraries and options
*************************************************************************;
LIBNAME IN  V612 "DATA";
LIBNAME IN2 V612 "apredtest";
LIBNAME OUT V612 "DATA";
LIBNAME LIBRARY  "..\..\DATA\FMTLIB";


OPTIONS PS=79 LS=132 COMPRESS=NO NOCENTER;

*************************************************************************
* Load Format definitions for CAHPS Individual and composite data sets.
*************************************************************************;
```

```
%INCLUDE "..\LOADWEB\LOADCAHQ.INC";

*************************************************************************
*************************************************************************
*
* Process Macro Input Parameters:
*
* 1) CNUM = Composite or rating variable number (1-10)
* 2) GNUM = Group number (1-8)
* 3) NVAR = Number of variables in the composite
* 4) VARS = List of individual variables for composite
* 5) SE   = List of individual standard error variables
*
* ____________________________________________________________
*    Adjusted Score           Definitions
*    Group Number
* ____________________________________________________________
* 1. Prime enrollees          XINS_COV IN (1,2,6) AND H07007_R>=7
* 2. Enrollees w/mil PCM      XENR_PCM IN (1,2,6) AND H07007_R>=7
* 3. Enrollees w/civ PCM      XENR_PCM = 3        AND H07007_R>=7
* 4. Nonenrollees             XINS_COV IN (3,4,5)
* 5. Active duty              BFGROUPP = 1
* 6. Active duty dependents   BFGROUPP = 2
* 7. Retirees and dependents  BFGROUPP IN (3,4)
* 8. All Beneficiaries
*
*************************************************************************;
%MACRO PROCESS(CNUM=, GNUM=, NVAR=, VARS=, SE=);
************************************************************************
* Assign value for BENTYPE composite year
************************************************************************;
%LET YEAR = "2007"; * Note that this is based on Calendar Year here;

************************************************************************
* Convert benchmark scores datasets into WEB layout.
************************************************************************;
%IF &CNUM<7 %THEN %DO;

  DATA INP;
    SET IN2.COMP&CNUM;
     WHERE X=&GNUM;



   DATA INP;
    SET INP  IN2.PROJERR&GNUM;
    RENAME SE=SESX;
RUN;
%END;
%ELSE %DO;

   DATA INP;
    SET IN2.PROJERR&GNUM;
    RENAME SE=SESX;
RUN;
%END;



   DATA COMP&CNUM._&Gnum;
      SET INP;
     IF _N_=1 THEN
     SET IN.COMP&CNUM._&GNUM;
      LENGTH MAJGRP  $30;
      LENGTH REGION  $25;
      LENGTH REGCAT  $26;
      LENGTH BENTYPE $50;
      LENGTH BENEFIT $34;
      LENGTH TIMEPD  $35;   ***MJS 07/03/03 Added line;

      ******************************************************************
      * For now, assign SIG = 0
      ******************************************************************;
```

```
   SIG = 0;

   ********************************************************************
   * Assign major group
   ********************************************************************;
   MAJGRP  = PUT(&Gnum,MAJGRPF.);

   ********************************************************************
   * Assign Region and Regcat
   ********************************************************************;
   REGION  = "Benchmark";
   REGCAT  = "Benchmark";

   ********************************************************************
   * Assign benefit and benefit type
   ********************************************************************;
   IF      &CNUM = 1  THEN BENEFIT = "Getting Needed Care";
   ELSE IF &CNUM = 2  THEN BENEFIT = "Getting Care Quickly";
   ELSE IF &CNUM = 3  THEN BENEFIT = "How Well Doctors Communicate";
   ELSE IF &CNUM = 4  THEN BENEFIT = "Courteous and Helpful Office Staff";
   ELSE IF &CNUM = 5  THEN BENEFIT = "Customer Service";
   ELSE IF &CNUM = 6  THEN BENEFIT = "Claims Processing";
   ELSE IF &CNUM = 7  THEN BENEFIT = "Health Care";
   ELSE IF &CNUM = 8  THEN BENEFIT = "Health Plan";
   ELSE IF &CNUM = 9  THEN BENEFIT = "Primary Care Manager";
   ELSE IF &CNUM = 10 THEN BENEFIT = "Specialty Care";

   BENTYPE = "Composite";   ***MJS 07/03/03 Changed from BENTYPE = PUT(&YEAR,$BENTYPF.);
   TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added;
    IF &CNUM<7 THEN DO;
       IF X=&GNUM THEN DO;
   ********************************************************************
   * Assign composite score and SEMEAN
   ********************************************************************;
         SCORE = TOTADJ;
         SEMEAN = SQRT(SDE**2+SESX**2);

   ********************************************************************
   * Output composite score record for each REGION
   ********************************************************************;
         OUTPUT;
       END;
    END;
   ********************************************************************
   * Now, output the individual score records
   ********************************************************************;
   IF &NVAR GT 1|&CNUM>6 THEN DO;
      ARRAY ITEMS &VARS;
      ARRAY SE    &SE;
      LENGTH NAME $8;
      DO I = 1 TO DIM(ITEMS); DROP I;
         CALL VNAME(ITEMS(I),NAME);
         NAME = SUBSTR(NAME,1,6);
         SCORE  = ITEMS(I);
         SEMEAN = SQRT(SE(I)**2+SESX**2);
         IF &NVAR GT 1 THEN
         BENTYPE = PUT(NAME,$BENTYPF.);
         TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added;
        IF COMPRESS(UPCASE(NAME))=COMPRESS(UPCASE(VAR)) THEN OUTPUT;
      END;
   END;

KEEP MAJGRP
     REGION
     REGCAT
     BENTYPE
     BENEFIT
     TIMEPD   /*MJS 07/03/03 Added*/
     SEMEAN
     SCORE
     SIG
   ;
RUN;
```

```
%MEND;

*************************************************************************
*************************************************************************
* Process each of the 8 Groups.
*************************************************************************
*************************************************************************;
%MACRO DOIT;
%DO I = 1 %TO 8;
   ************************************************************************
   * COMPOSITE # 1.
   * GETTING NEEDED CARE VARIABLES.
   ************************************************************************;
   %PROCESS(CNUM=1, GNUM=&I, NVAR=4, VARS=R07011_&I R07013_&I R07027_&I R07029_&I,
         SE=S_R07011 S_R07013 S_R07027 S_R07029);

   ************************************************************************
   * COMPOSITE # 2.
   * GETTING CARE QUICKLY VARIABLES.
   ************************************************************************;
   %PROCESS(CNUM=2, GNUM=&I, NVAR=4, VARS=R07017_&I R07022_&I R07019_&I R07030_&I,
         SE=S_R07017 S_R07022 S_R07019 S_R07030);

   ************************************************************************
   * COMPOSITE # 3.
   * HOW WELL DOCTORS COMMUNICATE.
   ************************************************************************;
   %PROCESS(CNUM=3, GNUM=&I, NVAR=4, VARS=R07033_&I R07034_&I R07035_&I R07036_&I,
         SE=S_R07033 S_R07034 S_R07035 S_R07036);

   ************************************************************************
   * COMPOSITE # 4.
   * COURTEOUS AND HELPFUL OFFICE STAFF.
   ************************************************************************;
   %PROCESS(CNUM=4, GNUM=&I, NVAR=2, VARS=R07031_&I R07032_&I, SE=S_R07031 S_R07032);

   ************************************************************************
   * COMPOSITE # 5.
   * CUSTOMER SERVICE.
   ************************************************************************;
   %PROCESS(CNUM=5, GNUM=&I, NVAR=3, VARS=R07043_&I R07045_&I R07047_&I,
         SE=S_R07043 S_R07045 S_R07047);

   ************************************************************************
   * COMPOSITE # 6.
   * CLAIMS PROCESSING.
   ************************************************************************;
   %PROCESS(CNUM=6, GNUM=&I, NVAR=2, VARS=R07040_&I R07041_&I, SE=S_R07040 S_R07041);

   ************************************************************************
   * INDIVIDUAL # 1.
   * RATING OF ALL HEALTH CARE: 0 - 10.
   ************************************************************************;
   %PROCESS(CNUM=7, GNUM=&I, NVAR=1, VARS=R07037_&I, SE=S_R07037);

   ************************************************************************
   * INDIVIDUAL # 2.
   * RATING OF HEALTH PLAN: 0 - 10.
   ************************************************************************;
   %PROCESS(CNUM=8, GNUM=&I, NVAR=1, VARS=R07048_&I, SE=S_R07048);

   ************************************************************************
   * INDIVIDUAL # 3.
   * RATING OF PERSONAL DOCTOR: 0 - 10.
   ************************************************************************;
   %PROCESS(CNUM=9, GNUM=&I, NVAR=1, VARS=R07009_&I, SE=S_R07009);

   ************************************************************************
   * INDIVIDUAL # 4.
   * SPECIALTY CARE: 0 - 10.
   ************************************************************************;
   %PROCESS(CNUM=10, GNUM=&I, NVAR=1, VARS=R07015_&I, SE=S_R07015);
```

```
%END;
%MEND DOIT;
%DOIT;

*****************************************************************************
*****************************************************************************
* STACK up all of the files into one final output dataset.
*****************************************************************************
*****************************************************************************;
DATA OUT.BENCHA04;
   SET COMP1_1  COMP1_2  COMP1_3  COMP1_4  COMP1_5  COMP1_6  COMP1_7  COMP1_8
       COMP2_1  COMP2_2  COMP2_3  COMP2_4  COMP2_5  COMP2_6  COMP2_7  COMP2_8
       COMP3_1  COMP3_2  COMP3_3  COMP3_4  COMP3_5  COMP3_6  COMP3_7  COMP3_8
       COMP4_1  COMP4_2  COMP4_3  COMP4_4  COMP4_5  COMP4_6  COMP4_7  COMP4_8
       COMP5_1  COMP5_2  COMP5_3  COMP5_4  COMP5_5  COMP5_6  COMP5_7  COMP5_8
       COMP6_1  COMP6_2  COMP6_3  COMP6_4  COMP6_5  COMP6_6  COMP6_7  COMP6_8
       COMP7_1  COMP7_2  COMP7_3  COMP7_4  COMP7_5  COMP7_6  COMP7_7  COMP7_8
       COMP8_1  COMP8_2  COMP8_3  COMP8_4  COMP8_5  COMP8_6  COMP8_7  COMP8_8
       COMP9_1  COMP9_2  COMP9_3  COMP9_4  COMP9_5  COMP9_6  COMP9_7  COMP9_8
       COMP10_1 COMP10_2 COMP10_3 COMP10_4 COMP10_5 COMP10_6 COMP10_7 COMP10_8
    ;
    IF SCORE = . THEN DELETE;
RUN;

TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6244-410)";
TITLE2 "Program Name: BENCHA04.SAS By Keith Rathbun";
TITLE3 "Program Inputs: Benchmark Individual and Composite data sets with adjusted scores";
TITLE4 "Program Outputs: BENCHA04.SD2 - Combined Benchmark Scores Database in WEB layout";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES TIMEPD BENEFIT BENTYPE MAJGRP REGION REGCAT
       REGION*REGCAT
      /MISSING LIST;
RUN;
```

G.11.A REPORTCARDS\MPR_ADULT2007\PRVCOMP.SAS - CALCULATE PREVENTIVE CARE COMPOSITE SCORES - ANNUAL.

```
*****************************************************************
*  Project:   DoD Reporting and Analysis 8860-400
*  Program:   PRVCOMP.SAS
*  Author:    Chris Rankin
*  Date:      12/22/2000
*
*  Modified:  1) 4/19/2001 By Keith Rathbun: Restrict population to
*                xins_cov in(1,2,3,6).  Use POSTSTR instead of
*                adj_cell.
*             2) 10/25/01 By Daniele Beahm: Because no poststratification
*                was done for q3 2000, changed POSTSTR back to ADJ_CELL
*             3) 04/09/02 modified macros the first three macros to create
*                temporary datasets (instead of writing permanent datasets)
*             4) 01/29/03 By Chris Rankin: Added &YR to output variable names
*                for the Trend program
*             5) 02/04/04 By Eric Schone: Updated for 2003 Annual Report. Changed
*                HP_FLU to HP_CHOL. Added NORMDATA data step and IN2000 libname.
*             6) 02/05/04 By Chris Rankin: CACSMPL taken from Group8 dataset
*             7) 02/2005 By Regina Gramss: Updated for 2004 Annual Report.  Changed
*                codes to use XSERVREG region/service affiliation fields.
*             8) 02/2006 By Regina Gramss: Update for 2005 Report.  Use 2005 data
*                for normalization.
*             9) 11/3/2006 By Keith Rathbun: Updated for the overseas change
*                done in the 2006 quarterly beneficiary reports.
*
*  Purpose:   Calculate MPR Preventive Care Composites
*  Input:     HCS06A_1.SD2
*  Output:    RFINAL.SD2
*             CFINAL.SD2
*             MFINAL.SD2
*             SFINAL.SD2
*             DFINAL.SD2
*  Include
*   Files:    LOADCAHPQ.INC
*    Note:    Next program is Loadmprq.sas
*****************************************************************;
OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMTERR COMPRESS=YES;

LIBNAME IN       V612  "..\..\..\DATA";
LIBNAME INNORM   V612  "..\..\..\..\2005\DATA";
LIBNAME CACLIB   V612  "..\CAHPS_Adult2007\Data";
LIBNAME OUT      V612  ".";
LIBNAME LIBRARY  V612  "..\..\..\DATA\FMTLIB";

%LET WGT = FWRWT;
%LET NORMWGT = CFWT;
%LET NORMDAT = HCS05A_1;
%LET DEBUG=N;      /** Set to Y for Debug print of datasets **/
%LET INDATA = HCS07A_1;
%LET YRDATA=HCS07;
%LET YR = 07;

/***** The following parameters are used in the Variance ****/
/***** calcuation macro for region and catchment area    ****/

%LET GRPNUM=8;      /** number of groups          **/
%LET COMPNUM=7;     /** number of variables       **/
%LET REGNUM=15;     /** number of regions         **/  *KRR 11/3/06: changed for 16 to 15;
%LET CATCHNUM=9999; /** number of catchment areas **/

%LET CMPNUM1=4;    /** number of variables in first composite  **/   /*ES 02/04/04*/
%LET CMPNUM2=3;    /** number of variables in second composite **/   /*ES 02/04/04*/

%LET COMPCNT=2;    /** number of composites                    **/

**** set up benchmarks for preventive services ;
**** note -- these are the hp 2000 goals     ;

%LET GOALVAR1= .90;    /** HP Goal for Prenatal Care         **/
```

```
%LET GOALVAR2= .70;    /** HP Goal for Mammography           **/
%LET GOALVAR3= .90;    /** HP Goal for Papsmear              **/
%LET GOALVAR4= .95;    /** HP Goal for Blood Pressure Check  **/
/*TOOK OUT CHOLESTEROL 01/2006 RSG **/
%LET GOALVAR5= .90;    /** access goal                       **/
%LET GOALVAR6= .90;    /** access goal                       **/
%LET GOALVAR7= .98;    /** access goal                       **/

%INCLUDE "..\..\LOADWEB\LOADCAHQ.INC";

************************************************************;
* Beneficiary group note
*    Eight groups             Definitions
* _________________________________________________________;
* 1. Prime enrollees          XINS_COV IN (1,2,6) AND H07007>=2
* 2. Enrollees w/mil PCM      XENR_PCM IN (1,2,6) AND H07007>=2
* 3. Enrollees w/civ PCM      XENR_PCM IN (3,7)   AND H07007>=2
* 4. Nonenrollees             XINS_COV IN (3)
* 5. Active duty              XBNFGRP = 1
* 6. Active duty dependents   XBNFGRP = 2
* 7. Retirees                 XBNFGRP IN (3,4)
* 8. All beneficiaries        ALL
************************************************************;

*-----------------------------------------------------
* Add cacsmpl from group8.sd2 dataset - CDR 2/05/2004
*-----------------------------------------------------;

PROC SORT DATA=CACLIB.GROUP8 OUT=GROUP8(KEEP=MPRID CACSMPL XSERVIND);
   BY MPRID;
RUN;

PROC SORT DATA=IN.&INDATA(KEEP=MPRID XINS_COV HP_BP HP_MAMOG
                              HP_PAP HP_PRNTL   /*ES 02/04/04*/
                              XTNEXREG XENR_PCM XBNFGRP ENBGSMPL &WGT FIELDAGE DBENCAT
                              STRATUM H07022 H07019  H07030 H07007 H07006 SERVAFF XREGION)
   OUT= &YRDATA; BY MPRID;
RUN;


/**** note -- output all data to a single dataset for macro */
/**** call                                                  */
/**** MACROS are no longer called for catchment areas       */

DATA NORMDATA(KEEP=XTNEXREG XSERVREG /* KRR - CACSMPL */ &WGT
                  PRVVAR1-PRVVAR&COMPNUM. NUMV1-NUMV&COMPNUM.
                  DENV1-DENV&COMPNUM /*IN_GROUP8*/ XTNEXREG XSERVREG XSERVAFF FIELDAGE);
                  /* 11/15/2006 JSO Added FIELDAGE in the keep statement */

  SET INNORM.&NORMDAT(KEEP=MPRID XINS_COV HP_BP
                      HP_MAMOG HP_PAP HP_PRNTL   /*ES 02/04/04*/
                      XTNEXREG XENR_PCM XBNFGRP ENBGSMPL &NORMWGT FIELDAGE DBENCAT
                      STRATUM H05022 H05019  H05030 H05007 H05006 XCATCH SERVAFF XREGION);

************************************************************************
* For quarterly reports, catchment level reporting is not done
* so the value of cellp is set to 1.
* For annual reporting purposes, cellp will need to be assigned
* to geocell
************************************************************************;

  IF SERVAFF = 'A' THEN XSERVAFF = 1;        *Army;
  ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;   *Air Force;
  ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;   *Navy;
  ELSE XSERVAFF = 4;                         *Other/unknown;

  IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

  IF XTNEXREG = . THEN DELETE;

  IF XINS_COV NOT IN(1,2,3,6,9) THEN DELETE;  /*JSO 07/30/2007, Added 9*/

  NXNS_COV = XINS_COV;              /*JSO 04/26/2007 added for reservists logic*/
```

```
                                    /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
  IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
  IF DBENCAT IN('GRD','IGR') AND H05006 = 3 THEN DO;
     NXNS_COV = 3;
     XENR_PCM = .;
  END;

  PRVVAR1=HP_PRNTL;        /** prenatal care  **/
  PRVVAR2=HP_MAMOG;        /** mammography    **/
  PRVVAR3=HP_PAP;          /** papsmear       **/
  PRVVAR4=HP_BP;           /** blood pressure **/
  /*DELETE CHOLESTEROL MEASURES - 01/2006 RSG  */
  PRVVAR5=H05022;          /** access var 1   **/   /*KRR 11/2006*/
  PRVVAR6=H05019;          /** access var 2   **/   /*KRR 11/2006*/
  PRVVAR7=H05030;          /** access var 3   **/   /*KRR 11/2006*/

/**** set up numerator and denominator for proportions ****/

  ARRAY PRVVAR(*) PRVVAR1-PRVVAR&COMPNUM;
  ARRAY  NUMER(*) NUMV1-NUMV&COMPNUM;
  ARRAY  DENOM(*) DENV1-DENV&COMPNUM;

  DO I = 1 TO &COMPNUM;
     IF I LE  &CMPNUM1 THEN DO;
        IF PRVVAR(I) = 1 THEN NUMER(I) = 1;
        ELSE NUMER(I)=0;
        IF PRVVAR(I) IN (1, 2) THEN DENOM(I)=1;
     END;
     ELSE IF I GT &CMPNUM1 THEN DO;
        IF PRVVAR(I) IN (1, 2) THEN NUMER(I)=1;
        ELSE NUMER(I)=0;
        IF PRVVAR(I) > 0 THEN DENOM(I)=1;
     END;
  END;
  DROP I;
  DENV4=1;

 /*RSG 02/2005 Added codes to define XSERVREG CACSMPL*/

    IF XTNEXREG = 1 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 1;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
       ELSE XSERVREG = 4;
    END;

    IF XTNEXREG = 2 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 5;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
       ELSE XSERVREG = 8;
    END;

    IF XTNEXREG = 3 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 9;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
       ELSE XSERVREG = 12;
    END;

    IF XTNEXREG = 4 THEN DO;
       IF XREGION = 13 THEN XSERVREG = 13;
       ELSE IF XREGION = 14 THEN XSERVREG = 14;
       ELSE IF XREGION = 15 THEN XSERVREG = 15;
    END;

   RENAME XCATCH=CACSMPL &NORMWGT = &WGT;
RUN;

PROC SORT DATA=CACLIB.GROUP8 OUT=GROUP8(KEEP=MPRID CACSMPL XSERVIND);
   BY MPRID;
RUN;
```

```
    DATA &YRDATA(KEEP=BGROUP MHS CONUS XSERVAFF CACSMPL &WGT. TMP_CELL
                      PRVVAR1-PRVVAR&COMPNUM. NUM&YR.V1-NUM&YR.V&COMPNUM.
                      DEN&YR.V1-DEN&YR.V&COMPNUM IN_GROUP8
                      XTNEXREG  XSERVREG  XSERVIND);  /*RSG  02/2005  Add  fields  used  for  Region
breakdown*/

      MERGE &YRDATA.(IN=IN_1) GROUP8(IN=IN_2); /*CDR 2/05/2004 */
      BY MPRID;
      IF IN_1;
      IF IN_2=1 THEN IN_GROUP8=1;
      ELSE IN_GROUP8=0;

      /*IF IN_1 & NOT IN_2 THEN PUT
      "&YRDATA: No Catchment Area for MPRID=" MPRID; */

    ************************************************************************
    * For quarterly reports, catchment level reporting is not done
    * so the value of cellp is set to 1.
    * For annual reporting purposes, cellp will need to be assigned
    * to geocell
    ************************************************************************;

      CELLP=1;
      LENGTH TMP_CELL 8;
      TMP_CELL = STRATUM;   /* KRR 11/3/2006: Use STRATUM instead of ADJ_CELL */

      IF SERVAFF = 'A' THEN XSERVAFF = 1;        *Army;
      ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;   *Air Force;
      ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;   *Navy;
      ELSE XSERVAFF = 4;                         *Other/unknown;

      IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

      IF XTNEXREG = . THEN DELETE;

      IF XINS_COV NOT IN(1,2,3,6,9) THEN DELETE;  /*JSO 07/30/2007, Added 9*/

      NXNS_COV = XINS_COV;   /*JSO 05/14/2007 added for reservists logic*/
                             /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
      IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
      IF DBENCAT IN('GRD','IGR') AND H07006 = 3 THEN DO;
         NXNS_COV = 3;
         XENR_PCM = .;
      END;

      PRVVAR1=HP_PRNTL;        /** prenatal care  **/
      PRVVAR2=HP_MAMOG;        /** mammography    **/
      PRVVAR3=HP_PAP;          /** papsmear       **/
      PRVVAR4=HP_BP;           /** blood pressure **/
      /* deleted cholesterol 01/2006 RSG  **/
      PRVVAR5=H07022;          /** access var 1   **/   /*KRR 11/2006*/
      PRVVAR6=H07019;          /** access var 2   **/   /*KRR 11/2006*/
      PRVVAR7=H07030;          /** access var 3   **/   /*KRR 11/2006*/

    /**** set up numerator and denominator for proportions ****/

      ARRAY PRVVAR(*) PRVVAR1-PRVVAR&COMPNUM;
      ARRAY  NUMER(*) NUM&YR.V1-NUM&YR.V&COMPNUM;
      ARRAY  DENOM(*) DEN&YR.V1-DEN&YR.V&COMPNUM;

      DO I = 1 TO &COMPNUM;
         IF I LE  &CMPNUM1 THEN DO;
            IF PRVVAR(I) = 1 THEN NUMER(I) = 1;
            ELSE NUMER(I)=0;
            IF PRVVAR(I) IN (1, 2) THEN DENOM(I)=1;
         END;
         ELSE IF I GT &CMPNUM1 THEN DO;
            IF PRVVAR(I) IN (1, 2) THEN NUMER(I)=1;
            ELSE NUMER(I)=0;
            IF PRVVAR(I) > 0 THEN DENOM(I)=1;
         END;
      END;
      DROP I;
```

```
  DENV4=1;

  MHS= 1;   /* set up dummy for MHS-- include all observations */

/*RSG 02/2005 Add codes to define XSERVREG*/

  IF XTNEXREG = 1 THEN DO;
     IF XSERVAFF = 1 THEN XSERVREG = 1;
     ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
     ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
     ELSE XSERVREG = 4;
  END;

  IF XTNEXREG = 2 THEN DO;
     IF XSERVAFF = 1 THEN XSERVREG = 5;
     ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
     ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
     ELSE XSERVREG = 8;
  END;

  IF XTNEXREG = 3 THEN DO;
     IF XSERVAFF = 1 THEN XSERVREG = 9;
     ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
     ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
     ELSE XSERVREG = 12;
  END;

  IF XTNEXREG = 4 THEN DO;
     IF XREGION = 13 THEN XSERVREG = 13;
     ELSE IF XREGION = 14 THEN XSERVREG = 14;
     ELSE IF XREGION = 15 THEN XSERVREG = 15;
  END;

*************************************************************************
* Assign indicator of CONUS based on XREGION.  CONUS stands for
* Contential United States it but includes both Alaska and Hawaii.
*************************************************************************;
/* RSG 02/2005 Define Conus by XTNEXREG*/

  IF XTNEXREG IN (1,2,3) THEN CONUS=1;
  ELSE IF XTNEXREG = 4 THEN CONUS=2;

* Prime enrollees     *;

  IF (NXNS_COV IN (1,2,6) AND H07007>=2) THEN DO;   /*ES 02/04/04*/
     BGROUP=1;
     OUTPUT;
  END;

* Enrollees with military PCMs *;

  IF (XENR_PCM IN (1,2,6) AND H07007>=2) THEN DO;   /*ES 02/04/04*/
     BGROUP=2;
     OUTPUT;
  END;

* Enrollees with civilian PCMs *;

  IF (XENR_PCM IN (3,7) AND H07007>=2) THEN DO;   /*ES 02/04/04*/
     BGROUP=3;
     OUTPUT;
  END;

* Nonenrollees *;

  IF NXNS_COV IN (3,9) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
     BGROUP=4;                  /*JSO 07/30/2007, Added 9*/
     OUTPUT;
  END;

* Active duty      *;

  IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
```

```
     BGROUP=5;        /*JSO 07/30/2007, added DBENCAT conditions*/
     OUTPUT;
  END;

* Active duty dependents  *;

  IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN DO;
     BGROUP=6;        /*JSO 07/30/2007, added DBENCAT conditions*/
     OUTPUT;
  END;

* Retirees  *;

  IF XBNFGRP IN (3,4) THEN DO;
     BGROUP=7;
     OUTPUT;
  END;

* All beneficiaries *;

  BGROUP=8;
  OUTPUT;

RUN;

PROC FREQ DATA=&YRDATA;
   TABLES IN_GROUP8/MISSING LIST;
   TITLE "OVERLAP BETWEEN &INDATA AND GROUP8 DATA";
RUN;

**** Next, check catchment areas for requisite number of observations ;
**** for the macro calls (exclude cacsmpl w/ <2 obs)                  ;
**** also, keep list of region/catchment area combinations            ;


PROC FREQ  DATA=&YRDATA;
    TABLE BGROUP*MHS*CONUS*XSERVind*CACSMPL/MISSING LIST
    OUT=OBSCNT(DROP=PERCENT);
RUN;


PROC SORT DATA=&YRDATA; BY BGROUP MHS CONUS XSERVind CACSMPL;
RUN;

DATA HCSDB /*FAILED*/;
   MERGE &YRDATA(IN=IN_ALL) OBSCNT(IN=IN_OBS);
   BY BGROUP MHS CONUS XSERVind CACSMPL;
   IF COUNT < 2 THEN DO;
       PUT "Failed obs # criterion: XSERVREG=" XSERVREG "CACSMPL=" CACSMPL;
       *OUTPUT FAILED;
   END;
*   ELSE OUTPUT HCSDB;
RUN;

DATA OBSCNT;
   SET OBSCNT;
   RENAME BGROUP=GROUP;
RUN;

PROC SORT NODUPKEY DATA=OBSCNT; BY GROUP CACSMPL;
RUN;

*******************************************************
*** First, calculate standard errors and create     ***
*** a file for each analytical unit                 ***
*******************************************************;

PROC SORT DATA=HCSDB; BY TMP_CELL;
RUN;

*******************************************************
***** Sudaan macro to calculate standard errors   *****
***** there are three output datasets created     *****
```

```
***** (REGION, CACSMPL, MHS)                        *****
***** Note:  7/10/2000 use CONUS for MHS            *****
***** Note:  there are 8 variables and 8 groups     *****
*****************************************************;

%MACRO A_SUDAAN(TABLEVAR);

*** set the number of levels in the proc descript ***;
*** for region or catchment                        ***;

 %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
     %LET ENDNUM=4;
     %LET PREF=S;         /** dataset prefix for service affiliation data    **/
 %END;
 %IF %UPCASE(&TABLEVAR)=XSERVREG %THEN %DO;
     %LET ENDNUM=&REGNUM;
     %LET PREF=R;         /** dataset prefix for region data    **/
 %END;
 %ELSE  %IF  %UPCASE(&TABLEVAR)=CONUS  %THEN  %LET  PREF=C;              /**  dataset  prefix  for
catchement area data **/

 %ELSE %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
     %LET ENDNUM=4;      /** RSG 01/2005 Change level of conus to 4 **/
     %LET PREF=M;
 %END;
 %ELSE %IF %UPCASE(&TABLEVAR)=CACSMPL %THEN %DO;
     %LET ENDNUM=&CATCHNUM;
     %LET PREF=D;         /** dataset prefix for catchement area data **/
 %END;

 %DO I=1 %TO &GRPNUM;     /** 8 groups    **/

     %DO J=1 %TO &COMPNUM;   /** 7 variables **/

         DATA INDATA&I.&J(KEEP=&WGT MHS CONUS XTNEXREG XSERVREG XSERVAFF
                                CACSMPL NUM&YR.V&J DEN&YR.V&J TMP_CELL);
           SET HCSDB;
           WHERE XSERVREG > 0 AND BGROUP=&I AND DEN&YR.V&J > 0;
           %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
               IF XSERVAFF > 4 OR XSERVAFF = . THEN DELETE;  /*RSG 01/2005 Delete Conus greater
than 4 which are not conus */
           %END;
             %IF %UPCASE(&TABLEVAR)=CONUS %THEN %DO;
                 IF CONUS NE 1 THEN DELETE;
             %END;
             %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
                 IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
             %END;
         RUN;

*** Calculate values for regions, catchment areas ****;

         %IF %UPCASE(&TABLEVAR) NE CONUS %THEN %DO;

            PROC DESCRIPT DATA=INDATA&I.&J DESIGN=STRWR NOPRINT;
                WEIGHT &WGT;
                SETENV DECWIDTH=4;
                NEST TMP_CELL / MISSUNIT;
                VAR NUM&YR.V&J;
                TABLES &TABLEVAR;
                SUBGROUP &TABLEVAR;
                LEVELS &ENDNUM;
                OUTPUT SEMEAN/ TABLECELL=DEFAULT REPLACE
                FILENAME=&PREF.GRP&I.V&J;
            RUN;

         %END;
         %ELSE %IF %UPCASE(&TABLEVAR)=CONUS %THEN %DO;

**** No tables, levels, or subgroups needed ****;

            PROC DESCRIPT DATA=INDATA&I.&J DESIGN=STRWR NOPRINT;
               WEIGHT &WGT;
```

```
               SETENV DECWIDTH=4;
               NEST TMP_CELL / MISSUNIT;
               VAR NUM&YR.V&J;
               OUTPUT SEMEAN/ TABLECELL=DEFAULT REPLACE
               FILENAME=&PREF.GRP&I.V&J;
            RUN;

         %END;

***** first, put all variables into one dataset for each group *****;

         DATA &PREF.GRP&I.V&J;
            SET &PREF.GRP&I.V&J;
            IF SEMEAN NE .;
            MHS=1;
            %IF %UPCASE(&TABLEVAR)=CONUS %THEN %DO;
                CONUS=1;
            %END;
         RUN;

         %IF &J=1 %THEN %DO;
            DATA &PREF.SEGRP&I;
               SET &PREF.GRP&I.V&J(KEEP=&TABLEVAR SEMEAN);
               GROUP=&I;
               IF SEMEAN NE .;
               RENAME SEMEAN = SERR&YR.V&J;
            RUN;
         %END;
         %ELSE %DO;
            DATA &PREF.SEGRP&I;
               MERGE &PREF.SEGRP&I &PREF.GRP&I.V&J(KEEP=&TABLEVAR SEMEAN);
               BY &TABLEVAR;
               GROUP=&I;
               RENAME SEMEAN = SERR&YR.V&J;
            RUN;
         %END;
     %END;

***** Put all data into one dataset  *****
***** Note:  changed output dataset  *****
***** to include group               *****;

     %IF &I=1 %THEN %DO;

        DATA &PREF.SERR;
           SET &PREF.SEGRP&I;
           KEEP GROUP &TABLEVAR SERR&YR.V1-SERR&YR.V&COMPNUM;
        RUN;
     %END;
     %ELSE %DO;

        DATA &PREF.SERR;
           SET &PREF.SERR
           &PREF.SEGRP&I;
        RUN;
     %END;

******** DEBUG PRINT   *******;

     %IF &DEBUG=Y %THEN %DO;
        %IF &I=&GRPNUM AND &PREF=R %THEN %DO;
             PROC PRINT DATA=&PREF.SERR;
                VAR &TABLEVAR GROUP SERR&YR.V1-SERR&YR.V&COMPNUM;
             RUN;
        %END;
     %END;

 %END;

%MEND A_SUDAAN;

%A_SUDAAN (CONUS);
%A_SUDAAN (XSERVAFF);
```

```
%A_SUDAAN (XSERVREG);
%A_SUDAAN (XTNEXREG);
%A_SUDAAN (CACSMPL);


*******************************************************
*** Next, calculate correlation coefficients         ***
*** and create a file for each analytical unit       ***
*******************************************************;

%MACRO GETCORR(BYVAR);

 %IF %UPCASE(&BYVAR)=XTNEXREG %THEN %LET PREF=S;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVREG %THEN %LET PREF=R;
 %ELSE %IF %UPCASE(&BYVAR)=CONUS %THEN %LET PREF=C;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %LET PREF=M;
 %ELSE %IF %UPCASE(&BYVAR)=CACSMPL %THEN %LET PREF=D;


 PROC SORT DATA=HCSDB; BY &BYVAR;
 RUN;

 %DO I = 1 %TO &GRPNUM;

    PROC CORR NOPRINT DATA=HCSDB OUTP=&PREF.CORRC&I;
       %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %DO;
          WHERE BGROUP=&I AND 1 <= XSERVAFF <= 4;     /** RSG 0/2005 Change xservreg values to
keep to be between 1-4 **/
       %END;
      %IF %UPCASE(&BYVAR)=CONUS %THEN %DO; /* RSG 02/2005 CONUS value must be 1*/
         WHERE BGROUP=&I AND CONUS = 1;
      %END;
       %ELSE %DO;
          WHERE BGROUP=&I;
       %END;
       BY &BYVAR;
       VAR PRVVAR1-PRVVAR&COMPNUM;
       WITH PRVVAR1-PRVVAR&COMPNUM;
       WEIGHT &WGT;
    RUN;

    DATA &PREF.CORRC&I;
      SET &PREF.CORRC&I;
      WHERE _TYPE_="CORR";
      GROUP=&I;
      ARRAY OLD PRVVAR1-PRVVAR&COMPNUM;
      ARRAY NEW COR&YR.V1-COR&YR.V&COMPNUM;
      DO J = 1 TO &COMPNUM;
         NEW(J)=OLD(J);
      END;
      DROP J PRVVAR1-PRVVAR&COMPNUM;
    RUN;

    %IF &I=1 %THEN %DO;

       DATA &PREF.CORRC;
         SET &PREF.CORRC&I;
       RUN;

    %END;
    %ELSE %DO;

       DATA &PREF.CORRC;
         SET &PREF.CORRC
         &PREF.CORRC&I;
       RUN;

    %END;
    %IF &DEBUG=Y %THEN %DO;
        %IF &I=&COMPNUM AND &PREF=R %THEN %DO;
           PROC PRINT DATA=&PREF.CORRC;
              WHERE GROUP=1;
           RUN;
```

```
        %END;
    %END;
 %END;

*** Flatten dataset(for each region, condense matrix to one row) ***;

 %DO K=1 %TO &COMPNUM;

    DATA &PREF.CORR&K;
      SET &PREF.CORRC;
      WHERE _NAME_ = "PRVVAR&K";
      ARRAY CORR   (&COMPNUM) COR&YR.V1-COR&YR.V&COMPNUM;
      ARRAY CORR&K (&COMPNUM) COR&YR.V&K.1-COR&YR.V&K.&COMPNUM;
      DO L=1 TO &COMPNUM;
         CORR&K(L)=CORR(L);
      END;
      KEEP GROUP &BYVAR COR&YR.V&K.1-COR&YR.V&K.&COMPNUM;
    RUN;
    %IF &K=1 %THEN %DO;
        DATA &PREF.CORR;
          SET &PREF.CORR&K;
        RUN;
    %END;
    %ELSE %DO;
       DATA &PREF.CORR;
         MERGE &PREF.CORR(IN=IN_1) &PREF.CORR&K(IN=IN_2);
          BY GROUP &BYVAR;
       RUN;
    %END;
    %IF &DEBUG=Y %THEN %DO;
       %IF &PREF=R %THEN %DO;
          PROC PRINT DATA=&PREF.CORR;
             WHERE GROUP=1;
          RUN;
       %END;
     %END;
 %END;

%MEND GETCORR;

%GETCORR(CONUS);
%GETCORR(XSERVAFF);
%GETCORR(XSERVREG);
%GETCORR(XTNEXREG);
%GETCORR(CACSMPL);

*******************************************************
***  Macro to derive composites for each         *******
***  beneficiary group, level                    *******
***  output one dataset for each group           *******
*******************************************************;

%MACRO GETPROP(BYVAR);

 %LET START = %EVAL(&CMPNUM1+1);

 %IF %UPCASE(&BYVAR)=XSERVREG %THEN %LET PREF=R;
 %ELSE %IF %UPCASE(&BYVAR)=CONUS %THEN %LET PREF=C;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %LET PREF=M;
 %ELSE %IF %UPCASE(&BYVAR)=XTNEXREG %THEN %LET PREF=S;
 %ELSE %IF %UPCASE(&BYVAR)=CACSMPL %THEN %LET PREF=D;


 PROC MEANS NWAY NOPRINT DATA=HCSDB;
    CLASS BGROUP &BYVAR;
    VAR NUM&YR.V1-NUM&YR.V&COMPNUM
        DEN&YR.V1-DEN&YR.V&COMPNUM;
    WEIGHT &WGT;
    OUTPUT OUT= &PREF.CMPSUM(DROP = _TYPE_)
    SUM =  ;
 RUN;
PROC MEANS NWAY NOPRINT DATA=normdata;
 *   CLASS &BYVAR;
```

```
        VAR
            DENV1-DENV&COMPNUM;
        WEIGHT &WGT;
        OUTPUT OUT= &PREF.norms(DROP = _TYPE_)
        SUM =  nrmv1-nrmv&compnum;
     RUN;
     PROC MEANS NWAY NOPRINT DATA=HCSDB;
        CLASS BGROUP &BYVAR;
        VAR DEN&YR.V1-DEN&YR.V&COMPNUM;
        OUTPUT OUT=&PREF.DGFR(DROP=_TYPE_ _FREQ_)
        SUM= NOBS&YR.V1-NOBS&YR.V&COMPNUM;
     RUN;
    data &pref.cmpsum;

    if _n_=1 then set &pref.norms;
    set &pref.cmpsum;
    proc sort data=&pref.cmpsum; by bgroup &byvar;
     DATA &PREF.CMPSUM;
       MERGE &PREF.CMPSUM(RENAME=(_FREQ_=N_OBS&YR.))
             &PREF.DGFR;
       BY BGROUP &BYVAR;

        %IF &PREF=M %THEN %DO;  /** added 7/10/2000 **/
            WHERE 1 <= XSERVAFF <= 4;          /** RSG 01/2005 Change conus values to keep to be
between 1-4 **/
        %END;
        %ELSE %IF &PREF=C %THEN %DO;
            WHERE CONUS = 1;
        %END;

       /**** set up group variable  **/

       RENAME BGROUP=GROUP;;

       /**** set up proportions, and composites **/

       ARRAY PROPORT PROP&YR.V1-PROP&YR.V&COMPNUM;
       ARRAY NUMER   NUM&YR.V1-NUM&YR.V&COMPNUM;
       ARRAY DENOM   DEN&YR.V1-DEN&YR.V&COMPNUM;
         array norm    nrmv1-nrmv&compnum;
     DO J=1 TO DIM(PROPORT);
          PROPORT(J) = NUMER(J)/DENOM(J);
       END;
       DROP J;


    ** added goalvars to datastep, 5/30/2000                ;
    ** taken out of temporary array for variance calculations;
    ** and used, kept as variables                           ;

       GOALVAR1=&GOALVAR1;
       GOALVAR2=&GOALVAR2;
       GOALVAR3=&GOALVAR3;
       GOALVAR4=&GOALVAR4;
       GOALVAR5=&GOALVAR5;
       GOALVAR6=&GOALVAR6;
       GOALVAR7=&GOALVAR7;

    ** the weight for preventive service is defined as the         ;
    **   proportion   of   the   denominator   for   that   service   to   the                    ;
;
    ** composite denominator                                       ;
    ** healthy people 2000 goals -- used as benchmarks             ;

       ARRAY   SVCWGT(&COMPNUM) WGT&YR.V1-WGT&YR.V&COMPNUM;
       ARRAY    BMARK(&COMPNUM) GOALVAR1-GOALVAR&COMPNUM;
       ARRAY WGTBMARK(&COMPNUM) WTD&YR.V1-WTD&YR.V&COMPNUM;
      array comp(&compnum) cmp&yr.v1-cmp&yr.v&compnum;
    cpden1=sum(of nrmv1-nrmv&cmpnum1);
    cpden2=sum(of nrmv&start-nrmv&compnum);
       DO K = 1 TO &COMPNUM;
          IF K < &START THEN SVCWGT(K)= norm(K)/cpden1;
          ELSE SVCWGT(K) = norm(K)/cpden2;
```

```
      WGTBMARK(K) = SVCWGT(K)*BMARK(K);
       comp(k)=svcwgt(k)*proport(k);
 END;
   DROP K;
   CP&YR.BMK1=SUM(OF WTD&YR.V1-WTD&YR.V&CMPNUM1);
   CP&YR.BMK2=SUM(OF WTD&YR.V&START-WTD&YR.V&COMPNUM);
   comp&yr.1=sum(of cmp&yr.v1-cmp&yr.v&cmpnum1);
   comp&yr.2=sum(of cmp&yr.v&start-cmp&yr.v&compnum);
   DROP WGT&YR.V1-WGT&YR.V&COMPNUM WTD&YR.V1-WTD&YR.V&COMPNUM
        NUM&YR.V1-NUM&YR.V&COMPNUM;

 RUN;

 %IF &DEBUG=Y AND &PREF=R %THEN %DO;

    PROC PRINT DATA=&PREF.CMPSUM;  /* print out final dataset */
    RUN;                                /* for region to check     */
 %END;

%MEND GETPROP;

%GETPROP(CONUS);
%GETPROP(XSERVAFF);
%GETprop(XSERVREG);
%GETPROP(XTNEXREG);
%GETPROP(CACSMPL);

*******************************************************
** since MHS benchmarks will be displayed           ****
** set up adjustment factor to apply to             ****
** each analytical unit's composite benchmarks      ****
*******************************************************;


DATA ADJUST;
   SET MCMPSUM(KEEP=GROUP CP&YR.BMK1 CP&YR.BMK2);
   WHERE GROUP=8;           /** use all beneficiaries **/
   RENAME CP&YR.BMK1=MHS&YR.BM1;
   RENAME CP&YR.BMK2=MHS&YR.BM2;
   DROP GROUP;
RUN;


*******************************************************;
***  Macro to merge 3 datasets for each          *******;
***  called by analytical unit                   *******;
***  output final dataset for                    *******;
***  Region, Catchment, MHS                      *******;
*******************************************************;
PROC FORMAT;  /*RSG 02/2005 - hardcoded in prog to have caps vs format in loadcahq.inc*/
   VALUE REGIONF
      0 = "CONUS MHS "
      1 = "NORTH"
      2 = "SOUTH"
      3 = "WEST"
      4 = "OVERSEAS";


%MACRO GETSIG(BYVAR);

 %LET START = %EVAL(&CMPNUM1+1);
 %LET NEXT  = %EVAL(&CMPNUM1+2);

 %IF %UPCASE(&BYVAR)=XSERVREG %THEN %LET PREF=R;
 %ELSE %IF %UPCASE(&BYVAR)=CONUS %THEN %LET PREF=C;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %LET PREF=M;
 %ELSE %IF %UPCASE(&BYVAR)=XTNEXREG %THEN %LET PREF=S;
 %ELSE %IF %UPCASE(&BYVAR)=CACSMPL %THEN %LET PREF=D;


 DATA OUT.&PREF.FINAL (KEEP= MAJGRP REGION REGCAT GOALVAR1-GOALVAR&COMPNUM
                SIG&YR.V1-SIG&YR.V&COMPNUM SCOR&YR.V1-SCOR&YR.V&COMPNUM
                CP&YR.SIG1-CP&YR.SIG&COMPCNT CP&YR.1SE CP&YR.2SE
```

```
                CP&YR.BMK1-CP&YR.BMK&COMPCNT
                SERR&YR.V1-SERR&YR.V&COMPNUM CP&YR.1SE CP&YR.2SE
                COMP&YR.1 COMP&YR.2 PROP&YR.V1-PROP&YR.V&COMPNUM
                DF&YR.SCR1-DF&YR.SCR&COMPNUM DF&YR._CP1 DF&YR._CP2
                NOBS&YR.V1-NOBS&YR.V&COMPNUM CP&YR.OBS1-CP&YR.OBS&COMPCNT
                DEN&YR.V1-DEN&YR.V&COMPNUM CP&YR.DEN1-CP&YR.DEN&COMPCNT);


      /** output a dataset to check **/

        /* OUT.&PREF.CHECK(DROP=DROP=SESQ&YR.V1-SESQ&YR.V&COMPNUM
                          PROP&YR.V1-PROP&YR.V&COMPNUM
                          SEM&YR.V11-SEM&YR.V&COMPNUM.&COMPNUM);*/

       FORMAT MAJGRP $30. REGION $25. REGCAT $42.;

       %IF &PREF=D %THEN %DO;

          MERGE OBSCNT(IN=IN_OBS) &PREF.CMPSUM(IN=IN_PROP) &PREF.CORR
                &PREF.SERR;
          BY GROUP &BYVAR;
          IF IN_OBS;

       %END;
       %ELSE %DO;

          MERGE &PREF.CMPSUM(IN=IN_PROP) &PREF.CORR
                &PREF.SERR;
          BY GROUP &BYVAR;
          IF IN_PROP;

       %END;

       /**  MAJGRP -- text field for group   **/

           IF GROUP=1 THEN MAJGRP="Prime Enrollees            ";
       ELSE IF GROUP=2 THEN MAJGRP="Enrollees with Military PCM";
       ELSE IF GROUP=3 THEN MAJGRP="Enrollees with Civilian PCM";
       ELSE IF GROUP=4 THEN MAJGRP="Non-enrolled Beneficiaries ";
       ELSE IF GROUP=5 THEN MAJGRP="Active Duty                ";
       ELSE IF GROUP=6 THEN MAJGRP="Active Duty Dependents     ";
       ELSE IF GROUP=7 THEN MAJGRP="Retirees and Dependents    ";
       ELSE IF GROUP=8 THEN MAJGRP="All Beneficiaries          ";


       /**** REGION AND REGCAT SETUP          **/

       %IF &PREF=D %THEN %DO;
          REGCAT=PUT(CACSMPL, CACR.);
          REGION=PUT(XSERVind, SERVREGo.);
       %END;
       %IF &PREF=S %THEN %DO;
           REGCAT=PUT(XTNEXREG,REGIONF.);
           REGION=PUT(XTNEXREG,REGIONF.);
       %END;
       %else %IF &PREF=C %THEN %DO;
           REGION="CONUS MHS";
           REGCAT="CONUS MHS";
       %END;
       %ELSE %IF &PREF=R %THEN %DO;
           REGION=PUT(XSERVREG, SERVREGo.);
           REGCAT=PUT(XSERVREG, SERVREGo.);
       %END;
       %ELSE %IF &PREF=M %THEN %DO;                          /** RSG 1/2005 Add codes for service
grouping **/
           REGION=PUT(XSERVAFF,XSERVAFF.);
           REGCAT=PUT(XSERVAFF,XSERVAFF.);
       %END;

       /**** setup t statistics, degreees of freedom    **/

       ARRAY    TSTAT{&COMPNUM} T_&YR.V1-T_&YR.V&COMPNUM;
       ARRAY    BMARK{&COMPNUM} GOALVAR1-GOALVAR&COMPNUM;
```

```
ARRAY  STNDERR{&COMPNUM} SERR&YR.V1-SERR&YR.V&COMPNUM;
ARRAY  SERRSQR{&COMPNUM} SESQ&YR.V1-SESQ&YR.V&COMPNUM;
ARRAY     DEGF{&COMPNUM} DF&YR.SCR1-DF&YR.SCR&COMPNUM;
ARRAY    DENOM{&COMPNUM} DEN&YR.V1-DEN&YR.V&COMPNUM;
ARRAY  PROPORT{&COMPNUM} PROP&YR.V1-PROP&YR.V&COMPNUM;
ARRAY    SCORE{&COMPNUM} SCOR&YR.V1-SCOR&YR.V&COMPNUM;
ARRAY   PVALUE{&COMPNUM} PVAL&YR.V1-PVAL&YR.V&COMPNUM;
ARRAY      SIG{&COMPNUM} SIG&YR.V1-SIG&YR.V&COMPNUM;
ARRAY    N_OBS{&COMPNUM} NOBS&YR.V1-NOBS&YR.V&COMPNUM;
array    norm{&compnum} nrmv1-nrmv&compnum;
/** get the item variance, t-statistics, df, p-values **/
/** and whether significant                            **/

DO I=1 TO &COMPNUM;
   SERRSQR{I}=STNDERR{I}**2;  /* Item variance */
   SCORE{I}=PROPORT{I}*100;   /* Score (prop. * 100) */
   IF STNDERR{I} > 0 THEN TSTAT{I}=(PROPORT{I}-BMARK{I})/STNDERR{I};
   ELSE TSTAT{I}=.;
   DEGF{I}=N_OBS{I}-1;
   PVALUE{I}=(1-PROBT(ABS(TSTAT{I}),DEGF{I}))*2;
   IF PVALUE{I} GE .05 THEN SIG{I}=0;
   ELSE IF PVALUE{I} < .05 THEN DO;
      IF PROPORT{I} > BMARK{I} THEN SIG{I}=1;
      IF PROPORT{I} < BMARK{I} THEN SIG{I}=-1;
   END;
END;
DROP I;

/** multiply each item pair std. errors and correlation coefficients **/
/** preventive care composite                                        **/

ARRAY SERRC1{&CMPNUM1} SERR&YR.V1-SERR&YR.V&CMPNUM1;
ARRAY SEwC1{&CMPNUM1} SEw&YR.V1-SEw&YR.V&CMPNUM1;
%DO J = 1 %TO &CMPNUM1;
   ARRAY  SMEAN&J{&CMPNUM1} SEM&YR.V&J.1-SEM&YR.V&J.&CMPNUM1;
   ARRAY CORVAR&J{&CMPNUM1} COR&YR.V&J.1-COR&YR.V&J.&CMPNUM1;
   DO K=1 TO &CMPNUM1;
      SMEAN&J{K}=SERR&YR.V&J*SERRC1{K}*CORVAR&J{K}*norm{K}*nrmV&J;
   END;
   SEM&YR.V&J.&J=0; /** don't count in final standard error calculation **/
   sew&yr.v&j= (nrmV&j**2)*SESQ&YR.V&j;
   %END;
DROP K;
/** multiply each item pair std. errors and correlation coefficients **/
/** access to care composite                                         **/

ARRAY SERRC2{&CMPNUM2} SERR&YR.V&START-SERR&YR.V&COMPNUM;

%DO L = &START %TO &COMPNUM;
   ARRAY  SMEAN&L{&CMPNUM2} SEM&YR.V&L.&START-SEM&YR.V&L.&COMPNUM;
   ARRAY CORVAR&L{&CMPNUM2} COR&YR.V&L.&START-COR&YR.V&L.&COMPNUM;
   DO M=1 TO &CMPNUM2;
      SMEAN&L{M}=SERR&YR.V&L*SERRC2{M}*CORVAR&L{M};
   END;
   SEM&YR.V&L.&L=0;  /** don't coun't in final standard error calculation **/
 %END;
 DROP M;
/** calculate composite t-statistic, pvalue, and whether significant **/
/** for composites                                                   **/

 %DO P=1 %TO &COMPCNT;
    %IF &P=1 %THEN %DO;

       /** composite standard error comprised of two parts **/
       CP&YR.&P.SE1=SUM(OF SEw&YR.V1-SEw&YR.V&CMPNUM1);
       CP&YR.&P.SE2=SUM(OF SEM&YR.V11-SEM&YR.V&CMPNUM1.&CMPNUM1.);
       cp&yr.obs&p=sum(of nobs&yr.v1-nobs&yr.v&cmpnum1);
       cp&yr.den&p=sum(of nrmv1-nrmv&cmpnum1);
    %END;
    %ELSE %DO;
       CP&YR.&P.SE1=SUM(OF SESQ&YR.V&START-SESQ&YR.V&COMPNUM);
       CP&YR.&P.SE2=SUM(OF SEM&YR.V&START.&START.-SEM&YR.V&COMPNUM.&COMPNUM.);
```

```
          %END;

        /** add the two parts of the composite standard error  **/
        /** calculate the composite t statistics and p-values  **/
        /** determine whether differences re sigificant       **/

       /**RSG - 02/2005 Some of the following codes will produce some
                "error" (e.g., fields that are not initialized) - these
                are "leftover" codes from previous versions of the survey
                where 2 composite scores were produced.  Now since we only
                use 1 composite score, these are basically calculations that
                are not used...but kept in "just in case"**/
          IF CP&YR.DEN&P > 0 THEN CP&YR.&P.SE=SQRT(CP&YR.&P.SE2+CP&YR.&P.SE1)/cp&yr.den&P;   /*RSG
02/2005 prevent division by zero*/
          ELSE CP&YR.&P.SE = .;
          IF CP&YR.&P.SE > 0 THEN CP&YR._T&P.=(COMP&YR.&P.-CP&YR.BMK&P.)/CP&YR.&P.SE;
          ELSE CP&YR._T&P.= .;
          DF&YR._CP&P.=CP&YR.OBS&P. - 1;
          CP&YR._P&P.=(1-PROBT(ABS(CP&YR._T&P.),DF&YR._CP&P.))*2;
          IF CP&YR._P&P GE .05 THEN CP&YR.SIG&P=0;
          ELSE IF CP&YR._P&P < .05 THEN DO;
             IF COMP&YR.&P. > CP&YR.BMK&P THEN CP&YR.SIG&P= 1;
             ELSE IF COMP&YR.&P. < CP&YR.BMK&P THEN CP&YR.SIG&P=-1;
          END;

        %END;

        OUTPUT OUT.&PREF.FINAL;

        /*%IF &PREF=M %THEN %DO;
           OUTPUT OUT.&PREF.CHECK;
        %END; */

     RUN;

    %MEND GETSIG;

    /** RSG 02/2005 - Any errors relating to unintialized fields such as
        cp&yr.den2 or cp&yr.obs2 can be ignored - these (as well as field
        that uses these fields for calculations, e.g. df&yr._cp2, are not
        used **/
    %GETSIG(CONUS);
    %GETSIG(XTNEXREG);
    %GETSIG(XSERVREG);
    %GETSIG(XSERVAFF);
    %GETSIG(CACSMPL);

    ENDSAS;
```

G.11.B REPORTCARDS\MPR_ADULT2007\SMOKING_BMI.SAS - CALCULATE HEALTHY BEHAVIOR COMPOSITE SCORES - ANNUAL.

```
*************************************************************************
*
*  Project:   DoD Reporting and Analysis 6244-410
*  Program:   SMOKING_BMI.SAS
*  Purpose:   Calculate Smoking Rate and Smoking Cessation
*             for each region-service affiliation and
*             conus-service affiliation groups.
*
*  Date:      1/31/2005
*  Author:    Regina Gramss
*
*  Modified:  1) 04/2005 By Regina Gramss, Updated for Q1 2005.
*             2) 12/2005 By Regina Gramss, Updated for Q4 2005.
*             3) 01/2006 By Regina Gramss - Updated for 2005 annual data.  Normalize
*                with 2005 data and not 2000.  Standardize using age/sex and MPCSMPL
*                (military personnel category).  Update smoking cessation
*                calculation with new formula to correspond more to HEDIS.  Use new
*                weight (CFWT) and use STRATUM as TMP_CELL.
*             4) 11/06/2006 By Keith Rathbun, Updated for 2006 survey.  Use CAHPS
*                2005 benchmark data.  Added quarterly update for overseas change.
*
*   Inputs:   1) 2006 Survey data: 2006\Data\HCS06A_1.SD2
*             2) 2005 CAHPS Benchmark Data: AC2005DB.SD2
*
*   Output:   SMOKE.SD2
*
*
*************************************************************************;
OPTIONS COMPRESS=YES NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMTERR;
LIBNAME BENCH  V612 "..\..\..\..\2005AdultChildNCBD\AC";
LIBNAME INDAT  v612 "..\..\..\Data";
LIBNAME INNORM v612 "..\..\..\..\2005\Data";
LIBNAME OUT    V612 ".";
LIBNAME LIBRARY '..\..\..\Data\fmtlib';
LIBNAME INGP '..\CAHPS_ADULT2007\DATA';

%LET DSN=HCS07A_1;
%LET DSN_NORM=HCS05A_1;
%LET REGNUM = 15;      /* KRR 11/2006 Changed from 16 to 15 */
%LET CONNUM = 4;
%LET CURRENT = 2007;
%LET WGT = CFWT;
%LET NORMWGT = CFWT;
%LET CATCHNUM=9999;

DATA BENCHA01;
   SET BENCH.AC2005DB (RENAME=(BIRTHYY=YOB));
   if product in (7,9) then model=4;
   if product=3 then model=2;                    /*coded according to AC FORMATS.SAS*/
   if product=1 then model=1;
   if product=4 then model=6;
   if product=8 then model=5;
   if product=2 then model=3;
   product=planid;
   if ^(model in (2,4));
   if disp in ('M10','I10')  ;
   if  ac52_05=1  &  (ac53_05  in  (1,2)  |(ac53_05=3  &  ac54_05=1))  &  ac55_05>=0  &  ac55_05<=4;
/*11/2006 KRR Updated for 2005 variable names*/
   cessbnch=0;
   if ac55_05>0 then cessbnch=1;
RUN;

proc summary nway; class product;
var cessbnch;
output out=tbench mean=;
proc print;
proc summary;
var cessbnch;
output out=tbench mean=;
```

```
proc print;
data _null_;
set tbench;
call symput('CNSLGOAL',cessbnch);
run;

%LET NSMKGOAL = 0.88;

%LET BMIGOAL  = 0.85;

%INCLUDE "..\..\LoadWeb\LOADCAHQ.INC";

PROC FORMAT;
VALUE AGEF
LOW - 34 = 1
 35 - 49 = 2
 50 - 64 = 3
 65 - HIGH = 4;

DATA NORMDATA (KEEP=TMP_CELL AGE_GRP XTNEXREG XSERVREG XSERVAFF XREGION
SM_RATE SM_CESS SM_RTDN SM_CSDN  BMI_DN BMI
                   TOTCON GROUP XSEXA &WGT. age_n MPCSMPL CACSMPL NXNS_COV);
                   /* 05/10/2007 JSO Added NXNS_COV in the keep statement */
SET INNORM.&DSN_NORM. (DROP=CACSMPL);
LENGTH AGE_N AGE_GRP TMP_CELL 8.;

TMP_CELL=STRATUM;

AGE_N = FIELDAGE;

AGE_GRP = PUT(AGE_N, AGEF.);
IF AGE_GRP<4;

IF SERVAFF = 'A' THEN XSERVAFF = 1;        *Army;
ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;   *Air Force;
ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;   *Navy;
ELSE XSERVAFF = 4;                         *Other/unknown;

IF XTNEXREG = 1 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 1;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
   ELSE XSERVREG = 4;
END;

IF XTNEXREG = 2 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 5;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
   ELSE XSERVREG = 8;
END;

IF XTNEXREG = 3 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 9;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
   ELSE XSERVREG = 12;
END;

IF XTNEXREG = 4 THEN DO; *KRR Updated 11/06/2006;
   IF      XREGION = 13 THEN XSERVREG = 13;
   ELSE IF XREGION = 14 THEN XSERVREG = 14;
   ELSE IF XREGION = 15 THEN XSERVREG = 15;
END;
IF HP_SMOKH IN (1,2) THEN DO;
   SM_RATE = 0;
   IF HP_SMOKH = 2 THEN SM_RATE=1;
   SM_RTDN=1;
END;

if hp_smokh=1 & h05055>0 then do;     /*RSG 02/2006 NEW SMOKING CESSATION FORMULA AS PER ERIC
SCHONE */
   if h05055>1 then sm_cess=1;
```

```
   else sm_cess=0;
   sm_csdn=1;
end;

IF xbmicat > 0  THEN DO;
    BMI = 0;
    BMI_DN=1;
   IF xbmicat <=3 THEN BMI=1;
END;

IF XTNEXREG IN (1,2,3) THEN TOTCON=1;

ELSE IF XTNEXREG = 4 THEN TOTCON=2;

IF MPCSMPL = 3 THEN MPCSMPL = 2;  /* RSG 02/2006 GROUP WARRANT OFFICER WITH OFFICER */

RENAME XCATCH=CACSMPL &NORMWGT = &WGT;

IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

IF XTNEXREG = .    THEN DELETE;

IF XINS_COV NOT IN(1,2,3,6,9) THEN DELETE;  /*JSO 07/30/2007, Added 9*/

NXNS_COV = XINS_COV;              /*JSO 04/26/2007 added for reservists logic*/
                                  /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
IF DBENCAT IN('GRD','IGR') AND H05006 = 3 THEN DO;
   NXNS_COV = 3;
   XENR_PCM = .;
END;

* prime enrollees;
IF NXNS_COV IN (1,2,6) AND H05007>=2 THEN DO;
   GROUP=1;
   OUTPUT;
END;

* enrollees with military pcms;
IF XENR_PCM IN (1,2,6) AND H05007>=2 THEN DO;
   GROUP=2;
   OUTPUT;
END;

* enrollees with civilian pcms;
IF XENR_PCM = 3 AND H05007>=2 THEN DO;
   GROUP=3;
   OUTPUT;
END;

* nonenrollees;
IF NXNS_COV IN (3,9) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
   GROUP=4;                   /*JSO 07/30/2007, Added 9*/
   OUTPUT;
END;

* active duty;
IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
   GROUP=5;        /*JSO 07/30/2007, added DBENCAT conditions*/
   OUTPUT;
END;

* active duty dependents;
IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR')THEN DO;
   GROUP=6;        /*JSO 07/30/2007, added DBENCAT conditions*/
   OUTPUT;
END;

* retirees;
IF XBNFGRP IN (3,4) THEN DO;
   GROUP=7;
   OUTPUT;
END;
```

```
     * all beneficiaries;
     GROUP=8;
     OUTPUT;

     RUN;

     DATA SMOKE (KEEP=TMP_CELL AGE_GRP XTNEXREG XSERVREG XSERVAFF TOTCON GROUP
                     SM_RATE SM_CESS SM_RTDN SM_CSDN XSEXA &WGT BMI_DN BMI XREGION
                     CACSMPL  MPCSMPL  NXNS_COV);/*  05/10/2007  JSO  Added  NXNS_COV  in  the  keep
statement */
     SET INDAT.&DSN.(DROP=CACSMPL);
     LENGTH AGE_N AGE_GRP TMP_CELL 8.;

     TMP_CELL=STRATUM;

     AGE_N = FIELDAGE;

     AGE_GRP = PUT(AGE_N, AGEF.);
     IF AGE_GRP<4;

     IF SERVAFF='A' THEN XSERVAFF=1;              *Army;
        ELSE IF SERVAFF='F' THEN XSERVAFF=2;      *Air Force;
        ELSE IF SERVAFF='N' THEN XSERVAFF=3;      *Navy;
        ELSE XSERVAFF=4;

     IF XTNEXREG = 1 THEN DO;
        IF XSERVAFF = 1 THEN XSERVREG = 1;
        ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
        ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
        ELSE XSERVREG = 4;
     END;

     IF XTNEXREG = 2 THEN DO;
        IF XSERVAFF = 1 THEN XSERVREG = 5;
        ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
        ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
        ELSE XSERVREG = 8;
     END;

     IF XTNEXREG = 3 THEN DO;
        IF XSERVAFF = 1 THEN XSERVREG = 9;
        ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
        ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
        ELSE XSERVREG = 12;
     END;

     IF XTNEXREG = 4 THEN DO; *KRR Updated 11/06/2006;
        IF      XREGION = 13 THEN XSERVREG = 13;
        ELSE IF XREGION = 14 THEN XSERVREG = 14;
        ELSE IF XREGION = 15 THEN XSERVREG = 15;
     END;

     IF XTNEXREG IN (1,2,3) THEN TOTCON=1;

     ELSE IF XTNEXREG=4 THEN TOTCON=2;

     IF MPCSMPL = 3 THEN MPCSMPL = 2;  /* RSG 02/2006 GROUP WARRANT OFFICER WITH OFFICER */

     RENAME XCATCH=CACSMPL;

     IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

     IF XTNEXREG = . THEN DELETE;

     IF XINS_COV NOT IN(1,2,3,6,9) THEN DELETE;  /*JSO 07/30/2007, Added 9*/

     NXNS_COV = XINS_COV;              /*JSO 04/26/2007 added for reservists logic*/
                                       /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
     IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
     IF DBENCAT IN('GRD','IGR') AND H07006 = 3 THEN DO;
        NXNS_COV = 3;
        XENR_PCM = .;
```

```
    END;

    IF HP_SMOKH IN (1,2) THEN DO;
       SM_RATE = 0;
       IF HP_SMOKH = 2 THEN SM_RATE=1;
       SM_RTDN=1;
    END;

    if hp_smokh=1 & H07055>0 then do;     /*RSG 02/2006 NEW SMOKING CESSATION FORMULA AS PER ERIC
SCHONE */
       if H07055>1 then sm_cess=1;
       else sm_cess=0;
       sm_csdn=1;
    end;

    IF xbmicat > 0  THEN DO;
        BMI = 0;
        BMI_DN=1;
       IF xbmicat <=3 THEN BMI=1;
    END;

    * prime enrollees;
    IF NXNS_COV IN (1,2,6) AND H07007>=2 THEN DO;
       GROUP=1;
       OUTPUT;
    END;

    * enrollees with military pcms;
    IF XENR_PCM IN (1,2,6) AND H07007>=2 THEN DO;
       GROUP=2;
       OUTPUT;
    END;

    * enrollees with civilian pcms;
    IF XENR_PCM = 3 AND H07007>=2 THEN DO;
       GROUP=3;
       OUTPUT;
    END;

    * nonenrollees;
    IF NXNS_COV IN (3,9) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
       GROUP=4;                   /*JSO 07/30/2007, Added 9*/
       OUTPUT;
    END;

    * active duty;
    IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
       GROUP=5;        /*JSO 07/30/2007, added DBENCAT conditions*/
       OUTPUT;
    END;

    * active duty dependents;
    IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN DO;
       GROUP=6;        /*JSO 07/30/2007, added DBENCAT conditions*/
       OUTPUT;
    END;

    * retirees;
    IF XBNFGRP IN (3,4) THEN DO;
       GROUP=7;
       OUTPUT;
    END;

    * all beneficiaries;
    GROUP=8;
    OUTPUT;

    RUN;
    proc freq;
    table xservreg*cacsmpl/list;
    PROC SORT DATA=SMOKE;
    BY TMP_CELL;
    PROC SORT DATA=NORMDATA;
```

```
BY TMP_CELL;
RUN;

%MACRO A_SUDAAN(TABLEVAR,SMOKE,SMOKEVAR,DEN);

%IF %UPCASE(&TABLEVAR)=XSERVREG %THEN %DO;
    %LET ENDNUM=&REGNUM;
   %LET PREF=R;
%END;
%ELSE %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
    %LET ENDNUM=&CONNUM;
   %LET PREF=M;
%END;
%ELSE %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
    %LET ENDNUM=&CONNUM;
   %LET PREF=S;
%END;
%ELSE %IF %UPCASE(&TABLEVAR)=CACSMPL %THEN %DO;   /**RSG 02/2005 add code to calc by CACSMPL**/
    %LET ENDNUM=&CATCHNUM;
    %LET PREF=D;
%END;

%ELSE %IF %UPCASE(&TABLEVAR)=TOTCON %THEN %LET PREF=C;

%DO I = 1 %TO 8;

    DATA INDAT&I.(KEEP=&WGT XSERVAFF XSERVREG AGE_GRP XSEXA CACSMPL MPCSMPL
                     &SMOKEVAR. &DEN. TMP_CELL XTNEXREG);
   SET SMOKE;
    WHERE XSERVREG > 0 AND GROUP=&I. AND &DEN. >= 0;
       %IF %UPCASE(&TABLEVAR) = XSERVAFF %THEN %DO;
           IF XSERVAFF > 4 OR XSERVAFF = . THEN DELETE;
       %END;
      %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
          IF TOTCON NE 1 THEN DELETE;
      %END;
      %IF %UPCASE(&TABLEVAR) = XTNEXREG %THEN %DO;
          IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
      %END;
    RUN;


       DATA NORMDAT&I.(KEEP=&WGT XSERVAFF XSERVREG AGE_GRP XSEXA &SMOKEVAR. &DEN.
                           TMP_CELL XTNEXREG MPCSMPL);
           SET NORMDATA;
                WHERE XSERVREG > 0 AND GROUP=&I.;

                %IF %UPCASE(&TABLEVAR) = XSERVAFF %THEN %DO;
                    IF XSERVAFF > 4 OR XSERVAFF = . THEN DELETE;
                %END;
           %IF %UPCASE(&TABLEVAR) = XTNEXREG %THEN %DO;
               IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
           %END;

             RUN;

          %IF %UPCASE(&SMOKE) NE CS AND %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
                    PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
                    WEIGHT &WGT;
                    SETENV DECWIDTH=4;
                    NEST TMP_CELL / missunit;
                    VAR &SMOKEVAR;
                    TABLES AGE_GRP*XSEXA*MPCSMPL*&TABLEVAR.;
                    SUBGROUP AGE_GRP XSEXA MPCSMPL &TABLEVAR.;
                    LEVELS 8 2 2 &ENDNUM.;
                    OUTPUT  SEMEAN MEAN wsum nsum
                            / TABLECELL=DEFAULT REPLACE
                              FILENAME=&PREF.GRP&I.&SMOKE.;
                    RUN;
          %END;
          %ELSE %IF %UPCASE(&SMOKE) NE CS AND %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
                    PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
                    WEIGHT &WGT;
```

```
                    SETENV DECWIDTH=4;
                    NEST TMP_CELL / missunit;
                    VAR &SMOKEVAR;
                    TABLES AGE_GRP*XSEXA*MPCSMPL;
                    SUBGROUP AGE_GRP XSEXA MPCSMPL;
                    LEVELS 3 2 2;
                    OUTPUT  SEMEAN MEAN wsum nsum
                            / TABLECELL=DEFAULT REPLACE
                              FILENAME=&PREF.GRP&I.&SMOKE.;
                    RUN;
            %END;

    %IF %UPCASE(&SMOKE) NE CS %THEN %DO;

               DATA &PREF.SER_&I.&SMOKE.;
               SET &PREF.GRP&I.&SMOKE.;
               GROUP=&I.;
               IF SEMEAN NE .;
               %IF %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
                   KEEP &TABLEVAR. GROUP AGE_GRP XSEXA MPCSMPL SEMEAN MEAN wsum nsum;
               %END;
               %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
                   TOTCON=1;
                   KEEP TOTCON GROUP AGE_GRP XSEXA MPCSMPL SEMEAN MEAN wsum nsum;
               %END;
            RUN;

            /* CREATE WEIGHTS */
            proc summary data=normdat&i. nway;
                  var &WGT;
                  where &den>0;
                  class age_grp xsexa MPCSMPL;
                  output out=norm_&i. sum=normwt;

                  proc sort data=&pref.ser_&i.&smoke.;
                  by age_grp xsexa mpcsmpl;

                  data &pref.ser_&i.&smoke.;
                  merge &pref.ser_&i.&smoke.(in=gin) norm_&i.;
                  by age_grp xsexa mpcsmpl;
                  if gin;
                  wsum=wsum/normwt;
                  nsum=nsum/normwt;
                  sesq=normwt*semean**2;
                  run;

                  proc summary data=&pref.ser_&i.&smoke. nway;
                  var mean semean sesq wsum nsum;
                  class &tablevar.;
                  weight normwt;
                  output    out=&pref.sert&i.&smoke.    mean(mean    sesq)=    sum(wsum    nsum)=
sumwgt(semean)=;
                  run;

            data &pref.sert&i.&smoke;
               set &pref.sert&i.&smoke;
               group=&i.;
                     semean=sqrt(sesq/semean);
               drop _type_ _freq_;
            run;

            %IF &I. = 1 %THEN %DO;

                DATA &PREF._&SMOKE.;
                SET &PREF.SERT&I.&SMOKE.;
                RUN;
            %END;
            %ELSE %DO;

                DATA &PREF._&SMOKE.;
                      SET &PREF._&SMOKE. &PREF.SERT&I.&SMOKE.;
                RUN;
```

```
            PROC SORT DATA=&PREF._&SMOKE.;
            BY GROUP;
            RUN;

        %END;

 %END;
        %IF %UPCASE(&SMOKE) = CS AND %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
                  PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
                  WEIGHT &WGT;
                  SETENV DECWIDTH=4;
                  NEST TMP_CELL / missunit;
                  VAR &SMOKEVAR;
                  TABLES AGE_GRP*XSEXA*&TABLEVAR.;
                  SUBGROUP AGE_GRP XSEXA &TABLEVAR.;
                  LEVELS 3 2 &ENDNUM.;
                  OUTPUT  SEMEAN MEAN wsum nsum
                          / TABLECELL=DEFAULT REPLACE
                            FILENAME=&PREF.GRP&I.&SMOKE.;
                  RUN;
        %END;
        %ELSE %IF %UPCASE(&SMOKE) = CS AND %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
                  PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
                  WEIGHT &WGT;
                  SETENV DECWIDTH=4;
                  NEST TMP_CELL / missunit;
                  VAR &SMOKEVAR;
                  TABLES AGE_GRP*XSEXA;
                  SUBGROUP AGE_GRP XSEXA;
                  LEVELS 3 2 ;
                  OUTPUT  SEMEAN MEAN wsum nsum
                          / TABLECELL=DEFAULT REPLACE
                            FILENAME=&PREF.GRP&I.&SMOKE.;
                  RUN;
        %END;

%IF %UPCASE(&SMOKE) = CS %THEN %DO;

           DATA &PREF.SER_&I.&SMOKE.;
           SET &PREF.GRP&I.&SMOKE.;
           GROUP=&I.;
           IF SEMEAN NE .;
           %IF %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
               KEEP &TABLEVAR. GROUP AGE_GRP XSEXA SEMEAN MEAN wsum nsum;
           %END;
           %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
               TOTCON=1;
               KEEP TOTCON GROUP AGE_GRP XSEXA SEMEAN MEAN wsum nsum;
           %END;
        RUN;

        /* CREATE WEIGHTS */
        proc summary data=normdat&i. nway;
              var &WGT;
              where &den>0;
              class age_grp xsexa;
              output out=norm_&i. sum=normwt;

              proc sort data=&pref.ser_&i.&smoke.;
              by age_grp xsexa;

              data &pref.ser_&i.&smoke.;
              merge &pref.ser_&i.&smoke.(in=gin) norm_&i.;
              by age_grp xsexa;
              if gin;
              wsum=wsum/normwt;
              nsum=nsum/normwt;
              sesq=normwt*semean**2;
              run;

              proc summary data=&pref.ser_&i.&smoke. nway;
              var mean semean sesq wsum nsum;
              class &tablevar.;
```

```
                    weight normwt;
                    output    out=&pref.sert&i.&smoke.    mean(mean    sesq)=    sum(wsum    nsum)=
sumwgt(semean)=;
                    run;

               data &pref.sert&i.&smoke;
                  set &pref.sert&i.&smoke;
                  group=&i.;
                        semean=sqrt(sesq/semean);
                  drop _type_ _freq_;
               run;





            %IF &I. = 1 %THEN %DO;

            DATA &PREF._CESS;
            SET &PREF.SERT&I.&SMOKE.;
            RUN;
            %END;
            %ELSE %DO;

            DATA &PREF._CESS;
                   SET &PREF._CESS &PREF.SERT&I.&SMOKE.;
                 RUN;

            PROC SORT DATA=&PREF._CESS;
            BY GROUP;
            RUN;

            %END;

         %END;
    %END;

    %MEND;

    %A_SUDAAN(XSERVAFF,RT,SM_RATE,SM_RTDN);
    %A_SUDAAN(XSERVAFF,CS,SM_CESS,SM_CSDN);
    %A_SUDAAN(XSERVAFF,BM,BMI,BMI_DN);
    %A_SUDAAN(XSERVREG,RT,SM_RATE,SM_RTDN);
    %A_SUDAAN(XSERVREG,CS,SM_CESS,SM_CSDN);
    %A_SUDAAN(XSERVREG,BM,BMI,BMI_DN);
    %A_SUDAAN(XTNEXREG,RT,SM_RATE,SM_RTDN);
    %A_SUDAAN(XTNEXREG,CS,SM_CESS,SM_CSDN);
    %A_SUDAAN(XTNEXREG,BM,BMI,BMI_DN);
    %A_SUDAAN(TOTCON,RT,SM_RATE,SM_RTDN);
    %A_SUDAAN(TOTCON,CS,SM_CESS,SM_CSDN);
    %A_SUDAAN(TOTCON,BM,BMI,BMI_DN);
    %A_SUDAAN(CACSMPL,RT,SM_RATE,SM_RTDN);
    %A_SUDAAN(CACSMPL,CS,SM_CESS,SM_CSDN);
    %A_SUDAAN(CACSMPL,BM,BMI,BMI_DN);

    %MACRO ADDIT(PREF, TYPE);

    DATA &PREF._&TYPE;
    SET &PREF._&TYPE;
    LENGTH BENEFIT $34. BENTYPE $50.;

    BENEFIT="Healthy Behaviors";
        %IF &TYPE=RT %THEN %DO;
            BENTYPE="Non-Smoking Rate";
        %END;
        %IF &TYPE=CESS %THEN %DO;
            BENTYPE="Counselled To Quit";
        %END;
        %IF &TYPE = BM %THEN %DO;
            BENTYPE = "Percent Not Obese";
        %END;
```

```
RUN;

%MEND;

%ADDIT(C,RT);
%ADDIT(C,CESS);
%ADDIT(C,BM);
%ADDIT(M,RT);
%ADDIT(M,CESS);
%ADDIT(M,BM);
%ADDIT(R,RT);
%ADDIT(R,CESS);
%ADDIT(R,BM);
%ADDIT(S,RT);
%ADDIT(S,CESS);
%ADDIT(S,BM);
%ADDIT(D,RT);
%ADDIT(D,CESS);
%ADDIT(D,BM);

proc freq data=ingp.group8 noprint;
tables cacsmpl*xservind / list out=cacformat(drop=count percent);
run;



%MACRO MAKEDATA(PREF, TABLEVAR);
  DATA &PREF._SMOKE;
   SET &PREF._RT
       &PREF._CESS
       &PREF._BM
;

   LENGTH MAJGRP  REGION REGCAT $30.;

    IF      GROUP=1 THEN MAJGRP="Prime Enrollees            ";
    ELSE IF GROUP=2 THEN MAJGRP="Enrollees with Military PCM";
    ELSE IF GROUP=3 THEN MAJGRP="Enrollees with Civilian PCM";
    ELSE IF GROUP=4 THEN MAJGRP="Non-enrolled Beneficiaries ";
    ELSE IF GROUP=5 THEN MAJGRP="Active Duty                ";
    ELSE IF GROUP=6 THEN MAJGRP="Active Duty Dependents     ";
    ELSE IF GROUP=7 THEN MAJGRP="Retirees and Dependents    ";
    ELSE IF GROUP=8 THEN MAJGRP="All Beneficiaries          ";

   %IF &TABLEVAR = XSERVAFF %THEN %DO;
       IF XSERVAFF = 1 THEN REGION = 'ARMY';
       IF XSERVAFF = 2 THEN REGION = 'AIR FORCE';
       IF XSERVAFF = 3 THEN REGION = 'NAVY';
       IF XSERVAFF = 4 THEN REGION = 'OTHER';
   %END;

   %IF &TABLEVAR = XSERVREG %THEN %DO;
           REGION = PUT(XSERVREG,SERVREGO.);
   %END;

   %IF &TABLEVAR = XTNEXREG %THEN %DO;
        IF XTNEXREG=1 THEN REGION="NORTH";
       ELSE IF XTNEXREG=2 THEN REGION="SOUTH";
       ELSE IF XTNEXREG=3 THEN REGION="WEST";
       ELSE IF XTNEXREG=4 THEN REGION="OVERSEAS";
   %END;

   %IF &TABLEVAR = TOTCON %THEN %DO;
        REGION = "CONUS MHS";
   %END;

        %IF &TABLEVAR = CACSMPL %THEN %DO;   /*RSG 02/2005 Add CACSMPL**/
        REGCAT = PUT(CACSMPL, CACR.);
        REGION = ' ';
        %END;

   %IF &TABLEVAR NE CACSMPL %THEN %DO;
        REGCAT=REGION;
```

```
        DROP GROUP &TABLEVAR;
        %END;

        %IF &TABLEVAR = CACSMPL %THEN %DO;   /*RSG 02/2005 Add CACSMPL**/
        REGCAT = PUT(CACSMPL, CACR.);
        REGION = ' ';
        %END;

   %IF &TABLEVAR NE CACSMPL %THEN %DO;
        REGCAT=REGION;
        DROP GROUP &TABLEVAR;
        %END;


   IF &TABLEVAR NE 0;

   RUN;

  %IF &TABLEVAR = CACSMPL %THEN %DO;

      PROC SORT DATA=&PREF._SMOKE;
      BY CACSMPL;

      DATA &PREF._SMOKE;
      MERGE &PREF._SMOKE (IN=A) CACFORMAT (IN=B);
      BY CACSMPL;
      IF A;
      REGION=PUT(XSERVind,SERVREGO.);
     DROP GROUP &TABLEVAR XSERVREG;
      RUN;
  %END;

%MEND MAKEDATA;

%MAKEDATA(M,XSERVAFF);
%MAKEDATA(C,TOTCON);
%MAKEDATA(R,XSERVREG);
%MAKEDATA(S,XTNEXREG);
%MAKEDATA(D,CACSMPL);


DATA SMOKE;
SET M_SMOKE R_SMOKE S_SMOKE C_SMOKE D_SMOKE;
SESQ = SEMEAN**2;
RENAME MEAN=SCORE wsum=n_wgt nsum=n_obs;
RUN;

/* CALCULATE COMPOSITE SCORE - AVERAGE RATE AND CESSATION*/

PROC SORT DATA=SMOKE;
BY MAJGRP REGION REGCAT;
RUN;

PROC SUMMARY DATA=SMOKE SUM;
BY MAJGRP REGION REGCAT;
VAR SCORE SESQ N_WGT N_OBS;
OUTPUT SUM= OUT=PRECOMP;
RUN;

DATA COMP(RENAME=(S_MEAN=SCORE S_SE=SEMEAN));
SET PRECOMP;
IF _FREQ_ = 3 THEN DO;
   S_MEAN=SCORE/3;
   S_SE=SQRT(SESQ)/3;
   N_OBS=round(N_OBS/3);
END;
ELSE DO;
   S_MEAN=.;
   S_SE=.;
END;
BENTYPE="Composite";
BENEFIT="Healthy Behaviors";
DROP _TYPE_ _FREQ_ SCORE SESQ;
```

```
RUN;

PROC SORT DATA=SMOKE;
BY MAJGRP BENTYPE;
RUN;

DATA BENCH;
SET SMOKE;
BY MAJGRP BENTYPE;
IF LAST.BENTYPE AND BENTYPE="Counselled To Quit" THEN DO;
   SCORE=&CNSLGOAL;
   SEMEAN=.;
   REGION="Benchmark";
   REGCAT="Benchmark";
   DROP N_WGT N_OBS;
   OUTPUT;
END;
ELSE IF LAST.BENTYPE AND BENTYPE="Non-Smoking Rate" THEN DO;
   SCORE=&NSMKGOAL;
   SEMEAN=.;
   REGION="Benchmark";
   REGCAT="Benchmark";
   DROP N_WGT N_OBS;
   OUTPUT;
END;
ELSE IF LAST.BENTYPE AND BENTYPE="Percent Not Obese" THEN DO;
   SCORE=&BMIGOAL;
   SEMEAN=.;
   REGION="Benchmark";
   REGCAT="Benchmark";
   DROP N_WGT N_OBS;
   OUTPUT;
   SCORE=(SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3;
   SEMEAN=.;
   REGION="Benchmark";
   REGCAT="Benchmark";
   BENTYPE="Composite";
   DROP N_WGT;
   OUTPUT;
END;
RUN;

DATA TEMP;
SET SMOKE;
IF REGION=REGCAT;
RUN;

PROC SORT DATA=TEMP;
BY REGION BENTYPE;
RUN;

DATA BENCH2;
SET TEMP;
BY REGION BENTYPE;
IF LAST.BENTYPE AND BENTYPE="Counselled To Quit" THEN DO;
   SCORE=&CNSLGOAL;
   SEMEAN=.;
   MAJGRP="Benchmark";
   DROP N_WGT N_OBS;
   OUTPUT;
END;
IF LAST.BENTYPE AND BENTYPE="Non-Smoking Rate" THEN DO;
   SCORE=&NSMKGOAL;
   SEMEAN=.;
   MAJGRP="Benchmark";
   DROP N_WGT;
   OUTPUT;
END;
IF LAST.BENTYPE AND BENTYPE="Percent Not Obese" THEN DO;
   SCORE=&BMIGOAL;
   SEMEAN=.;
   MAJGRP="Benchmark";
   DROP N_WGT;
```

```
   OUTPUT;
   SCORE=(SUM(&CNSLGOAL, &NSMKGOAL, &BMIGOAL))/3;
   SEMEAN=.;
   MAJGRP="Benchmark";
   BENTYPE="Composite";
   DROP N_WGT N_OBS;
   OUTPUT;
END;
RUN;

DATA SIG1;
SET SMOKE COMP;
IF BENTYPE='Non-Smoking Rate' THEN DO;
   IF SEMEAN > 0 THEN TSTAT=(SCORE-&NSMKGOAL)/SEMEAN;
   ELSE TSTAT=.;
   IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
   ELSE PVAL=.;

   IF PVAL GE 0.05 THEN SIG=0;
   ELSE IF PVAL < 0.05 THEN DO;
      IF SCORE > &NSMKGOAL THEN SIG = 1;
     ELSE IF SCORE < &NSMKGOAL THEN SIG = -1;
   END;
END;
IF BENTYPE='Counselled To Quit' THEN DO;
   IF SEMEAN > 0 THEN TSTAT=(SCORE-&CNSLGOAL)/SEMEAN;
   ELSE TSTAT=.;
   IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
   ELSE PVAL=.;
   IF PVAL GE 0.05 THEN SIG=0;
   ELSE IF PVAL < 0.05 THEN DO;
      IF SCORE > &CNSLGOAL THEN SIG = 1;
     ELSE IF SCORE < &CNSLGOAL THEN SIG = -1;
   END;
END;
IF BENTYPE='Percent Not Obese' THEN DO;
   IF SEMEAN > 0 THEN TSTAT=(SCORE-&BMIGOAL)/SEMEAN;
   ELSE TSTAT=.;
   IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
   ELSE PVAL=.;
   IF PVAL GE 0.05 THEN SIG=0;
   ELSE IF PVAL < 0.05 THEN DO;
      IF SCORE > &BMIGOAL THEN SIG = 1;
     ELSE IF SCORE < &BMIGOAL THEN SIG = -1;
   END;
END;
IF BENTYPE='Composite' THEN DO;
   IF SEMEAN > 0 THEN TSTAT=(SCORE-((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3))/SEMEAN;
   ELSE TSTAT=.;
   IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
   ELSE PVAL=.;
   IF PVAL GE 0.05 THEN SIG=0;
   ELSE IF PVAL < 0.05 THEN DO;
      IF SCORE > ((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3) THEN SIG = 1;
     ELSE IF SCORE <((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3) THEN SIG = -1;
   END;
END;

DROP TSTAT PVAL;
RUN;

DATA SMOKE_ALL;
SET SIG1 BENCH BENCH2;
TIMEPD="&CURRENT.";
RUN;

PROC SORT DATA=SMOKE_ALL OUT=OUT.SMOKE;
BY MAJGRP REGION REGCAT BENTYPE;
RUN;
```

G.11.C REPORTCARDS\MPR_ADULT2007\LOADMPR.SAS - CONVERT THE MPR SCORES DATABASE INTO THE WEB LAYOUT - ANNUAL.

```
*****************************************************************;
*  Project:   DoD Reporting and Analysis 6244-410
*  Program:   LOADMPR.SAS
*  Author:    Chris Rankin
*  Date:      4/07/2000
*  Modified:  1) 5/08/2001 -- standard errors retained in output data set.
*             2) 1/8/2003 by Keith Rathbun: Updated to accomodate the
*                2002 survey.
*             3) 1/30/2003 by Chris Rankin:  Updated to for trends from
*                2000, 2002 Annual.
*             4) 02/05/2004 by Mike Scott: Updated for 2003 Annual Report.
*                Uncommented Flu Shot and changed to Cholesterol.
*             5) 02/2005 by Regina Gramss: Updated for 2004 Annual Report.
*                Added codes for new "Region" fields.  Include smoke data
*                from smoking.sas program.
*             6) 02/2006 by Regina Gramss: Updated for 2005.  Dropped chol measure.
*             7) 11/07/2006 by Keith Rathbun: Changed REG loop control from
*                16 to 15 and format servregf to servrego.
*
*  Purpose:   Calculate MPR Preventive Care Composites
*
*   Input:    RFINAL.SD2
*             CFINAL.SD2
*             MFINAL.SD2
*             DFINAL.SD2
*             SFINAL.SD2
*             SMOKE.SD2
*   Output:   loadmpr.sd2
*****************************************************************;

OPTIONS COMPRESS=YES NOCENTER LS=124 PS=74 SOURCE SOURCE2;

LIBNAME   INLIB   V612 ".";
LIBNAME   OUT     V612 ".";
LIBNAME   LIBRARY V612 "..\..\..\data\fmtlib";   /*MJS 02/05/04*/

%LET COMPNUM=7; /*** number of questions in both composites ***/
%LET CMPNUM1=4; /*** number of questions in first composite ***/   /*MJS 02/05/04*/

%LET YR=07;
%LET YEAR=2007;
%LET EYR=05;

%INCLUDE "..\..\LOADWEB\LOADCAHQ.INC";

*************************************************************;
*** Note -- take out access to care questions and composite ***;
*************************************************************;

DATA BENCHMKS(KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SIG);
  FORMAT MAJGRP $30.  REGION $25. REGCAT $42.
         BENEFIT $34. BENTYPE $50. TIMEPD $35.;

  SET inlib.CFINAL;

  /***** Benchmarks       *****/

  ARRAY BENCHMK{*} GOALVAR1-GOALVAR&CMPNUM1 CP&yr.BMK1;
  DO I = 1 TO 5;   /*MJS 02/05/04*/
     SCORE   = BENCHMK{I}*100;
     SIG     = .;
     REGION  = "Benchmark";
     REGCAT  = "Benchmark";
     BENEFIT = "Preventive Care";
     IF      I = 1 THEN BENTYPE = "Prenatal Care";
     ELSE IF I = 2 THEN BENTYPE = "Mammography";
     ELSE IF I = 3 THEN BENTYPE = "Pap Smear";
     ELSE IF I = 4 THEN BENTYPE = "Hypertension";
     /*ELSE IF I = 5 THEN BENTYPE = "Cholesterol Testing";*/   /*RSG 01/27/06*/
```

```
     ELSE IF I = 5 THEN BENTYPE = "Composite";
    TIMEPD = "&YEAR";  /*RSG 02/2005*/
     OUTPUT;
  END;
  DROP I;
RUN;

DATA BENCHMKS;
  SET BENCHMKS;
  OUTPUT;
  IF MAJGRP = "All Beneficiaries" THEN DO;
     DO REG = 1 TO 15; DROP REG;
           MAJGRP = "Benchmark";
           REGION = PUT(REG,SERVREGO.);
           REGCAT = PUT(REG,SERVREGO.);
           OUTPUT;
     END;
     DO SERV = 1 TO 4; DROP SERV;
         MAJGRP = "Benchmark";
         REGION = PUT(SERV,XSERVAFF.);
         REGCAT = PUT(SERV,XSERVAFF.);
         OUTPUT;
     END;
    MAJGRP = "Benchmark";
    REGION = 'CONUS MHS';
    REGCAT = 'CONUS MHS';
    OUTPUT;
    MAJGRP = "Benchmark";
    REGION = 'NORTH';
    REGCAT = 'NORTH';
    OUTPUT;
    MAJGRP = "Benchmark";
    REGION = 'SOUTH';
    REGCAT = 'SOUTH';
    OUTPUT;
    MAJGRP = "Benchmark";
    REGION = 'WEST';
    REGCAT = 'WEST';
    OUTPUT;
    MAJGRP = "Benchmark";
    REGION = 'OVERSEAS';
    REGCAT = 'OVERSEAS';
    OUTPUT;
  END;
RUN;

PROC FREQ DATA=BENCHMKS;
   TABLES MAJGRP/MISSING LIST;
RUN;

*************************;
*****  Scores          **;
*************************;

DATA DFINAL;
  SET INLIB.DFINAL;
  WHERE UPCASE(TRIM(MAJGRP)) IN ("PRIME ENROLLEES", "ENROLLEES WITH MILITARY PCM",
                                 "ACTIVE DUTY", "ALL BENEFICIARIES");
RUN;

DATA SCORES(KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SEMEAN SIG N_OBS N_WGT);
  FORMAT MAJGRP $30.  REGION $25. REGCAT $42.
          BENEFIT $34. BENTYPE $50. TIMEPD $35.;
  SET INLIB.MFINAL
      INLIB.RFINAL
      DFINAL
      INLIB.SFINAL
      INLIB.CFINAL;
IF REGCAT='Out of Catchment Region 01' then REGCAT='Out of Catchment North Region';
IF REGCAT='Out of Catchment Region 02' then REGCAT='Out of Catchment South Region';
IF REGCAT='Out of Catchment Region 03' then REGCAT='Out of Catchment West Region';
IF REGCAT='Out of Catchment Region 04' then REGCAT='Out of Catchment OCONUS Region';
```

```
  ARRAY SEMEANS{*} SERR&YR.V1-SERR&YR.V&CMPNUM1.  CP&YR.1SE ;
  ARRAY  SCORES{*} SCOR&YR.V1-SCOR&YR.V&CMPNUM1.  Comp&YR.1;
  ARRAY  SIGNIF{*} SIG&YR.V1-SIG&YR.V&CMPNUM1.    CP&YR.SIG1;
  ARRAY   NOBS {*} NOBS&YR.V1-NOBS&YR.V&CMPNUM1.  CP&YR.OBS1;
  ARRAY   NWGT {*} DEN&YR.V1-DEN&YR.V&CMPNUM1     CP&YR.DEN1;
  cp&YR.den1=0;
  DO I = 1 TO 5;   /*MJS 02/05/04*/
     SCORE   = SCORES{I};
     SEMEAN  = SEMEANS{I};
     SIG     = SIGNIF{I};
     N_OBS   = NOBS{I};
     N_WGT   = NWGT{I};
     if i<5 then cp&YR.den1+nwgt[i];
     BENEFIT = "Preventive Care";
     IF      I = 1 THEN BENTYPE = "Prenatal Care";
     ELSE IF I = 2 THEN BENTYPE = "Mammography";
     ELSE IF I = 3 THEN BENTYPE = "Pap Smear";
     ELSE IF I = 4 THEN BENTYPE = "Hypertension";
     /*ELSE IF I = 5 THEN BENTYPE = "Cholesterol Testing";*/   /*RSG 01/27/06*/
     ELSE IF I = 5 THEN DO;
          BENTYPE = "Composite";  /*RSG 02/2005*/
          score=score*100;
     END;;
    TIMEPD = "&YEAR";
     OUTPUT;
  END;
RUN;

PROC FREQ DATA=SCORES;
   WHERE UPCASE(TRIM(MAJGRP)) IN ("PRIME ENROLLEES", "ENROLLEES WITH MILITARY PCM",
                                  "ACTIVE DUTY", "ALL BENEFICIARIES");
   TABLES MAJGRP*REGCAT;
RUN;

DATA DTREND;
  SET INLIB.DTREND; by majgrp;
  WHERE UPCASE(TRIM(MAJGRP)) IN ("PRIME ENROLLEES", "ENROLLEES WITH MILITARY PCM",
                                 "ACTIVE DUTY", "ALL BENEFICIARIES");
RUN;

/*
proc sort data=inlib.mtrend out=mtrend; by descending majgrp;
data mtrend;
set mtrend;
retain adj1 adj2 0;
if upcase(majgrp)="ALL BENEFICIARIES" then do;
adj1=cp&YR.bmk1; adj2=cp&EYR.bmk1; end;
proc print;
proc sort data=mtrend; by majgrp;
data mtrend(drop=adj1 adj2);
set mtrend;
retain tadj1 tadj2 0;
if _n_=1 then do;
tadj1=adj1;
tadj2=adj2;
end;
*/

DATA TREND1 (KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE semean TIMEPD SCORE SIG N_OBS N_WGT);
   FORMAT MAJGRP $30.  REGION $25. REGCAT $42.
          BENEFIT $34. BENTYPE $50. TIMEPD $35.;

   SET inlib.CTREND
       DTREND
       INLIB.RTREND
       INLIB.STREND
       INLIB.MTREND;by majgrp;
/*
   if _n_=1 then do;
      adj1=tadj1;
      adj2=tadj2;
   end;
   retain adj1 adj2;
```

```
   score=100*((comp031*adj1/cp03bmk1)-(comp011*adj2/cp01bmk1));*/

/*RSG 02/2005 following code no longer needed - need trend for all
  benefit level, not just composite*/
/*   score=cmptrnd1;
   SIG= SIGCPTR1;
   N_OBS=DF_COMP1;
   N_WGT=NWGTC1;
   BENTYPE="Trend";
   BENEFIT="Preventive Care";
   OUTPUT;
*/
IF REGCAT='Out of Catchment Region 01' then REGCAT='Out of Catchment North Region';
IF REGCAT='Out of Catchment Region 02' then REGCAT='Out of Catchment South Region';
IF REGCAT='Out of Catchment Region 03' then REGCAT='Out of Catchment West Region';
IF REGCAT='Out of Catchment Region 04' then REGCAT='Out of Catchment OCONUS Region';

  ARRAY  SCORES{*} TRENDV1-TRENDV&CMPNUM1.  CMPTRND1;
  ARRAY  SIGNIF{*} SIGTRND1-SIGTRND&CMPNUM1.    SIGCPTR1;
  ARRAY   NOBS {*} DFSCOR1-DFSCOR&CMPNUM1.  DF_COMP1;
  ARRAY   NWGT {*} NWGT1-NWGT&CMPNUM1.  NWGTC1;
  DO I = 1 TO 5;   /*MJS 02/05/04*/
     SCORE   = SCORES{I};
     SEMEAN=.;
     SIG     = SIGNIF{I};
     N_OBS   = NOBS{I};
     N_WGT   = NWGT{I};
     BENEFIT = "Preventive Care";
     IF      I = 1 THEN BENTYPE = "Prenatal Care";
     ELSE IF I = 2 THEN BENTYPE = "Mammography";
     ELSE IF I = 3 THEN BENTYPE = "Pap Smear";
     ELSE IF I = 4 THEN BENTYPE = "Hypertension";
     /*ELSE IF I = 5 THEN BENTYPE = "Cholesterol Testing";*/   /*RSG 01/27/06*/
     ELSE IF I = 5 THEN DO;
          BENTYPE = "Composite";  /*RSG 02/2005*/
*          score=score*100;
     END;;
    TIMEPD = "Trend";
     OUTPUT;
  END;
RUN;

DATA TREND2(KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE SCORE SIG TIMEPD);
  FORMAT MAJGRP $30.  REGION $25. REGCAT $42.
         BENEFIT $34. BENTYPE $50. TIMEPD $35.;

  SET INLIB.CTREND;

/*RSG 02/2005 hard code in benchmark trends for each measure -
      comment out code for just composite trend benchmark*/
/*  SCORE= TRNDBMK1;
  SIG=.;
  SEMEAN=.;
  REGION="Benchmark";
  REGCAT="Benchmark";
  BENTYPE="Trend";
  BENEFIT="Preventive Care";
  OUTPUT;
*/

  DO I = 1 TO 5;   /*MJS 02/05/04*/
     SCORE   = 0;
     SIG     = .;
     REGION  = "Benchmark";
     REGCAT  = "Benchmark";
     BENEFIT = "Preventive Care";
     IF      I = 1 THEN BENTYPE = "Prenatal Care";
     ELSE IF I = 2 THEN BENTYPE = "Mammography";
     ELSE IF I = 3 THEN BENTYPE = "Pap Smear";
     ELSE IF I = 4 THEN BENTYPE = "Hypertension";
     /*ELSE IF I = 5 THEN BENTYPE = "Cholesterol Testing";*/   /*RSG 01/27/06*/
     ELSE IF I = 5 THEN BENTYPE = "Composite";
    TIMEPD = "Trend";  /*RSG 02/2005*/
```

```
     OUTPUT;
  END;
  DROP I;
RUN;

DATA OUT.LOADMPR(KEEP=MAJGRP REGION REGCAT BENEFIT semean BENTYPE SCORE SIG
                      N_OBS N_WGT TIMEPD);
  SET BENCHMKS TREND1 TREND2 SCORES INLIB.SMOKE;
RUN;


PROC FREQ DATA=OUT.LOADMPR;
   WHERE TIMEPD='Trend';
   TABLES BENTYPE*REGION/MISSING LIST;
RUN;
```

G.12 REPORTCARDS\MPR_ADULT2007\TRENDMPR.SAS - CALCULATE TREND AND PERFORM SIGNIFICANCE TESTS ON MPR SCORES - ANNUAL.

```
*****************************************************************
*
*  Project:   DoD Reporting and Analysis 6244-410
*  Program:   TRENDMPR.SAS
*  Author:    Chris Rankin
*  Date:      6/19/2000
*
*  Modified:  1) 02/21/2001
*             trend calculation changed
*             2) 01/29/2003 By Keith Rathbun, Chris Rankin: Updated to
*                calculate trends based on 2000 to 2002.
*             3) 02/10/2004 By Mike Scott: Updated for 2003 Annual Report.
*             4) 02/2005 By Regina Gramss: Updated for 2004 Annual Report.
*                added codes to use XSERVREG for region.
*             5) 02/2006 By Regina Gramss: Updated for 2005.  Remove
*                cholesterol as a measure.
*
*  Purpose:   Calculate trends from 2004 to 2006.
*
*  Outputs:   RTREND.SD2
*             MTREND.SD2
*             CTREND.SD2
*             STREND.SD2
*             DTREND.SD2
*
*  Inputs:    RFINAL.SD2
*             CFINAL.SD2
*             MFINAL.SD2
*             SFINAL.SD2
*             DFINAL.SD2
*
*  Notes:     1) Next program is loadmpr.sas.
*
*****************************************************************;
OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2;

%LET YR = 07;
%LET EYR = 05;

LIBNAME IN&YR   V612  ".";
LIBNAME IN&EYR. V612  "..\..\20&EYR.\ReportCards\MPR_Adult20&EYR.";
LIBNAME OUT     V612  ".";
LIBNAME LIBRARY "..\..\..\data\fmtlib";

%LET COMPNUM=7;      /** number of variables - 02/2006 RSG - changed from 8 to 7 because
cholesterol dropped   **/

**** Note:  groups changed 6/16/2000 to correspond with ;
**** definition of CAHPS groups                         ;

*************************************************************;
* Beneficiary group note
*    Eight groups             Definitions
* ___________________________________________________________;
* 1. Prime enrollees          XINSCOV IN (1,2,6) AND H06007>=2
* 2. Enrollees w/mil PCM      XENR_PCM IN (2,6)  AND H06007>=2
* 3. Enrollees w/civ PCM      XENR_PCM=3         AND H06007>=2
* 4. Nonenrollees             XINSCOV IN (3)
* 5. Active duty              BFGROUPP=1
* 6. Active duty dependents   BFGROUPP=2
* 7. Retirees                 BFGROUPP IN (3,4)
* 8. All beneficiaries        ALL
*************************************************************;

/*** macro to merge final datasets together and calculate trends ***/

%MACRO TRENDS(INDATA, OUTDATA);

  PROC SORT DATA=IN&EYR..&INDATA;
```

```
      BY MAJGRP REGION REGCAT;
   RUN;

   PROC SORT DATA=IN&YR..&INDATA;
      BY MAJGRP REGION REGCAT;
   RUN;

   DATA OUT.&OUTDATA;
      MERGE IN&YR..&INDATA(IN=IN_&YR.) IN&EYR..&INDATA(IN=IN_&EYR.);
      BY MAJGRP REGION REGCAT;
      IF IN_&YR. & IN_&EYR.;

      /*** calculate trends in the composite benchmarks ***/
      ARRAY   BMK&YR.{*} CP&YR.BMK1 CP&YR.BMK2;
      ARRAY   BMK&EYR.{*} CP&EYR.BMK1 CP&EYR.BMK2;
      ARRAY BMKTRND{*} TRNDBMK1 TRNDBMK2;

      DO J=1 TO 2;
         IF BMK&EYR.{J} > 0 THEN BMKTRND{J}=100*(BMK&YR.{J}-BMK&EYR.{J});
         ELSE BMKTRND{J}=.;
      END;
      DROP J;

      /*** note-- don't use adjusted scores ***/
      ARRAY SCORE&YR.{*} PROP&YR.V1-PROP&YR.V&COMPNUM COMP&YR.1 COMP&YR.2;
      ARRAY SCORE&EYR.{*} PROP&EYR.V1-PROP&EYR.V&COMPNUM COMP&EYR.1 COMP&EYR.2;
      ARRAY  SERR&YR.{*} SERR&YR.V1-SERR&YR.V&COMPNUM CP&YR.1SE  CP&YR.2SE;
      ARRAY  SERR&EYR.{*} SERR&EYR.V1-SERR&EYR.V&COMPNUM CP&EYR.1SE  CP&EYR.2SE;
      ARRAY   TREND{*} TRENDV1-TRENDV&COMPNUM   CMPTRND1 CMPTRND2;
      ARRAY   TSTAT{*} T_TRNDV1-T_TRNDV&COMPNUM T_CTRND1 T_CTRND2;
      ARRAY  PVALUE{*} P_TRNDV1-P_TRNDV&COMPNUM P_CTRND1 P_CTRND2;
      ARRAY     SIG{*} SIGTRND1-SIGTRND&COMPNUM SIGCPTR1 SIGCPTR2;
      ARRAY DEGFR&YR.{*} DF&YR.SCR1-DF&YR.SCR&COMPNUM DF&YR._CP1 DF&YR._CP2;
      ARRAY DEGFR&EYR.{*} DF&EYR.SCR1-DF&EYR.SCR&COMPNUM DF&EYR._CP1 DF&EYR._CP2;
      ARRAY    DEGF{*} DFSCOR1-DFSCOR&COMPNUM DF_COMP1 DF_COMP2;
      ARRAY   DENOM{*} DENOMT1-DENOMT&COMPNUM DENOMTC1 DENOMTC2;
      ARRAY   DEN&EYR.{*} DEN&EYR.V1-DEN&EYR.V&COMPNUM CP&EYR.DEN1 CP&EYR.DEN2;
      ARRAY   DEN&YR.{*} DEN&YR.V1-DEN&YR.V&COMPNUM CP&YR.DEN1 CP&YR.DEN2;
      ARRAY    NWGT{*} NWGT1-NWGT&COMPNUM NWGTC1 NWGTC2;

      /*** setup t statistics, degreees of freedom    ***/
      DO I=1 TO 9;
         IF SCORE&EYR.{I} GE 0 AND SCORE&YR.{I} GE 0 THEN DO;
            IF SCORE&EYR.{I} > 0 THEN TREND{I}=100*(SCORE&YR.{I}-SCORE&EYR.{I});
            ELSE TREND{I}=.;
            DENOM{I}= SERR&EYR.{I}**2+SERR&YR.{I}**2;
            IF DENOM{I} > 0 THEN
               TSTAT{I}=(SCORE&YR.{I}-SCORE&EYR.{I})/SQRT(DENOM{I});
            ELSE TSTAT{I}=.;
            DEGF{I}=MIN(DEGFR&YR.{I},DEGFR&EYR.{I});
            NWGT{I}=MIN(DEN&YR.{I},DEN&EYR.{I});
            IF DEGF{I}=0 THEN DEGF{I}=1;
            IF DEGF{I}IN (0, .) THEN
            PUT "MAJGRP=" MAJGRP "REGCAT=" REGCAT "REGION=" REGION
            "DEGFR&EYR.=" DEGFR&EYR.{I} "DEGFR&YR.=" DEGFR&YR.{I};
            PVALUE{I}=(1-PROBT(ABS(TSTAT{I}),DEGF{I}))*2;
            IF TREND{I}=. THEN SIG{I}=.;
            ELSE IF TREND{I} NE . THEN DO;
               IF PVALUE{I} GE .05 THEN SIG{I}=0;
               IF PVALUE{I} < .05  THEN DO;
                  IF TSTAT{I} > 0 THEN SIG{I}=1;
                  IF TSTAT{I} < 0 & TSTAT{I} ne . THEN SIG{I}=-1;
               END;
            END;
         END;
      END;
      DROP I;
   RUN;

%MEND TRENDS;

%TRENDS(MFINAL, MTREND);
%TRENDS(RFINAL, RTREND);
```

```
%TRENDS(CFINAL, CTREND);
%TRENDS(SFINAL, STREND);
%TRENDS(DFINAL, DTREND);
```

G.13.A LOADWEB\FAKE.SAS - GENERATE THE WEB LAYOUT/TEMPLATE FILE - ANNUAL.

```
/*******************************************************************/
/* PROJECT:  6244-410 - 2006 Annual Beneficiary Reports            */
/* PROGRAM:  FAKE.SAS                                              */
/* PURPOSE:  Generate Fake Data for Report Cards                   */
/* AUTHOR:   Mark A. Brinkley                                      */
/*                                                                 */
/* MODIFIED: 1) July 2000 By Eric Schone to utilize CACRPT and CATREP */
/*              include files.                                     */
/*           2) January 2002 By Keith Rathbun: Updated to support the */
/*              2000 Annual HCSDB format.                          */
/*           3) January 2003 By Keith Rathbun: Updated to support the */
/*              2002 Annual HCSDB format.  Delete flu shot, increment */
/*              previous years by 1, added 2002.                   */
/*           4) February 2004 By Mike Scott: Updated for 2003 Annual  */
/*              Report. Uncommented Flu Shot and changed it to     */
/*              Cholesterol.                                       */
/*           5) February 2005 By Regina Gramss: Updated for 2004   */
/*              annual report.  Include smoking scores and use     */
/*              XSERVREG for region fields.                        */
/*           6) November 7, 2006 by Keith Rathbun: Updated for 2006.  */
/*              Added in the quarterly overseas updates.           */
/*           7) November 13, 2007 by Keith Rathbun: Updated parameters*/
/*              for 2007.                                          */
/*                                                                 */
/*******************************************************************/

LIBNAME OUT V612 '.';
LIBNAME IN  V612 '..\ReportCards\CAHPS_Adult2007\Data';   /*** Changed to group8 location for
revised cacsmpl KRR 02-05-2004 ***/
LIBNAME LIBRARY V612 '..\..\DATA\FMTLIB';

OPTIONS COMPRESS=YES NOFMTERR;

%include "loadcahq.inc";

/*RSG 02/2005 added to make fake.sd2 with macros*/
%LET NUMQTR = 4;  /*RSG 02/2005 - Numbering based off quarterly program*/
%LET PERIOD1 = 2005;
%LET PERIOD2 = 2006;
%LET PERIOD3 = 2007;
%LET PERIOD4 = Trend;

DATA TEMP;
   SET IN.GROUP8(KEEP=XSERVind XSERVAFF XTNEXREG CONUS CACSMPL);   /*KRR 02/05/04*/
RUN;

************************************************************************
* CACSMPL FORMAT DEFINITIONS FOR REPORT CARD USE FACILITY NAME
* RSG - 02/2005 - USE CACR FORMAT FROM LIBRARY
************************************************************************;

proc freq data=temp;
   table xservind*cacsmpl/ noprint out=temp2;
run;

data temp3;
   length cafmt $42;
   set temp2 end=last; by xservind;
   caf=0;
   where cacsmpl ne 9999;
   if first.xservind then do;
      cafmt=put(xservind,servrego.);
      output;
   end;
   cafmt=put(cacsmpl,cacr.);
   caf=1;
   if count>1 & cafmt ne 'INV' then output;
   if last then do;
      xservind=0;
      caf=0;
```

```
cafmt='Benchmark';
output;

caf=1;


xservind=16;
cafmt = 'ARMY';
output;

xservind=17;
cafmt = 'AIR FORCE';
output;

xservind=18;
cafmt = 'NAVY';
output;

xservind=19;
cafmt = 'OTHER';
output;

xservind=20;
cafmt = 'NORTH';
output;

xservind=21;
cafmt = 'SOUTH';
output;

xservind=22;
cafmt = 'WEST';
output;

xservind=23;
cafmt = 'OVERSEAS';
output;

xservind=24;
cafmt = 'Europe Army';
output;

xservind=25;
cafmt = 'Europe Air Force';
output;

xservind=26;
cafmt = 'Europe Navy';
output;

xservind=27;
cafmt = 'Europe Other';
output;

xservind=28;
cafmt = 'Pacific Army';
output;

xservind=29;
cafmt = 'Pacific Air Force';
output;

xservind=30;
cafmt = 'Pacific Navy';
output;

xservind=31;
cafmt = 'Pacific Other';
output;

xservind=32;
cafmt = 'Latin America Army';
output;
```

```
          xservind=33;
          cafmt = 'Latin America Air Force';
          output;

          xservind=34;
          cafmt = 'Latin America Navy';
          output;

          xservind=35;
          cafmt = 'Latin America Other';
          output;

          xservind=36;
          cafmt = 'CONUS MHS';
          output;
       end;
    run;

    proc sort; by xservind caf cafmt; run;

    data temp4;
       set temp3 end=last;
       start=_n_; label=cafmt; type='N'; fmtname='ROWMAT';
       if last then call symput('x',_n_);
    run;

    proc format cntlin=temp4;
    proc print data=temp4;


    RUN;

    %MACRO FAKE;
    DATA FAKE;

      KEEP MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD I K;   ***MJS 06/18/03 Added TIMEPD;

      LENGTH MAJGRP  $ 30
             REGION  $ 25    /*RSG 01/2005 lengthen format to fit service affiliation*/
             REGCAT  $ 42
             BENTYPE $ 50
             TIMEPD  $ 5;   ***MJS 06/18/03 Added TIMEPD;



      DO I=1 TO 8;             ** 8 Major groups **;

         MAJGRP=PUT(I,MAJGRPF.);

         DO J=1 TO &x;        ** Region/catchment **;

         REGCAT=PUT(J,ROWMAT.);
         RETAIN REGION;

         **RSG 01/2005 Change code to fit XSERVREG values**;
         IF REGCAT IN ('ARMY','NAVY','AIR FORCE','OTHER',
                       'NORTH','SOUTH','WEST','OVERSEAS','CONUS MHS',
                       'Overseas Europe','Overseas Pacific','Overseas Latin America',
                       'North Army','North Navy','North Air Force','North Other',
                       'South Army','South Navy','South Air Force','South Other',
                       'West Army','West Navy','West Air Force','West Other',
                       'Europe Army', 'Europe Navy', 'Europe Air Force', 'Europe Other',
                       'Pacific Army', 'Pacific Navy', 'Pacific Air Force', 'Pacific Other',
                       'Latin America Army', 'Latin America Navy', 'Latin America Air Force',
'Latin America Other')
            THEN REGION=REGCAT;


            DO K=1 TO 12;      ** 12 Benefits **;  /*** 12-13 MAB ***/

              BENEFIT=PUT(K,BEN.);
```

```
            IF K=1 THEN DO;
                DO L=1 TO 5;                    ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                    BENTYPE=PUT(L,GETNCARE.);   ***that replaced BENTYPE hard assignment;
                    %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                    %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                END;
            END;
            ELSE IF K=2 THEN DO;
                DO L=1 TO 5;                    ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                    BENTYPE=PUT(L,GETCAREQ.);   ***that replaced BENTYPE hard assignment;
                    %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                    %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                END;
            END;
            ELSE IF K=3 THEN DO;
                DO L=1 TO 3;                    ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                    BENTYPE=PUT(L,CRTSHELP.);   ***that replaced BENTYPE hard assignment;
                    %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                    %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                END;
            END;
            ELSE IF K=4 THEN DO;
                DO L=1 TO 5;                    ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                    BENTYPE=PUT(L,HOWWELL.);    ***that replaced BENTYPE hard assignment;
                    %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                    %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                END;
            END;
            ELSE IF K=5 THEN DO;
                DO L=1 TO 4;                    ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                    BENTYPE=PUT(L,CUSTSERV.);   ***that replaced BENTYPE hard assignment;
                    %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                    %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                END;
            END;
            ELSE IF K=6 THEN DO;
                DO L=1 TO 3;                    ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                    BENTYPE=PUT(L,CLMSPROC.);   ***that replaced BENTYPE hard assignment;
                    %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                    %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                END;
            END;
            ELSE IF K=7 THEN DO;
                %DO Q = 1 %TO &NUMQTR;    ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                    BENTYPE = "Composite";   ***MJS 07/07/03 Added;
                    TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/    ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
                %END;                        ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
            END;
            ELSE IF K=8 THEN DO;
                %DO Q = 1 %TO &NUMQTR;    ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                    BENTYPE = "Composite";   ***MJS 07/07/03 Added;
                    TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/    ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
                %END;                        ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
            END;
            ELSE IF K=9 THEN DO;
```

```
                %DO Q = 1 %TO &NUMQTR;    ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                    BENTYPE = "Composite";   ***MJS 07/07/03 Added;
                    TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/    ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
                %END;                         ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
            END;
            ELSE IF K=10 THEN DO;
                %DO Q = 1 %TO &NUMQTR;    ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                    BENTYPE = "Composite";   ***MJS 07/07/03 Added;
                    TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/    ***MJS 07/07/03
Changed BENTYPE to TIMEPD;
                %END;                         ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after
this line;
            END;
            ELSE IF K=11 THEN DO;
                DO L=1 TO 5;                   ***MJS 06/18/03 Added L loop and BENTYPE PUT;
                    BENTYPE=PUT(L,PREVCARE.);   ***that replaced BENTYPE hard assignment;
                    %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
                    %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
                END;
        END;
            ELSE IF K=12 THEN DO;            ***RSG 02/2005 Added for smoking scores.;
                DO M=1 TO 4;
                    BENTYPE=PUT(M,SMOKEF.);
                    %DO Q = 1 %TO &NUMQTR;   ***RSG 02/2005 Changed start point to 2 for annual -
only go back 2 years;
                        TIMEPD = "&&PERIOD&Q"; OUTPUT;
                    %END;
                END;
            END;
          END;
        END;
    END;
  RUN;
  %MEND FAKE;
  %FAKE;

  /*** 12-13 MAB ***/
  /*** Need to create single benchmarks for ALL major groups ***/
  DATA EXTRA;
    SET FAKE;
    IF MAJGRP="Prime Enrollees" AND REGION=REGCAT AND REGION^="Benchmark";
    MAJGRP="Benchmark";
  RUN;
  /*** Combine extra data with fake ***/
  DATA FAKE;
    SET EXTRA FAKE;
    IF REGCAT="Benchmark" THEN REGION=REGCAT;
  RUN;

  /*** Need to clean up data ***/
  DATA FAKE2;
    SET FAKE;

    /*** Need to set oddball records to missing ***/
    if region=''|compress(regcat)='.' then delete;

    /*** Don't populate catchment areas for 4 major groups ***/
    IF I IN(3,4,6,7) AND REGION^=REGCAT THEN DELETE;
    SIG = .;
    SCORE = .;

    DROP I K;
  RUN;

  /*RSG 02/2005 ORDER FILE*/

  DATA ORDER1;
```

```
  SET FAKE2;
  IF MAJGRP = "Benchmark" THEN DELETE;

  IF MAJGRP = "Prime Enrollees" THEN LINEUP=1;
  IF MAJGRP = "Enrollees with Military PCM" THEN LINEUP=2;
  IF MAJGRP = "Enrollees with Civilian PCM" THEN LINEUP=3;
  IF MAJGRP = "Standard/Extra Users" THEN LINEUP=4;
  IF MAJGRP = "Active Duty" THEN LINEUP=5;
  IF MAJGRP = "Active Duty Dependents" THEN LINEUP=6;
  IF MAJGRP = "Retirees and Dependents" THEN LINEUP=7;
  IF MAJGRP = "All Users" THEN LINEUP=8;

  IF REGION = "Benchmark" THEN LINEUP1=1;
  ELSE IF UPCASE(REGION) = 'CONUS MHS' THEN LINEUP1=2;

  ELSE IF UPCASE(REGION) = 'ARMY' THEN LINEUP1=3;
  ELSE IF UPCASE(REGION) = 'NAVY' THEN LINEUP1=4;
  ELSE IF UPCASE(REGION) = 'AIR FORCE' THEN LINEUP1=5;
  ELSE IF UPCASE(REGION) = 'OTHER' THEN LINEUP1=6;

  ELSE IF UPCASE(REGION) = 'NORTH' THEN LINEUP1=7;
  ELSE IF UPCASE(REGION) = 'NORTH ARMY' THEN LINEUP1=8;
  ELSE IF UPCASE(REGION) = 'NORTH NAVY' THEN LINEUP1=9;
  ELSE IF UPCASE(REGION) = 'NORTH AIR FORCE' THEN LINEUP1=10;
  ELSE IF UPCASE(REGION) = 'NORTH OTHER' THEN LINEUP1=11;

  ELSE IF UPCASE(REGION) = 'SOUTH' THEN LINEUP1=12;
  ELSE IF UPCASE(REGION) = 'SOUTH ARMY' THEN LINEUP1=13;
  ELSE IF UPCASE(REGION) = 'SOUTH NAVY' THEN LINEUP1=14;
  ELSE IF UPCASE(REGION) = 'SOUTH AIR FORCE' THEN LINEUP1=15;
  ELSE IF UPCASE(REGION) = 'SOUTH OTHER' THEN LINEUP1=16;

  ELSE IF UPCASE(REGION) = 'WEST' THEN LINEUP1=17;
  ELSE IF UPCASE(REGION) = 'WEST ARMY' THEN LINEUP1=18;
  ELSE IF UPCASE(REGION) = 'WEST NAVY' THEN LINEUP1=19;
  ELSE IF UPCASE(REGION) = 'WEST AIR FORCE' THEN LINEUP1=20;
  ELSE IF UPCASE(REGION) = 'WEST OTHER' THEN LINEUP1=21;

  ELSE IF UPCASE(REGION) = 'OVERSEAS' THEN LINEUP1=22;

  ELSE IF UPCASE(REGION) = 'OVERSEAS EUROPE' THEN LINEUP1=23;
  ELSE IF UPCASE(REGION) = 'EUROPE ARMY' THEN LINEUP1=24;
  ELSE IF UPCASE(REGION) = 'EUROPE NAVY' THEN LINEUP1=25;
  ELSE IF UPCASE(REGION) = 'EUROPE AIR FORCE' THEN LINEUP1=26;
  ELSE IF UPCASE(REGION) = 'EUROPE OTHER' THEN LINEUP1=27;

  ELSE IF UPCASE(REGION) = 'OVERSEAS PACIFIC' THEN LINEUP1=28;
  ELSE IF UPCASE(REGION) = 'PACIFIC ARMY' THEN LINEUP1=29;
  ELSE IF UPCASE(REGION) = 'PACIFIC NAVY' THEN LINEUP1=30;
  ELSE IF UPCASE(REGION) = 'PACIFIC AIR FORCE' THEN LINEUP1=31;
  ELSE IF UPCASE(REGION) = 'PACIFIC OTHER' THEN LINEUP1=32;

  ELSE IF UPCASE(REGION) = 'OVERSEAS LATIN AMERICA' THEN LINEUP1=33;
  ELSE IF UPCASE(REGION) = 'LATIN AMERICA ARMY' THEN LINEUP1=34;
  ELSE IF UPCASE(REGION) = 'LATIN AMERICA NAVY' THEN LINEUP1=35;
  ELSE IF UPCASE(REGION) = 'LATIN AMERICA AIR FORCE' THEN LINEUP1=36;
  ELSE IF UPCASE(REGION) = 'LATIN AMERICA OTHER' THEN LINEUP1=37;

  ELSE LINEUP1=38;

  IF REGION=REGCAT THEN LINEUP2=1;
  ELSE LINEUP2=2;

RUN;   ***MJS 07/03/03 Changed BENTYPE to TIMEPD;

PROC SORT DATA=ORDER1 OUT=OUT.FAKE (DROP=LINEUP LINEUP1 LINEUP2);
BY LINEUP LINEUP1 LINEUP2 REGCAT;
RUN;

PROC FREQ;
  TABLES MAJGRP REGION REGCAT BENTYPE BENEFIT;
RUN;
```

G.13.B LOADWEB\MERGFINL.SAS - MERGE THE FINAL CAHPS AND MPR SCORES DATABASES INTO THE WEB LAYOUT - ANNUAL.

```
*************************************************************************
*
* PROGRAM:  MERGFINL.SAS
* TASK:     2007 DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Merge the final CAHPS and MPR Scores Databases
*           into the WEB layout preserving the order of the FAKE.SD2.
*
* WRITTEN:  06/07/2000 BY KEITH RATHBUN
*
* MODIFIED: 1) 01/09/2002 BY KEITH RATHBUN: Updated to support the 2000
*              annual HCSDB.
*           2) 01/07/2002 BY KEITH RATHBUN: Updated to support the 2002
*              annual HCSDB.
*           3) 02/08/2004 BY CHRIS RANKIN:  Updated to support the 2003
*              annual HCSDB.
*           4) 11/07/2006 BY KEITH RATHBUN: Updated to support the 2006
*              annual HCSDB.
*           4) 11/13/2007 BY KEITH RATHBUN: Updated to support the 2007
*              annual HCSDB.
*
* INPUTS:   1) MPR and CAHPS Individual and Composite data sets with adjusted
*              scores, and benchmark data for DoD HCS.
*              - LOADMPR.SD2  - MPR Scores Databases
*              - LOADCAHP.SD2 - CAHPS Scores Databases
*              - BENCHA04.SD2 - CAHPS Benchmark Databases
*              - FAKE.SD2     - WEB Layout in Column order
*
* OUTPUT:   1) MERGFINL.SD2 - Combined Scores Database in WEB layout
*
* NOTES:
*
* 1) The following steps need to be run prior to this
*    program (2005,2006,2007):
*  - STEP1.SAS       - Recode questions and generate CAHPS group files
*  - STEP2.SAS       - Calculate CAHPS individual adjusted scores for groups 1-8
*  - COMPOSIT.SAS    - Calculate composite adjusted scores for group 1-8
*  - PRVCOMP.SAS     - Calculate MPR individual and composite scores
*  - SMOKING_BMI.SAS - Calculate MPR smoking and BMI scores
*  - BENCHA01-04.SAS - Convert Benchmark Scores into WEB layout
*  - LOADCAHP.SAS    - Convert CAHPS Scores Database into WEB layout
*
* 2) The output file (MERGFINL.SD2) will be run through the
*    MAKEHTML.SAS program to generate the WEB pages.
*
*************************************************************************
* Assign data libraries and options
*************************************************************************;
LIBNAME IN01  V612 ".";
LIBNAME IN02  V612 ".";
LIBNAME IN03  V612 "..\2005\LOADWEB";
LIBNAME IN04  V612 "..\2006\LOADWEB";
LIBNAME IN05  V612 "..\REPORTCARDS\MPR_ADULT2007";
LIBNAME IN06  V612 "..\2005\REPORTCARDS\MPR_ADULT2005";
LIBNAME IN07  V612 "..\2006\REPORTCARDS\MPR_ADULT2006";
LIBNAME IN08  V612 "..\BENCHMARK\DATA";
LIBNAME IN09  V612 "..\2005\BENCHMARK\DATA";
LIBNAME IN10  V612 "..\2006\BENCHMARK\DATA";
LIBNAME OUT   V612 ".";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

%LET PERIOD5 = 2005;
%LET PERIOD6 = 2006;
%LET PERIOD7 = 2007;

*************************************************************************
* Construct ORDERing variable from WEB layout
*************************************************************************;
DATA ORDER;
```

```
   SET IN01.FAKE;
   ORDER = _N_;
   LENGTH KEY $200;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
   KEEP KEY ORDER;
RUN;

PROC SORT DATA=ORDER; BY KEY; RUN;

*************************************************************************
* Merge the Scores Databases
*************************************************************************;
DATA MERGFINL;
   SET IN02.LOADCAHP (IN=INCAHP07)
       IN03.LOADCAHP (IN=INCAHP05)
       IN04.LOADCAHP (IN=INCAHP06)
       IN05.LOADMPR  (IN=INMPR07)
       IN06.LOADMPR  (IN=INMPR05)
       IN07.LOADMPR  (IN=INMPR06)
       IN08.BENCHA04 (IN=INBEN07)
       IN09.BENCHA04 (IN=INBEN05)
       IN10.BENCHA04 (IN=INBEN06);
   SVCAHP07 = INCAHP07;
   SVCAHP05 = INCAHP05;
   SVCAHP06 = INCAHP06;
   SVMPR07  = INMPR07 ;
   SVMPR05  = INMPR05 ;
   SVMPR06  = INMPR06 ;
   SVBEN07  = INBEN07 ;
   SVBEN05  = INBEN05 ;
   SVBEN06  = INBEN06 ;

   LENGTH KEY $200;

   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
   IF SCORE = . THEN DELETE;
   IF TRIM(REGCAT) = "INV" THEN DELETE;
RUN;

PROC SORT DATA=MERGFINL; BY KEY; RUN;

*************************************************************************
* Append ORDERing variable to the merged Scores database file
*************************************************************************;
DATA MERGFINL2 out.MISSING;
   MERGE MERGFINL(IN=IN1) ORDER(IN=IN2);
   BY KEY;

   LENGTH FLAG $30;
   IF IN1 AND IN2 THEN FLAG = "IN SCORES DB AND LAYOUT";
   ELSE IF    IN1 THEN FLAG = "IN SCORES DB ONLY";
   ELSE IF    IN2 THEN FLAG = "IN LAYOUT ONLY";

   LENGTH SOURCE $30;
   IF SVCAHP07 = 1 THEN SOURCE = "CAHPS &PERIOD7.";
   IF SVCAHP06 = 1 THEN SOURCE = "CAHPS &PERIOD6.";
   IF SVCAHP05 = 1 THEN SOURCE = "CAHPS &PERIOD5.";
   IF SVMPR07  = 1 THEN SOURCE = "MPR &PERIOD7. .";
   IF SVMPR06  = 1 THEN SOURCE = "MPR &PERIOD6.  ";
   IF SVMPR05  = 1 THEN SOURCE = "MPR &PERIOD5.  ";
   IF SVBEN07  = 1 THEN SOURCE = "BENCHMARK &PERIOD7.";
   IF SVBEN06  = 1 THEN SOURCE = "BENCHMARK &PERIOD6.";
   IF SVBEN05  = 1 THEN SOURCE = "BENCHMARK &PERIOD5.";

   IF IN1 AND NOT IN2 THEN OUTPUT out.MISSING; *Missing from layout;
   IF IN1 AND ORDER NE . THEN OUTPUT MERGFINL2;
RUN;

*************************************************************************
```

```
* Reorder file according to WEB layout
*************************************************************************;
PROC SORT DATA=MERGFINL2 OUT=OUT.MERGFINL; BY ORDER; RUN;

DATA FAKE;
SET IN01.FAKE;
   ORDER = _N_;
RUN;

DATA LAYONLY;
   MERGE FAKE(IN=IN1) OUT.MERGFINL(IN=IN2 KEEP=ORDER);
   BY ORDER;
   IF IN1 AND NOT IN2;
RUN;

TITLE1 "2007 DOD Health Survey Scores/Report Cards (6244-410)";
TITLE2 "Program Name: MERGFINL.SAS By Keith Rathbun";
TITLE3 "Program Inputs: MPR and CAHPS Combined Scores data sets and WEB Layout";
TITLE4  "Program  Outputs:  MERGFINL.SD2  -  Merged  Final  Scores  Database  for  input  to
MAKEHTML.SAS";

TITLE5 "MERGFINL.SD2 Data source counts";
PROC FREQ DATA=OUT.MERGFINL;
  TABLES SOURCE FLAG

  SVCAHP07 SVCAHP06 SVCAHP05
  SVMPR07  SVMPR06  SVMPR05
  SVBEN07  SVBEN06  SVBEN05

  SVCAHP07 * SVCAHP06 * SVCAHP05 *
  SVMPR07  * SVMPR06  * SVMPR05  *
  SVBEN07  * SVBEN06  * SVBEN05

 /MISSING LIST;
RUN;

TITLE5 "MERGFINL.SD2 Data attribute counts";
PROC FREQ DATA=OUT.MERGFINL;
TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT
       REGION*REGCAT
      /MISSING LIST;
RUN;

TITLE5 "LAYONLY.SD2 Data attribute counts";
PROC FREQ DATA=LAYONLY;
TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT
       REGION*REGCAT
      /MISSING LIST;
RUN;

TITLE5 "No matching record found in LAYOUT file (FAKE.SD2)";
PROC PRINT DATA=OUT.MISSING;
VAR MAJGRP REGION REGCAT BENTYPE BENEFIT;
RUN;
```

G.14 LOADWEB\CONUS_Q.SAS - GENERATE CAHPS CONUS SCORES AND PERFORM SIGNIFICANCE TESTS - ANNUAL.

```
***************************************************************************
*
*  PROGRAM:  CONUS_Q.SAS
*  TASK:     ANNUAL DOD HEALTH CARE SURVEY ANALYSIS (8860-410)
*  PURPOSE:  Generate CAHPS CONUS scores and perform significance tests.
*
*  WRITTEN:  11/13/2000 BY KEITH RATHBUN, Adapted from CONUS_A.SAS.
*            Merged SIGNIF_A.SAS funtionality.
*
*  MODIFIED: 1) 01/07/2002 BY KEITH RATHBUN, Updated for 2000 annual consumer
*               reports.
*            2) 01/27/2003 BY KEITH RATHBUN, Updated for 2002 annual consumer
*               reports.
*            3) 02/08/2004 BY CHRIS RANKIN, Updated for 2003 annual consumer
*               reports.
*            4) 11/14/2007 BY KEITH RATHBUN, Updated for 2007 annual consumer
*               reports.
*
*   INPUTS:  1) MERGFINL.SD2 - Scores Database in WEB Layout
*            2) FAKE.SD2 - Scores Database WEB Layout
*            3) CONUS_A.SD2 - Previous years Combined CAHPS/MPR Scores Database in WEB layout
*
*   OUTPUT:  1) CONUS_Q.SD2 - Combined CAHPS/MPR Scores Database in WEB layout
*            2) LT30Q.SD2 - Records with <= 30 observations
*
*    NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - STEP1Q.SAS   - Recode questions and generate group files
*    - STEP2.SAS    - Calculate individual adjusted scores for group 1-8
*    - COMPOSIT.SAS - Calculate composite adjusted scores for group 1-8
*    - MERGFINL.SAS - Merge the final CAHPS and MPR Scores Databases
*
***************************************************************************
* Assign data libraries and options
***************************************************************************;
LIBNAME  IN1 V612 ".";
LIBNAME OUT V612 ".";

*LIBNAME IN1 V612 "l:\2005\programs\loadweb";
*LIBNAME OUT V612 "l:\2005\programs\loadweb";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

****************************************************************************
****************************************************************************
*
* Process Macro Input Parameters:
*
* 1) BENTYPE = Benefit Type
* 2) MAJGRP = Major Group
* 3) TYPE = INDIVIDUAL or COMPOSITE
* 4) BENEFIT = COMPOSITE Benefit Type
*
****************************************************************************
****************************************************************************;
* Set up empty template file for data merge purposes and set first time flag
****************************************************************************;
%LET DSN = MERGFINL;

DATA INIT;
   SET IN1.&DSN;
   DELETE;
RUN;
%LET FLAG = 0;

%MACRO PROCESS(BENTYPE=,MAJGRP=,TYPE=,BENEFIT=);
DATA TEMP;
   SET PRETEMP END=FINISHED;
   %IF "&TYPE" = "INDIVIDUAL" %THEN %DO;
```

```
      WHERE BENTYPE = "&BENTYPE" AND "&MAJGRP" = MAJGRP AND REGION = REGCAT AND
            REGION NOT IN("Benchmark","CONUS MHS") AND
            REGCAT NOT IN("Benchmark","CONUS MHS") AND
            REGION NOT IN ("ARMY","AIR FORCE","NAVY","OTHER");
   %END;
   %ELSE %IF "&TYPE" = "COMPOSITE" %THEN %DO;
      WHERE BENTYPE = &BENTYPE AND "&MAJGRP" = MAJGRP AND REGION = REGCAT AND
            BENEFIT = "&BENEFIT" AND
            REGION NOT IN("Benchmark","CONUS MHS") AND
            REGCAT NOT IN("Benchmark","CONUS MHS") AND
            REGION NOT IN ("ARMY","AIR FORCE","NAVY","OTHER");
   %END;
   %ELSE %DO;
      PUT "ERROR: Invalid Type = &TYPE";
   %END;

   IF SUBSTR(REGION,1,5) IN ('North','South') THEN DO;
      IF SUBSTR(REGION,1,5)='North' THEN REGCON=1;
     ELSE IF SUBSTR(REGION,1,5)='South' THEN REGCON=2;
     TOTCON=1;
      IF SUBSTR(REGION,7,4)='Army' THEN SERVICE=1;
     ELSE IF SUBSTR(REGION,7,9)='Air Force' THEN SERVICE=2;
     ELSE IF SUBSTR(REGION,7,4)='Navy' THEN SERVICE=3;
     ELSE SERVICE=4;
   END;
   ELSE IF SUBSTR(REGION,1,4)='West' THEN DO;
      REGCON=3;
     TOTCON=1;
      IF SUBSTR(REGION,6,4)='Army' THEN SERVICE=1;
     ELSE IF SUBSTR(REGION,6,9)='Air Force' THEN SERVICE=2;
     ELSE IF SUBSTR(REGION,6,4)='Navy' THEN SERVICE=3;
     ELSE SERVICE=4;
   END;
  ELSE IF SUBSTR(REGION,1,6)='Europe' THEN DO;
      REGCON=4;
      TOTCON=2;
      IF      SUBSTR(REGION,8,4)='Army'       THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,8,9)='Air Force'  THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,8,4)='Navy'       THEN SERVICE=3;
      ELSE                                         SERVICE=4;
   END;
      ELSE IF SUBSTR(REGION,1,7)='Pacific' THEN DO;
      REGCON=5;
      TOTCON=2;
      IF      SUBSTR(REGION,9,4)='Army'       THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,9,9)='Air Force'  THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,9,4)='Navy'       THEN SERVICE=3;
      ELSE                                         SERVICE=4;
   END;
   ELSE IF SUBSTR(REGION,1,13)='Latin America' THEN DO;
      REGCON=6;
      TOTCON=2;
      IF      SUBSTR(REGION,15,4)='Army'      THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,15,9)='Air Force' THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,15,4)='Navy'      THEN SERVICE=3;
      ELSE                                         SERVICE=4;
   END;

RUN;

*********************************************************************;
* RSG 01/2005 Calc. total Service Affiliation Scores       *;
*********************************************************************;
PROC SORT DATA=TEMP;
BY SERVICE;

DATA TEMP2;
   SET TEMP;
   BY SERVICE;
      length key $200;
   IF FIRST.SERVICE THEN DO;
      SUMSCOR1 = 0;    RETAIN SUMSCOR1;
      SUMWGT1 = 0;     RETAIN SUMWGT1;
```

```
      SUMSE2 = 0;      RETAIN SUMSE2;
      SUMWGT2 = 0;     RETAIN SUMWGT2;
      N_OBS1 = 0;      RETAIN N_OBS1;
   END;

   IF SCORE  NE . AND N_WGT NE . THEN SUMSCOR1 = SUMSCOR1 + (SCORE*N_WGT);
   IF N_WGT  NE . THEN SUMWGT1  = SUMWGT1  + N_WGT;
   IF SEMEAN NE . AND N_WGT NE . THEN SUMSE2 = SUMSE2 + (SEMEAN*N_WGT)**2;
   IF N_OBS  NE . THEN N_OBS1 + N_OBS;


KEEP MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG SCORE SEMEAN N_OBS N_WGT
     FLAG SOURCE SUMSCOR1 SUMWGT1 SUMSE2 KEY;   ***MJS 07/08/03 Added TIMEPD;

   IF LAST.SERVICE THEN DO;

      IF SUMWGT1 NOTIN (.,0) THEN DO;
        SCORE   = SUMSCOR1/SUMWGT1;
        SEMEAN  = SQRT(SUMSE2)/SUMWGT1;
     END;
     ELSE DO;
       SCORE   = .;
       SEMEAN  = .;
     END;

      N_OBS   = N_OBS1;
      N_WGT   = SUMWGT1;
      SOURCE  = "CONUS";
      FLAG    = "CONUS";
      IF SERVICE=1 THEN REGION = "ARMY";
      IF SERVICE=2 THEN REGION = "AIR FORCE";
      IF SERVICE=3 THEN REGION = "NAVY";
      IF SERVICE=4 THEN REGION = "OTHER";

      REGCAT  = REGION;
      KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
            UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
            UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
      OUTPUT;
   END;
RUN;
*********************************************************************;
* RSG 01/2005 Calc. Total Region scores                             *;
*********************************************************************;
PROC SORT DATA=TEMP;
BY REGCON;
DATA TEMP3;
   SET TEMP;
   BY REGCON;
      length key $200;
   IF FIRST.REGCON THEN DO;
      SUMSCOR1 = 0;    RETAIN SUMSCOR1;
      SUMWGT1 = 0;     RETAIN SUMWGT1;
      SUMSE2 = 0;      RETAIN SUMSE2;
      SUMWGT2 = 0;     RETAIN SUMWGT2;
      N_OBS1 = 0;      RETAIN N_OBS1;
   END;

   IF SCORE  NE . AND N_WGT NE . THEN SUMSCOR1 = SUMSCOR1 + (SCORE*N_WGT);
   IF N_WGT  NE . THEN SUMWGT1  = SUMWGT1  + N_WGT;
   IF SEMEAN NE . AND N_WGT NE . THEN SUMSE2 = SUMSE2 + (SEMEAN*N_WGT)**2;
   IF N_OBS  NE . THEN N_OBS1 + N_OBS;

KEEP MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG SCORE SEMEAN N_OBS N_WGT
     FLAG SOURCE SUMSCOR1 SUMWGT1 SUMSE2 KEY;   ***MJS 07/08/03 Added TIMEPD;

   IF LAST.REGCON THEN DO;

      IF SUMWGT1 NOTIN (.,0) THEN DO;
        SCORE   = SUMSCOR1/SUMWGT1;
        SEMEAN  = SQRT(SUMSE2)/SUMWGT1;
     END;
     ELSE DO;
```

```
       SCORE   = .;
       SEMEAN  = .;
     END;
      N_OBS   = N_OBS1;
      N_WGT   = SUMWGT1;
      SOURCE  = "REGION";
      FLAG    = "REGION";
      IF REGCON=1 THEN REGION = "NORTH";
      IF REGCON=2 THEN REGION = "SOUTH";
      IF REGCON=3 THEN REGION = "WEST";
      IF REGCON=4 THEN REGION = "Overseas Europe";
      IF REGCON=5 THEN REGION = "Overseas Pacific";
      IF REGCON=6 THEN REGION = "Overseas Latin America";
      REGCAT  = REGION;
      KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
            UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
            UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
      OUTPUT;
   END;
RUN;

*********************************************************************;
* RSG 01/2005 Calc. Total CONUS Scores                              *;
*********************************************************************;
PROC SORT DATA=TEMP;
BY TOTCON;
DATA TEMP4;
   SET TEMP END=FINISHED;BY TOTCON;
      length key $200;
   IF FIRsT.Totcon THEN DO;
      SUMSCOR1 = 0;    RETAIN SUMSCOR1;
      SUMWGT1 = 0;     RETAIN SUMWGT1;
      SUMSE2 = 0;      RETAIN SUMSE2;
      SUMWGT2 = 0;     RETAIN SUMWGT2;
      N_OBS1 = 0;      RETAIN N_OBS1;
   END;
   ***********************************************************************
   * Calculate for CONUS and OCONUS
   ***********************************************************************;

      IF SCORE  NE . AND N_WGT NE . THEN SUMSCOR1 = SUMSCOR1 + (SCORE*N_WGT);
      IF N_WGT  NE . THEN SUMWGT1  = SUMWGT1  + N_WGT;
      IF SEMEAN NE . AND N_WGT NE . THEN SUMSE2 = SUMSE2 + (SEMEAN*N_WGT)**2;
      IF N_OBS  NE . THEN N_OBS1 + N_OBS;

   IF LAST.TOTCON THEN GOTO FINISHED;
   RETURN;

KEEP MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG SCORE SEMEAN N_OBS N_WGT
     FLAG SOURCE SUMSCOR1 SUMWGT1 SUMSE2 KEY;   ***MJS 07/08/03 Added TIMEPD;

   FINISHED:
      IF SUMWGT1 NOTIN (.,0) THEN DO;
        SCORE   = SUMSCOR1/SUMWGT1;
        SEMEAN  = SQRT(SUMSE2)/SUMWGT1;
     END;
     ELSE DO;
       SCORE   = .;
       SEMEAN  = .;
     END;
      N_OBS   = N_OBS1;
      N_WGT   = SUMWGT1;
      IF TOTCON=1 THEN DO;
      SOURCE  = "CONUS";
      FLAG    = "CONUS";
      REGION = "CONUS MHS";
      END;
      IF TOTCON=2 THEN Do;
      SOURCE="OVERSEAS";
      FLAG="OVERSEAS";
      REGION="OVERSEAS";
      END;
      REGCAT  = REGION;
```

```
          KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
                UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
                UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
          OUTPUT;
     RUN;

     %IF &FLAG = 0 %THEN %DO;
        DATA FINAL;
           SET INIT TEMP2 TEMP3 TEMP4;
        RUN;
     %END;
     %ELSE %DO;
        DATA FINAL;
           SET FINAL TEMP2 TEMP3 TEMP4;
        RUN;
     %END;
     %LET FLAG = 1;

     %MEND;

     %MACRO CALLIT(TIMEPD=);

     DATA PRETEMP;
     SET IN1.&DSN.;
     IF TIMEPD="&TIMEPD";
     RUN;

     ************************************************************************
     * Create CONUS for Active Duty - Individual
     ************************************************************************;
     %PROCESS(BENTYPE=Advice over Telephone                                  ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled Correctly                               ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled in a Reasonable Time                    ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Courteous and Respectful                               ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Delays in Care while Awaiting Approval                 ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Explains so You can Understand                         ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Helpful                                                ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Listens Carefully                                      ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Getting Help from Customer Service             ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem with Paperwork                                 ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Necessary Care                        ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse                 ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Referral to Specialist                ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Shows Respect                                          ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Spends Time with You                                   ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Urgent Care                                   ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment             ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Routine Visit                                 ,MAJGRP=Active Duty,
TYPE=INDIVIDUAL);

     ************************************************************************
     * Create CONUS for Active Duty Dependents - Individual
     ************************************************************************;
```

```
     %PROCESS(BENTYPE=Advice over Telephone                          ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled Correctly                       ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled in a Reasonable Time            ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Courteous and Respectful                       ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Delays in Care while Awaiting Approval         ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Explains so You can Understand                 ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Helpful                                        ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Listens Carefully                              ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Getting Help from Customer Service     ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem with Paperwork                         ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Necessary Care                ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse         ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Referral to Specialist        ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Shows Respect                                  ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Spends Time with You                           ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Urgent Care                           ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment     ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Routine Visit                         ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);

     ****************************************************************************
     * Create CONUS for Enrollees with Civilian PCM - Individual
     ****************************************************************************;
     %PROCESS(BENTYPE=Advice over Telephone                          ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled Correctly                       ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled in a Reasonable Time            ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Courteous and Respectful                       ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Delays in Care while Awaiting Approval         ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Explains so You can Understand                 ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Helpful                                        ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Listens Carefully                              ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Getting Help from Customer Service     ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem with Paperwork                         ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Necessary Care                ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse         ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Referral to Specialist        ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Shows Respect                                  ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
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     %PROCESS(BENTYPE=Spends Time with You                          ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Urgent Care                          ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment    ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Routine Visit                        ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);

     ***************************************************************************
     * Create CONUS for Enrollees with Military PCM - Individual
     ***************************************************************************;
     %PROCESS(BENTYPE=Advice over Telephone                         ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled Correctly                      ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled in a Reasonable Time           ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Courteous and Respectful                      ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Delays in Care while Awaiting Approval        ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Explains so You can Understand                ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Helpful                                       ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Listens Carefully                             ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Getting Help from Customer Service    ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem with Paperwork                        ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Necessary Care               ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse        ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Referral to Specialist       ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Shows Respect                                 ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Spends Time with You                          ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Urgent Care                          ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment    ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Routine Visit                        ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);

     ***************************************************************************
     * Create CONUS for Non-enrolled Beneficiaries - Individual
     ***************************************************************************;
     %PROCESS(BENTYPE=Advice over Telephone                                ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled Correctly                             ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled in a Reasonable Time                  ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Courteous and Respectful                             ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Delays in Care while Awaiting Approval               ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Explains so You can Understand                       ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Helpful                                              ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Listens Carefully                                    ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
```

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    %PROCESS(BENTYPE=Problem  Getting  Help  from  Customer  Service         ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problem with Paperwork                                  ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems Getting Necessary Care                         ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems  Getting  Personal  Doctor/Nurse               ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems  Getting  Referral  to  Specialist             ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Shows Respect                                           ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Spends Time with You                                    ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait for Urgent Care                                    ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait  More  than  15  Minutes  Past  Appointment        ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait for Routine Visit                                  ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);

    ************************************************************************
    * Create CONUS for Prime Enrollees - Individual
    ************************************************************************;
    %PROCESS(BENTYPE=Advice over Telephone                                  ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Claims Handled Correctly                               ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Claims Handled in a Reasonable Time                    ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Courteous and Respectful                               ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Delays in Care while Awaiting Approval                 ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Explains so You can Understand                         ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Helpful                                                ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Listens Carefully                                      ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problem  Finding/Understanding  Written  Material,MAJGRP=Prime  Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problem  Getting  Help  from  Customer  Service        ,MAJGRP=Prime  Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problem with Paperwork                                 ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems Getting Necessary Care                        ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems  Getting  Personal  Doctor/Nurse              ,MAJGRP=Prime  Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems  Getting  Referral  to  Specialist            ,MAJGRP=Prime  Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Shows Respect                                          ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Spends Time with You                                   ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait for Urgent Care                                   ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait  More  than  15  Minutes  Past  Appointment       ,MAJGRP=Prime  Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait for Routine Visit                                 ,MAJGRP=Prime Enrollees,
TYPE=INDIVIDUAL);

    ************************************************************************
    * Create CONUS for Retirees and Dependents - Individual
    ************************************************************************;
    %PROCESS(BENTYPE=Advice over Telephone                        ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Claims Handled Correctly                     ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Claims Handled in a Reasonable Time          ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
```

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     %PROCESS(BENTYPE=Courteous and Respectful                      ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Delays in Care while Awaiting Approval        ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Explains so You can Understand                ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Helpful                                       ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Listens Carefully                             ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Getting Help from Customer Service    ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem with Paperwork                        ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Necessary Care               ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse        ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Referral to Specialist       ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Shows Respect                                 ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Spends Time with You                          ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Urgent Care                          ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment    ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Routine Visit                        ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);

     ***************************************************************************
     * Create CONUS for All Beneficiaries - Individual
     ***************************************************************************;
     %PROCESS(BENTYPE=Advice over Telephone                             ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled Correctly                          ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims Handled in a Reasonable Time               ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Courteous and Respectful                          ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Delays in Care while Awaiting Approval            ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Explains so You can Understand                    ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Helpful                                           ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Listens Carefully                                 ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Getting Help from Customer Service       ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem with Paperwork                            ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Necessary Care                   ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse            ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Referral to Specialist           ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Shows Respect                                     ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Spends Time with You                              ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait for Urgent Care                              ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment       ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);
```

```
    %PROCESS(BENTYPE=Wait for Routine Visit                              ,MAJGRP=All Beneficiaries,
TYPE=INDIVIDUAL);


    ***************************************************************************
    * Process Quarterly CONUS Composites
    ***************************************************************************
    ***************************************************************************
    * Create CONUS for Claims Processing - Quarterly
    ***************************************************************************;
    %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                , TYPE=COMPOSITE,BENEFIT=Claims
Processing);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
    %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents     , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
    %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Claims
Processing);
    %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Claims
Processing);
    %PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
    %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
    %PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
    %PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Claims
Processing);

    ***************************************************************************
    * Create CONUS for Courteous and Helpful Office Staff - Quarterly
    ***************************************************************************;
    %PROCESS(BENTYPE="Composite",   MAJGRP=Active   Duty                                          ,
TYPE=COMPOSITE,BENEFIT=Courteous   and   Helpful   Office   Staff);        ***MJS   07/08/03   Changed
BENTYPE="&PERIOD4" to BENTYPE="Composite";
    %PROCESS(BENTYPE="Composite",     MAJGRP=Active     Duty     Dependents                        ,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);
    %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Civilian         PCM,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);
    %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Military         PCM,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);
    %PROCESS(BENTYPE="Composite",           MAJGRP=Non-enrolled           Beneficiaries           ,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);
    %PROCESS(BENTYPE="Composite",   MAJGRP=Prime   Enrollees                                        ,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);
    %PROCESS(BENTYPE="Composite",     MAJGRP=Retirees     and     Dependents                      ,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);
    %PROCESS(BENTYPE="Composite",    MAJGRP=All    Beneficiaries                                    ,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);

    ***************************************************************************
    * Create CONUS for Customer Service - Quarterly
    ***************************************************************************;
    %PROCESS(BENTYPE="Composite",   MAJGRP=Active   Duty                                            ,
TYPE=COMPOSITE,BENEFIT=Customer   Service);       ***MJS   07/08/03   Changed   BENTYPE="&PERIOD4"   to
BENTYPE="Composite";
    %PROCESS(BENTYPE="Composite",     MAJGRP=Active     Duty     Dependents                        ,
TYPE=COMPOSITE,BENEFIT=Customer Service);
    %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Civilian         PCM,
TYPE=COMPOSITE,BENEFIT=Customer Service);
    %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Military         PCM,
TYPE=COMPOSITE,BENEFIT=Customer Service);
    %PROCESS(BENTYPE="Composite",           MAJGRP=Non-enrolled           Beneficiaries           ,
TYPE=COMPOSITE,BENEFIT=Customer Service);
    %PROCESS(BENTYPE="Composite",   MAJGRP=Prime   Enrollees                                        ,
TYPE=COMPOSITE,BENEFIT=Customer Service);
    %PROCESS(BENTYPE="Composite",     MAJGRP=Retirees     and     Dependents                      ,
TYPE=COMPOSITE,BENEFIT=Customer Service);
    %PROCESS(BENTYPE="Composite",    MAJGRP=All    Beneficiaries                                    ,
TYPE=COMPOSITE,BENEFIT=Customer Service);

    ***************************************************************************
    * Create CONUS for Getting Care Quickly - Quarterly
    ***************************************************************************;
```

```
     %PROCESS(BENTYPE="Composite",   MAJGRP=Active   Duty                                        ,
TYPE=COMPOSITE,BENEFIT=Getting  Care  Quickly);     ***MJS  07/08/03  Changed  BENTYPE="&PERIOD4"  to
BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite",     MAJGRP=Active     Duty     Dependents                        ,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Civilian         PCM,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Military         PCM,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);
     %PROCESS(BENTYPE="Composite",           MAJGRP=Non-enrolled           Beneficiaries           ,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);
     %PROCESS(BENTYPE="Composite",   MAJGRP=Prime   Enrollees                                        ,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);
     %PROCESS(BENTYPE="Composite",     MAJGRP=Retirees     and     Dependents                      ,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);
     %PROCESS(BENTYPE="Composite",    MAJGRP=All    Beneficiaries                                   ,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);

     ***************************************************************************
     * Create CONUS for Getting Needed Care - Quarterly
     ***************************************************************************;
     %PROCESS(BENTYPE="Composite",   MAJGRP=Active   Duty                                        ,
TYPE=COMPOSITE,BENEFIT=Getting  Needed  Care);     ***MJS  07/08/03  Changed  BENTYPE="&PERIOD4"  to
BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite",     MAJGRP=Active     Duty     Dependents                        ,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Civilian         PCM,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Military         PCM,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);
     %PROCESS(BENTYPE="Composite",           MAJGRP=Non-enrolled           Beneficiaries           ,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);
     %PROCESS(BENTYPE="Composite",   MAJGRP=Prime   Enrollees                                        ,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);
     %PROCESS(BENTYPE="Composite",     MAJGRP=Retirees     and     Dependents                      ,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);
     %PROCESS(BENTYPE="Composite",    MAJGRP=All    Beneficiaries                                   ,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);

     ***************************************************************************
     * Create CONUS for Health Care - Quarterly
     ***************************************************************************;
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                 , TYPE=COMPOSITE,BENEFIT=Health
Care);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents     , TYPE=COMPOSITE,BENEFIT=Health
Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Health
Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Health
Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Health
Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Health
Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Health
Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Health
Care);

     ***************************************************************************
     * Create CONUS for Health Plan - Quarterly
     ***************************************************************************;
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                 , TYPE=COMPOSITE,BENEFIT=Health
Plan);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents     , TYPE=COMPOSITE,BENEFIT=Health
Plan);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Health
Plan);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Health
Plan);
     %PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Health
Plan);
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     %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees            , TYPE=COMPOSITE,BENEFIT=Health
Plan);
     %PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Health
Plan);
     %PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries          , TYPE=COMPOSITE,BENEFIT=Health
Plan);

     ************************************************************************
     * Create CONUS for How Well Doctors Communicate - Quarterly
     ************************************************************************;
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                  , TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents       , TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees              , TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents      , TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries            , TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);

     ************************************************************************
     * Create CONUS for Primary Care Manager - Quarterly
     ************************************************************************;
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                                    ,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);     ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to
BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents                         ,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);
     %PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries ,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);
     %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees                                ,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);
     %PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents                        ,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);
     %PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries                              ,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);

     ************************************************************************
     * Create CONUS for Specialty Care - Quarterly
     ************************************************************************;
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty                                    ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);       ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to
BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents                         ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees                                ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents                        ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries                              ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);

     %MEND;
     %CALLIT(TIMEPD=2007); /*KRR 11/14/2007*/
     %CALLIT(TIMEPD=2006); /*KRR 11/14/2007*/
     %CALLIT(TIMEPD=2005); /*KRR 11/14/2007*/
```

```
*************************************************************************
* Extract ORDER and KEY from the WEB Layout file.  TEMPQ will be used
* as place holders for missing records.  FAKE will be used for adding
* new records.
*************************************************************************;
DATA FAKE;
   SET IN1.FAKE;
   SIG = .;
   SCORE = .;
   ORDER = _N_;
   LENGTH KEY $200.;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
   IF BENEFIT='Total' THEN DELETE;

RUN;
PROC SORT DATA=FAKE OUT=TEMPQ;       BY KEY; RUN;
PROC SORT DATA=FAKE(KEEP=ORDER KEY); BY KEY; RUN;

************************************************************************
* Append BENCHMARK records to CAHPS records and perform significance tests
*************************************************************************;
DATA BENCHMRK(KEEP=MAJGRP BENEFIT BENTYPE SEMEAN SCORE timepd);
   SET IN1.&DSN;
   WHERE REGION = "Benchmark" AND SVMPR05=0 AND SVMPR06=0 AND SVMPR07=0; /*KRR 11/14/2007*/
RUN;
Data abnchmrk(keep=benefit bentype timepd ascore);
set benchmrk;
where majgrp='All Beneficiaries';
rename score=ascore;
run;
proc sort; by benefit bentype timepd;
proc sort data=benchmrk; by benefit bentype timepd;
data benchmrk;
merge benchmrk abnchmrk; by benefit bentype timepd;

PROC SORT DATA=BENCHMRK; BY MAJGRP BENEFIT BENTYPE timepd; RUN;

PROC SORT DATA=FINAL; BY KEY; RUN;

DATA CONUS_Q;
   MERGE FINAL(IN=IN1 DROP=ORDER) FAKE(IN=IN2);
   BY KEY;
   IF IN1;
RUN;
PROC SORT DATA=CONUS_Q; BY MAJGRP BENEFIT BENTYPE timepd; RUN;

************************************************************************
* Perform significance tests for CONUS scores
*************************************************************************;
DATA SIGTEST1;
   MERGE CONUS_Q(IN=SIN) BENCHMRK(RENAME=(SCORE=BSCORE SEMEAN=BSEMEAN));
   BY MAJGRP BENEFIT BENTYPE timepd;
   LENGTH KEY $200.;
*%include "offset.inc";
*%include "l:\2005\programs\loadweb\offset.inc";
   TEMP = (SCORE-BSCORE)/SQRT(BSEMEAN**2+SEMEAN**2);
   IF N_OBS > 1 THEN TEST = 2*(1-PROBT(ABS(TEMP),N_OBS-1));
   ELSE TEST = .;
   SIG = 0;
   IF TEST < 0.05 THEN SIG = 1;
   IF SCORE < BSCORE THEN SIG = -SIG;

   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
   SOURCE = "CONUS_Q";
   FLAG   = "CONUS_Q";
   score=score+ascore-bscore;
   IF SIN;
RUN;
```

```
PROC SORT DATA=SIGTEST1; BY KEY; RUN;

*************************************************************************
* Extract CAHPS scores to perform significance tests
*************************************************************************;
DATA CAHPS MPR;
   SET IN1.&DSN;
   ************************************************************************
   * Significance tests have already been performed for MPR scores,
   * so remove from file.
   ************************************************************************;

   IF SVMPR05 = 1|svmpr06=1|svmpr07=1 THEN OUTPUT MPR; /*KRR 11/14/2007*/
   IF SVMPR05 = 0 & svmpr06 = 0 & svmpr07 = 0 THEN OUTPUT CAHPS; /*KRR 11/14/2007*/
RUN;

PROC SORT DATA=CAHPS;
   BY MAJGRP BENEFIT BENTYPE timepd;
RUN;

*************************************************************************
* Perform significance tests for CAHPS scores
*************************************************************************;
DATA SIGTEST2;
   MERGE CAHPS(IN=SIN) BENCHMRK(RENAME=(SCORE=BSCORE SEMEAN=BSEMEAN));
   BY MAJGRP BENEFIT BENTYPE timepd;
*%include "offset.inc";
*%include "l:\2005\programs\loadweb\offset.inc";
   TEMP = (SCORE-BSCORE)/SQRT(BSEMEAN**2+SEMEAN**2);
   IF N_OBS > 1 THEN TEST = 2*(1-PROBT(ABS(TEMP),N_OBS-1));
   ELSE TEST = .;
   SIG = 0;
   IF N_OBS >= 30 AND TEST < 0.05 THEN SIG = 1;
   IF SCORE < BSCORE THEN SIG = -SIG;
   IF SIN;
   score=score+ascore-bscore;
RUN;
PROC SORT DATA=SIGTEST2; BY KEY; RUN;

PROC SORT DATA=MPR; BY KEY; RUN;

*************************************************************************
* Combine previously created records with the new file
*************************************************************************;
DATA COMBINE OUT.LT30Q;
   SET SIGTEST1 SIGTEST2 MPR;
   BY KEY;
   ************************************************************************
   * Remove N_OBS < 30 OR N_WGT < 200
   ************************************************************************;
   IF (N_OBS < 30 OR N_WGT < 200) AND (MAJGRP NE "Benchmark") AND
      (REGION NE "Benchmark")
      THEN OUTPUT OUT.LT30Q;
   ELSE OUTPUT COMBINE;
RUN;

*************************************************************************
* Create place holders for missing records
*************************************************************************;
DATA FAKEONLY;
   MERGE COMBINE(IN=IN1) TEMPQ(IN=IN2);
   BY KEY;
   SOURCE = "FAKE ONLY";
   FLAG   = "FAKE ONLY";
   IF IN2 AND NOT IN1;
RUN;

*************************************************************************
* Combine all of the missing records with the existing records to generate
* the complete WEB layout file.
*************************************************************************;
DATA CONUS_Q;
   SET FAKEONLY COMBINE;
```

```
   BY KEY;

   IF BENEFIT NE "Preventive Care" THEN SCORE = SCORE*100;
RUN;

PROC SORT DATA=CONUS_Q OUT=OUT.CONUS_Q; BY ORDER; RUN;

TITLE1 "Annual 2007 DOD Health Survey Scores/Report Cards (6077-410)";
TITLE2 "Program Name: CONUS_Q.SAS By Keith Rathbun";
TITLE3 "Program Inputs: MERGFINL.SD2 - Scores Database in WEB Layout";
TITLE4 "Program Outputs: CONUS_Q.SD2 - CONUS Scores Database in WEB layout";

PROC FREQ;
TABLES SIG FLAG SOURCE BENEFIT BENTYPE MAJGRP REGION REGCAT
       REGION*REGCAT
      /MISSING LIST;
RUN;
```

G.15 LOADWEB\TREND_A.SAS - CALCULATE TRENDS FOR CAHPS SCORES - ANNUAL.

```
***************************************************************************
*
* PROGRAM:  TREND_A.SAS
* TASK:     2007 DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Add TREND records to Scores database.
*
* WRITTEN:  06/28/2000 BY KEITH RATHBUN
*
* MODIFIED: 1) 02/21/2001 BY KEITH RATHBUN -- updated calculation for
*              trend score (DSCORE).
*           2) 01/07/2002 BY KEITH RATHBUN -- updated for 2000 survey.
*              Use 1998/2000 pairs to caclulate trends.
*           3) 01/27/2003 BY KEITH RATHBUN -- updated for 2002 survey.
*              Use 2000/2002 pairs to caclulate trends.
*           4) 02/08/2004 BY CHRIS RANKIN -- updated for 2003 survey.
*              Use 2001/2003 pairs to caclulate trends.
*           5) 02/2005 BY REGINA GRAMSS -- updated for 2004 survey,
*              include smoking cessation trend calculation,
*              put patch in for to order properly.
*           6) 02/2006 BY REGINA GRAMSS -- update for 2005.  Use
*              second set of scores using "old" weights to calculate
*              trend.
*           7) 11/14/2007 BY KEITH RATHBUN -- updated for 2007 survey.
*
* INPUTS:   1) CONUS_Q.SD2 - MPR and CAHPS Scores Database in WEB layout
*           2) FAKE.SD2 - Scores Database WEB Layout
*
* OUTPUT:   1) TREND_A.SD2 - Combined Scores Database in WEB layout
*
* NOTES:
*
* 1) All of the scores DB programs must be run and MERGFINL.SAS prior to
*    running this program.  All report card records must be merged prior
*    to the trend calculations (MERGFINL.SAS,CONUS_Q.SAS,TOTAL_A.SAS).
*
* 2) The output file (TREND_A.SD2) will be run through the
*    MAKEHTML.SAS program to generate the HTML consumer reports.
*
***************************************************************************
* Assign data libraries and options
***************************************************************************;

LIBNAME IN   V612 ".";
LIBNAME OUT  V612 ".";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER ERRORS=10000;
/*RSG 02/2005 code copied from 2003 TOTAL_Ar.SAS - eliminate all records
  with semean>.05 or missing and delete all records for that region/regcat
  this will reduce the number of missing data*/

data fakecut(keep=region regcat);
set in.conus_q;
where majgrp='Prime Enrollees' & region ne regcat
 & benefit='Health Plan' & timepd='2007'; *KRR 11/14/2007 changed timepd to 2007;
if semean>.05|semean=.;

proc sort; by region regcat;
data fake;
set in.fake;
oorder=_n_;
proc sort data=fake; by region regcat;
data newfake;
merge fakecut(in=fin) fake; by region regcat;
if fin then delete;
proc sort data=newfake out=out.newfake; by oorder;
run;

***************************************************************************
* Extract records to calculate TRENDs.  Keep only 2001/2003 pairs for CAHPS
* records.  Trends have already been calculated for MPR scores.
```

```
*************************************************************************;

DATA TRENDS;
   SET IN.CONUS_Q (drop=key);       * KRR 11/14/2007, changed 2004,2006 ;
   WHERE TIMEPD IN ('2005','2007'); * to 2005,2007;
   ************************************************************************
   * Trends already calculated for MPR scores, so remove from file
   * (RSG 02/2005) EXCEPT Healthy Behavior scores whose trend need to be calculated
   ************************************************************************;

   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));

   *KRR 11/14/2007, changed svmpr04/05/06 to svmpr05/06/07;
   IF (SVMPR05 = 1 or SVMPR06 = 1 or SVMPR07 = 1)
      AND BENEFIT NE 'Healthy Behaviors' THEN DELETE;

RUN;

DATA TEMP05;
   SET TRENDS;
   KEEP MAJGRP REGION REGCAT BENEFIT BENTYPE ;
   IF TIMEPD = "2005";
RUN;
PROC SORT DATA=TEMP05; BY MAJGRP REGION REGCAT BENEFIT BENTYPE; RUN;

DATA TEMP07;
   SET TRENDS;
   KEEP MAJGRP REGION REGCAT BENEFIT BENTYPE;
   IF TIMEPD = "2007";
RUN;
PROC SORT DATA=TEMP07; BY MAJGRP REGION REGCAT BENEFIT BENTYPE; RUN;

DATA PAIR0507(keep=majgrp region regcat benefit bentype);
   MERGE TEMP05(IN=IN05) TEMP07(IN=IN07);
   BY MAJGRP REGION REGCAT BENEFIT BENTYPE;
   IF IN05 AND IN07;
RUN;

PROC SORT DATA=TRENDS;
   BY MAJGRP REGION REGCAT BENEFIT BENTYPE;
RUN;

DATA TRENDS2;
   MERGE TRENDS(IN=INTREND) PAIR0507(IN=INPAIR);
   BY MAJGRP REGION REGCAT BENEFIT BENTYPE;
   IF INTREND AND INPAIR;
RUN;

PROC SORT DATA=TRENDS;
   BY MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD;
RUN;
  proc print data=trends(obs=100);
************************************************************************
* Calculate TRENDs keeping only the TREND records
************************************************************************;

DATA TRENDS bench;
   SET TRENDS(drop=bscore bsemean);
   BY MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD;
   IF TIMEPD = '2005' THEN DO;
      SCORE05 = SCORE/100;
      SE05    = SEMEAN;
      N05     = N_OBS;
      W05     = N_WGT;
   END;
   RETAIN SCORE05 SE05 N05 W05;
   IF TIMEPD = '2007' THEN DO;
      SCORE07 = SCORE/100;
      SE07    = SEMEAN;
      N07     = N_OBS;
      W07     = N_WGT;
```

```
   END;
   RETAIN SCORE07 SE07 N07 W07;
   LENGTH KEY $200.;
   IF TIMEPD = '2007' THEN DO;
      TIMEPD = "Trend";
      KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
            UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
            UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
      SOURCE = "TREND";
      SEMEAN = SQRT(SE05**2+SE07**2);
      N_OBS  = MIN(N05,N07);
      N_WGT  = MIN(W05,W07);
      SCORE  = SCORE07-SCORE05;
      DSCORE = 100*(SCORE07-SCORE05);
      if region='Benchmark' then OUTPUT bench;
      else output trends;
   END;
   DROP ORDER SCORE05 SCORE07 SE05 SE07 N05 N07;
RUN;


PROC SORT DATA=trends;
   BY MAJGRP BENEFIT BENTYPE TIMEPD;
RUN;
proc sort data=bench out=benchs(keep=majgrp benefit bentype timepd score semean);
by majgrp benefit bentype timepd;
run;

*************************************************************************
* Perform significance tests for CAHPS scores
*************************************************************************;
DATA trends;
   MERGE trends(IN=SIN) BENCHs(RENAME=(SCORE=BSCORE SEMEAN=BSEMEAN));
   BY MAJGRP BENEFIT BENTYPE;
   if bsemean=. then bsemean=0;
   TEMP = (SCORE-BSCORE)/SQRT(BSEMEAN**2+SEMEAN**2);
   TEST = 2*(1-PROBT(ABS(TEMP),N_OBS-1));
   SIG = 0;
   IF N_OBS >= 30 AND TEST < 0.05 THEN SIG = 1;
   IF SCORE < BSCORE THEN SIG = -SIG;
   IF SIN;
RUN;

data trends;
set trends bench;
score=dscore;
PROC SORT DATA=TRENDS; BY KEY; RUN;

*************************************************************************
* Construct ORDERing variable from WEB layout
* (RSG 02/2005 add fix to order it properly
*************************************************************************;
DATA ORDER;
 SET IN.newFAKE;
   ORDER = _N_;
   LENGTH KEY $200;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
   KEEP KEY ORDER;
RUN;

PROC SORT DATA=ORDER; BY KEY; RUN;

DATA MERGTRND;
   MERGE TRENDS(IN=IN1) ORDER(IN=IN2);
   BY KEY;
   IF IN1 and in2;
RUN;

PROC SORT DATA=IN.CONUS_Q OUT=CONUS_Q;
by key;run;
data conus_q;
```

```
     merge conus_q order(in=gin); by key;
     if gin;
proc sort data=CONUS_Q; by order;
PROC SORT DATA=MERGTRND; BY ORDER; RUN;

DATA OUT.TREND_A;
   update MERGTRND CONUS_Q;
   BY ORDER;

   IF BENEFIT = "Primary Care Manager" THEN BENEFIT = "Personal Doctor";   /*MJS 02/13/2003*/

   IF REGCAT = "5th Med Grp-Minot" THEN REGION = "West Air Force";
   IF substr(region,1,5) in ('Latin','Europ','Pacif') then delete;

RUN;

TITLE1 "2007 DOD Health Survey Scores/Report Cards (6244-410)";
TITLE2 "Program Name: TREND_A.SAS By Keith Rathbun";
TITLE3 "Program Inputs: MPR and CAHPS data records in WEB Layout";
TITLE4 "Program Outputs: TREND_A.SD2 - Merged Final Scores Database with TRENDs for input to
SIGNIF_A.SAS";

TITLE5 "FREQs of TREND_A.SD2";
PROC FREQ;
   TABLES SOURCE FLAG MAJGRP REGION BENEFIT BENTYPE
  /MISSING LIST;
RUN;

TITLE5 "FREQs of newFAKE.SD2";
PROC FREQ DATA=IN.newFAKE;
   TABLES MAJGRP REGION BENEFIT BENTYPE
  /MISSING LIST;
RUN;
```

G.16 LOADWEB\MAKEHTMA.SAS - GENERATE HTML AND XLS FILES FOR TRICARE BENEFICIARY REPORTS - ANNUAL.

```
*====================================================================;
*   Programmer:  Mark A. Brinkley                                    ;
*        Title:  MAKEHTMA.SAS                                        ;
*       Client:  6077-410                                            ;
*         Date:  02-28-2005                                          ;
*                                                                    ;
*      Purpose:  This program is designed to create                  ;
*                 ANNUAL report cards                                ;
*                                                                    ;
*                                                                    ;
*  Input files:  ?????.SD2                                           ;
* Output files:  HTML\                                               ;
*                  3384*3 F*.HTM Files (Frame version)               ;
*                  3384   P*.HTM Files (Printer friendly - no frames) ;
*                  3384   P*.XLS Files (Excel files)                 ;
*                 -------------------                                ;
*                 16920   TOTAL files                                ;
*                                                                    ;
*                                                                    ;
*                                                                    ;
*   ÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!   ;
*                                                                    ;
*     IF YOU MODIFY THIS PROGRAM THEN PLEASE INITIAL AND DOCUMENT    ;
*     YOUR CHANGES.  THOSE FAILING TO DO THIS WILL BE SEVERELY       ;
*     BEATEN.                                                        ;
*                                                                    ;
*   ÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!ÛÛÛ!   ;
*                                                                    ;
*                                                                    ;
*                                                                    ;
* Modifications:                                                     ;
* 11-01-2000 - JSykes added pieces to create Excel Spreadsheets      ;
* 07-01-2001 - MAB modified for qtr 2                                ;
* 10-25-2001 - C.Rankin moved link to printer friendly version       ;
*              from frame, created macro variable to include         ;
*              third row of subbenefit heading                       ;
* 11-01-2001 - D.Beahm changed splitpercent to splitpixel and adjusted;
*              the pixel size of the top frame to prevent scrolling  ;
*              she also added a <BR> before the printer icon to make ;
*              sure it appears on it's own line                      ;
* 12-21-2001 - D.Beahm changed column widths for frame page a so that ;
*              the column headers would line up with the data in frame;
*              page b. Also revised Excel code so benchmarks for the ;
*              majorgrp are shaded dark red instead of blue          ;
* 04-18-2002 - Quarterly report cards will now show a rolling 4      ;
*              quarters of data for the trend. DKB updated the period ;
*              BENTYPE references to account for this, this will need ;
*              to be done each quarter. Also revised footnote        ;
*              to indicate that this is the 2002 Survey of Health Care;
*              Beneficiaries. This reflects a change from previous   ;
*              years, the survey year now refers to the processing   ;
*              year instead of the year for which data was collected. ;
*              Also changed image reference from QTR to COL, these   ;
*              new names for the qtr images reflects the column they ;
*              are in instead of the quarter they represent          ;
* 06-19-2002 - Mark Brinkley                                         ;
*                 Updated for Q2_2002                                ;
*                 Changed macro var PERIOD to CURRENTPERIOD          ;
*                 Added macro vars PERIOD1-PERIOD3                   ;
* 07-29-2002 - Daniele Beahm                                         ;
*                 Added links to trend pages. Clicking on the fielding;
*                 Period now takes you to the component page for that ;
*                 period and clicking on the Trend column header now ;
*                 takes you to the Trend section of the help file    ;
* 02-04-2003 - Mike Scott                                            ;
*                 Changed "Primary Care Manager" to "Personal Doctor" ;
* 02-10-2003 - Mike Scott                                            ;
*                 Inserted LENGTH HREF $ 250 statements before       ;
*                 href = "string" statements so that href wouldn't be ;
```

```
*                 set by default                                        ;
* 02-14-2003 - Mike Scott                                               ;
*                 Added code to avoid scores > 100                      ;
* 04-30-2003 - Mike Scott                                               ;
*                 Changed Preventive Care columns from 5 to 6 to        ;
*                 accommodate Cholesterol Testing.                      ;
* 05-01-2003 - Mike Scott                                               ;
*                 Updated periods for Q1 2003, and changed "2001 and    ;
*                 2002" to "2002 and 2003" and "2002 Health Care        ;
*                 Survey" to "2003 Health Care Survey".                 ;
* 05-04-2003 - Mike Scott                                               ;
*                 Removed Civilian PCM (var1=3 or majgrp=3), and        ;
*                 changed 4-8 references to 3-7.                        ;
* 05-06-2003 - Mike Scott                                               ;
*                 Changed 7-0-0 to 8-0-0.                               ;
* 05-13-2003 - Mike Scott                                               ;
*                 Changed two widths.                                   ;
* 05-14-2003 - Mike Scott                                               ;
*                 Changed columns from 2-12 to 1-11 which is            ;
*                 controlled by var3 - decreased var3's by 1 and        ;
*                 decreased K loops by 1.                               ;
* 07-03-2003 - Mike Scott                                               ;
*                 Incorporated TIMEPD variable into program to run      ;
*                 with Q1 2003 TOTAL_Q rerun to include TIMEPD          ;
*                 variable.                                             ;
* 07-30-2003 - Mike Scott                                               ;
*                 Added else do section to correct header.              ;
* 07-31-2003 - Mike Scott                                               ;
*                 Updated periods for Q2 2003.                          ;
* 08-01-2003 - Mike Scott                                               ;
*                 Added code so periods would print on var3=7,8,9,10.   ;
* 08-07-2003 - Regina Gramss                                            ;
*                 Changed program to create additional trend pages      ;
*                 for each sub-benefit: pages are now named with 4      ;
*                 numbers (var4 has been added to all file name         ;
*                 references) to compensate for additional layer        ;
*                 of pages. All file references have been changed       ;
*                 to include var4.                                      ;
* 01-28-2004 - Mike Scott                                               ;
*                 Changed back to html being generated in HTML          ;
*                 directory below directory where MAKEHTMQ is being     ;
*                 run.                                                  ;
* 01-29-2004 - Mike Scott                                               ;
*                 Commented out LENGTH HREF $ 250 statements, since     ;
*                 HREF was already declared.                            ;
* 02-11-2004 - Mike Scott                                               ;
*                 Changed all lengths to 100 that were less than 100.   ;
* 03-24-2004 - Mike Scott                                               ;
*                 Updated for Q1 2004.  Changed hard-coded years in     ;
*                 footnotes stating source to macro variables.          ;
* 05-07-2004 - Mike Scott - Changed "Wait More than 15 Minutes Past     ;
*              Appointment" to "Wait in Doctor's Office" and            ;
*              "Problems Getting Referral to Specialist" to "Problems   ;
*              Getting to See Specialist".  NAed out trends for the     ;
*              composites Getting Needed Care, Getting Care Quickly,    ;
*              and Customer Service and for the questions Problems      ;
*              Getting Personal Doctor/Nurse (GNC), Wait in Doctor's    ;
*              Office (GCQ), and Problem with Paperwork (CS).           ;
* 02-16-2004 - Mike Scott - Moved initial data read-in outside macro    ;
*              loop to speed up program.                                ;
* 06-22-2004 - Regina Gramss - Updated for Q2 2004 run.                 ;
* 08-02-2004 - Regina Gramss - removed lines that replaced trend        ;
*              with NA                                                  ;
* 10-07-2004 - Regina Gramss - Adjusted for XTNEXREG                    ;
* 02-14-2005 - Mark Brinkley - added 12th benefit SMOKING               ;
* 03-28-2005 - Mark Brinkley - made changed to fix excel pages          ;
* 11-19-2007 - Keith Rathbun - Added 's' to Behavior. Updated           ;
*              parameters for 2007 survey.                              ;
*                                                                       ;
* NOTE: Update only SRCYR1, SRCYR2, PERIOD1/2/3, and CURRENTPERIOD.     ;
*=======================================================================;
```

```
    OPTIONS COMPRESS=YES;

    %LET SRCYR1 = 2006;   *** Previous year;
    %LET SRCYR2 = 2007;   *** Current year;

    %LET CURRENTPERIOD = 2007;
    %LET QTRS=3;                                          /** Qtr of these reports    **/


    OPTIONS NOXWAIT;


    %LET HTMLSP=%NRSTR( );
    %LET QUOTE=%STR("");
    %LET OUTDIR=HTML;                   /** Directory to put HTML files **/  /*MJS 01/28/04 Set to
HTML*/
    %LET IMGDIR=images;               /** Directory with images **/
    %LET TARGET=target='_parent';     /** HTML code for frames targeting **/
    %LET OUTXLS=1;                    /** 1=Make XLS file/0=Don't   Added 1-24 MAB **/
    %LET fontface=%STR(Arial,Helvetica,Swiss,Geneva);
    %LET hdcolr=%STR('white');
    %LET BLUE=%STR('#663300');        /** This is really dark red **/
    %LET GREEN=%STR('#009933');
    %LET RED=%STR('#cc0000');
    %LET GRAY=%STR('white');
    %LET LOGO=%STR('images\tricare_side_35_new.gif');
    %LET HELP_BUT=%STR('images\help75.gif');
    %LET HOME_BUT=%STR('images\home75.gif');
    %LET BACK_BUT=%STR('images\back75.gif');
    %LET NUMBER_HTML_FILES=0;         /** Keep count of HTML files created **/

    %LET SUB_HEAD=0;                  /** Macro variable for sub-benfit heading **/
                                      /** 1=headings, 0=no headings             **/

    /*******************************************************/
    /***** Macro for putting notes at bottom of table   *****/
    /*******************************************************/
    %MACRO BOTTOM_NOTES();
       %if &var3. =7 or &var3. = 8 or &var3. = 9 or &var3. = 10  or
           (&seppage. = 2 and &var3. ne 12 and &var4. ne 0 and
            &var4. ne 3) %then %do;   ***MJS 4/23/03 Changed 8 to 7;
         PUT "<tr>";
         PUT   "             <td   colspan='&columns.'><font   face='Arial,Helvetica,Swiss,Geneva'
size='2'>Source:   Health   Care   Surveys   of   DoD   Beneficiaries   conducted   in   &SRCYR1   and
&SRCYR2.</font>";   ***MJS 03/24/04 C
         PUT "    <font face='Arial,Helvetica,Swiss,Geneva' size='2' color='#009933'><br>";
         PUT "    <b>Indicates score significantly exceeds benchmark</b></font><b>&htmlsp.<br>";
         PUT     "                   </b><font     face='Arial,Helvetica,Swiss,Geneva'     size='2'
color='#cc0000'><i>Indicates score significantly falls short of benchmark</i></font><br>";
         PUT   "          <font   face='Arial,Helvetica,Swiss,Geneva'   size='2'>NA   Indicates   not
applicable</font><br>";
         PUT "     <font face='Arial,Helvetica,Swiss,Geneva' size='2'>*** Indicates suppressed due
to small sample size</font><br>";
         PUT  "       <center><a  href='&hrefxls.'><img  src='&imgdir.\excel.gif'  border=0>Download
Page</a></center>";

         PUT "</td></tr>";
       %end;
       %else %if (&var3.=12 and (&var4.=3 or &var4.=0) and &seppage.=2) %then %do;  /* 08/04/04 -
RSG - CREATE FOOTNOTE FOR TREND PAGES THAT WAS MODIFIED*/
         PUT "<tr>";
         PUT   "             <td   colspan='&columns.'><font   face='Arial,Helvetica,Swiss,Geneva'
size='2'>Source:   Health   Care   Surveys   of   DoD   Beneficiaries   conducted   in   &SRCYR1   and
&SRCYR2.</font>";   ***MJS 03/24/04 C
         PUT "    <font face='Arial,Helvetica,Swiss,Geneva' size='2' color='#009933'><br>";
         PUT "    <b>Indicates score significantly exceeds benchmark</b></font><b>&htmlsp.<br>";
         PUT     "                   </b><font     face='Arial,Helvetica,Swiss,Geneva'     size='2'
color='#cc0000'><i>Indicates score significantly falls short of benchmark</i></font><br>";
         PUT   "          <font   face='Arial,Helvetica,Swiss,Geneva'   size='2'>NA   Indicates   not
applicable</font><br>";
         PUT "     <font face='Arial,Helvetica,Swiss,Geneva' size='2'>*** Indicates suppressed due
to small sample size</font><br>";
```

```
          PUT  "       <center><a  href='&hrefxls.'><img  src='&imgdir.\excel.gif'  border=0>Download
Page</a></center>";
          PUT "</td></tr>";
        %end;
        %else %do;
          PUT "<tr>";
          PUT   "             <td   colspan='&columns.'><font   face='Arial,Helvetica,Swiss,Geneva'
size='2'>Source: &SRCYR2 Health Care Survey of DOD Beneficiaries</font>";   ***MJS 03/24/04 Changed
hard-coded year to m
          PUT "    <font face='Arial,Helvetica,Swiss,Geneva' size='2' color='#009933'><br>";
          PUT "    <b>Indicates score significantly exceeds benchmark</b></font><b>&htmlsp.<br>";
          PUT     "                   </b><font     face='Arial,Helvetica,Swiss,Geneva'     size='2'
color='#cc0000'><i>Indicates score significantly falls short of benchmark</i></font><br>";
          PUT   "          <font   face='Arial,Helvetica,Swiss,Geneva'   size='2'>NA   Indicates   not
applicable</font><br>";
          PUT "     <font face='Arial,Helvetica,Swiss,Geneva' size='2'>*** Indicates suppressed due
to small sample size</font><br>";
          PUT  "       <center><a  href='&hrefxls.'><img  src='&imgdir.\excel.gif'  border=0>Download
Page</a></center>";
        %end;


     %MEND BOTTOM_NOTES;



     /*******************************************************/
     /***** Macro for adding in link row to trends data  *****/
     /*******************************************************/

     /*** Macro variable with Javascript to go back ***/
     %LET        GOBACK=%STR(<script>document.write(&quote.<a        href='javascript:history.go(-1)'
target='_parent'>&quote.);
     document.write(&quote.<img    src='images\\back75.gif'    border='0'    alt='Go    to    previous
page'>&quote.);document.write(&quote.</a>&quote.);</script>);


     LIBNAME SRC1 V612 '.'  ACCESS=READONLY;
     *LIBNAME SRC1 V612 'L:\2005\PROGRAMS\LOADWEB';

     OPTIONS LS=210;


     /*********************************************************************/
     /****   Macro to create html pages                                  ****/
     /****          var1=major group                                     ****/
     /****          var2=region                                          ****/
     /****          var3=benefit                                         ****/
     /****          var4=trend                                           ****/
     /****       seppage=0/no separate pages for qtrly trends            ****/
     /****               1/1st separate page with LINK to trends         ****/
     /****               2/2nd separate page with trends                 ****/
     /*********************************************************************/
     /** RSG 08/07/03 - added var4 to add extra dimension of page numbers for
         sub benefit trend pages**/


     DATA PRE_SUBSET (RENAME=(TIME=TIMEPD));
       SET SRC1.TREND_A(DROP=FLAG SOURCE KEY);    /*** MAB testing 3/16/2005 ***/

       /* 02/2006 RSG - need to reset timepd to longer length to include
          values with asterix*/

       LENGTH TIME $6.;
       TIME=TIMEPD;
       IF BENEFIT="Total" THEN DELETE;  /*** MAB testing 2/11/2005 ***/

       IF MAJGRP = "All Beneficiaries" THEN MAJGRP = "All Users";
       IF MAJGRP = "Non-enrolled Beneficiaries" THEN MAJGRP = "Standard/Extra Users";

       IF SCORE>100 then SCORE=100;
       IF (TIMEPD="Trend" and -.5<SCORE<0) THEN SCORE=ABS(SCORE);
```

```
  IF BENTYPE="Wait More than 15 Minutes Past Appointment" THEN     /*MJS 5/7/04 Changed label*/
    BENTYPE="Wait in Doctor`s Office";
  IF BENTYPE="Problems Getting Referral to Specialist" THEN        /*MJS 5/7/04 Changed label*/
    BENTYPE="Problems Getting to See Specialist";



  DROP TIMEPD;

     IF MAJGRP = "Benchmark" THEN LINEUP=1;
    ELSE IF MAJGRP = "Prime Enrollees" THEN LINEUP=2;
    ELSE IF MAJGRP = "Enrollees with Military PCM" THEN LINEUP=3;
    ELSE IF MAJGRP = "Standard/Extra Users" THEN LINEUP=4;
    ELSE IF MAJGRP = "Active Duty" THEN LINEUP=5;
    ELSE IF MAJGRP = "Active Duty Dependents" THEN LINEUP=6;
    ELSE IF MAJGRP = "Retirees and Dependents" THEN LINEUP=7;
    ELSE IF MAJGRP = "All Users" THEN LINEUP=8;

     IF REGION = "Benchmark" THEN LINEUP2=1;
     ELSE IF UPCASE(REGION) = 'CONUS MHS' THEN LINEUP2=2;
     ELSE IF UPCASE(REGION) = 'ARMY' THEN LINEUP2=3;
     ELSE IF UPCASE(REGION) = 'NAVY' THEN LINEUP2=4;
     ELSE IF UPCASE(REGION) = 'AIR FORCE' THEN LINEUP2=5;
     ELSE IF UPCASE(REGION) = 'OTHER' THEN LINEUP2=6;
     ELSE IF UPCASE(REGION) = 'NORTH' THEN LINEUP2=7;
     ELSE IF UPCASE(REGION) = 'NORTH ARMY' THEN LINEUP2=8;
     ELSE IF UPCASE(REGION) = 'NORTH NAVY' THEN LINEUP2=9;
     ELSE IF UPCASE(REGION) = 'NORTH AIR FORCE' THEN LINEUP2=10;
     ELSE IF UPCASE(REGION) = 'NORTH OTHER' THEN LINEUP2=11;
     ELSE IF UPCASE(REGION) = 'SOUTH' THEN LINEUP2=12;
     ELSE IF UPCASE(REGION) = 'SOUTH ARMY' THEN LINEUP2=13;
     ELSE IF UPCASE(REGION) = 'SOUTH NAVY' THEN LINEUP2=14;
     ELSE IF UPCASE(REGION) = 'SOUTH AIR FORCE' THEN LINEUP2=15;
     ELSE IF UPCASE(REGION) = 'SOUTH OTHER' THEN LINEUP2=16;
     ELSE IF UPCASE(REGION) = 'WEST' THEN LINEUP2=17;
     ELSE IF UPCASE(REGION) = 'WEST ARMY' THEN LINEUP2=18;
     ELSE IF UPCASE(REGION) = 'WEST NAVY' THEN LINEUP2=19;
     ELSE IF UPCASE(REGION) = 'WEST AIR FORCE' THEN LINEUP2=20;
     ELSE IF UPCASE(REGION) = 'WEST OTHER' THEN LINEUP2=21;
     ELSE IF UPCASE(REGION) = 'OVERSEAS' THEN LINEUP2=22;
     ELSE IF UPCASE(REGION) = 'OVERSEAS EUROPE' THEN LINEUP2=23;
     ELSE IF UPCASE(REGION) = 'OVERSEAS PACIFIC' THEN LINEUP2=24;
     ELSE IF UPCASE(REGION) = 'OVERSEAS LATIN AMERICA' THEN LINEUP2=25;


RUN;   ***MJS 07/03/03 Changed BENTYPE to TIMEPD;

PROC SORT;
BY LINEUP LINEUP2;
RUN;


%MACRO MKHTML(var1,var2,var3,seppage,var4);


/*** Determine some macro variables ***/
%if &prefix=f %then %do;
  %let width1=640;
  %let width2=640;
  %let border=0;
%end;
%else %do;
  %let width1=90%;
  %let width2=85%;
  %let border=1;
%end;

%let number_html_files=%EVAL(1+&number_html_files.);


/** Load in data **/
DATA SUBSET;
  SET PRE_SUBSET;
```

```
LENGTH FILEOUT1 $ 100;   /*MJS 02/11/04*/
LENGTH FILEOUT2 $ 100;
LENGTH FILEOUT3 $ 100;


/*** VAR1 indicated major group ***/
%if &var1.=1 %then %let major=%STR(Prime Enrollees);
%if &var1.=2 %then %let major=%STR(Enrollees with Military PCM);
%if &var1.=3 %then %let major=%STR(Enrollees with Civilian PCM);
%if &var1.=4 %then %let major=%STR(Standard/Extra Users);
%if &var1.=5 %then %let major=%STR(Active Duty);
%if &var1.=6 %then %let major=%STR(Active Duty Dependents);
%if &var1.=7 %then %let major=%STR(Retirees and Dependents);
%if &var1.=8 %then %let major=%STR(All Users);


%if &var4. = 0 %then %do;
    %LET BEN_TYPE=%STR('Composite');
%end;
%else %do;
    %if &var3. = 1 %then %do;
        %if &var4. = 1 %then %do;
            %LET BEN_TYPE = %STR('Problems Getting Personal Doctor/Nurse');
   %end;
        %else %if &var4. = 2 %then %do;
            %LET BEN_TYPE = %STR('Problems Getting to See Specialist');
        %end;
        %else %if &var4. = 3 %then %do;
            %LET BEN_TYPE = %STR('Problems Getting Necessary Care');
        %end;
        %else %if &var4. = 4 %then %do;
            %LET BEN_TYPE = %STR('Delays in Care while Awaiting Approval');
        %end;
    %end;
    %else %if &var3. = 2 %then %do;
        %if &var4. = 1 %then %do;
            %LET BEN_TYPE = %STR('Advice over Telephone');
        %end;
        %else %if &var4. = 2 %then %do;
            %LET BEN_TYPE = %STR('Wait for Routine Visit');
        %end;
        %else %if &var4. = 3 %then %do;
            %LET BEN_TYPE = %STR('Wait for Urgent Care');
        %end;
        %else %if &var4. = 4 %then %do;
            %LET BEN_TYPE = %STR('Wait in Doctor`s Office');
        %end;
    %end;
    %else %if &var3. = 3 %then %do;
        %if &var4. = 1 %then %do;
            %LET BEN_TYPE = %STR('Courteous and Respectful');
        %end;
        %else %if &var4. = 2 %then %do;
            %LET BEN_TYPE = %STR('Helpful');
        %end;
    %end;
    %else %if &var3. = 4 %then %do;
        %if &var4. = 1 %then %do;
            %LET BEN_TYPE = %STR('Listens Carefully');
        %end;
        %else %if &var4. = 2 %then %do;
            %LET BEN_TYPE = %STR('Explains so You can Understand');
        %end;
   %else %if &var4. = 3 %then %do;
            %LET BEN_TYPE = %STR('Shows Respect');
        %end;
        %else %if &var4. = 4 %then %do;
            %LET BEN_TYPE = %STR('Spends Time with You');
        %end;
    %end;
    %else %if &var3. = 5 %then %do;
        %if &var4. = 1 %then %do;
            %LET BEN_TYPE = %STR('Problem Finding/Understanding Written Material');
```

```
            %end;
            %else %if &var4. = 2 %then %do;
                %LET BEN_TYPE = %STR('Problem Getting Help from Customer Service');
            %end;
            %else %if &var4. = 3 %then %do;
                %LET BEN_TYPE = %STR('Problem with Paperwork');
            %end;
        %end;
        %else %if &var3. = 6 %then %do;
            %if &var4. = 1 %then %do;
                %LET BEN_TYPE = %STR('Claims Handled in a Reasonable Time');
            %end;
            %else %if &var4. = 2 %then %do;
                %LET BEN_TYPE = %STR('Claims Handled Correctly');
            %end;
        %end;
        %else %if &var3. = 11 %then %do;
            %if &var4. = 1 %then %do;
                %LET BEN_TYPE = %STR('Mammography');
            %end;
            %else %if &var4. = 2 %then %do;
                %LET BEN_TYPE = %STR('Pap Smear');
            %end;
            %else %if &var4. = 3 %then %do;
                %LET BEN_TYPE = %STR('Hypertension');
            %end;
            %else %if &var4. = 4 %then %do;
                %LET BEN_TYPE = %STR('Prenatal Care');
            %end;
        %end;
        %else %if &var3. = 12 %then %do;    /*** MAB Added 2/11/2005 ***/
            %if &var4. = 1 %then %do;
                %LET BEN_TYPE = %STR('Non-Smoking Rate');
            %end;
            %else %if &var4. = 2 %then %do;
                %LET BEN_TYPE = %STR('Counselled To Quit');
            %end;
            %else %if &var4. = 3 %then %do;
                %LET BEN_TYPE = %STR('Percent Not Obese');
            %end;
        %end;
    %end;

       IF MAJGRP = "&major.";     /*** MAB MODIFIED 3/16/2005 ***/
       %let comma=%STR(,);
       %let grpmsg=%STR(Click below to view this table by other groups);


     /*** Create macro variables to refer to Component or Trend pages ***/
     %if &seppage.=2 %then %do;
        %let q=q;
        %let unq=;
        %let click_alt=Click for Component data;
        %let click_image=component.gif;
     %end;
     %else %do;
        %let q=;
        %let unq=q;
        %let click_alt=Click for Trend data;
        %let click_image=trend.gif;
     %end;


     FILEOUT1=COMPRESS("&outdir.\&prefix.&var1.-&var2.-&var3.-&var4.&q..htm");      /** Main html
**/
     FILEOUT2=COMPRESS("&outdir.\&prefix.&var1.-&var2.-&var3.-&var4.&q.a.htm");   /** Header html
**/
     FILEOUT3=COMPRESS("&outdir.\&prefix.&var1.-&var2.-&var3.-&var4.&q.b.htm");     /** Data html
**/
     %if &outxls.=1 %then %do;
        %let fileout1= NUL;
        %let fileout2= NUL;
        %let fileout3= NUL;
```

```
        %end;
        %else %do;
          call symput('fileout1',FILEOUT1);
          call symput('fileout2',FILEOUT2);
          call symput('fileout3',FILEOUT3);
        %end;



      /*-------------------------*/
      /* 2000/11: begin xls code */
      /*-------------------------*/

      FILEOUTX=COMPRESS("&outdir.\p&var1.-&var2.-&var3.-&var4.&q..xls");            /* create run-
specific xls file */
      CALL SYMPUT('fileoutX',FILEOUTX);                                    /* via global macro vars
*/
      %if &seppage. ne 2 %then %do;
      TEMPLATE=COMPRESS("Templates\Template&var3..xls");
      %end;
      %else %if (&var3.=12 and &var4.=0 and &seppage.=2) %then %do;
              TEMPLATE=COMPRESS("Templates\Template_trend2.xls");
      %end;
      %else %do;
              TEMPLATE=COMPRESS("Templates\Template_trend.xls");
      %end;
      CALL SYMPUT('template',TEMPLATE);                                   /* identify which template
xls file */
      /*-------------------------*/
      /* 2000/11: end xls code   */
      /*-------------------------*/


      /*** VAR3 dictates type of benefit heading ***/
      %if &var3=0 %then %do;
        %let headvar=BENEFIT;
      %end;
      %else %do;
        %if &seppage.=2 or &var3=7 or &var3=8 or &var3=9 or &var3=10 %then %let headvar=TIMEPD;
        %else %let headvar=BENTYPE;
      %end;


      /*** Link to XLS file ***/
      HREFXLS=COMPRESS("p&var1.-&var2.-&var3.-&var4.&q..xls");
      call symput('hrefxls',HREFXLS);
    RUN;


    /*** Subset data by region ***/
    DATA SUBSET2;
      SET SUBSET;

      %if &var2.=0 %then %do;    /** 0 = All regions **/
         IF REGION=REGCAT;       /** Just do All Region table **/
          %let sub_regs=%STR(All Regions);
      %end;

      %else %if &var2.=1 %then %do;
         IF UPCASE(REGION)="CONUS MHS" ;
          %let sub_regs=%STR(CONUS MHS);
      %end;
      %else %if &var2.=2 %then %do;
         IF UPCASE(REGION)="ARMY";
          %let sub_regs=%STR(ARMY);
      %end;
      %else %if &var2.=3 %then %do;
         IF UPCASE(REGION)="NAVY" ;
          %let sub_regs=%STR(NAVY);
      %end;
      %else %if &var2.=4 %then %do;
         IF UPCASE(REGION)="AIR FORCE";
          %let sub_regs=%STR(AIR FORCE);
```

```
 %end;

 %else %if &var2.=5 %then %do;
    IF UPCASE(REGION)="OTHER";
     %let sub_regs=%STR(OTHER);
 %end;
 %else %if &var2.=6 %then %do;
    IF UPCASE(REGION)="NORTH";
     %let sub_regs=%STR(NORTH);
 %end;
 %else %if &var2.=7 %then %do;
    IF UPCASE(REGION)="NORTH ARMY" or REGION="Benchmark" or REGION = "CONUS MHS"
       OR REGION="NORTH" OR REGION="ARMY";
     %let sub_regs=%STR(North Army);
 %end;
 %else %if &var2.=8 %then %do;
    IF UPCASE(REGION)="NORTH NAVY" or REGION="Benchmark" or REGION = "CONUS MHS"
       OR REGION="NORTH" OR REGION="NAVY";
     %let sub_regs=%STR(North Navy);
 %end;

 %else %if &var2.=9 %then %do;
    IF UPCASE(REGION)="NORTH AIR FORCE" or REGION="Benchmark" or REGION = "CONUS MHS"
       OR REGION="NORTH" OR REGION="AIR FORCE";
     %let sub_regs=%STR(North Air Force);
 %end;
 %else %if &var2.=10 %then %do;
    IF UPCASE(REGION)="NORTH OTHER" or REGION="Benchmark" or REGION = "CONUS MHS"
     OR REGION="NORTH" OR REGION="OTHER";
     %let sub_regs=%STR(North Other);
 %end;
 %else %if &var2.=11 %then %do;
    IF UPCASE(REGION)="SOUTH";
     %let sub_regs=%STR(SOUTH);
 %end;
 %else %if &var2.=12 %then %do;
    IF UPCASE(REGION)="SOUTH ARMY" or REGION="Benchmark" or REGION = "CONUS MHS"
       OR REGION="SOUTH" OR REGION="ARMY";
     %let sub_regs=%STR(South Army);
 %end;

%else %if &var2.=13 %then %do;
    IF UPCASE(REGION)="SOUTH NAVY" or REGION="Benchmark" or REGION = "CONUS MHS"
       OR REGION="SOUTH" OR REGION="NAVY";
     %let sub_regs=%STR(South Navy);
%end;
%else %if &var2.=14 %then %do;
    IF UPCASE(REGION)="SOUTH AIR FORCE" or REGION="Benchmark" or REGION = "CONUS MHS"
       OR REGION="SOUTH" OR REGION="AIR FORCE";
     %let sub_regs=%STR(South Air Force);
%end;
%else %if &var2.=15 %then %do;
    IF UPCASE(REGION)="SOUTH OTHER" or REGION="Benchmark" or REGION = "CONUS MHS"
       OR REGION="SOUTH" OR REGION="OTHER";
     %let sub_regs=%STR(South Other);
%end;
%else %if &var2.=16 %then %do;
    IF UPCASE(REGION)="WEST";
     %let sub_regs=%STR(OVERSEAS);
%end;

%else %if &var2.=17 %then %do;
    IF UPCASE(REGION) = "WEST ARMY" or REGION="Benchmark" or REGION = "CONUS MHS"
       OR REGION="WEST" OR REGION="ARMY";
     %let sub_regs=%STR(West Army);
%end;
%else %if &var2.=18 %then %do;
    IF UPCASE(REGION) = "WEST NAVY" or REGION="Benchmark" or REGION = "CONUS MHS"
       OR REGION="WEST" OR REGION="NAVY";
     %let sub_regs=%STR(West Navy);
%end;
%else %if &var2.=19 %then %do;
    IF UPCASE(REGION) = "WEST AIR FORCE" or REGION="Benchmark" or REGION = "CONUS MHS"
```

```
        OR REGION="WEST" OR REGION="AIR FORCE";
      %let sub_regs=%STR(West Air Force);
 %end;
 %else %if &var2.=20 %then %do;
     IF UPCASE(REGION) = "WEST OTHER" or REGION="Benchmark" or REGION = "CONUS MHS"
        OR REGION="WEST" OR REGION="OTHER";
      %let sub_regs=%STR(West Other);
 %end;
 %else %if &var2.=21 %then %do;
     IF UPCASE(REGION) = "OVERSEAS" ;
      %let sub_regs=%STR(OVERSEAS);
 %end;
 %else %if &var2.=22 %then %do;
      IF UPCASE(REGION) = "OVERSEAS EUROPE" or REGION="Benchmark" or REGION = "CONUS MHS"
        OR REGION="OVERSEAS" OR REGION="EUROPE";
       %let sub_regs=%STR(Overseas Europe);
  %end;
  %else %if &var2.=23 %then %do;
      IF UPCASE(REGION) = "OVERSEAS PACIFIC"or REGION="Benchmark" or REGION = "CONUS MHS"
        OR REGION="OVERSEAS" OR REGION="PACIFIC";
       %let sub_regs=%STR(Overseas Pacific);
  %end;
  %else %if &var2.=24 %then %do;
      IF UPCASE(REGION) = "OVERSEAS LATIN AMERICA"or REGION="Benchmark" or REGION = "CONUS MHS"
        OR REGION="OVERSEAS" OR REGION="LATIN AMERICA";
       %let sub_regs=%STR(Overseas Latin America);
  %end;
RUN;


/*** Subset data by Benefit ***/
DATA SUBSET3;
  SET SUBSET2;

  %if &var3.=0 %then %do;   /** 0=All Benefits **/
     IF BENTYPE="Composite" and TIMEPD="&currentperiod.";
  %end;
  %else %if &var3.=1 %then %do;
     IF BENEFIT="Getting Needed Care";

     /*** # of columns for this benefit table ***/
     %let columns=%EVAL(5+&qtrs.);
  %end;
  %else %if &var3.=2 %then %do;
     IF BENEFIT="Getting Care Quickly";
     %let columns=%EVAL(5+&qtrs.);
  %end;
  %else %if &var3.=3 %then %do;
     IF BENEFIT="Courteous and Helpful Office Staff";
     %let columns=%EVAL(3+&qtrs.);
  %end;
  %else %if &var3.=4 %then %do;
     IF BENEFIT="How Well Doctors Communicate";
     %let columns=%EVAL(5+&qtrs.);
  %end;
  %else %if &var3.=5 %then %do;
     IF BENEFIT="Customer Service";
     %let columns=%EVAL(4+&qtrs.);
  %end;
  %else %if &var3.=6 %then %do;
     IF BENEFIT="Claims Processing";
     %let columns=%EVAL(3+&qtrs.);
  %end;
  %else %if &var3.=7 %then %do;
     IF BENEFIT="Health Plan";
     %let columns=%EVAL(2+&qtrs.);
  %end;
  %else %if &var3.=8 %then %do;
     IF BENEFIT="Health Care";
     %let columns=%EVAL(2+&qtrs.);
  %end;
  %else %if &var3.=9 %then %do;
     IF BENEFIT="Personal Doctor";
```

```
     %let columns=%EVAL(2+&qtrs.);
  %end;
  %else %if &var3.=10 %then %do;
     IF BENEFIT="Specialty Care";
     %let columns=%EVAL(2+&qtrs.);
  %end;
  %else %if &var3.=11 %then %do;
     IF BENEFIT="Preventive Care";
     %let columns=%EVAL(5+&qtrs.);
  %end;
  %else %if &var3.=12 %then %do;
     IF BENEFIT="Healthy Behaviors";
     %let columns=%EVAL(4+&qtrs.);
  %end;

  /*** Set macro variable ***/
  %if &var3.=0 %then %do;
      %let sub_ben=%STR(&currentperiod. Composite Scores);
      %let columns=13;
  %end;
  %else %do;
    call symput('sub_ben',BENEFIT);
  %end;


  /*** Determine number of columns for sub-benefits  ***/
  /*** Equals cols - (x for qtrs  - 1 for stub column) ***/
  %let subcols=%EVAL(&columns.-&qtrs.-2);

  /*** Determine number of columns less 1st (stub) column ***/
  %let columns_less1=%EVAL(&columns.-1);

RUN;


DATA SUBSET4;
  SET SUBSET3;

  WIDTH_COL1=120; /** Set width of column 1 **/

  IF BENTYPE="Composite" THEN WIDTH3=90;
  ELSE WIDTH3=90;

  /** Deal with some special cases **/
  IF BENEFIT="Preventive Care" THEN DO;
      IF BENTYPE="Composite" THEN WIDTH3=.;
      ELSE WIDTH3=80;
  END;
  IF BENEFIT="Courteous and Helpful Office Staff" AND
          BENTYPE="Composite" THEN WIDTH3=70;


  %if &var3.=0 %then %do;
     WIDTH_COL1=.;
     WIDTH3=40;
  %end;

  %if &prefix.=p %then %do;
     WIDTH3=.;
  %end;

RUN;



OPTIONS LS=152;
PROC PRINT;
 VAR BENEFIT BENTYPE TIMEPD REGION REGCAT MAJGRP;
RUN CANCEL;
PROC PRINT;
 VAR BENEFIT BENTYPE REGION REGCAT MAJGRP;
RUN CANCEL;
```

```
/*************************************************************/
/****  Put out Header rows of table                        ****/
/*************************************************************/
DATA HTML;
  SET SUBSET4;
  LENGTH HREFBACK $100;

  IF REGION IN("Benchmark");

  /** Determine where back button should link to **/
  %if &var1.=0 %then %do;
     HREFBACK=COMPRESS("&prefix.8-0-0-0.htm");
  %end;
  %else %do;
     HREFBACK=COMPRESS("&prefix.&var1.-0-0-0.htm");
  %end;

  /*** Create macro variable date with today's date ***/
  DATETIME=DATETIME();
  CALL SYMPUT ('DATETIME',left(put(datetime,datetime20.)));
  DROP DATETIME;

RUN;



/*** ÛÛ FRAMES SECTION ÛÛ ***/
%if &prefix=f %then %do;

    /*** Make frameset page split frames smaller on all ratings pages ***/

   %if &var3.=0 %then %do;
         %let splitpixel=228;
    %end;
    %else %if &var3.=1 OR &var3.=2 %then %do;
         %let splitpixel=211;
    %end;
    %else %if &var3.=3 OR &var3.=6 OR &var3.=12 %then %do;
         %let splitpixel=181;
    %end;
    %else %if &var3.=4 %then %do;
         %let splitpixel=196;
    %end;
    %else %if &var3.=5 %then %do;
         %let splitpixel=221;
    %end;
    %else %if &var3.=7 OR &var3.=8 OR &var3.=9 OR &var3.=10 %then %do;
         %let splitpixel=158;
    %end;
    %else %if &var3.=11 %then %do;
         %let splitpixel=192;
    %end;

    %if &SEPPAGE.=2 %then %do;
         %let splitpixel=157;
    %end;


   /*** Create frameset page HTML page ***/
   DATA _NULL_;
     FILE "&FILEOUT1.";
     PUT "<html>";
     PUT "<frameset rows='&splitpixel.,*'>";
      %if &seppage.=2 %then %do;
        PUT   "         <frame   src='f&var1.-&var2.-&var3.-&var4.qa.htm'      MARGINHEIGHT='0'
MARGINWIDTH='0'>";
        PUT   "         <frame   src='f&var1.-&var2.-&var3.-&var4.qb.htm'      MARGINHEIGHT='0'
MARGINWIDTH='0'>";
      %end;
      %else %do;
        PUT   "         <frame   src='f&var1.-&var2.-&var3.-&var4.a.htm'      MARGINHEIGHT='0'
MARGINWIDTH='0'>";
```

```
            PUT   "         <frame   src='f&var1.-&var2.-&var3.-&var4.b.htm'      MARGINHEIGHT='0'
MARGINWIDTH='0'>";
          %end;


         PUT "</frameset></html>";
       RUN;


       /*** Since done making frameset page then assign fileout1 = frame 1 ***/
       %let fileout1=&fileout2.;
       %if &seppage.=1 %then %do;
           %let fileout1=&fileout2.;
        %end;
        %else %if &seppage.=2 %then %do;
           %let fileout1=&fileout2.;
        %end;

    %end;


    /*** Initialize HTML page ***/
    DATA _NULL_;
      FILE "&FILEOUT1.";

      PUT "<! Created &datetime.>";
      PUT "<html><head><title>";
      PUT "&major. &comma. &sub_ben., &sub_regs.";
      PUT "</title></head>";
      PUT "<body bgcolor='#999999' text='#000099' link='#660066' alink='#660066' vlink='#996699'>";

      /*** link to printer friendly version moved, 10/25/2001 C.Rankin ***/


    RUN;

    /*-------------------------*/
    /* 2000/11: begin xls code */
    /*-------------------------*/
    %if &outxls.=1 %then %do;
      X "COPY &template. &fileoutX.";                                 /* copy template xls to run-
specific xls file */
      X "START &fileoutX.";                                          /* open run-specific xls file
*/
      FILENAME XLSTITLE DDE 'excel|Sheet1!R1C1:R2C20' NOTAB;           /* xls rows 1 & 2 (titles)
*/
      FILENAME XLSDATA DDE 'excel|Sheet1!R6C1:R100C20' NOTAB;        /* xls rows 6+ (body of table)
*/
    %end;
    /*-------------------------*/
    /* 2000/11: end xls code   */
    /*-------------------------*/




    /*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
    /*** If ALL benefits (VAR3=0) then do special column headers ***/
    %if &var3.=0 %then %do;
    DATA _NULL_;
      SET HTML END=EOF;
      *LENGTH HREF $ 250;   /*MJS 01/29/04 Commented out statement*/

      IF _N_=1 THEN DO;

            FILE "&FILEOUT1." MOD;      /* 2000/11: moved file stmt inside if stmt */

             /*** put table title ***/
             /**PUT   "<h2><center><font   face='&fontface.'>&major.,   &sub_regs.   <br>   &sub_ben.
</font></center></h2>"**/

             /** MF Changes ROW 1 **/
```

```
             PUT     "<center><table     border='&border.'     cellpadding='2'     cellspacing='0'
bgcolor='#D8D8D8' colspan=13 width='&width1.'>";
             PUT "<tr bgcolor='white'>";
             PUT "     <td colspan='6' valign='top' bgcolor='#999999'><img border='0' height='25'
width='242' src=&logo.></td>";
             PUT "    <td colspan='7' align='right' valign='bottom' bgcolor='#999999'>";
             PUT "          <div align='right'>";
             PUT "             <a href='..\html\index.htm' &target.><img src=&home_but. border='0'
alt='Return to Main Page'></a>&htmlsp. &htmlsp.";
             PUT "&goback.";

             PUT "           <noscript><a href=""" HREFBACK  +(-1) """ &target.><img src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";
             PUT "          &htmlsp. &htmlsp.";
             PUT "             <a href='..\html\help.htm' &target.><img src=&help_but. border='0'
alt='Help'></a></div>";
             PUT "    </td>";
             PUT "</tr>";

             PUT "<tr>";
             PUT "        <td valign='center' align='center' colspan='13' bgcolor='#D8D8D8'>";
             PUT "                     <font face='&fontface.' color='#3333cc' size='5'><b>&major.
&comma.  &sub_regs.<br>";
             PUT "                 &sub_ben.</b></font>";
             PUT "        </td>";
             PUT "</tr>";


             /*** Print out 3rd row ***/
             /*** ÛÛ FRAMES SECTION ÛÛ ***/


              /***here***/

             %if &prefix=f %then %do;
                  PUT "<tr bgcolor= &hdcolr.>";
                        /**RSG 02/2005 add in a dummy gif to align titles and comment out extra
cell**/
                  PUT  "<td  width=40  colspan=1><IMG  SRC='&imgdir.\dummy.gif'  ALT='Total  Score'
BORDER=0></td>";
                  PUT  "<td  width=80  colspan=2><IMG  SRC='&imgdir.\eoa.gif'ALT='Ease  of  Access'
BORDER=0></td>";
                  PUT     "<td     width=185     colspan=4><IMG     SRC='&imgdir.\com_cus_ser.gif'
ALT='Communication and Customer Service' BORDER=0></td>";
                  PUT  "<td  width=160  colspan=4><IMG  SRC='&imgdir.\ratings0.gif'  ALT='Ratings'
BORDER=0></td>";
                  PUT  "<td  width=50  colspan=1><IMG  SRC='&imgdir.\prevention.gif'  ALT='Prevention'
BORDER=0></td>";
                  PUT   "<td   width=80   colspan=2><IMG   SRC='&imgdir.\healthy.gif'   ALT='Healthy
Behaviors' BORDER=0></td>";
                  PUT "</tr>";
                  PUT "<tr bgcolor= &hdcolr.>";
              %end;
              %else %do;
                  PUT "<tr bgcolor= &hdcolr.>";
                  PUT "<td>&htmlsp.</td>";

                  PUT   "<td   align='center'   valign='bottom'   colspan=2><font   face='&fontface.'
size='2'><b>Ease of Access</b></font></td>";
                  PUT   "<td   align='center'   valign='bottom'   colspan=4><font   face='&fontface.'
size='2'><b>Communication and Customer Service</b></font></td>";
                  PUT   "<td   align='center'   valign='bottom'   colspan=4><font   face='&fontface.'
size='2'><b>Ratings</b></font></td>";
                  PUT   "<td   align='center'   valign='bottom'   colspan=1><font   face='&fontface.'
size='2'><b>Prevention</b></font></td>";
                  PUT   "<td   align='center'   valign='bottom'   colspan=1><font   face='&fontface.'
size='2'><b>Healthy Behaviors</b></font></td>";
                  PUT "</tr>";
                  PUT "<tr bgcolor= &hdcolr.>";
              %end;


             /*** Print out 1st column of 4th row ***/
```

```
             /*** ÛÛ FRAMES SECTION ÛÛ ***/
             %if &prefix=f %then %do;
                 PUT "<td width=80>&htmlsp.</td>";
             %end;
             %else %do;
                 PUT "<td width='7%'><font face='&fontface.'>&htmlsp.</font></td>";
             %end;

             bennum=1;  /** index to all 12 benefits **/


             /*-------------------------*/
             /* 2000/11: begin xls code */
             /*-------------------------*/
             %if &outxls.=1 %then %do;
               FILE XLSTITLE;
               PUT "&major. &comma. &sub_regs.";
               PUT "%cmpres('&sub_ben.')";
             %end;
             /*-------------------------*/
             /* 2000/11: begin xls code */
             /*-------------------------*/
      END;

       FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */

       /*** Put Benefits across columns (Continuation of 4th row) ***/
       HREF=COMPRESS("..\html\&prefix.&var1.-&var2.-"||bennum||"-&var4..htm");


       /** If TOTAL benefit then don't have HREF **/
       /*** ÛÛ FRAMES SECTION ÛÛ ***/
       %if &prefix=f %then %do;
         IMAGE=COMPRESS("&imgdir.\image0_"||bennum||".gif");
         IF BENNUM=0 THEN PUT "<td align='center' valign='bottom'><IMG SRC='&imgdir.\image0_0.gif'
alt='Total' BORDER=0></td>";
         ELSE PUT "<td align='center' valign='bottom'><a href=""" HREF +(-1) """ &target.><IMG
SRC='" IMAGE "' alt='" BENEFIT "' BORDER=0></a></td>";

       %end;
       %else %do;
         IF BENNUM=0 THEN PUT "<td width='7%' align='center' valign='bottom'><font
face='&fontface.'size='1'>" &HEADVAR. "</font></td>";
         ELSE PUT "<td width='7%' align='center' valign='bottom'><font face='&fontface.'size='1'><a
href=""" HREF +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
       %end;


      bennum+1;


      IF EOF THEN DO;
        PUT "</tr>";
      END;

    RUN;
    %end;




    /*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
    /*** If Sub-benefit (VAR3^=0) then do differently ***/
    /*** If not separate page (SEPPAGE=0) for quarterly info then do as before ***/
    %else %if &var3.=7 OR &var3.=8 OR &var3.=9 OR &var3.=10 %then %do;



    DATA _NULL_;
      SET HTML END=EOF;
      *LENGTH HREF $ 250;

      COLUMNS=&columns.;
```

```
      SPAN2=ROUND(COLUMNS/2,1);
      SPAN1=COLUMNS-SPAN2;


      IF _N_=1 THEN DO;

            FILE "&FILEOUT1." MOD ;


            /** MF Changes ROW 1 **/
            PUT     "<center><table     border='&border.'     cellpadding='2'     cellspacing='0'
bgcolor='#D8D8D8' width='&width2.'>";
            PUT "<tr bgcolor='white'>";
            PUT  "        <td  colspan="""  SPAN1  +(-1)  """  valign='top'  bgcolor='#999999'><img
border='0' height='25' width='242' src=&logo.></td>";
            PUT  "          <td  colspan="""  SPAN2  +(-1)  """  align='right'  valign='bottom'
bgcolor='#999999'>";
            PUT "          <div align='right'>";
            PUT "             <a  href='..\html\index.htm'  &target.><img  src=&home_but.  border='0'
alt='Return to Main Page'></a>&htmlsp. &htmlsp.";


            PUT "&goback.";

            PUT "           <noscript><a  href="""  HREFBACK  +(-1)  """  &target.><img  src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";
            PUT "          &htmlsp. &htmlsp.";
            PUT "             <a  href='..\html\help.htm'  &target.><img  src=&help_but.  border='0'
alt='Help'></a></div>";
            PUT "    </td>";
            PUT "</tr>";

            /** MF Changes ROW 2 **/

            PUT "<tr>";
            PUT  "             <td  valign='center'  align='center'  colspan="""  COLUMNS  +(-1)  """
bgcolor='#D8D8D8'>";
            PUT "                     <font  face='&fontface.'  color='#3333cc'  size='5'><b>&major.
&comma.  &sub_regs. <br>";

            /*** If ratings then don't display reference period ***/
            %if &var3.=7 OR &var3.=8 OR &var3.=9 OR &var3.=10 %then %do;
                           ***MJS 4/23/03 Changed 8/9/10/11 to 7/8/9/10;
                  PUT "                 &sub_ben.</b></font>";
            %end;
            %else %do;
                  PUT "                 &sub_ben.<BR>&currentperiod.</b></font>";
            %end;


            PUT "        </td>";
            PUT "</tr>";


            /*** Sub_head macro variable added C.Rankin 10/25/2001  ***/

            %if &sub_head.=1 %then %do;
               /** 3rd Row ***/
               /** ÛÛ FRAMES SECTION ÛÛ ***/
               %if &prefix=f %then %do;
                    PUT "<tr bgcolor= &hdcolr.><td>&htmlsp.</td>";   /** Column 1 **/
                    /*** If sub-benefits then output sub-benefit columns ***/
                    %if &subcols.^=0 %then %do;
                      IMAGE=COMPRESS("&imgdir.\span_image&var3..gif");
                      PUT "<td align='center' valign='bottom' colspan=&subcols.><IMG SRC=" IMAGE "
alt='" BENEFIT "' BORDER=0></td>";
                      PUT     "<td     align='center'     valign='bottom'     colspan=&qtrs.><IMG
SRC='&imgdir.\composite.gif' ALT='Composite' BORDER=0></td></tr>";
                    %end;
                    %else %do;
                      PUT     "<td     align='center'     valign='bottom'     colspan=&qtrs.><IMG
SRC='&imgdir.\border_rating.gif' ALT='Ratings' BORDER=0></td></tr>";
                    %end;
```

```
                %end;
                %else %do;
                     PUT "<tr bgcolor= &hdcolr.><td>&htmlsp.</td>";   /** Column 1 **/
                     /*** If sub-benefits then output sub-benefit columns ***/
                     %if &subcols.^=0 %then %do;
                       PUT    "<td    align='center'    valign='bottom'    colspan=&subcols.><font
face='&fontface.'><b>&sub_ben.<br>components</b></font></td>";
                       PUT     "<td     align='center'     valign='bottom'     colspan=&qtrs.><font
face='&fontface.'><b>Composite</b></font></td></tr>";
                     %end;
                     %else %do;
                       PUT     "<td     align='center'     valign='bottom'     colspan=&qtrs.><font
face='&fontface.'><b>Ratings</b></font></td></tr>";
                     %end;
                %end;
             %end;


             /*** 4th Row start (column 1) ***/
             /*** ÛÛ FRAMES SECTION ÛÛ ***/
             %if &prefix=f %then %do;
               PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
               PUT    "<td    align='left'    valign='bottom'><img    src='&imgdir.\blank_35_50.gif'
border=0></td>";
             %end;
             %else %do;
               PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
               PUT "<td width='10%'>&htmlsp.</td>";
             %end;



             /*-------------------------*/
             /* 2000/11: begin xls code */
             /*-------------------------*/
             %if &outxls.=1 %then %do;
               FILE XLSTITLE;
               PUT "&major. &comma. &sub_regs.";
               PUT "%cmpres('&sub_ben.')";
             %end;
             /*-------------------------*/
             /* 2000/11: begin xls code */
             /*-------------------------*/
      END;

      FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */
      /*** Print out column headings ***/

          HREF=COMPRESS("..\html\help.htm#q&var3.");
          HREF1=COMPRESS("..\html\help.htm#trend");




      /*** 4th Row (columns 2+) ***/
      /*** If quarter column then HREF link is different ****/
      /*** ÛÛ FRAMES SECTION ÛÛ ***/

      %if &prefix=f %then %do;
         %if &var3. = 12 and (&var4. = 0 or &var4. = 3) and &seppage. = 2 %then %do;
             IF _N_>&subcols. AND
                _N_    =    1    OR    _N_    =    4    THEN    IMAGE=COMPRESS("&imgdir.\col"||_N_-
&subcols.||"_r"||".gif");
             ELSE IMAGE=COMPRESS("&imgdir.\col"||_N_-&subcols.||".gif");
         %end;
         %else %do;
             IF _N_>&subcols. THEN IMAGE=COMPRESS("&imgdir.\col"||_N_-&subcols.||".gif");
             ELSE IMAGE=COMPRESS("&imgdir.\image&var3._"||_N_||".gif");
         %end;


         /*7-29-2002 DKB ADDED LINK TO TREND SECTION OF HELP FILE */
```

```
          IF TIMEPD NE "TREND" AND TIMEPD NE "TREND*" THEN PUT "<td align='center'
valign='bottom'><a href=""" HREF +(-1) """ &target.><IMG SRC='" IMAGE "' alt='" TIMEPD "'
BORDER=0></a></td>";
          ELSE PUT "<td align='center' valign='bottom'><a href=""" HREF1 +(-1) """ &target.><IMG
SRC='" IMAGE "' alt='" TIMEPD "' BORDER=0></a></td>";
       %end;
       %else %do;
          /*7-29-2002 DKB ADDED LINK TO TREND SECTION OF HELP FILE */
          IF TIMEPD NE "TREND" AND TIMEPD NE "TREND*" THEN PUT "<td width='10%' align='center'
valign='bottom'><font face='&fontface.' size='1'><a href=""" HREF +(-1) """ &target.>" &HEADVAR.
"</a></font><
          ELSE PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.'
size='1'><a href=""" HREF1 +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
       %end;


       IF EOF THEN DO;
         PUT "</font></tr>";
       END;

     RUN;
     %end;




     /*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
     /*** Added MAB 11-20-2000 ***/
     /*** If Sub-benefit then do differently ***/
     /*** If separate page (SEPPAGE=1) then create 1st of 2 HTML files ***/
     /*** 1 for data without qtrly info and 1 for just qtrly info ***/
     %else %if &seppage.=1 %then %do;


     DATA HTML2;
       SET HTML;
       IF TIMEPD="&currentperiod.";
       IF BENTYPE="Composite" THEN DELETE;
     RUN;






     /*** Remove qtrs from column counts ***/
     %let columns=%EVAL(&columns.-&qtrs.);

     /*** Do sub-benefit page without any qtrly info ***/
     DATA _NULL_;
       SET HTML2 END=EOF;


       FILE "&FILEOUT1." MOD ;

       COLUMNS=&columns.;
       SPAN2=ROUND(COLUMNS/2,1);
       SPAN1=COLUMNS-SPAN2;


       IF _N_=1 THEN DO;



             FILE "&FILEOUT1." MOD ;


              /** MF Changes ROW 1 **/
              PUT "<center><table border='&border.' cellpadding='2' cellspacing='0'
bgcolor='#D8D8D8' width='&width2.'>";
              PUT "<tr bgcolor='white'>";
```

```
             PUT  "        <td  colspan="""  SPAN1  +(-1)  """  valign='top'  bgcolor='#999999'><img
border='0' height='25' width='242' src=&logo.></td>";
             PUT   "          <td   colspan="""   SPAN2   +(-1)   """   align='right'   valign='bottom'
bgcolor='#999999'>";
             PUT "          <div align='right'>";
               /** RSG - 09/02/03 Second set of trend pages need to refer to var4=0 pages **/
             PUT "          <a href='..\html\&prefix.&var1.-&var2.-&var3.-0&unq..htm' &target.><img
src='&imgdir.\&click_image.' alt='&click_alt.' border=0></a>&htmlsp.";
             PUT "             <a  href='..\html\index.htm'  &target.><img  src=&home_but.  border='0'
alt='Return to Main Page'></a>&htmlsp. ";

             PUT "&goback.";
             PUT "           <noscript><a href="""  HREFBACK  +(-1)  """  &target.><img  src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";
             PUT "          &htmlsp. ";
             PUT "             <a  href='..\html\help.htm'  &target.><img  src=&help_but.  border='0'
alt='Help'></a></div>";
                PUT "    </td>";
             PUT "</tr>";

             /** MF Changes ROW 2 **/
             PUT "<tr>";
             PUT  "             <td  valign='center'  align='center'  colspan="""  COLUMNS  +(-1)  """
bgcolor='#D8D8D8'>";
             PUT "                     <font  face='&fontface.'  color='#3333cc'  size='5'><b>&major.
&comma.  &sub_regs. <br>";


             PUT "                 &sub_ben.<BR>&currentperiod.</b></font>";



             PUT "        </td>";
             PUT "</tr>";

             /*** Sub_head macro variable added C.Rankin 10/25/2001  ***/

             %if &sub_head.=1 %then %do;
                /*** 3rd Row ***/
                /*** ÛÛ FRAMES SECTION ÛÛ ***/
                %if &prefix=f %then %do;
                   PUT "<tr bgcolor= &hdcolr.><td>&htmlsp.</td>";   /** Column 1 **/
                   IMAGE=COMPRESS("&imgdir.\span_image&var3..gif");
IMAGE=COMPRESS("&imgdir.\span_image&var3..gif");
                   PUT  "<td  align='center'  valign='bottom'  colspan=&subcols.><IMG  SRC="  IMAGE  "
alt='" BENEFIT "' BORDER=0></td>";
                %end;
                %else %do;
                   PUT "<tr bgcolor= &hdcolr.><td>&htmlsp.</td>";   /** Column 1 **/
                   PUT     "<td     align='center'     valign='bottom'     colspan=&subcols.><font
face='&fontface.'><b>&sub_ben.<br>components</b></font></td>";
                %end;
             %end;

             /*** 4th Row start (column 1) ***/
             /*** ÛÛ FRAMES SECTION ÛÛ ***/
             %if &prefix=f %then %do;
               PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
          if columns ne 3 and columns ne 6 and columns ne 4 then do;
                 PUT   "<td   align='left'   valign='bottom'><img   src='&imgdir.\blank_50_50.gif'
border=0></td>";
                end;
          else if columns = 3 or columns = 4 then do;
                 PUT   "<td   align='left'   valign='bottom'><img   src='&imgdir.\blank_120_50.gif'
border=0></td>";
          end;
          else if columns = 6 then do;
                 PUT   "<td   align='left'   valign='bottom'><img   src='&imgdir.\blank_145_50.gif'
border=0></td>";
          end;

             %end;
             %else %do;
```

```
               PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
               PUT "<td width='10%'>&htmlsp.</td>";
             %end;


      qnum=1; /**RSG 08/07/03 Added as counter to use to for link to the trend pages**/

             /*-------------------------*/
             /* 2000/11: begin xls code */
             /*-------------------------*/
             %if &outxls.=1 %then %do;
               FILE XLSTITLE;
               PUT "&major. &comma. &sub_regs.";
               PUT "%cmpres('&sub_ben.')";
             %end;
             /*-------------------------*/
             /* 2000/11: begin xls code */
             /*-------------------------*/
      END;

      FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */
      /*** Print out column headings ***/

      /*HREF=COMPRESS("help.htm#q&var3.");   */

      HREF=COMPRESS("..\html\&prefix.&var1.-&var2.-&var3.-"||qnum||"&unq..htm");
       *** RSG 08/07/03 Use qnum counter to refer to subbenefit trend pages;

    ***************************************;
      /*** 4th Row (columns 2+) ***/
      /*** If quarter column then HREF link is different ****/
      /*** ÛÛ FRAMES SECTION ÛÛ ***/
      %if &prefix=f %then %do;
       IMAGE=COMPRESS("&imgdir.\image&var3._"||_N_||".gif");
            PUT "<td align='center' valign='bottom'><a href=""" HREF +(-1) """ &target.><IMG SRC='"
IMAGE "' alt='" BENTYPE "' BORDER=0></a></td>";
      %end;
      %else %do;
         PUT  "<td  width='10%'  align='center'  valign='bottom'><font  face='&fontface.'  size='1'><a
href=""" HREF +(-1) """ &target.>" &HEADVAR. "</a></font></td>";
      %end;

      qnum+1; *** RSG 08/07/03 Added to increase the counter;

      IF EOF THEN DO;
        PUT "</font></tr>";
        /***  2-2 MAB removed scale row ***/
      END;


    RUN;
    %end;




    /*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
    /*** If separate page (SEPPAGE=2) then create 2nd of 2 HTML files ***/
    /*** 1 for data without qtrly info and 1 for just qtrly info ***/
    %else %if &seppage.=2 %then %do;


    /*** Keep only qtrs in column counts ***/

    %let columns=%EVAL(&qtrs.+2);


    /*** Then do sub-benefit page with just qtrly info ***/
    DATA JUSTQTR;
      SET HTML;
      /*** Since spliting up table need to delete some records ***/

      *  IF BENTYPE="Composite";   ***DKB ADDED TREND on 4/29/2002 to account for trend col;
```

```
%if &var4. = 0 %then %do;  **RSG ADDED TREND FOR BENTYPES on 8/7/2003 - select
                                 records appropriate for bentype;
        IF BENTYPE="Composite";
%end;
%else %if &var4. ne 0 and BENTYPE ne "Composite" %then %do;

        %if &var3. = 1 %then %do;
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Problems Getting Personal Doctor/Nurse";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Problems Getting to See Specialist";
                %end;
                %else %if &var4. = 3 %then %do;
                        IF BENTYPE = "Problems Getting Necessary Care";
                %end;
                %else %if &var4. = 4 %then %do;
                        IF BENTYPE = "Delays in Care while Awaiting Approval";
                %end;
        %end;
        %else %if &var3. = 2 %then %do;
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Advice over Telephone";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Wait for Routine Visit";
                %end;
                %else %if &var4. = 3 %then %do;
                        IF BENTYPE = "Wait for Urgent Care";
                %end;
                %else %if &var4. = 4 %then %do;
                        IF BENTYPE = "Wait in Doctor`s Office";
                %end;
        %end;
        %else %if &var3. = 3 %then %do;
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Courteous and Respectful";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Helpful";
                %end;
        %end;
        %else %if &var3. = 4 %then %do;
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Listens Carefully";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Explains so You can Understand";
                %end;
                %else %if &var4. = 3 %then %do;
                        IF BENTYPE = "Shows Respect";
                %end;
                %else %if &var4. = 4 %then %do;
                        IF BENTYPE = "Spends Time with You";
                %end;
        %end;
        %else %if &var3. = 5 %then %do;
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Problem Finding/Understanding Written Material";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Problem Getting Help from Customer Service";
                %end;
                %else %if &var4. = 3 %then %do;
                        IF BENTYPE = "Problem with Paperwork";
                %end;
        %end;
        %else %if &var3. = 6 %then %do;
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Claims Handled in a Reasonable Time";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Claims Handled Correctly";
```

```
                %end;
            %end;
            %else %if &var3. = 11 %then %do;
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Mammography";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Pap Smear";
                %end;
                %else %if &var4. = 3 %then %do;
                        IF BENTYPE = "Hypertension";
                %end;
                %else %if &var4. = 4 %then %do;
                        IF BENTYPE = "Prenatal Care";
                %end;
            %end;
            %else %if &var3. = 12 %then %do;    /*** MAB Added 2/11/2005 ***/
                %if &var4. = 1 %then %do;
                        IF BENTYPE = "Non-Smoking Rate";
                %end;
                %else %if &var4. = 2 %then %do;
                        IF BENTYPE = "Counselled To Quit";
                %end;
                      %else %if &var4. = 3 %then %do;
                              IF BENTYPE = "Percent Not Obese";
                      %end;
            %end;

            call symput('sub2_ben',BENTYPE); **create macro var to use in sub-benefit
                                              trend pages (below) - RSG 08/07/03;
    %end;


  RUN;

  DATA _NULL_;
    SET JUSTQTR END=EOF;


    FILE "&FILEOUT1." MOD ;

    COLUMNS=&columns.;
    SPAN2=ROUND(COLUMNS/2,1);
    SPAN1=COLUMNS-SPAN2;

    IF _N_=1 THEN DO;

          FILE "&FILEOUT1." MOD ;

           /** MF Changes ROW 1 **/
           PUT     "<center><table     border='&border.'     cellpadding='2'     cellspacing='0'
bgcolor='#D8D8D8' width='&width2.'>";
           PUT "<tr bgcolor='white'>";
           PUT  "       <td  colspan="""  SPAN1  +(-1)  """  valign='top'  bgcolor='#999999'><img
border='0' height='25' width='242' src=&logo.></td>";
           PUT   "          <td   colspan="""   SPAN2   +(-1)   """   align='right'   valign='bottom'
bgcolor='#999999'>";
           PUT "          <div align='right'>";
           PUT "          <a href='..\html\&prefix.&var1.-&var2.-&var3.-0&unq..htm' &target.><img
src='&imgdir.\&click_image.' alt='&click_alt.' border=0></a>&htmlsp.";
           PUT "             <a  href='..\html\index.htm'  &target.><img  src=&home_but.  border='0'
alt='Return to Main Page'></a>&htmlsp. &htmlsp.";


           PUT "&goback.";

           PUT "          <noscript><a href="""  HREFBACK  +(-1)  """  &target.><img  src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";
           PUT "          &htmlsp.";
           PUT "             <a  href='..\html\help.htm'  &target.><img  src=&help_but.  border='0'
alt='Help'></a></div>";
           PUT "    </td>";
           PUT "</tr>";
```

```
            /** MF Changes ROW 2 **/

            PUT "<tr>";
            PUT  "             <td  valign='center'  align='center'  colspan="""  COLUMNS  +(-1)  """
bgcolor='#D8D8D8'>";
            PUT "                     <font  face='&fontface.'  color='#3333cc'  size='5'><b>&major.
&comma.  &sub_regs. <br>";

            PUT "                 &sub_ben.</b></font><br>";
            /*** For trend data for each benefit type, display benefit type - RSG 08/07/03***/
              %if &var4. ne 0 %then %do;
            PUT "                <font face='&fontface.' color='#3333cc' size='4'><b>";
              PUT "                 &sub2_ben.</b></font>";
              %end;
            PUT "        </td>";
            PUT "</tr>";


            /*** 3rd Row ***/
            /*** ÛÛ FRAMES SECTION ÛÛ ***/
            /**PUT "<td></td>"**/



            /*** 4th Row start (column 1) ***/
            /*** ÛÛ FRAMES SECTION ÛÛ ***/
            %if &prefix=f %then %do;
              PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
              PUT    "<td    align='left'    valign='bottom'><img    src='&imgdir.\blank_75_50.gif'
border=0></td>";
            %end;
            %else %do;
              PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
              PUT "<td width='10%'>&htmlsp.</td>";
            %end;



            /*-------------------------*/
            /* 2000/11: begin xls code */
            /*-------------------------*/
            %if &outxls.=1 %then %do;
              FILE XLSTITLE;
              PUT "&major. &comma. &sub_regs.";
                %if &var4. = 0 %then %do;
                     PUT "%cmpres('&sub_ben.')";
                %end;
                %else %do;
                     PUT "%CMPRES('&sub_ben. &comma. &sub2_ben.')";
                %end;
            %end;
            /*-------------------------*/
            /* 2000/11: begin xls code */
            /*-------------------------*/
      END;

      FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */
      /*** Print out column headings ***/


          LENGTH HREFf1 $250;
          LENGTH HREFf2 $250;
          LENGTH HREFf3 $250;

          LENGTH HREFp1 $250;
          LENGTH HREFp2 $250;
          LENGTH HREFp3 $250;

          LENGTH HREF5  $250;
```

```
          ****7-29-2002  DKB  ADDED  LINKS  TO  COMPONENT  PAGES  OF  PREVIOUS  QUARTERS  FROM  TREND
PAGE****;
          ************************THIS WILL NEED TO BE UPDATED EACH QUARTER**********************;
           ***FRAMES***;
           HREFf1=COMPRESS("..\Period1\f&var1.-&var2.-&var3.-0.htm");
           HREFf2=COMPRESS("..\Period2\f&var1.-&var2.-&var3.-0.htm");
           HREFf3=COMPRESS("f&var1.-&var2.-&var3.-0.htm");

           ***NO FRAMES***;
           HREFp1=COMPRESS("..\Period1\p&var1.-&var2.-&var3.-0.htm");
           HREFp2=COMPRESS("..\Period2\p&var1.-&var2.-&var3.-0.htm");
           HREFp3=COMPRESS("p&var1.-&var2.-&var3.-0.htm");

          ****HELP FILE FOR TREND COLUMN***;
           HREF5=COMPRESS("..\html\help.htm#trend");       /*7-29-2002  DKB  ADDED  LINK  FOR  TREND
SECTION OF HELP FILE*/

        ******************************************************;

      /*** 4th Row (columns 2+) ***/
      /*** If quarter column then HREF link is different ****/
      /*** ÛÛ FRAMES SECTION ÛÛ ***/


      %if &prefix=f %then %do;
         %if &var3. = 12 and (&var4. = 0 or &var4. = 3) and &seppage. = 2 %then %do;
             IF _N_ = 1 OR _N_ = 4 THEN IMAGE=COMPRESS("&imgdir.\col"||_N_||"_r"||".gif");   *RSG
02/2006 - USE ALTERNATIVE COL HEADING FOR NOTE;
        ELSE IMAGE=COMPRESS("&imgdir.\col"||_N_||".gif");
         %end;
        %else %do;
             IMAGE=COMPRESS("&imgdir.\col"||_N_||".gif");
         %end;

        IF _N_=1 THEN HREF=HREFf1;
        ELSE IF _N_=2 THEN HREF=HREFf2;
        ELSE IF _N_=3 THEN HREF=HREFf3;
        ELSE IF _N_=4 THEN HREF=HREF5;
          if timepd ne "TREND*" then
               PUT  "<td  align='center'  valign='bottom'><a  href="""  HREF  +(-1)  """  &target.><IMG
SRC='" IMAGE "' alt='" TIMEPD "' BORDER=0></a></td>";
          else do;
            IMAGE=COMPRESS("&imgdir.\col"||_N_||"_R.gif");
           PUT "<td align='center' valign='bottom'><a href="""  HREF +(-1)  """  &target.><IMG SRC='"
IMAGE "' alt='" TIMEPD "' BORDER=0></a></td>";
          end;
      %end;
      %else %do;
        IF _N_=1 THEN HREF=HREFp1;
        ELSE IF _N_=2 THEN HREF=HREFp2;
        ELSE IF _N_=3 THEN HREF=HREFp3;
        ELSE IF _N_=4 THEN HREF=HREF5;
        /*7-29-2002 DKB ADDED LINK TO TREND SECTION OF HELP FILE*/

       PUT  "<td  width='10%'  align='center'  valign='bottom'><font  face='&fontface.'  size='1'><a
href="""  HREF +(-1)  """  &target.>" &HEADVAR. "</a></font></td>";

    %end;


      IF EOF THEN DO;
        PUT "</font></tr>";
      END;

    RUN;

    %end;

    /*** ÛÛ FRAMES SECTION ÛÛ ***/
    %if &prefix=f %then %do;
      /*** Close out header HTML page ***/
      DATA _NULL_;
        FILE "&FILEOUT1." MOD;
```

```
        PUT "</center></table>";
        PUT "</body></html>";
      RUN;


      /*** Since done making frame 1 page then assign fileout1 = frame 2 ***/
      %let fileout1=&fileout3.;

      /*** Initialize out data HTML page ***/
      DATA _NULL_;
        FILE "&FILEOUT3.";

        PUT "<! Created &datetime.>";
        PUT "<html>";
        PUT    "<body    bgcolor='#999999'    text='#000099'    link='#660066'    alink='#660066'
vlink='#996699'>";
        PUT   "<center><table   border='1'   cellpadding='2'   cellspacing='0'   bgcolor='#D8D8D8'
cols=&columns. width=640>";
      RUN;



    %end;




    /***************************************/
    /****  Put out rest of table      ****/
    /****  Colored scores and Stub    ****/
    /***************************************/
    %if &seppage.=0 OR &var3.=7 OR &var3.=8 OR &var3.=9 OR &var3.=10 %then %do;
    DATA HTML3;
      SET SUBSET4;
    RUN;
    %end;
    %else %if &seppage.=1 %then %do;
    DATA HTML3;
      SET SUBSET4;

      IF TIMEPD="&currentperiod.";

      /*** Since spliting up table need to delete some records ***/

      %IF &VAR3. NE 0 %THEN %DO;
          IF BENTYPE="Composite" THEN DELETE;
      %END;
    RUN;

    %end;
    %else %if &seppage.=2 %then %do;

    DATA HTML3;
      SET SUBSET4;
      /*** Since spliting up table need to delete some records ***/
      /*** Modified 2-2 MAB to deal with new period values **/


      IF BENTYPE=&BEN_TYPE;


    RUN;
    %end;

    /*ÛÛÛÛ ALL MAJGRPS ÛÛÛÛ*/
    %if &var1.=0 %then %do;

    DATA HTML4;
      SET HTML3 END=EOF;
```

```
      IF MAJGRP="Prime Enrollees" THEN MAJNUM=1;
      IF MAJGRP="Enrollees with Military PCM"  THEN MAJNUM=2;
      IF MAJGRP="Enrollees with Civilian PCM" THEN MAJNUM=3;
      IF MAJGRP="Standard/Extra Users" THEN MAJNUM=4;
      IF MAJGRP="Active Duty" THEN MAJNUM=5;
      IF MAJGRP="Active Duty Dependents" THEN MAJNUM=6;
      IF MAJGRP="Retirees and Dependents" THEN MAJNUM=7;
      IF MAJGRP="All Users" THEN MAJNUM=8;


      /*** HREF link to another page ***/
      HREF=COMPRESS("..\html\&prefix."||MAJNUM||"-0-&var3.-&var4.&q..htm");   /** Link is diff for
CONUS MHS region **/


      LENGTH HREFQ LMAJGRP $ 100;
      RETAIN LMAJGRP;

      IF _N_=1 THEN DO;
         LMAJGRP=" ";
         ROW=0;


        /*** Add links to trend data 7.6.2001 MAB ***/
        %let columns_less1=%EVAL(&columns.-1);
        %if &seppage.=0 %then %do;
              FILE "&FILEOUT1." MOD ;
              PUT  "<tr  bgcolor=  &gray.><td  width='"  WIDTH_COL1  "'><font  face='&fontface.'
size='2'><b>Trends</b></font></td>";

              %do i=1 %to 12;
                 %if &i.^=7 AND &i.^=8 AND &i.^=9 AND &i.^=10 %then %do;   ***MJS 04/14/03 Changed
8,9,10,11 to 7,8,9,10;
                     HREFQ=COMPRESS("..\html\&prefix.&var1.-&var2.-&i.-0q.htm");
                 %end;
                 %else %do;
                     HREFQ=COMPRESS("..\html\&prefix.&var1.-&var2.-&i.-0.htm");
                 %end;
                 %if &prefix.=f %then %do;
                   PUT  "<td  width='"  WIDTH3  "'><a  href='"  HREFQ  "'  &target.><CENTER><img
src='&imgdir.\trend_row.gif' border=0></CENTER></a></td>";
                       %end;
                       %else %do;
                   PUT "<td><a href='" HREFQ "' &target.><CENTER><img src='&imgdir.\trend_row.gif'
border=0></CENTER></a></td>";
                       %end;
              %end;
              PUT "</tr>";
        %end;

      END;



      IF LMAJGRP^=MAJGRP THEN DO;             /*** Start new row ***/
            FILE "&FILEOUT1." MOD ;
            ROW+1;
            IF LMAJGRP^=" " THEN PUT "</tr>";


            /*** Column 1 / Row 1 ***/
            /*** ÛÛ FRAMES SECTION ÛÛ ***/
            %if &prefix=f %then %do;
                IF  MAJGRP  IN("Benchmark")  THEN  PUT  "<tr><td  width='"  WIDTH_COL1  "'><b><font
face='&fontface.' size='2'>" MAJGRP "</font></b></td>";    /*** no HREF links ***/
            %end;
            %else %do;
                IF MAJGRP IN("Benchmark") THEN PUT "<tr><td><b><font face='&fontface.' size='2'>"
MAJGRP "</font></b></td>";                          /*** no HREF links ***/
            %end;

            /*** Column 1 / Row 2+ ***/
```

```
            ELSE  IF  MOD(ROW,2)=0  THEN  PUT  "<tr  bgcolor=  &gray.><td><font  face='&fontface.'
size='2'><a href="""  HREF +(-1)  """  &target.> " MAJGRP " </a></font></td>";   /** Shade row **/
            ELSE PUT "<tr><td><font face='&fontface.' size='2'><a href="""  HREF +(-1)  """  &target.>
" MAJGRP " </a></font></td>";


            /*-------------------------*/
            /* 2000/11: begin xls code */
            /*-------------------------*/
             %if &outxls.=1 %then %do;
               FILE XLSDATA;
               IF LMAJGRP^=" " THEN           PUT " ";
               IF REGION IN("Benchmark") THEN PUT REGION '09'x @@;    /* '09'x ensures text string
is put into one cell */
               ELSE IF MOD(ROW,2)=0 THEN      PUT MAJGRP '09'x @@;   /* rather than spanning across
cells              */
               ELSE                           PUT MAJGRP '09'x @@;
             %end;
            /*-------------------------*/
            /* 2000/11: end xls code   */
            /*-------------------------*/

            LMAJGRP=MAJGRP;
       END;


       /*** Column 2+ ***/
       /*********************************************/
       /**** Need to output different formats    ****/
       /*********************************************/
       FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */


       IF MAJGRP IN("Benchmark") THEN DO;
            IF  SCORE=.  THEN  PUT  "<td  width='"  WIDTH3  "'  align='center'  valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
            ELSE   IF   SCORE=.A   THEN   PUT   "<td   width='"   WIDTH3   "'   align='center'
valign='bottom'><b><font  face='&fontface.'  color=&blue.  size='2'>NA<!CODE=  "  +(-1)  ORDER  Z5.
"></font></b></td>";
            ELSE   PUT   "<td   width='"   WIDTH3   "'   align='center'   valign='bottom'><b><font
face='&fontface.'   color=&blue.   size='2'>"   SCORE   3.0   "<!CODE=   "   +(-1)   ORDER   Z5.
"></font></b></td>";
       END;
       ELSE DO;
         IF SCORE=. THEN DO;
             PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>***<!CODE=
" +(-1) ORDER Z5.  "></font></b></td>";
         END;
         ELSE IF SCORE=.A THEN DO;
             PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>NA<!CODE= "
+(-1) ORDER Z5.  "></font></b></td>";
         END;
         ELSE DO;
             IF  SIG=1  THEN  PUT  "<td  align='center'  valign='bottom'><b><font  face='&fontface.'
size='2' color=&green.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
             ELSE IF SIG=. THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
             ELSE IF SIG=.A THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
             ELSE IF SIG=-1 THEN PUT "<td align='center' valign='bottom'><i><font face='&fontface.'
size='2' color=&red.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></i></td>";
             ELSE PUT "<td align='center' valign='bottom'><font face='&fontface.' size='2'>" SCORE
3.0 "<!CODE= " +(-1) ORDER Z5.  "></font></td>";
         END;
       END;



       /*-------------------------*/
       /* 2000/11: begin xls code */
       /*-------------------------*/
       %if &outxls.=1 %then %do;
         FILE XLSDATA;
```

```
        IF MAJGRP IN("Benchmark") THEN DO;
             IF SCORE=. THEN        PUT "***" '09'x @@;
             ELSE IF SCORE=.A THEN  PUT "NA"  '09'x @@;
             ELSE                   PUT SCORE '09'x @@;
        END;
        ELSE DO;
          IF SCORE=. THEN DO;
              PUT "***" '09'x @@;
          END;
          ELSE IF SCORE=.A THEN DO;
              PUT "NA" '09'x @@;
          END;
          ELSE DO;
              IF SIG=1 THEN       PUT SCORE '09'x @@;
              ELSE IF SIG=. THEN  PUT "***" '09'x @@;
              ELSE IF SIG=.A THEN PUT "NA"  '09'x @@;
              ELSE IF SIG=-1 THEN PUT SCORE '09'x @@;
              ELSE                PUT SCORE '09'x @@;
          END;
        END;
      %end;
      /*-------------------------*/
      /* 2000/11: end xls code   */
      /*-------------------------*/

      IF EOF THEN DO;
         FILE "&FILEOUT1." MOD ;                        /* 2000/11: to refer back to htm file */
         PUT "</tr>";  /*** terminate last row ***/

         %BOTTOM_NOTES;  /** Macro with bottom notes **/


        /*-------------------------*/
        /* 2000/11: begin xls code */
        /*-------------------------*/
         %if &outxls.=1 %then %do;
            %if (&var3.=12 and (&var4=0 or &var4.=3) and &seppage.=2) %then %do;
              FILE XLSDATA;
              PUT; PUT;
              PUT "Source: &SRCYR2 Health Care Survey of DOD Beneficiaries";    ***MJS 03/24/04
Changed hard-coded year to macro variable;
              PUT "Indicates score significantly exceeds benchmark";
              PUT "Indicates score significantly falls short of benchmark";
              PUT "NA Indicates not applicable";
              PUT "*** Indicates suppressed due to small sample size";
            %end;
               %else %do;
              FILE XLSDATA;
              PUT; PUT;
              PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and
&SRCYR2";   ***MJS 03/24/04 Changed hard-coded year to macro variable;
              PUT "Indicates score significantly exceeds benchmark";
              PUT "Indicates score significantly falls short of benchmark";
              PUT "NA Indicates not applicable";
              PUT "*** Indicates suppressed due to small sample size";
            %end;
         %end;

        /*-------------------------*/
        /* 2000/11: end xls code   */
        /*-------------------------*/

      END;
    RUN;
    %end;




    /*ÛÛÛÛ All Regions ÛÛÛÛ*/
    %if &var2.=0 %then %do;
```

```
    DATA HTML4;
      SET HTML3 END=EOF;

      LENGTH LREGION HREFQ $ 100;
      RETAIN LREGION;

      IF _N_=1 THEN DO;
         LREGION=" ";
         REGNUM=1;
         ROW=0;



        %let columns_less1=%EVAL(&columns.-1);
        %if &seppage.=0 %then %do;
              FILE "&FILEOUT1." MOD ;
              PUT  "<tr  bgcolor=  &gray.><td  width='"  WIDTH_COL1  "'><font  face='&fontface.'
size='2'><b>Trends</b></font></td>";

               %do i=1 %to 12;   ***RSG 02/2005 changed 11 to 12 since we now have 12 benefits;
                 %if &i.^=7 AND &i.^=8 AND &i.^=9 AND &i.^=10 %then %do;   ***MJS 04/14/03 Changed
from 8,9,10,11 to 7,8,9,10;
                     HREFQ=COMPRESS("..\html\&prefix.&var1.-&var2.-&i.-0q.htm");   /*** href to 2nd
html file ***/
                 %end;

                 %else %do;
                     HREFQ=COMPRESS("..\html\&prefix.&var1.-&var2.-&i.-0.htm");   /*** href to 2nd
html file ***/
                 %end;
                 %if &prefix.=f %then %do;
                   PUT  "<td  width='"  WIDTH3  "'><a  href='"  HREFQ  "'  &target.><CENTER><img
src='&imgdir.\trend_row.gif' border=0></CENTER></a></td>";
            %end;
            %else %do;
                  PUT "<td><a href='" HREFQ "' &target.><CENTER><img src='&imgdir.\trend_row.gif'
border=0></CENTER></a></td>";
            %end;
              %end;
              PUT "</tr>";
        %end;


    END;


      IF LREGION^=REGION THEN DO;              /*** Start new row ***/
            FILE "&FILEOUT1." MOD ;
            ROW+1;
            IF LREGION^=" " THEN PUT "</tr>";  /*** terminate previous row ***/


            /*-------------------------*/
            /* 2000/11: begin xls code */
            /*-------------------------*/
            %if &outxls.=1 %then %do;
              FILE XLSDATA;
              IF LREGION^=" " THEN PUT " ";          /*** terminate previous row ***/
              FILE "&FILEOUT1." MOD ;                /* 2000/11: to refer back to htm file */
            %end;
            /*-------------------------*/
            /* 2000/11: end xls code   */
            /*-------------------------*/


            /*** Column 1 / Row 1 ***/
            /*** ÛÛ FRAMES SECTION ÛÛ ***/
            %if &prefix=f %then %do;
               IF  REGION  IN("Benchmark")  THEN  PUT  "<tr><td  width='"  WIDTH_COL1  "'><b><font
face='&fontface.' size='2'>" REGCAT "</font></b></td>";  /*** no HREF links ***/
            %end;
            %else %do;
```

```
               IF REGION IN("Benchmark") THEN PUT "<tr><td><b><font face='&fontface.' size='2'>"
REGCAT "</font></b></td>";  /*** no HREF links ***/
            %end;
            ELSE DO;   /*** HREF links for each region ***/


              HREF=COMPRESS("..\html\&prefix.&var1.-"||REGNUM||"-&var3.-&var4.&q..htm"); /** MAB 3-
16-2005 Added VAR1 **/

              /*** Column 1 / Row 2+ ***/
              %if &prefix=f %then %do;
             %if &var1.=3 or &var1.=4 or &var1.=6 or &var1.=7 %then %do;
                      IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font face='&fontface.'
size='2'> " REGCAT " </font></td>";
                      ELSE PUT "<tr><td><font face='&fontface.' size='2'> " REGCAT " </font></td>";
             %end;
             %else %do;
                      if regcat = "NORTH" or regcat = "SOUTH" or regcat="WEST" or
                         regcat = "OVERSEAS" or regcat="CONUS MHS" then do;
                    IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><b><font face='&fontface.'
size='2'> " REGCAT " </b></font></td>";
                         ELSE PUT "<tr><td><b><font face='&fontface.' size='2'> " REGCAT "
</b></font></td>";
                      end;
                      else if regcat = "ARMY" or regcat = "NAVY" or regcat = "AIR FORCE" or
                           regcat = "OTHER" then do;
                    IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font face='&fontface.'
size='2'> " REGCAT " </font></td>";
                         ELSE PUT "<tr><td><font face='&fontface.' size='2'> " REGCAT "
</font></td>";
                      end;
                      else do;
                         IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font face='&fontface.'
size='2'><a href="""  HREF +(-1) """ &target.> " REGCAT " </a></font></td>"; /** Shade row **/
                         ELSE PUT "<tr><td><font face='&fontface.' size='2'><a href="""  HREF +(-1)
""" &target.> " REGCAT " </a></font></td>";
                      end;
                  %end;
          %end;
              %else %do;
             %if &var1.=3 or &var1.=4 or &var1.=6 or &var1.=7 %then %do;
                 IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font face='&fontface.'
size='2'> " REGCAT " </font></td>";
                      ELSE PUT "<tr><td><font face='&fontface.' size='2'> " REGCAT " </font></td>";
                  %end;
                  %else %do;
                      if regcat = "NORTH" or regcat = "SOUTH" or regcat="WEST" or
                         regcat = "OVERSEAS" or regcat="CONUS MHS" then do;
                    IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><b><font face='&fontface.'
size='2'> " REGCAT " </b></font></td>";
                         ELSE PUT "<tr><td><b><font face='&fontface.' size='2'> " REGCAT "
</b></font></td>";
                      end;
                      else if regcat = "ARMY" or regcat = "NAVY" or regcat = "AIR FORCE" or
                           regcat = "OTHER" then do;
                           IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font
face='&fontface.' size='2'> " REGCAT " </font></td>";
                         ELSE PUT "<tr><td><font face='&fontface.' size='2'> " REGCAT "
</font></td>";
                      end;
                      else do;
                         IF MOD(ROW,2)=0 THEN PUT "<tr bgcolor= &gray.><td><font face='&fontface.'
size='2'><a href="""  HREF +(-1) """ &target.> " REGCAT " </a></font></td>"; /** Shade row **/
                         ELSE PUT "<tr><td><font face='&fontface.' size='2'><a href="""  HREF +(-1)
""" &target.> " REGCAT " </a></font></td>";
                      end;
                  %end;
              %end;

              REGNUM+1;


            END;
```

```
            /*-------------------------*/
            /* 2000/11: begin xls code */
            /*-------------------------*/
            %if &outxls.=1 %then %do;
              FILE XLSDATA;
              IF REGION IN("Benchmark") THEN  PUT REGCAT '09'x @@;   /* no logic difference */
              ELSE DO;
                IF MOD(ROW,2)=0 THEN               PUT REGCAT '09'x @@;     /* just presentation
difference in htm */
                ELSE                            PUT REGCAT '09'x @@;   /* keeping as is to preserve
htm code structure */
              END;
            %end;
            /*-------------------------*/
            /* 2000/11: end xls code   */
            /*-------------------------*/

            LREGION=REGION;
      END;


      /*** Column 2+ ***/
      /*********************************************/
      /**** Need to output different formats    ****/
      /*********************************************/
      FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */
      IF REGION IN("Benchmark") THEN DO;
         %if &prefix.=f %then %do;
           IF SCORE=. THEN PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
           ELSE IF SCORE=.A THEN PUT "<td width='" WIDTH3 "' align='center'
valign='bottom'><b><font face='&fontface.' color=&blue. size='2'>NA<!CODE= " +(-1) ORDER Z5.
"></font></b></td>";
           ELSE PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>" SCORE 3.0 "<!CODE= " +(-1) ORDER Z5.
"></font></b></td>";
         %end;
         %else %do;
           IF SCORE=. THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
color=&blue. size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
           ELSE IF SCORE=.A THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
color=&blue. size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
           ELSE PUT "<td align='center' valign='bottom'><b><font face='&fontface.' color=&blue.
size='2'>" SCORE 3.0 "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
         %end;
      END;
      ELSE DO;
        IF SCORE=. THEN DO;
           PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>***<!CODE=
" +(-1) ORDER Z5.  "></font></b></td>";
        END;
        ELSE IF SCORE=.A THEN DO;
           PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>NA<!CODE= "
+(-1) ORDER Z5.  "></font></b></td>";
        END;
        ELSE DO;
           IF SIG=1 THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2' color=&green.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
           ELSE IF SIG=. THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>***<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
           ELSE IF SIG=.A THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font></b></td>";
           ELSE IF SIG=-1 THEN PUT "<td align='center' valign='bottom'><i><font face='&fontface.'
size='2' color=&red.>" SCORE 3.0  "<!CODE= " +(-1) ORDER Z5.  "></font></i></td>";
           ELSE PUT "<td align='center' valign='bottom'><font face='&fontface.' size='2'>" SCORE
3.0 "<!CODE= " +(-1) ORDER Z5.  "></font></td>";
        END;
      END;


      /*-------------------------*/
      /* 2000/11: begin xls code */
```

```
      /*-------------------------*/
      %if &outxls.=1 %then %do;
        FILE XLSDATA;
        IF REGION IN("Benchmark") THEN DO;
             IF SCORE=. THEN       PUT "***" '09'x @@;
             ELSE IF SCORE=.A THEN PUT "NA"  '09'x @@;
             ELSE                  PUT SCORE '09'x @@;
        END;
        ELSE DO;
          IF SCORE=. THEN DO;
              PUT "***" '09'x @@;
          END;
          ELSE IF SCORE=.A THEN DO;
              PUT "NA" '09'x @@;
          END;
          ELSE DO;
              IF SIG=1 THEN       PUT SCORE '09'x @@;
              ELSE IF SIG=. THEN  PUT "***" '09'x @@;
              ELSE IF SIG=.A THEN PUT "NA"  '09'x @@;
              ELSE IF SIG=-1 THEN PUT SCORE '09'x @@;
              ELSE                PUT SCORE '09'x @@;
          END;
        END;
      %end;
      /*-------------------------*/
      /* 2000/11: end xls code   */
      /*-------------------------*/



      IF EOF THEN DO;
         FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */
         PUT "</tr>";  /*** terminate last row ***/


         %BOTTOM_NOTES;  /** Macro with bottom notes **/


         /*-------------------------*/
         /* 2000/11: begin xls code */
         /*-------------------------*/
         %if &outxls.=1 %then %do;
            %if (&var3.=12 and (&var4.=0 or &var4.=3) and &seppage.=2) %then %do;
              FILE XLSDATA;
              PUT; PUT;
              PUT "Source: &SRCYR2 Health Care Survey of DOD Beneficiaries";    ***MJS 03/24/04
Changed hard-coded year to macro variable;
              PUT "Indicates score significantly exceeds benchmark";
              PUT "Indicates score significantly falls short of benchmark";
              PUT "NA Indicates not applicable";
              PUT "*** Indicates suppressed due to small sample size";
            %end;
            %else %do;
              FILE XLSDATA;
              PUT; PUT;
              PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and
&SRCYR2";   ***MJS 03/24/04 Changed hard-coded year to macro variable;
              PUT "Indicates score significantly exceeds benchmark";
              PUT "Indicates score significantly falls short of benchmark";
              PUT "NA Indicates not applicable";
              PUT "*** Indicates suppressed due to small sample size";
            %end;
         %end;
         /*-------------------------*/
         /* 2000/11: end xls code   */
         /*-------------------------*/

      END;

    RUN;

    %end;
```

```
     /*ÛÛÛÛ Single Regions ÛÛÛÛ*/
     /* This code is not applicable for the 2000 report cards */
     /*  since not enough data to display sub-region info. */
     /*  Will leave in code in case this changes */
     %if &var2.^=0 AND &var1.^=0 %then %do;
     DATA HTML4;
       SET HTML3 END=EOF;

       LENGTH LREGCAT $ 100;
       RETAIN LREGCAT;

       IF _N_=1 THEN DO;
          LREGCAT=" ";
          ROW=0;
       END;

       IF LREGCAT^=REGCAT THEN DO;              /*** Start new row ***/
             FILE "&FILEOUT1." MOD ;
             ROW+1;
             IF LREGCAT^=" " THEN PUT "</tr>";  /*** terminate previous row ***/
             IF  REGCAT  IN("Benchmark")  THEN  PUT  "<tr><td  width='"  WIDTH_COL1  "'><b><font
face='&fontface.' size='2'>" REGCAT "</font></b></td>";
             ELSE  IF  SUBSTR(REGCAT,1,5)  =  "CONUS"  THEN  PUT  "<tr  bgcolor=  &gray.><td><b><font
face='&fontface.' size='2'>" REGCAT "</font></b></td>";
             ELSE IF REGCAT NE "ARMY" AND REGCAT NE "NAVY" AND REGCAT NE "AIR FORCE" AND REGCAT NE
"OTHER" AND
                    UPCASE(SUBSTR(REGCAT,1,5)) NE "NORTH" AND UPCASE(SUBSTR(REGCAT,1,5)) NE "SOUTH"
AND
                  UPCASE(SUBSTR(REGCAT,1,4)) NE "WEST" AND UPCASE(SUBSTR(REGCAT,1,8)) NE "OVERSEAS"
THEN DO;
                  IF  MOD(ROW,2)=0  THEN  PUT  "<tr  bgcolor=  &gray.><td><font  face='&fontface.'
size='2'><a href="".\HTML\help.htm#MTFs"">" REGCAT " </a></font></td>"; /** Shade row **/
                  ELSE        PUT        "<tr><td><font        face='&fontface.'        size='2'><a
href="".\HTML\help.htm#MTFs"">" REGCAT " </a></font></td>";
                 END;
             ELSE DO;
                  IF  MOD(ROW,2)=0  THEN  PUT  "<tr  bgcolor=  &gray.><td><font  face='&fontface.'
size='2'>" REGCAT "</font></td>";   /** Shade row **/
                  ELSE PUT "<tr><td><font face='&fontface.' size='2'>" REGCAT "</font></td>";
             END;

             /*-------------------------*/
             /* 2000/11: begin xls code */
             /*-------------------------*/
             %if &outxls.=1 %then %do;
               FILE XLSDATA;
               IF LREGCAT^=" " THEN PUT " ";
               IF  REGCAT  IN("Benchmark")  THEN        PUT  REGCAT  '09'x  @@;            /*  no  logic
difference */
               ELSE IF SUBSTR(REGCAT,1,5) = "CONUS" THEN PUT REGCAT '09'x @@;    /*** MAB 3/27/2005
Fixed error ***/
               ELSE IF MOD(ROW,2)=0 THEN           PUT REGCAT '09'x @@;         /* just presentation
difference in htm */
               ELSE                                PUT REGCAT '09'x @@;         /* keeping as is to
preserve htm code structure */
             %end;
             /*-------------------------*/
             /* 2000/11: end xls code   */
             /*-------------------------*/


             LREGCAT=REGCAT;

       END;



       /*********************************************/
```

```
      /**** Need to output different formats    ****/
      /*********************************************/
      FILE "&FILEOUT1." MOD ;                 /* 2000/11: refer back to htm file */
      IF REGION IN("Benchmark") THEN DO;
           IF SCORE=. THEN PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>***<!CODE= " +(-1) ORDER Z5. "></font></b></td>";
           ELSE IF SCORE=.A THEN PUT "<td width='" WIDTH3 "' align='center'
valign='bottom'><b><font face='&fontface.' color=&blue. size='2'>NA<!CODE= " +(-1) ORDER Z5.
"></font></b></td>";
           ELSE PUT "<td width='" WIDTH3 "' align='center' valign='bottom'><b><font
face='&fontface.' color=&blue. size='2'>" SCORE 3.0 "<!CODE= " +(-1) ORDER Z5.
"></font></b></td>";
      END;
      ELSE DO;
        IF SCORE=. THEN DO;
            PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>***<!CODE=
" +(-1) ORDER Z5. "></font></b></td>";
        END;
        ELSE IF SCORE=.A THEN DO;
            PUT "<td align='center' valign='bottom'><b><font face='&fontface.' size='2'>NA<!CODE= "
+(-1) ORDER Z5. "></font></b></td>";
        END;
        ELSE DO;
            IF SIG=1 THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2' color=&green.>" SCORE 3.0 "<!CODE= " +(-1) ORDER Z5. "></font></b></td>";
            ELSE IF SIG=. THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>***<!CODE= " +(-1) ORDER Z5. "></font></b></td>";
            ELSE IF SIG=.A THEN PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>NA<!CODE= " +(-1) ORDER Z5. "></font></b></td>";
            ELSE IF SIG=-1 THEN PUT "<td align='center' valign='bottom'><i><font face='&fontface.'
size='2' color=&red.>" SCORE 3.0 "<!CODE= " +(-1) ORDER Z5. "></font></i></td>";
            ELSE PUT "<td align='center' valign='bottom'><font face='&fontface.' size='2'>" SCORE
3.0 "<!CODE= " +(-1) ORDER Z5. "></font></td>";
        END;
      END;

      /*-------------------------*/
      /* 2000/11: begin xls code */
      /*-------------------------*/
      %if &outxls.=1 %then %do;
        FILE XLSDATA;
        IF REGION IN("Benchmark") THEN DO;
             IF SCORE=. THEN        PUT "***" '09'x @@;
             ELSE IF SCORE=.A THEN  PUT "NA"  '09'x @@;
             ELSE                   PUT SCORE '09'x @@;
        END;
        ELSE DO;
          IF SCORE=. THEN DO;
              PUT "***" '09'x @@;
          END;
          ELSE IF SCORE=.A THEN DO;
              PUT "NA" '09'x @@;
          END;
          ELSE DO;
              IF SIG=1 THEN       PUT SCORE '09'x @@;
              ELSE IF SIG=. THEN  PUT "***" '09'x @@;
              ELSE IF SIG=.A THEN PUT "NA"  '09'x @@;
              ELSE IF SIG=-1 THEN PUT SCORE '09'x @@;
              ELSE                PUT SCORE '09'x @@;
          END;
        END;
      %end;
      /*-------------------------*/
      /* 2000/11: end xls code   */
      /*-------------------------*/


      IF EOF THEN DO;
         FILE "&FILEOUT1." MOD ;                /* 2000/11: refer back to htm file */
         PUT "</tr>";  /*** terminate last row ***/

         %BOTTOM_NOTES;  /** Macro with bottom notes **/
```

```
         /*-------------------------*/
         /* 2000/11: begin xls code */
         /*-------------------------*/
         %if &outxls.=1 %then %do;
            %if (&var3.=12 and (&var4.=0 or &var4.=3) and &seppage.=2) %then %do;
              FILE XLSDATA;
              PUT; PUT;
              PUT "Source: &SRCYR2 Health Care Survey of DOD Beneficiaries";    ***MJS 03/24/04
Changed hard-coded year to macro variable;
              PUT "Indicates score significantly exceeds benchmark";
              PUT "Indicates score significantly falls short of benchmark";
              PUT "NA Indicates not applicable";
              PUT "*** Indicates suppressed due to small sample size";
            %end;
            %else %do;
              FILE XLSDATA;
              PUT; PUT;
              PUT "Source: Health Care Surveys of DoD Beneficiaries conducted in &SRCYR1 and
&SRCYR2";   ***MJS 03/24/04 Changed hard-coded year to macro variable;
              PUT "Indicates score significantly exceeds benchmark";
              PUT "Indicates score significantly falls short of benchmark";
              PUT "NA Indicates not applicable";
             %end;
         %end;
         /*-------------------------*/
         /* 2000/11: end xls code   */
         /*-------------------------*/

      END;

    RUN;

    %end;



    /*************************************/
    /****  Print out footer info      ****/
    /*************************************/
    DATA _NULL_;
        FILE "&FILEOUT1." MOD ;
        LENGTH HREF $250;


        /** Determine where back button should link to **/
        %if &var1.=0 %then %do;
           HREFBACK=COMPRESS("&prefix.8-0-0-0.htm");
        %end;
        %else %do;
           HREFBACK=COMPRESS("&prefix.&var1.-0-0-0.htm");
        %end;


        /** MF Changes **/
        PUT "<tr>";
        PUT "   <td colspan='&columns.'>";
        PUT "      <center>";
        PUT  "                <a  href='..\html\index.htm'  &target.><img  src=&home_but.  border='0'
alt='Return to Main Page'></a>&htmlsp.&htmlsp.";
                  /*** 7-17 MAB added JS code to go back ***/
        PUT "&goback.";
        PUT "              <noscript><a href=""  HREFBACK   +(-1)  ""  &target.><img  src=&back_but.
border='0' alt='Return to Top Level'></a></noscript>";

        PUT  "                <a  href='..\html\help.htm'  &target.><img  src=&help_but.  border='0'
alt='Help'></a><br>";
        PUT "         <font face='Arial,Helvetica,Swiss,Geneva' size='2'><b>&grpmsg.<br>";
        PUT "         </b></font>";



        majgrp1=COMPRESS("&prefix.1-&var2.-&var3.-&var4.&q..htm");
```

```
        majgrp2=COMPRESS("&prefix.2-&var2.-&var3.-&var4.&q..htm");
        majgrp3=COMPRESS("&prefix.3-&var2.-&var3.-&var4.&q..htm");        ***MJS   05/04/03   Removed
Civilian PCM;
        majgrp4=COMPRESS("&prefix.4-&var2.-&var3.-&var4.&q..htm");    ***(majgrp3), and changed 4-8
to 3-7;
        majgrp5=COMPRESS("&prefix.5-&var2.-&var3.-&var4.&q..htm");
        majgrp6=COMPRESS("&prefix.6-&var2.-&var3.-&var4.&q..htm");
        majgrp7=COMPRESS("&prefix.7-&var2.-&var3.-&var4.&q..htm");
        majgrp8=COMPRESS("&prefix.8-&var2.-&var3.-&var4.&q..htm");   /**RSG - ADD IN MAJGRP 8**/


         /*** Certain major groups are not large enough to show ***/
         /*** catchment level detail. So if we are in html file ***/
         /*** which has this detail then don't link to a html   ***/
         /*** file which doesn't exist                          ***/

        %if &var1.^=0 %then %do;
          %if &var1.^=3 and &var1.^=4 and &var1.^=6 and &var1.^=7 and &var2.^=0 %then %do;

             PUT  "<a  href="""  MAJGRP1  +(-1)  """  &target.><font  face='&fontface.'  size='2'>Prime
Enrollees</font></a>&htmlsp.&htmlsp.";
             PUT "<a href="""  MAJGRP2 +(-1)  """  &target.><font face='&fontface.' size='2'>Enrollees
with Military PCM</font></a>&htmlsp.&htmlsp.";
             PUT  "<a  href="""  MAJGRP5  +(-1)  """  &target.><font  face='&fontface.'  size='2'>Active
Duty</font></a>&htmlsp.&htmlsp.";
             PUT  "<a  href="""  MAJGRP8  +(-1)  """  &target.><font  face='&fontface.'  size='2'>All
Users</font></a>";

          %end;
          %else %do;

            PUT  "<a  href="""  MAJGRP1  +(-1)  """  &target.><font  face='&fontface.'  size='2'>Prime
Enrollees</font></a>&htmlsp.&htmlsp.";
            PUT "<a href="""  MAJGRP2 +(-1)  """  &target.><font face='&fontface.' size='2'>Enrollees
with Military PCM</font></a>&htmlsp.&htmlsp.";
            PUT "<a href="""  MAJGRP3 +(-1)  """  &target.><font face='&fontface.' size='2'>Enrollees
with Civilian PCM</font></a>&htmlsp.&htmlsp.";  /*RSG 02/2005 added Civilian PCM*/
            PUT    "<a    href="""    MAJGRP4    +(-1)    """    &target.><font    face='&fontface.'
size='2'>Standard/Extra Users</font></a>&htmlsp.&htmlsp.";
            PUT "<br>";
            PUT  "<a  href="""  MAJGRP5  +(-1)  """  &target.><font  face='&fontface.'  size='2'>Active
Duty</font></a>&htmlsp.&htmlsp.";
            PUT  "<a  href="""  MAJGRP6  +(-1)  """  &target.><font  face='&fontface.'  size='2'>Active
Duty Dependents</font></a>&htmlsp.&htmlsp.";
            PUT  "<a  href="""  MAJGRP7  +(-1)  """  &target.><font  face='&fontface.'  size='2'>Retirees
and Dependents</font></a>&htmlsp.&htmlsp.";
            PUT  "<a  href="""  MAJGRP8  +(-1)  """  &target.><font  face='&fontface.'  size='2'>All
Users</font></a>";

          %end;
        %end;

       /*** link to printer friendly version moved C.Rankin 10/25/2001 ***/

       /*** If creating frames need link to printer friendly version of file ***/
       %if &prefix=f %then %do;
          HREFP=COMPRESS("p&var1.-&var2.-&var3.-&var4.&q..htm");
          PUT  "      <BR><font  face='Arial,Helvetica,Swiss,Geneva'  size='1'><a  href='"  HREFP  "'
&target.><img  src='&imgdir.\printer.gif'  alt='Printer  Friendly  Page'  border=0>Printer  Friendly
Page</a></font>
       %end;



    RUN;


    /*** Close HTML page ***/
    DATA _NULL_;
      FILE "&FILEOUT1." MOD ;

      PUT "</center></td></tr></table>";
      PUT "</body></html>";
```

```
RUN;


/*-------------------------------*/
/* 2000/12: begin xls color code */
/*-------------------------------*/
%if &outxls.=1 %then %do;
  FILENAME CMDS DDE 'excel|system';

  /* Align 2 titles */
  DATA _NULL_;
     FILE CMDS;
     %if &var3 = 3 or &var3 = 6 %then %do;
         CELL=COMPRESS("[SELECT(""R1C1:R1C"||4||""")]"); PUT CELL;
         PUT '[ALIGNMENT(3, False, 3,0, False,,,True)]';  /** Merges titles across columns **/
         CELL=COMPRESS("[SELECT(""R2C1:R2C"||4||""")]"); PUT CELL;
         PUT '[ALIGNMENT(3, False, 3,0, False,,,True)]';  /** Merges titles across columns **/
     %end;
     %else %do;
         CELL=COMPRESS("[SELECT(""R1C1:R1C"||&columns.||""")]"); PUT CELL;
         PUT '[ALIGNMENT(3, False, 3,0, False,,,True)]';  /** Merges titles across columns **/
         CELL=COMPRESS("[SELECT(""R2C1:R2C"||&columns.||""")]"); PUT CELL;
         PUT '[ALIGNMENT(3, False, 3,0, False,,,True)]';  /** Merges titles across columns **/
     %end;

  RUN;

  DATA _NULL_;
    FILE CMDS;
    SET HTML4(DROP=ROW) END=EOF;

    RETAIN ROW COLUMN;


    /*** Need to initialize row and column pointers ***/
    IF _N_=1 THEN DO;
      ROW=6;
      COLUMN=1;
    END;


   COLUMN=COLUMN+1;
    IF COLUMN>&columns. THEN DO;
       ROW=ROW+1;
       COLUMN=2;
    END;


    CELL=COMPRESS("[SELECT(""R"||ROW||"C"||COLUMN||":R"||ROW||"C"||COLUMN||""")]");
    PUT CELL;

    /** Before color cell center data **/
    PUT '[ALIGNMENT(3, False, 3,0, False)]';


    IF     REGION     IN("Benchmark")     OR     MAJGRP     IN("Benchmark")     THEN     PUT
'[FORMAT.FONT("Arial",10,True,False,False,False,9)]';  /*** BOLD & DARK RED ***/
    ELSE IF SCORE NOT IN(.,.A) THEN DO;
      IF SIG=1 THEN PUT '[FORMAT.FONT("Arial",10,True,False,False,False,10)]';            /***
BOLD & GREEN ***/
      ELSE IF SIG=-1 THEN PUT '[FORMAT.FONT("Arial",10,False,True,False,False,3)]';       /***
RED ***/
      ELSE PUT '[FORMAT.FONT("Arial",10,False,False,False,False,5)]';    /*** BLUE ***/
    END;


    /*** If last record then output footer ***/
    IF EOF THEN DO;
       ROW=ROW+3; COLUMN=1;
       CELL=COMPRESS("[SELECT(""R"||ROW||"C"||COLUMN||":R"||ROW||"C"||COLUMN||""")]");
       PUT CELL;
```

```
          PUT '[FORMAT.FONT("Arial",10,True,False,False,False,10)]';            /*** BOLD & GREEN
***/
          ROW=ROW+1;
          CELL=COMPRESS("[SELECT(""R"||ROW||"C"||COLUMN||":R"||ROW||"C"||COLUMN||""")]");
          PUT CELL;
          PUT '[FORMAT.FONT("Arial",10,False,True,False,False,3)]';     /*** RED ***/
        END;
      RUN;
      FILENAME CMDS DDE 'excel|system';
      DATA _NULL_;
        FILE CMDS;
        PUT '[SAVE()]';
        PUT '[CLOSE()]';
      RUN;
    %end;
    /*-------------------------------*/
    /* 2000/12: end xls color code   */
    /*-------------------------------*/




    %MEND MKHTML;
    /*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/
    /*ÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛÛ*/

    /*
    %LET PREFIX=p;
    %LET OUTXLS=0;
    %MKHTML(3,0,1,2,1);
    %MKHTML(1,0,12,2,1);
    %MKHTML(1,0,12,1,0);
    %MKHTML(1,0,12,2,2);
    %MKHTML(1,0,12,2,3);
    %MKHTML(1,0,12,2,0);
    */

    *********************************************;
    **** Create macros to all MKHTML macro  ****;
    *********************************************;

    /*** Create 8 HTML pages (8 Majgrps / All Regions / All Benefits)***/
    %MACRO DOALL1();
                %MKHTML(1,0,0,0,0);
                %MKHTML(2,0,0,0,0);
                %MKHTML(3,0,0,0,0);
                %MKHTML(4,0,0,0,0);
                %MKHTML(5,0,0,0,0);
                %MKHTML(6,0,0,0,0);
                %MKHTML(7,0,0,0,0);
                %MKHTML(8,0,0,0,0);
    %MEND DOALL1;



    /*** Create 368 HTML pages (8 Majgrps / All Regions / 12 Benefits)***/
    %MACRO DOALL2();
       %DO J=1 %TO 8;
           %DO K=1 %TO 12;
                   %MKHTML(&J.,0,&K.,1,0);
                      %if &k.^=7 AND &k.^=8 AND &k.^=9 AND &k.^=10 %then %do;
                                      %IF &K. = 1 OR &K. = 2 OR &K. = 4 OR &K. = 11 %THEN %DO L= 0
%TO 4;
                                                %MKHTML(&J.,0,&K.,2,&L.);
                                      %END;
                                      %ELSE %IF &K. = 3 OR &K. = 6 %THEN %DO L = 0 %TO 2;  ***RSG
02/2005 - ADDED 12TH BENEFIT;
                                         %MKHTML(&J.,0,&K.,2,&L.);
                                      %END;
                                      %ELSE %IF &K. = 5 OR &K. = 12 %THEN %DO L = 0 %TO 3;
                                         %MKHTML(&J.,0,&K.,2,&L.);
                                      %END;
                    %END;
```

```
            %END;
        %END;
    %MEND DOALL2;

    /*** Need to populate new table for all majgrps ***/
    /*** Create 736 HTML pages (All Majgrps / 16 Regions / 12 Benefits) ***/
    %MACRO DOALL4(i=);
            %DO K = 1 %TO 12;
                /*** Call macro for 2nd page (except for ratings benefits) ***/
                %DO J = 7 %TO 10;
                    %MKHTML(&I.,&J.,&K.,1,0);
                    %if &k.^=7 AND &k.^=8 AND &k.^=9 AND &k.^=10 %then %do;
                        %IF &K. = 1 OR &K. = 2 OR &K. = 4 OR &K. = 11 %THEN %DO L = 0 %TO 4;
                             %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                        %ELSE %IF &K. = 3 OR &K. = 6 %THEN %DO L = 0 %TO 2; /*** MAB Added
2/11/2005 ***/
                             %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                        %ELSE %IF &K. = 5 OR &K.=12 %THEN %DO L = 0 %TO 3;
                             %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                    %end;
                %END;
                %DO J = 12 %TO 15;
                    %MKHTML(&I.,&J.,&K.,1,0);
                    %if &k.^=7 AND &k.^=8 AND &k.^=9 AND &k.^=10 %then %do;
                        %IF &K. = 1 OR &K. = 2 OR &K. = 4 OR &K. = 11 %THEN %DO L = 0 %TO 4;
                             %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                        %ELSE %IF &K. = 3 OR &K. = 6 %THEN %DO L = 0 %TO 2; /*** MAB Added
2/11/2005 ***/
                             %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                        %ELSE %IF &K. = 5 OR &K.=12 %THEN %DO L = 0 %TO 3;
                             %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                    %end;
                %END;
                %DO J = 17 %TO 20;
                    %MKHTML(&I.,&J.,&K.,1,0);
                    %if &k.^=7 AND &k.^=8 AND &k.^=9 AND &k.^=10 %then %do;
                        %IF &K. = 1 OR &K. = 2 OR &K. = 4 OR &K. = 11 %THEN %DO L = 0 %TO 4;
                             %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                        %ELSE %IF &K. = 3 OR &K. = 6 %THEN %DO L = 0 %TO 2; /*** MAB Added
2/11/2005 ***/
                             %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                        %ELSE %IF &K. = 5 OR &K.=12 %THEN %DO L = 0 %TO 3;
                             %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                    %end;
                %END;
                %DO J = 22 %TO 24;
                    %MKHTML(&I.,&J.,&K.,1,0);
                    %if &k.^=7 AND &k.^=8 AND &k.^=9 AND &k.^=10 %then %do;
                        %IF &K. = 1 OR &K. = 2 OR &K. = 4 OR &K. = 11 %THEN %DO L = 0 %TO 4;
                             %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                        %ELSE %IF &K. = 3 OR &K. = 6 %THEN %DO L = 0 %TO 2; /*** MAB Added
2/11/2005 ***/
                             %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                        %ELSE %IF &K. = 5 OR &K.=12 %THEN %DO L = 0 %TO 3;
                             %MKHTML(&I.,&J.,&K.,2,&L.);
                        %END;
                    %end;
                %END;

        %END;
    %MEND DOALL4;
```

```
 /*** Create 16 HTML pages (8 Majgrps / 16 Regions / All Benefits) ***/
%MACRO DOALL5(I=);
      %DO J=7 %TO 10;
           %MKHTML(&i.,&j.,0,0,0);
      %END;
      %DO J=12 %TO 15;
           %MKHTML(&i.,&j.,0,0,0);
      %END;
      %DO J=17 %TO 20;
           %MKHTML(&i.,&j.,0,0,0);
      %END;
      %DO J=22 %TO 24;
           %MKHTML(&i.,&j.,0,0,0);
      %END;

%MEND DOALL5;




/*** Run macro to create Frame HTML files ***/


%LET PREFIX=f;
%LET OUTXLS=0;
%DOALL1;
%DOALL2;
%DOALL4(I=1);
%DOALL4(I=2);
%DOALL4(I=5);
%DOALL4(I=8);
%DOALL5(I=1);
%DOALL5(I=2);
%DOALL5(I=5);
%DOALL5(I=8);


/*** Run macro to create Printer Friendly HTML files (non-frames) ***/

%LET PREFIX=p;
%LET OUTXLS=0;
%DOALL1;
%DOALL2;
%DOALL4(I=1);
%DOALL4(I=2);
%DOALL4(I=5);
%DOALL4(I=8);
%DOALL5(I=1);
%DOALL5(I=2);
%DOALL5(I=5);
%DOALL5(I=8);

/*** Run macro to create Excel files ONLY ***/

%LET PREFIX=p;
%LET OUTXLS=1;
%DOALL1;
%DOALL2;
%DOALL4(I=1);
%DOALL4(I=2);
%DOALL4(I=5);
%DOALL4(I=8);
%DOALL5(I=1);
%DOALL5(I=2);
%DOALL5(I=5);
%DOALL5(I=8);


%PUT "&number_html_files. HTML files created.";
```

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APPENDIX H

SAS CODE FOR 2007 TRICARE CONSUMER WATCH - QUARTERS I-IV AND COMBINED ANNUAL

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H.1 CONSUMERWATCH\CONSUMERWATCH-CMACRO.INC - PRODUCE NUMBERS FOR ANNUAL CONSUMER WATCH REPORTS.

```
*******************************************************************************
* PROJECT: 8860-420
* PROGRAM: CONSUMERWATCH-C.INC
* PURPOSE: To pull from Beneficiary Reports the numbers that go into the data
*          sheet in Excel to produce graphs
*          Catchment level only
* AUTHOR : NATALIE JUSTH
* DATE   : 2/12/02
* UPDATED: 2/5/03
* UPDATED: 11/17/03
* UPDATED  03/15/2005 LUCY LU
*          --REMOVE LIBNAME FORM THE PROGRAM
*          --SUBSTITUDE ACTUAL YEAR VALUES BY MACRO YEAR VARIABLES
*          --ADD SMOKING CESSATION RATE ON PREVENTIVE CARE TABLE
* UPDATED: 01/31/2006 LUCY LU FOR 2005 ANNUAL CATCHMENT
*          --CHANGE 'CHOLESTEROL TESTING' TO 'PERCENT OF NORMAL WEIGHT'
*
* UPDATED: 04/07/2006 LUCY LU: ADD THE CODE TO COMPARE THE ANNUAL COMSUMER WATCH
*          WITH REPORT CARDS IN SCORESAND SIGNIFICANCE.
*
* INPUT  : ..\..\..\&YEAR.\PROGRAMS\LOADWEB\TREND_A.SD2
* OUTPUT : INTO EXCEL SPREADSHEET
*******************************************************************************;

OPTIONS NOXWAIT NOFMTERR MPRINT;

TITLE "Consumer Watch &YEAR. - Catchment";

%MACRO RUNCW (AREA=,     /*AREA=Catchment area                                  */
              NAME=,     /*NAME=Name of Excel file being created for catchment area  */
              FOLDER=    /*FOLDER=Regional folder                               */
             );

/* Change parameter for each catchment area */
%LET VAL = &AREA.;


x "COPY TEMPLATE.XLS &FOLDER.\&NAME.";

DATA _NULL_;
   X=SLEEP(5);
RUN;

X "START &FOLDER.\&NAME.";


DATA _NULL_;
   X=SLEEP(5);
RUN;

*******************************************************************************
* FIGURE 1: Health Care Rating
*******************************************************************************;
TITLE2 'Figure 1: Health Care Rating';
PROC FREQ DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT in ("&VAL","Benchmark")
     AND BENEFIT = 'Health Care'
     AND TIMEPD IN ("&YEARP2.", "&YEARP1.", "&YEAR.");
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE*SIG/NOPRINT OUT=FIG1_SC(DROP=COUNT PERCENT);
RUN;
PROC FREQ DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT = 'Benchmark'
     AND BENEFIT = 'Health Care'
     AND TIMEPD = "&YEAR.";
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE/NOPRINT OUT=FIG1_BE(DROP=COUNT PERCENT);
RUN;
DATA FIG1_SC FIG1_A(KEEP=SCORE TIMEPD);
```

```
   SET FIG1_SC;
   IF REGCAT='Benchmark' THEN OUTPUT FIG1_A;
      ELSE OUTPUT FIG1_SC;
RUN;
PROC SORT DATA=FIG1_SC;
   BY TIMEPD;
RUN;
PROC SORT DATA=FIG1_A;
   BY TIMEPD;

 /*add the code here to preserve above dataset for later comparision, LLu 4/6/2006*/
DATA CFIG1;
   SET FIG1_SC;

KEEP MAJGRP REGCAT BENEFIT TIMEPD SCORE SIG;
RUN;


DATA FIG1_SC(DROP=ASCORE);
   MERGE FIG1_SC
         FIG1_A(RENAME=(SCORE=ASCORE));
   BY TIMEPD;
   SCORE=SCORE-ASCORE;
RUN;

DATA FIG1;
   SET FIG1_BE FIG1_SC;
   RETAIN BSCORE;
   IF REGCAT = 'Benchmark' THEN DO;
      ROW = 1;
      BSCORE=SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP2." THEN DO;
      ROW = 2;
      SCORE=BSCORE+SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP1." THEN DO;
      ROW = 3;
      SCORE=BSCORE+SCORE;
   END;
   ELSE IF TIMEPD = "&YEAR." THEN DO;
      ROW =4 ;
      SCORE=BSCORE+SCORE;
   END;

   COL2 = SCORE / 100;
   COL3 = SIG;
RUN;

PROC SORT;
   BY ROW;
RUN;
*TITLE2 'FIGURE 1';
*PROC PRINT;
RUN;

*****************************************************************************
* DDE LINK (EXCEL file has to be open )
*****************************************************************************;
FILENAME CMDS DDE "EXCEL|SYSTEM";

FILENAME TBL DDE "EXCEL|RATINGS!R18C2:R21C3";

DATA _NULL_;
   SET FIG1;
   FILE TBL NOTAB LRECL=200;
   PUT COL2 '09'X COL3;
RUN;

******************************************************************************
* FIGURE 2: Health Plan Rating
******************************************************************************;
TITLE2 'Figure 2: Health Plan Rating';
```

```
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT in ("&VAL","Benchmark")
     AND BENEFIT = 'Health Plan'
     AND TIMEPD IN ("&YEARP2.", "&YEARP1.", "&YEAR.");
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE*SIG/ OUT=FIG2_SC(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT = 'Benchmark'
     AND BENEFIT = 'Health Plan'
     AND TIMEPD = "&YEAR.";
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE/ OUT=FIG2_BE(DROP=COUNT PERCENT);
RUN;
DATA FIG2_SC FIG2_A(KEEP=SCORE TIMEPD);
   SET FIG2_SC;
   IF REGCAT='Benchmark' THEN OUTPUT FIG2_A;
      ELSE OUTPUT FIG2_SC;
RUN;

 /*add the code here to preserve above dataset for later comparision, LLu 4/6/2006*/
DATA CFIG2;
   SET FIG2_SC;

KEEP MAJGRP REGCAT  BENEFIT TIMEPD SCORE SIG;
RUN;

PROC SORT DATA=FIG2_SC;
   BY TIMEPD;
RUN;
PROC SORT DATA=FIG2_A;
   BY TIMEPD;
RUN;
DATA FIG2_SC(DROP=ASCORE);
   MERGE FIG2_SC
         FIG2_A(RENAME=(SCORE=ASCORE));
   BY TIMEPD;
   SCORE=SCORE-ASCORE;
RUN;

DATA FIG2;
   SET FIG2_BE FIG2_SC;
   RETAIN BSCORE;
   IF REGCAT = 'Benchmark' THEN DO;
      ROW = 1;
      BSCORE=SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP2." THEN DO;
      ROW = 2;
      SCORE=BSCORE+SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP1." THEN DO;
      ROW = 3;
      SCORE=BSCORE+SCORE;
   END;
   ELSE IF TIMEPD = "&YEAR." THEN DO;
      ROW = 4;
      SCORE=BSCORE+SCORE;
   END;

   COL2 = SCORE / 100;
   COL3 = SIG;
RUN;

PROC SORT;
   BY ROW;
RUN;
*TITLE2 'FIGURE 2';
*PROC PRINT;
RUN;

*****************************************************************************
* DDE LINK (EXCEL file has to be open )
```

```
*****************************************************************************;

FILENAME TBL DDE "EXCEL|RATINGS!R18C6:R21C7";

DATA _NULL_;
   SET FIG2;
   FILE TBL NOTAB LRECL=200;
   PUT COL2 '09'X COL3;
RUN;

******************************************************************************
* FIGURE 3: Personal Doctor
******************************************************************************;
TITLE2 'Figure 3: Personal Doctor Rating';
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT in ("&VAL","Benchmark")
     AND BENEFIT = 'Personal Doctor'
     AND TIMEPD IN ("&YEARP2.", "&YEARP1.", "&YEAR.");
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE*SIG/ OUT=FIG3_SC(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT = 'Benchmark'
     AND BENEFIT = 'Personal Doctor'
     AND TIMEPD = "&YEAR.";
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE/ OUT=FIG3_BE(DROP=COUNT PERCENT);
RUN;
DATA FIG3_SC FIG3_A(KEEP=SCORE TIMEPD);
   SET FIG3_SC;
   IF REGCAT='Benchmark' THEN OUTPUT FIG3_A;
      ELSE OUTPUT FIG3_SC;
RUN;

 /*add the code here to preserve above dataset for later comparision, LLu 4/6/2006*/
DATA CFIG3;
   SET FIG3_SC;

KEEP MAJGRP REGCAT BENEFIT TIMEPD SCORE SIG;
RUN;


PROC SORT DATA=FIG3_SC;
   BY TIMEPD;
RUN;
PROC SORT DATA=FIG3_A;
   BY TIMEPD;
RUN;
DATA FIG3_SC(DROP=ASCORE);
   MERGE FIG3_SC
         FIG3_A(RENAME=(SCORE=ASCORE));
   BY TIMEPD;
   SCORE=SCORE-ASCORE;
RUN;

DATA FIG3;
   SET FIG3_BE FIG3_SC;
   RETAIN BSCORE;
   IF REGCAT = 'Benchmark' THEN DO;
      ROW = 1;
      BSCORE=SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP2." THEN DO;
      ROW = 2;
      SCORE=BSCORE+SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP1." THEN DO;
      ROW = 3;
      SCORE=BSCORE+SCORE;
   END;
   ELSE IF TIMEPD = "&YEAR." THEN DO;
      ROW = 4;
      SCORE=BSCORE+SCORE;
```

```
   END;

   COL2 = SCORE / 100;
   COL3 = SIG;
RUN;

PROC SORT;
   BY ROW;
RUN;
*TITLE2 'FIGURE 3';
*PROC PRINT;
RUN;

*****************************************************************************
* DDE LINK (EXCEL file has to be open )
*****************************************************************************;

FILENAME TBL DDE "EXCEL|RATINGS!R18C10:R21C11";

DATA _NULL_;
   SET FIG3;
   FILE TBL NOTAB LRECL=200;
   PUT COL2 '09'X COL3;
RUN;


******************************************************************************
* FIGURE 4: Specialist Rating
******************************************************************************;
TITLE2 'Figure 4: Specialist Rating';
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT in ("&VAL","Benchmark")
     AND BENEFIT = 'Specialty Care'
     AND TIMEPD IN ("&YEARP2.", "&YEARP1.", "&YEAR.");
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE*SIG/ OUT=FIG4_SC(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT = 'Benchmark'
     AND BENEFIT = 'Specialty Care'
     AND TIMEPD = "&YEAR.";
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE/ OUT=FIG4_BE(DROP=COUNT PERCENT);
RUN;
DATA FIG4_SC FIG4_A(KEEP=SCORE TIMEPD);
   SET FIG4_SC;
   IF REGCAT='Benchmark' THEN OUTPUT FIG4_A;
      ELSE OUTPUT FIG4_SC;
RUN;

 /*add the code here to preserve above dataset for later comparision, LLu 4/6/2006*/
DATA CFIG4;
   SET FIG4_SC;

KEEP MAJGRP REGCAT BENEFIT TIMEPD SCORE SIG;
RUN;

PROC SORT DATA=FIG4_SC;
   BY TIMEPD;
RUN;
PROC SORT DATA=FIG4_A;
   BY TIMEPD;
RUN;
DATA FIG4_SC(DROP=ASCORE);
   MERGE FIG4_SC
         FIG4_A(RENAME=(SCORE=ASCORE));
   BY TIMEPD;
   SCORE=SCORE-ASCORE;
RUN;

DATA FIG4;
   SET FIG4_BE FIG4_SC;
   RETAIN BSCORE;
```

```
   IF REGCAT = 'Benchmark' THEN DO;
      ROW = 1;
      BSCORE=SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP2." THEN DO;
      ROW = 2;
      SCORE=BSCORE+SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP1." THEN DO;
      ROW = 3;
      SCORE=BSCORE+SCORE;
   END;
   ELSE IF TIMEPD = "&YEAR." THEN DO;
      ROW = 4;
      SCORE=BSCORE+SCORE;
   END;

   COL2 = SCORE / 100;
   COL3 = SIG;
RUN;

PROC SORT;
   BY ROW;
RUN;
*TITLE2 'FIGURE 4';
*PROC PRINT;
RUN;

*****************************************************************************
* DDE LINK (EXCEL file has to be open )
*****************************************************************************;

FILENAME TBL DDE "EXCEL|RATINGS!R18C14:R21C15";

DATA _NULL_;
   SET FIG4;
   FILE TBL NOTAB LRECL=200;
   PUT COL2 '09'X COL3;
RUN;


*****************************************************************************
* FIGURE 5: Access Composites
*****************************************************************************;
TITLE2 'Figure 5: Access Composites';
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT in ("&VAL","Benchmark")
     AND BENEFIT IN ('Getting Needed Care','Getting Care Quickly')
     AND BENTYPE='Composite' & TIMEPD IN ("&YEARP2.", "&YEARP1.", "&YEAR.");
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE*SIG/ OUT=FIG5_SC(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT = 'Benchmark'
     AND BENEFIT IN ('Getting Needed Care','Getting Care Quickly')
     AND BENTYPE='Composite' & TIMEPD = "&YEAR.";
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE/ OUT=FIG5_BE(DROP=COUNT PERCENT);
RUN;
DATA FIG5_SC FIG5_A(KEEP=SCORE TIMEPD BENEFIT);
   SET FIG5_SC;
   IF REGCAT='Benchmark' THEN OUTPUT FIG5_A;
      ELSE OUTPUT FIG5_SC;
RUN;

 /*add the code here to preserve above dataset for later comparision, LLu 4/6/2006*/
DATA CFIG5;
   SET FIG5_SC;

KEEP MAJGRP REGCAT BENEFIT TIMEPD SCORE SIG;
RUN;
```

```
PROC SORT DATA=FIG5_SC;
   BY BENEFIT TIMEPD;
RUN;
PROC SORT DATA=FIG5_A;
   BY BENEFIT TIMEPD;
RUN;
DATA FIG5_SC(DROP=ASCORE);
   MERGE FIG5_SC
         FIG5_A(RENAME=(SCORE=ASCORE));
   BY BENEFIT TIMEPD;
   SCORE=SCORE-ASCORE;
RUN;
PROC SORT DATA=FIG5_BE;
   BY BENEFIT;
RUN;

DATA COL2(DROP=SCORE RENAME=(SCORE1=COL2))
     COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
     COL4(DROP=SCORE  RENAME=(SCORE1=COL4))
     COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
     COL6(KEEP=ROW SIG RENAME=(SIG=COL6))
     COL7(kEEP=ROW SIG RENAME=(SIG=COL7));
   SET FIG5_BE FIG5_SC ; BY BENEFIT;
   RETAIN BSCORE;
   IF REGCAT = 'Benchmark' THEN DO;
      ROW = 1;
      BSCORE=SCORE;
      SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP2." THEN DO;
      ROW = 2;
      SCORE=BSCORE+SCORE;
      SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP1." THEN DO;
      ROW = 3;
      SCORE=BSCORE+SCORE;
      SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = "&YEAR." THEN DO;
      ROW = 4;
      SCORE=BSCORE+SCORE;
      SCORE1=SCORE;
   END;

   IF (BENEFIT = 'Getting Needed Care' AND REGCAT NE 'Benchmark') THEN OUTPUT COL2 COL6;
   IF (BENEFIT = 'Getting Needed Care' AND REGCAT = 'Benchmark') THEN OUTPUT COL3;
   IF (BENEFIT = 'Getting Care Quickly' AND REGCAT NE 'Benchmark') THEN OUTPUT COL4 COL7;
   IF (BENEFIT = 'Getting Care Quickly' AND REGCAT = 'Benchmark') THEN OUTPUT COL5;

RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;


/*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 5. LLU 04/07/2006*/

DATA FIG5A;
   MERGE COL2 COL6;
  BY ROW;
RUN;

DATA FIG5B;
   MERGE  COL4 COL7;
  BY ROW;
RUN;

DATA FIG5AB;
```

```
   SET FIG5A FIG5B;
  BY ROW;
RUN;



DATA FIG5;
   MERGE COL2 COL3 COL4(KEEP=ROW COL4) COL5 COL6 COL7;
   BY ROW;
RUN;
*TITLE2 'ACCESS COMPOSITES';
*PROC PRINT;
RUN;

*****************************************************************************
* DDE LINK (EXCEL file has to be open )
*****************************************************************************;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C2:R21C2";

DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   PUT COL2;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C3:R18C3";

DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   PUT COL3;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C4:R21C4";

DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   PUT COL4;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C5:R18C5";

DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   PUT COL5;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R23C2:R26C4";

DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   PUT COL6 '09'X '09'X COL7;
RUN;

*****************************************************************************
* FIGURE 6: Office Composites
*****************************************************************************;
TITLE2 'Figure 6: Office Composites';
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT in ("&VAL","Benchmark")
     AND BENEFIT IN ('Courteous and Helpful Office Staff','How Well Doctors Communicate')
     AND BENTYPE="Composite" & TIMEPD
    IN ("&YEARP2.", "&YEARP1.", "&YEAR.");
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE*SIG/ OUT=FIG6_SC(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT = 'Benchmark'
```

```
      AND BENEFIT IN ('Courteous and Helpful Office Staff','How Well Doctors Communicate')
      AND BENTYPE="Composite" & TIMEPD = "&YEAR.";
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE/ OUT=FIG6_BE(DROP=COUNT PERCENT);
RUN;
DATA FIG6_SC FIG6_A(KEEP=SCORE TIMEPD BENEFIT);
   SET FIG6_SC;
   IF REGCAT='Benchmark' THEN OUTPUT FIG6_A;
      ELSE OUTPUT FIG6_SC;
RUN;

 /*add the code here to preserve above dataset for later comparision, LLu 4/6/2006*/
DATA CFIG6;
   SET FIG6_SC;

KEEP MAJGRP REGCAT BENEFIT TIMEPD SCORE SIG;
RUN;


PROC SORT DATA=FIG6_SC;
   BY BENEFIT TIMEPD;
RUN;
PROC SORT DATA=FIG6_A;
   BY BENEFIT TIMEPD;
RUN;
DATA FIG6_SC(DROP=ASCORE);
   MERGE FIG6_SC
         FIG6_A(RENAME=(SCORE=ASCORE));
   BY BENEFIT TIMEPD;
   SCORE=SCORE-ASCORE;
RUN;
PROC SORT DATA=FIG6_BE;
   BY BENEFIT;
RUN;

DATA COL2(DROP=SCORE RENAME=(SCORE1=COL2))
     COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
     COL4(DROP=SCORE RENAME=(SCORE1=COL4))
     COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
     COL6(KEEP=ROW SIG RENAME=(SIG=COL6))
     COL7(kEEP=ROW SIG RENAME=(SIG=COL7));
   SET FIG6_BE FIG6_SC ; BY BENEFIT;
   RETAIN BSCORE;
   IF REGCAT = 'Benchmark' THEN DO;
      ROW = 1;
      BSCORE=SCORE;
      SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP2." THEN DO;
      ROW = 2;
      SCORE=BSCORE+SCORE;
      SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP1." THEN DO;
      ROW = 3;
      SCORE=BSCORE+SCORE;
      SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = "&YEAR." THEN DO;
      ROW = 4;
      SCORE=BSCORE+SCORE;
      SCORE1=SCORE;
   END;

   IF (BENEFIT = 'Courteous and Helpful Office Staff' AND REGCAT NE 'Benchmark') THEN OUTPUT
COL2 COL6;
   IF (BENEFIT = 'Courteous and Helpful Office Staff' AND REGCAT = 'Benchmark') THEN OUTPUT
COL3;
   IF (BENEFIT = 'How Well Doctors Communicate' AND REGCAT NE 'Benchmark') THEN OUTPUT COL4
COL7;
   IF (BENEFIT = 'How Well Doctors Communicate' AND REGCAT = 'Benchmark') THEN OUTPUT COL5;

RUN;
```

```
PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;

/*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 5. LLU 04/07/2006*/

DATA FIG6A;
   MERGE COL2 COL6;
  BY ROW;
RUN;

DATA FIG6B;
   MERGE  COL4 COL7;
  BY ROW;
RUN;

DATA FIG6AB;
   SET FIG6A FIG6B;
  BY ROW;
RUN;


DATA FIG6;
   MERGE COL2 COL3 COL4(KEEP=ROW COL4) COL5 COL6 COL7;
   BY ROW;
RUN;
*TITLE2 'OFFICE COMPOSITES';
*PROC PRINT;
RUN;

*****************************************************************************
* DDE LINK (EXCEL file has to be open )
*****************************************************************************;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C8:R21C8";

DATA _NULL_;
   SET FIG6;
   FILE TBL NOTAB LRECL=200;
   PUT COL2;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C9:R18C9";

DATA _NULL_;
   SET FIG6;
   FILE TBL NOTAB LRECL=200;
   PUT COL3;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C10:R21C10";

DATA _NULL_;
   SET FIG6;
   FILE TBL NOTAB LRECL=200;
   PUT COL4;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C11:R18C11";

DATA _NULL_;
   SET FIG6;
   FILE TBL NOTAB LRECL=200;
   PUT COL5;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R23C8:R26C10";

DATA _NULL_;
   SET FIG6;
```

```
   FILE TBL NOTAB LRECL=200;
   PUT COL6 '09'X '09'X COL7;
RUN;

*******************************************************************************
* FIGURE 7: Claims/Service Composites
*******************************************************************************;
TITLE2 'Figure 7: Claims/Service Composites';
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT in ("&VAL","Benchmark")
     AND BENEFIT IN ('Customer Service','Claims Processing')
     AND BENTYPE ="Composite" & TIMEPD IN ("&YEARP2.", "&YEARP1.", "&YEAR.");
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE*SIG/ OUT=FIG7_SC(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=TREND_A;
   WHERE MAJGRP = 'Prime Enrollees'
     AND REGCAT = 'Benchmark'
     AND BENEFIT IN ('Customer Service','Claims Processing')
     AND BENTYPE ="Composite" & TIMEPD= "&YEAR.";
   TABLES MAJGRP*REGCAT*BENEFIT*TIMEPD*SCORE/ OUT=FIG7_BE(DROP=COUNT PERCENT);
RUN;
DATA FIG7_SC FIG7_A(KEEP=SCORE TIMEPD BENEFIT);
   SET FIG7_SC;
   IF REGCAT='Benchmark' THEN OUTPUT FIG7_A;
      ELSE OUTPUT FIG7_SC;
RUN;

 /*add the code here to preserve above dataset for later comparision, LLu 4/6/2006*/
DATA CFIG7;
   SET FIG7_SC;

KEEP MAJGRP REGCAT BENEFIT TIMEPD SCORE SIG;
RUN;


PROC SORT DATA=FIG7_SC;
   BY BENEFIT TIMEPD;
RUN;
PROC SORT DATA=FIG7_A;
   BY BENEFIT TIMEPD;
RUN;
DATA FIG7_SC(DROP=ASCORE);
   MERGE FIG7_SC
         FIG7_A(RENAME=(SCORE=ASCORE));
   BY BENEFIT TIMEPD;
   SCORE=SCORE-ASCORE;
RUN;
PROC SORT DATA=FIG7_BE;
   BY BENEFIT;
RUN;

DATA COL2(DROP=SCORE RENAME=(SCORE1=COL2))
     COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
     COL4(DROP=SCORE  RENAME=(SCORE1=COL4))
     COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
     COL6(KEEP=ROW SIG RENAME=(SIG=COL6))
     COL7(kEEP=ROW SIG RENAME=(SIG=COL7));
   SET FIG7_BE FIG7_SC ; BY BENEFIT;
   RETAIN BSCORE;
   IF REGCAT = 'Benchmark' THEN DO;
      ROW = 1;
      BSCORE=SCORE;
      SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP2." THEN DO;
      ROW = 2;
      SCORE=BSCORE+SCORE;
      SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = "&YEARP1." THEN DO;
      ROW = 3;
      SCORE=BSCORE+SCORE;
```

```
      SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = "&YEAR." THEN DO;
      ROW = 4;
      SCORE=BSCORE+SCORE;
      SCORE1=SCORE;
   END;

   IF (BENEFIT = 'Customer Service' AND REGCAT NE 'Benchmark') THEN OUTPUT COL2 COL6;
   IF (BENEFIT = 'Customer Service' AND REGCAT = 'Benchmark') THEN OUTPUT COL3;
   IF (BENEFIT = 'Claims Processing' AND REGCAT NE 'Benchmark') THEN OUTPUT COL4 COL7;
   IF (BENEFIT = 'Claims Processing' AND REGCAT = 'Benchmark') THEN OUTPUT COL5;

RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;

/*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 5. LLU 04/07/2006*/

DATA FIG7A;
   MERGE COL2 COL6;
  BY ROW;
RUN;

DATA FIG7B;
   MERGE  COL4 COL7;
  BY ROW;
RUN;

DATA FIG7AB;
   SET FIG7A FIG7B;
  BY ROW;
RUN;


DATA FIG7;
   MERGE COL2 COL3 COL4(KEEP=ROW COL4) COL5 COL6 COL7;
   BY ROW;
RUN;
*TITLE2 'CLAIMS/SERVICE COMPOSITES';
*PROC PRINT;
RUN;

*****************************************************************************
* DDE LINK (EXCEL file has to be open )
*****************************************************************************;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C14:R21C14";

DATA _NULL_;
   SET FIG7;
   FILE TBL NOTAB LRECL=200;
   PUT COL2;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C15:R18C15";

DATA _NULL_;
   SET FIG7;
   FILE TBL NOTAB LRECL=200;
   PUT COL3;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C16:R21C16";

DATA _NULL_;
   SET FIG7;
   FILE TBL NOTAB LRECL=200;
```

```
      PUT COL4;
   RUN;

   FILENAME TBL DDE "EXCEL|COMPOSITES!R18C17:R18C17";

   DATA _NULL_;
      SET FIG7;
      FILE TBL NOTAB LRECL=200;
      PUT COL5;
   RUN;

   FILENAME TBL DDE "EXCEL|COMPOSITES!R23C14:R26C16";

   DATA _NULL_;
      SET FIG7;
      FILE TBL NOTAB LRECL=200;
      PUT COL6 '09'X '09'X COL7;
   RUN;

   ******************************************************************************
   * TABLE 1: Preventive Care
   ******************************************************************************;
   PROC FREQ NOPRINT DATA=TREND_A;
      WHERE MAJGRP = 'Prime Enrollees'
        AND REGCAT = "&VAL"
        AND TIMEPD = "&YEAR"
        AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
        AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                        'Percent Not Obese', 'Non-Smoking Rate','Counselled To Quit');
      TABLES MAJGRP*REGCAT*BENEFIT*BENTYPE*SEMEAN*SCORE*SIG/ OUT=TAB1_03(DROP=COUNT PERCENT);
      TABLES MAJGRP*REGCAT*BENEFIT*BENTYPE*SEMEAN*N_OBS/ OUT=TAB2_03(DROP=COUNT PERCENT);
   RUN;
   PROC FREQ NOPRINT DATA=TREND_A;
      WHERE MAJGRP = 'Prime Enrollees'
        AND REGCAT = 'Benchmark'
        AND TIMEPD = "&YEAR"
        AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
        AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                        'Percent Not Obese', 'Non-Smoking Rate','Counselled To Quit');
        TABLES MAJGRP*REGCAT*BENEFIT*BENTYPE*SEMEAN*SCORE*SIG/ OUT=TAB3_03(DROP=COUNT PERCENT);
   RUN;
   PROC FREQ NOPRINT DATA=TREND_A;
       WHERE MAJGRP = 'Prime Enrollees'
         AND REGCAT = "&VAL"
         AND TIMEPD = "&YEARP1"
         AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
         AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                        'Percent Not Obese', 'Non-Smoking Rate','Counselled To Quit');
       TABLES  MAJGRP*REGCAT*BENEFIT*BENTYPE*SEMEAN*SCORE*N_OBS*N_WGT*SIG/  OUT=TAB1_02(DROP=COUNT
PERCENT);
   RUN;
   PROC FREQ NOPRINT DATA=TREND_A;
      WHERE MAJGRP = 'Prime Enrollees'
        AND REGCAT = "&VAL"
        AND TIMEPD = "&YEARP2"
        AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
        AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                        'Percent Not Obese', 'Non-Smoking Rate','Counselled To Quit');
      TABLES  MAJGRP*REGCAT*BENEFIT*BENTYPE*SEMEAN*SCORE*N_OBS*N_WGT*SIG/  OUT=TAB1_01(DROP=COUNT
PERCENT);
   RUN;

   DATA TAB303;
      SET TAB3_03;
      IF REGCAT = 'Benchmark' THEN DO;
         ROW=5;
         IF BENTYPE='Mammography' THEN COL2=SCORE;
            ELSE IF BENTYPE='Pap Smear' THEN COL3=SCORE;
            ELSE IF BENTYPE='Hypertension' THEN COL4=SCORE;
            ELSE IF BENTYPE='Prenatal Care' THEN COL5=SCORE;
            ELSE IF BENTYPE='Percent Not Obese' THEN COL6=SCORE;
            ELSE IF BENTYPE = 'Non-Smoking Rate' THEN COL7=SCORE;
            ELSE IF BENTYPE ='Counselled To Quit' THEN COL8=SCORE;
```

```
   END;
PROC SORT;
   BY ROW;
RUN;
DATA TAB203;
   SET TAB2_03;
   ROW=4;
   IF MAJGRP='Prime Enrollees';
   IF BENTYPE='Mammography' THEN COL2=N_OBS;
      ELSE IF BENTYPE='Pap Smear' THEN COL3=N_OBS;
      ELSE IF BENTYPE='Hypertension' THEN COL4=N_OBS;
      ELSE IF BENTYPE='Prenatal Care' THEN COL5=N_OBS;
      ELSE IF BENTYPE='Percent Not Obese' THEN COL6=N_OBS;
      ELSE IF BENTYPE = 'Non-Smoking Rate' THEN COL7=N_OBS;
      ELSE IF BENTYPE ='Counselled To Quit' THEN COL8=N_OBS;
PROC SORT;
   BY ROW;
RUN;
DATA TAB103;
   SET TAB1_03;
   ROW=3;
   IF BENTYPE='Mammography' THEN DO;
      COL2=SCORE;
      COL9=SIG;
   END;
   ELSE IF BENTYPE='Pap Smear' THEN DO;
      COL3=SCORE;
      COL10=SIG;
   END;
   ELSE IF BENTYPE='Hypertension' THEN DO;
      COL4=SCORE;
      COL11=SIG;
   END;
   ELSE IF BENTYPE='Prenatal Care' THEN DO;
      COL5=SCORE;
      COL12=SIG;
   END;
   ELSE IF BENTYPE='Percent Not Obese' THEN DO;
      COL6=SCORE;
      COL13=SIG;
   END;
   ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
      COL7=SCORE;
      COL14=SIG;
   END;
   ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
      COL8=SCORE;
      COL15=SIG;
   END;

   PROC SORT;
   BY ROW;
RUN;

DATA TAB101;
   SET TAB1_01;
   ROW=1;
   IF BENTYPE='Mammography' THEN DO;
      IF (N_WGT<200 OR N_OBS<30) THEN COL2=.;
      ELSE DO;
         COL2=SCORE;
         COL9=SIG;
      END;
   END;
   ELSE IF BENTYPE='Pap Smear' THEN DO;
      IF (N_WGT<200 OR N_OBS<30) THEN COL3=.;
      ELSE DO;
         COL3=SCORE;
         COL10=SIG;
      END;
   END;
   ELSE IF BENTYPE='Hypertension' THEN DO;
      IF (N_WGT<200 OR N_OBS<30) THEN COL4=.;
```

```
      ELSE DO;
         COL4=SCORE;
         COL11=SIG;
      END;
   END;
   ELSE IF BENTYPE='Prenatal Care' THEN DO;
      IF (N_WGT<200 OR N_OBS<30) THEN COL5=.;
      ELSE DO;
         COL5=SCORE;
         COL12=SIG;
      END;
   END;
   ELSE IF BENTYPE='Percent Not Obese' THEN DO;
      IF (N_WGT<200 OR N_OBS<30) THEN COL6=.;
      ELSE DO;
         COL6=SCORE;
         COL13=SIG;
      END;
   END;
   ELSE IF BENTYPE='Non-Smoking Rate' THEN DO;
      IF (N_WGT<200 OR N_OBS<30) THEN COL7=.;
      ELSE DO;
         COL7=SCORE;
         COL14=SIG;
      END;
   END;
   ELSE IF BENTYPE='Counselled To Quit' THEN DO;
      IF (N_WGT<200 OR N_OBS<30) THEN COL8=.;
      ELSE DO;
         COL8=SCORE;
         COL15=SIG;
      END;
    END;

PROC SORT;
   BY ROW;
RUN;
DATA TAB102;
   SET TAB1_02;
   ROW=2;
   IF BENTYPE='Mammography' THEN DO;
      IF (N_WGT<200 OR N_OBS<30) THEN COL2=.;
      ELSE DO;
         COL2=SCORE;
         COL9=SIG;
      END;
   END;
   ELSE IF BENTYPE='Pap Smear' THEN DO;
      IF (N_WGT<200 OR N_OBS<30) THEN COL3=.;
      ELSE DO;
         COL3=SCORE;
         COL10=SIG;
      END;
   END;
   ELSE IF BENTYPE='Hypertension' THEN DO;
      IF (N_WGT<200 OR N_OBS<30) THEN COL4=.;
      ELSE DO;
         COL4=SCORE;
         COL11=SIG;
      END;
   END;
   ELSE IF BENTYPE='Prenatal Care' THEN DO;
      IF (N_WGT<200 OR N_OBS<30) THEN COL5=.;
      ELSE DO;
         COL5=SCORE;
         COL12=SIG;
      END;
   END;
   ELSE IF BENTYPE='Percent Not Obese' THEN DO;
      IF (N_WGT<200 OR N_OBS<30) THEN COL6=.;
      ELSE DO;
         COL6=SCORE;
         COL13=SIG;
```

```
      END;
   END;
   ELSE IF BENTYPE='Non-Smoking Rate' THEN DO;
      IF (N_WGT<200 OR N_OBS<30) THEN COL7=.;
      ELSE DO;
         COL7=SCORE;
         COL14=SIG;
      END;
   END;
   ELSE IF BENTYPE='Counselled To Quit' THEN DO;
      IF (N_WGT<200 OR N_OBS<30) THEN COL8=.;
      ELSE DO;
         COL8=SCORE;
         COL15=SIG;
      END;
   END;
PROC SORT;
   BY ROW;
RUN;

DATA TAB1;
   MERGE TAB101 TAB102 TAB103 TAB203 TAB303;
   BY ROW;
RUN;
DATA COL2(DROP=COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL3(DROP=COL2 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL4(DROP=COL2 COL3 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL5(DROP=COL2 COL3 COL4 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL6(DROP=COL2 COL3 COL4 COL5 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL7(DROP=COL2 COL3 COL4 COL5 COL6 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL8(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL9(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL10 COL11 COL12 COL13 COL14 COL15)
     COL10(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL11 COL12 COL13 COL14 COL15)
     COL11(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL12 COL13 COL14 COL15)
     COL12(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL13 COL14 COL15)
     COL13(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL14 COL15)
     COL14(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL15)
     COL15(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14)
;
   SET TAB1;

   IF COL2 NE . THEN OUTPUT COL2;
   IF COL3 NE . THEN OUTPUT COL3;
   IF COL4 NE . THEN OUTPUT COL4;
   IF COL5 NE . THEN OUTPUT COL5;
   IF COL6 NE . THEN OUTPUT COL6;
   IF COL7 NE . THEN OUTPUT COL7;
   IF COL8 NE . THEN OUTPUT COL8;
   IF COL9 NE . THEN OUTPUT COL9;
   IF COL10 NE . THEN OUTPUT COL10;
   IF COL11 NE . THEN OUTPUT COL11;
   IF COL12 NE . THEN OUTPUT COL12;
   IF COL13 NE . THEN OUTPUT COL13;
   IF COL14 NE . THEN OUTPUT COL14;
   IF COL15 NE . THEN OUTPUT COL15;
RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;
PROC SORT DATA=COL8; BY ROW; RUN;
PROC SORT DATA=COL9; BY ROW; RUN;
PROC SORT DATA=COL10; BY ROW; RUN;
PROC SORT DATA=COL11; BY ROW; RUN;
PROC SORT DATA=COL12; BY ROW; RUN;
PROC SORT DATA=COL13; BY ROW; RUN;
PROC SORT DATA=COL14; BY ROW; RUN;
PROC SORT DATA=COL15; BY ROW; RUN;

DATA ALLROWS;
```

```
      LENGTH ROW 8.;
      DO ROW = 1 TO 5;
         OUTPUT;
      END;
   RUN;

   PROC SORT DATA=ALLROWS; BY ROW; RUN;

   DATA TABLE1;
      MERGE COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11
            COL12 COL13 COL14 COL15 ALLROWS;
      BY ROW;
   RUN;


   ****************************************************************************
   * DDE LINK (EXCEL file has to be open )
   ****************************************************************************;
   FILENAME TBL DDE "EXCEL|TABLES!R4C9:R8C22";

   DATA _NULL_;
      SET TABLE1;
      FILE TBL NOTAB LRECL=200;
      IF ROW=5 THEN DO;
      PUT COL2 '09'X COL3 '09'X COL4 '09'X COL5 '09'X COL6 '09'X COL7 '09'X '-' '09'X COL9 '09'X
COL10
          '09'X COL11 '09'X COL12 '09'X COL13 '09'X COL14 '09'X COL15;
      END;
      ELSE DO;
      PUT COL2 '09'X COL3 '09'X COL4 '09'X COL5 '09'X COL6 '09'X COL7 '09'X COL8 '09'X COL9 '09'X
COL10
          '09'X COL11 '09'X COL12 '09'X COL13 '09'X COL14 '09'X COL15;

      END;
   RUN;

   /*Run Excel macro signif,  May 9 2006, LLU*/

   options noxsync;
   *-- Specify XL filename ;

   *%let excelf = &NAME..XLS ;

   *-- Specify XL macro name ;
   %let macron = signif ;


   FILENAME CMDS DDE "EXCEL|SYSTEM";


   DATA _NULL_;
     FILE CMDS;
     DDECommand = '[Run("' || "&macron" || '",0)]' ;
     put DDEcommand ;

   RUN;


   *FILENAME CMDS DDE "EXCEL|SYSTEM";
   DATA _NULL_;
      FILE CMDS;
      PUT '[SAVE]';
      PUT '[CLOSE]';
   RUN;




   ******************************************************************************
          COMPARE SCORES AND SIG B/T CONSUMER WATCH AND REPORT CARDS.
          SET 0.015 DIFFERENCE AS THRESHOLD.
          LUCY LU 04/04/2006
   ******************************************************************************;
```

```
PROC SORT DATA=FIG1(DROP=SCORE);            *FROM CONSUMER WATCH;
BY BENEFIT TIMEPD REGCAT;

PROC SORT DATA=FIG2(DROP=SCORE);
BY BENEFIT TIMEPD REGCAT;

PROC SORT DATA=FIG3(DROP=SCORE);
BY BENEFIT TIMEPD REGCAT;

PROC SORT DATA=FIG4(DROP=SCORE);
BY BENEFIT TIMEPD REGCAT;

PROC SORT DATA=FIG5AB OUT=FIG5;
BY BENEFIT TIMEPD REGCAT;

PROC SORT DATA=FIG6AB OUT=FIG6;
BY BENEFIT TIMEPD REGCAT;

PROC SORT DATA=FIG7AB OUT=FIG7;
BY BENEFIT TIMEPD REGCAT;
RUN;


%MACRO COMPARE(I=, TITL=);


PROC SORT DATA=CFIG&I;                   *FROM REPROT CARDS;
BY BENEFIT TIMEPD REGCAT;
RUN;

DATA COMBFIG&I;
   MERGE CFIG&I.(IN=F1) FIG&I(IN=F2);
BY BENEFIT TIMEPD REGCAT;


IF F1 AND F2;

FIG = &I;

IF FIG <=4 THEN DO;
   SCORE2=COL2*100;
   SIG2=COL3;
END;

ELSE IF FIG >4 THEN DO;
   IF COL2 >= 0 THEN SCORE2=COL2;
   ELSE IF COL4 >0 THEN SCORE2=COL4;

   IF COL6 >= .Z THEN SIG2=COL6;
   ELSE IF COL7>=.Z THEN SIG2=COL7;
END;


   SCOREDIF=SCORE2-SCORE;
   SIGDIF=SIG2-SIG;


IF ABS(SCOREDIF)>.015 OR SIGDIF>0 THEN FLAG=1;
ELSE FLAG=0;

KEEP BENEFIT TIMEPD REGCAT SCORE SIG SCORE2 SIG2 SCOREDIF SIGDIF FLAG;

LABEL
FLAG="DIFF IN SCORES >0.015 OR/AND DIFF IN SIG >0"
SCORE="SCORES FROM CONUS"
SCORE2="SCORES FROM CONSUMER WATCH"
SIG="SIG FROM CONUS"
SIG2="SIG FROM CONSUMER WATCH"
;
```

```
TITLE  "  ";
TITLE2 "*******************************************************";
TITLE3 "&YEAR. CATCHMENT CONSUMER WATCH, &AREA ";

PROC PRINT L NOOBS;
TITLE4 "Compare &TITL.";
RUN;


%MEND COMPARE;


%COMPARE(I=1, TITL=Health Care Rating);
%COMPARE(I=2, TITL=Health Plan Rating);
%COMPARE(I=3, TITL=Personal Provider Rating);
%COMPARE(I=4, TITL=Specialist Rating);

%COMPARE(I=5, TITL=Access composites);

%COMPARE(I=6, TITL=Office composites);
%COMPARE(I=7, TITL=Claims/Service composites);


%MEND RUNCW;
```

H.2.A CONSUMERWATCH\CONSUMERWATCH-CCONUS.SAS - RUN ANNUAL MTF TRICARE CONSUMER WATCH REPORTS FOR CONUS.

```
*******************************************************************************
* PROJECT: 8860-420
* PROGRAM: CONSUMERWATCH-Cconus.SAS
* PURPOSE: Run Catchment Consumer Watch
* AUTHOR : NATALIE JUSTH
* DATE   : 2/12/02
* UPDATED: 2/5/03
* UPDATED: 11/17/03
* UPDATED: 03/17/05 BY LUCY LU.
* UPDATED: 11/21/06 BY LUCY LU.
* UPDATED: 11/16/07 BY LUCY LU.
*
*******************************************************************************;
OPTIONS PS=63 LS=86 NOCENTER MPRINT NOFMTERR SPOOL ;


/**********************/
/* TIME PERIOD MACROS */
/**********************/

%LET YEAR   = 2007;
%LET YEARP1 = 2006;
%LET YEARP2 = 2005;

%INCLUDE 'CATREP.INC';

LIBNAME LIBRARY '..\..\..\2007\Data\fmtlib';
LIBNAME INT V612 '..\..\..\2007\programs\loadweb';

/*LLU 03/17/2005, REMOVE APOSTROPHE FROM VARIABLE REGCAT FOR EXCEL NAMING*/

DATA TREND_A;
   SET INT.TREND_A(RENAME=(REGCAT=XREGCAT));

REGCAT=COMPRESS(XREGCAT,"'");
DROP XREGCAT;

RUN;



%INCLUDE "CONSUMERWATCH-CMACRO.INC";

/*** MACRO TO RUN CATCHMENT LEVEL REPORTS BY REGION ****/

%MACRO RUNBYREG (REG=,    /*Region as it appears in TREND_A */
                 FOLDER=  /*Regional folder name            */
                );

   PROC FREQ DATA=TREND_A;
      TABLES REGION*REGCAT / LIST MISSING OUT=TEMP;
      WHERE (REGION=&REG AND REGCAT NE &REG) OR REGION='CONUS MHS';
   RUN;

   DATA TEMP;
      SET TEMP;

      /* DO NOT PRODUCE CONSUMER WATCH REPORTS FOR OUT OF CATCHMENT AREAS */

      IF SUBSTR(REGCAT,1,16)="Out of Catchment" THEN DELETE;
      *IF REGCAT IN ('AIR FORCE','ARMY','NAVY','NORTH','OTHER',
                   'OVERSEAS','SOUTH','WEST','BENCHMARK')

      THEN DELETE;


   RUN;

   DATA _NULL_;
```

```
      SET TEMP END=FINISHED;

      LENGTH CMPRS $39;
      LENGTH NUM $4;

      CMPRS=COMPRESS(REGCAT)||".xls";
      NUM=COMPRESS(PUT(_N_,4.));

      CALL SYMPUT("REGCAT"||NUM,REGCAT);
      CALL SYMPUT("CMPRS"||NUM,CMPRS);


      IF FINISHED THEN DO;
         CALL SYMPUT("N",_N_);
      END;
   RUN;

   %MACRO PROCESS;
      %DO I=1 %TO &N;
         %RUNCW(AREA=&&REGCAT&I,NAME=&&CMPRS&I,FOLDER=&FOLDER);
      %END;
   %MEND PROCESS;

   %PROCESS;

%MEND RUNBYREG;


%RUNBYREG(REG="CONUS MHS",FOLDER=CONUSMHS);
```

H.2.B CONSUMERWATCH\CONSUMERWATCH-CNORTH.SAS - RUN ANNUAL MTF TRICARE CONSUMER WATCH REPORTS FOR NORTH REGION.

```
OPTIONS PS=63 LS=200 COMPRESS=NO ERRORS=2 NOCENTER SOURCE2 NOFMTERR SPOOL;
*******************************************************************************
* PROJECT: 8860-420
* PROGRAM: CONSUMERWATCH-CMACRO.SAS
* PURPOSE: Run Catchment Consumer Watch
* AUTHOR : NATALIE JUSTH
* DATE   : 2/12/02
* UPDATED: 2/5/03
* UPDATED: 11/17/03
* UPDATED: 03/17/05 BY LUCY LU.
* UPDATED: 02/01/06 BY LUCY LU.
* UPDATED: 11/22/06 BY LUCY LU.
* UPDATED: 11/16/07 BY LUCY LU.
*
*******************************************************************************;
options mprint symbolgen;


/**********************/
/* TIME PERIOD MACROS */
/**********************/

%LET YEAR   = 2007;
%LET YEARP1 = 2006;
%LET YEARP2 = 2005;

%INCLUDE 'CATREP.INC';

LIBNAME LIBRARY '..\..\Data\fmtlib';
LIBNAME INT V612 '..\loadweb';
*LIBNAME IN    '.';


/*LLU 03/17/2005, REMOVE APOSTROPHE FROM VARIABLE REGCAT FOR EXCEL NAMING*/

DATA TREND_A;
   SET INT.TREND_A(RENAME=(REGCAT=XREGCAT));

REGCAT=COMPRESS(XREGCAT,"'");
DROP XREGCAT;

RUN;


%INCLUDE "CONSUMERWATCH-CMACRO.INC";

/*** MACRO TO RUN CATCHMENT LEVEL REPORTS BY REGION ****/

%MACRO RUNBYREG (REG=,    /*Region as it appears in TREND_A */
                 FOLDER=  /*Regional folder name            */
                );

   PROC FREQ DATA=TREND_A;
      TABLES REGION*REGCAT / LIST MISSING OUT=TEMP;
      WHERE (REGION=&REG AND REGCAT NE &REG) OR REGION='CONUS MHS';
   RUN;

   DATA TEMP;
      SET TEMP;

      /* DO NOT PRODUCE CONSUMER WATCH REPORTS FOR OUT OF CATCHMENT AREAS */

      IF SUBSTR(REGCAT,1,16)="Out of Catchment" THEN DELETE;

   RUN;

   DATA _NULL_;
      SET TEMP END=FINISHED;
```

```
      LENGTH CMPRS $39;
      LENGTH NUM $4;

      CMPRS=COMPRESS(REGCAT)||".xls";
      NUM=COMPRESS(PUT(_N_,4.));

      CALL SYMPUT("REGCAT"||NUM,REGCAT);
      CALL SYMPUT("CMPRS"||NUM,CMPRS);


      IF FINISHED THEN DO;
         CALL SYMPUT("N",_N_);
      END;
   RUN;

   %MACRO PROCESS;
      %DO I=1 %TO &N;
         %RUNCW(AREA=&&REGCAT&I,NAME=&&CMPRS&I,FOLDER=&FOLDER);
      %END;
   %MEND PROCESS;

   %PROCESS;

%MEND RUNBYREG;

%RUNBYREG(REG="North Air Force",FOLDER=North);
%RUNBYREG(REG="North Army",FOLDER=North);
%RUNBYREG(REG="North Navy",FOLDER=North);
%RUNBYREG(REG="North Other",FOLDER=North);
```

H.2.C CONSUMERWATCH\CONSUMERWATCH-COVERSEAS.SAS - RUN ANNUAL MTF TRICARE CONSUMER WATCH REPORTS FOR OVERSEAS REGION.

```
*****************************************************************************
* PROJECT: 8860-420
* PROGRAM: CONSUMERWATCH-CMACRO.SAS
* PURPOSE: Run Catchment Consumer Watch
* AUTHOR : NATALIE JUSTH
* DATE   : 2/12/02
* UPDATED: 2/5/03
* UPDATED: 11/17/03
* UPDATED: 03/17/05 BY LUCY LU.
* UPDATED: 02/01/06 BY LUCY LU.
* UPDATED: 11/21/06 BY LUCY LU FOR 2006 CONSUMER WATCH.
* UPDATED: 11/16/07 BY LUCY LU FOR 2007 CONSUMER WATCH.
*
*****************************************************************************;
options mlogic PS=63 LS=200  NOCENTER NOFMTERR SPOOL;


/**********************/
/* TIME PERIOD MACROS */
/**********************/

%LET YEAR   = 2007;
%LET YEARP1 = 2006;
%LET YEARP2 = 2005;

%INCLUDE 'CATREP.INC';

LIBNAME LIBRARY '..\..\Data\fmtlib';
LIBNAME INT V612 '..\loadweb';
LIBNAME IN    '.';

/*LLU 03/17/2005, REMOVE APOSTROPHE FROM VARIABLE REGCAT FOR EXCEL NAMING*/

DATA TREND_A;
   SET INT.TREND_A(RENAME=(REGCAT=XREGCAT));

REGCAT=COMPRESS(XREGCAT,"'");
DROP XREGCAT;

RUN;


%INCLUDE "CONSUMERWATCH-CMACRO.INC";

/*** MACRO TO RUN CATCHMENT LEVEL REPORTS BY REGION ****/

%MACRO RUNBYREG (REG=,    /*Region as it appears in TREND_A */
                 FOLDER=  /*Regional folder name            */
                );

   PROC FREQ DATA=TREND_A;
      TABLES REGION*REGCAT / LIST MISSING OUT=TEMP;
      WHERE (REGION=&REG AND REGCAT NE &REG) OR REGION='CONUS MHS';
   RUN;

   DATA TEMP;
      SET TEMP;

      /* DO NOT PRODUCE CONSUMER WATCH REPORTS FOR OUT OF CATCHMENT AREAS */

      IF SUBSTR(REGCAT,1,16)="Out of Catchment" THEN DELETE;

   RUN;

   DATA _NULL_;
      SET TEMP END=FINISHED;

      LENGTH CMPRS $39;
      LENGTH NUM $4;
```

```
      CMPRS=COMPRESS(REGCAT)||".xls";
      NUM=COMPRESS(PUT(_N_,4.));

      CALL SYMPUT("REGCAT"||NUM,REGCAT);
      CALL SYMPUT("CMPRS"||NUM,CMPRS);


      IF FINISHED THEN DO;
         CALL SYMPUT("N",_N_);
      END;
   RUN;

   %MACRO PROCESS;
      %DO I=1 %TO &N;
         %RUNCW(AREA=&&REGCAT&I,NAME=&&CMPRS&I,FOLDER=&FOLDER);
      %END;
   %MEND PROCESS;

   %PROCESS;

%MEND RUNBYREG;

%RUNBYREG(REG="Overseas Europe",FOLDER=Overseas);
%RUNBYREG(REG="Overseas Latin America",FOLDER=Overseas);
%RUNBYREG(REG="Overseas Pacific",FOLDER=Overseas);
```

H.2.D CONSUMERWATCH\CONSUMERWATCH-CSOUTH.SAS - RUN ANNUAL MTF TRICARE CONSUMER WATCH REPORTS FOR SOUTH REGION.

```
OPTIONS PS=63 LS=200 COMPRESS=NO ERRORS=2 NOCENTER NOFMTERR SPOOL;
******************************************************************************
* PROJECT: 8860-420
* PROGRAM: CONSUMERWATCH-CMACRO.SAS
* PURPOSE: Run Catchment Consumer Watch
* AUTHOR : NATALIE JUSTH
* DATE   : 2/12/02
* UPDATED: 2/5/03
* UPDATED: 11/17/03
* UPDATED: 03/17/05 BY LUCY LU.
* UPDATED: 02/01/05 BY LUCY LU.
* UPDATED: 11/21/06 BY LUCY LU FOR 2006 CONSUMER WATCH.
* UPDATED: 11/16/07 BY LUCY LU FOR 2007 CONSUMER WATCH.
*
*******************************************************************************;
options mprint;


/**********************/
/* TIME PERIOD MACROS */
/**********************/

%LET YEAR   = 2007;
%LET YEARP1 = 2006;
%LET YEARP2 = 2005;

%INCLUDE 'CATREP.INC';

LIBNAME LIBRARY '..\..\Data\fmtlib';
LIBNAME INT V612 '..\loadweb';
LIBNAME IN    '.';

/*LLU 03/17/2005, REMOVE APOSTROPHE FROM VARIABLE REGCAT FOR EXCEL NAMING*/

DATA TREND_A;
   SET INT.TREND_A(RENAME=(REGCAT=XREGCAT));

REGCAT=COMPRESS(XREGCAT,"'");
DROP XREGCAT;

RUN;


%INCLUDE "CONSUMERWATCH-CMACRO.INC";

/*** MACRO TO RUN CATCHMENT LEVEL REPORTS BY REGION ****/

%MACRO RUNBYREG (REG=,    /*Region as it appears in TREND_A */
                 FOLDER=  /*Regional folder name            */
                );

   PROC FREQ DATA=TREND_A;
      TABLES REGION*REGCAT / LIST MISSING OUT=TEMP;
      WHERE (REGION=&REG AND REGCAT NE &REG) OR REGION='CONUS MHS';
   RUN;


   DATA TEMP;
      SET TEMP;

      /* DO NOT PRODUCE CONSUMER WATCH REPORTS FOR OUT OF CATCHMENT AREAS */

      IF SUBSTR(REGCAT,1,16)="Out of Catchment" THEN DELETE;
      *IF REGCAT IN ('AIR FORCE','ARMY','NAVY','NORTH','OTHER',
                   'OVERSEAS','SOUTH','WEST','BENCHMARK')

      THEN DELETE;
```

```
   RUN;

   DATA _NULL_;
      SET TEMP END=FINISHED;

      LENGTH CMPRS $39;
      LENGTH NUM $4;

      CMPRS=COMPRESS(REGCAT)||".xls";
      NUM=COMPRESS(PUT(_N_,4.));

      CALL SYMPUT("REGCAT"||NUM,REGCAT);
      CALL SYMPUT("CMPRS"||NUM,CMPRS);


      IF FINISHED THEN DO;
         CALL SYMPUT("N",_N_);
      END;
   RUN;

   %MACRO PROCESS;
      %DO I=1 %TO &N;
         %RUNCW(AREA=&&REGCAT&I,NAME=&&CMPRS&I,FOLDER=&FOLDER);
      %END;
   %MEND PROCESS;

   %PROCESS;

%MEND RUNBYREG;


%RUNBYREG(REG="South Air Force",FOLDER=South);
%RUNBYREG(REG="South Army",FOLDER=South);
%RUNBYREG(REG="South Navy",FOLDER=South);
%RUNBYREG(REG="South Other",FOLDER=South);
```

H.2.E CONSUMERWATCH\CONSUMERWATCH-CWEST.SAS - RUN ANNUAL MTF TRICARE CONSUMER WATCH REPORTS FOR WEST REGION.

```
OPTIONS PS=63 LS=200 COMPRESS=NO ERRORS=2 NOCENTER SOURCE2 NOFMTERR SPOOL;
******************************************************************************
* PROJECT: 8860-420
* PROGRAM: CONSUMERWATCH-CMACRO.SAS
* PURPOSE: Run Catchment Consumer Watch
* AUTHOR : NATALIE JUSTH
* DATE   : 2/12/02
* UPDATED: 2/5/03
* UPDATED: 11/17/03
* UPDATED: 03/17/05 BY LUCY LU.
* UPDATED: 01/02/06 BY LUCY LU.
* UPDATED: 11/22/06 BY LUCY LU.
* UPDATED: 11/16/07 BY LUCY LU.
******************************************************************************;
options mprint symbolgen;


/**********************/
/* TIME PERIOD MACROS */
/**********************/

%LET YEAR   = 2007;
%LET YEARP1 = 2006;
%LET YEARP2 = 2005;

%INCLUDE 'CATREP.INC';

LIBNAME LIBRARY '..\..\Data\fmtlib';
LIBNAME INT V612 '..\loadweb';
LIBNAME IN    '.';

/*LLU 03/17/2005, REMOVE APOSTROPHE FROM VARIABLE REGCAT FOR EXCEL NAMING*/

DATA TREND_A;
   SET INT.TREND_A(RENAME=(REGCAT=XREGCAT));

REGCAT=COMPRESS(XREGCAT,"'");
DROP XREGCAT;

RUN;



%INCLUDE "CONSUMERWATCH-CMACRO.INC";

/*** MACRO TO RUN CATCHMENT LEVEL REPORTS BY REGION ****/

%MACRO RUNBYREG (REG=,    /*Region as it appears in TREND_A */
                 FOLDER=  /*Regional folder name            */
                );

   PROC FREQ DATA=TREND_A;
      TABLES REGION*REGCAT / LIST MISSING OUT=TEMP;
      WHERE (REGION=&REG AND REGCAT NE &REG) OR REGION='CONUS MHS';
   RUN;

   DATA TEMP;
      SET TEMP;

      /* DO NOT PRODUCE CONSUMER WATCH REPORTS FOR OUT OF CATCHMENT AREAS */

      IF SUBSTR(REGCAT,1,16)="Out of Catchment" THEN DELETE;


   RUN;

   DATA _NULL_;
      SET TEMP END=FINISHED;
```

```
      LENGTH CMPRS $39;
      LENGTH NUM $4;

      CMPRS=COMPRESS(REGCAT)||".xls";
      NUM=COMPRESS(PUT(_N_,4.));

      CALL SYMPUT("REGCAT"||NUM,REGCAT);
      CALL SYMPUT("CMPRS"||NUM,CMPRS);


      IF FINISHED THEN DO;
         CALL SYMPUT("N",_N_);
      END;
   RUN;

   %MACRO PROCESS;
      %DO I=1 %TO &N;
         %RUNCW(AREA=&&REGCAT&I,NAME=&&CMPRS&I,FOLDER=&FOLDER);
      %END;
   %MEND PROCESS;

   %PROCESS;

%MEND RUNBYREG;

*%RUNBYREG(REG="West Air Force",FOLDER=West);
%RUNBYREG(REG="West Army",FOLDER=West);
*%RUNBYREG(REG="West Navy",FOLDER=West);
*%RUNBYREG(REG="West Other",FOLDER=West);
```

H.3.A Q4FY2007\PROGRAMS\CONSUMERWATCH\CONSUMERWATCH-CONUS.SAS - RUN CONUS TRICARE CONSUMER WATCH REPORTS - RUN QUARTERLY.

```
*******************************************************************************
* PROJECT: 6077-420
* PROGRAM: CONSUMERWATCH-CONUS.SAS
* PURPOSE: CALL CONSUMERWATCH MACRO PROGRAM
*          TO PRODUCE EXCEL TABLE FOR CONUS DATA.
*
* WRITTEN: 02/10/2005 BY LUCY LU FOR Q4 2004.
*
* UPDATE:  4/26/2005 FOR Q1 2005.
* UPDATE:  8/4/2005 FOR Q2 2005.
* UPDATE:  12/15/2005 FOR Q4 2005.
* UPDATE:  04/04/2006 FOR Q2 FISCAL YEAR 2006, LUCY Lu. STARTING THIS QUARTER,
*          THE PERIOD IS CHANGED TO FISCAL YEAR.
* UPDATE:  09/01/2006 Lucy Lu FOR FY 3 2006.
* UPDATE:  10/05/2006 Lucy Lu FOR FY 4 2006.
* MODIFIED 7/30/2007 BY LUCY LU
*          UNIFY THE PERDIOD MACRO VARIABLES WITH BENEFICIARY REPORT CARDS PROGRAMS
*          CURRNT  ===> PERIOD4
*          CURRNTQ ===> PERIOD4Q
*          PREV1   ===> PERIOD3
*          PREV1Q  ===> PERIOD3Q
*          PREV2   ===> PERIOD2
*          PREV2Q  ===> PERION2Q
*          PREV3   ===> PERIOD1
*          PREV3Q  ===> PERIOND1Q
*
*
* INPUT  : DATA FROM CONSUMER REPORTS: ..\..\PROGRAMS\LOADWEB\CONUS_Q.SD2
*
* OUTPUT : INTO EXCEL SPREADSHEET
*
* PROGRAM TO CALL: CONSUMERWATCH-MACRO.INC
*******************************************************************************;


/****************************/
/* UPDATE REGIONAL LIBNAMES */
/****************************/

/* LIBNAMES for Regional Consumer Watch */
LIBNAME CURNTR '..\LOADWEB';


LIBNAME IN    '.';


/*****************************************/
/* TIME PERIOD MACROS: UPDATE EACH QUARTER */
/*****************************************/

*starting 2006, the period is changed to fiscal year, LLU 4/5/06;


%LET PERIOD4    = 'July, 2007';   *CURRENT QUARTER;
%LET PERIOD4Q   = Q4;

%LET PERIOD3    = 'April, 2007';
%LET PERIOD3Q   = Q3;

%LET PERIOD2    = 'January, 2007';
%LET PERIOD2Q   = Q2;

%LET PERIOD1    = 'October, 2006';
%LET PERIOD1Q   = Q1;


%LET POP= Prime Enrollees;

TITLE "6244-420 DOD CONSUMER WATCH &PERIOD4Q FY 2007";
```

```
%INCLUDE "CONSUMERWATCH-MACRO.INC";


%RUNCW(AREA=CONUS MHS,
       FOLDER=CONUSMHS,
       CURRENT=CURNTR.TOTAL_Q);
```

H.3.B Q4FY2007\PROGRAMS\CONSUMERWATCH\CONSUMERWATCH-R.SAS - RUN REGIONAL TRICARE CONSUMER WATCH REPORTS - RUN QUARTERLY.

```
*******************************************************************************
* PROJECT: 6077-420
* PROGRAM: CONSUMERWATCH-R.SAS
* PURPOSE: CALL CONSUMERWATCH MACRO PROGRAM
*          TO PRODUCE EXCEL TABLE FOR REGIONS.
*
* WRITTEN: 02/10/2005 BY LUCY LU FOR Q4 2004 DATA.
*
* UPDATE:  4/26/2005 FOR Q1 2005.
* UPDATE:  8/4/2005 FOR Q2 2005.
* UPDATE:  12/15/05 FOR Q4 2005.
* UPDATE:  04/04/2006 FOR Q2 FISCAL YEAR 2006, LUCY Lu. STARTING THIS QUARTER,
*          THE PERIOD IS CHANGED TO FISCAL YEAR.
* UPDATE:  08/31/2006 FOR Q3 FISCAL YEAR 2006, LUCY Lu. REGIONAL CHANGE TO
*          OVERSEAS EUROPE AND OVERSEAS PACIFIC.
* MODIFIED 7/30/2007 BY LUCY LU
*          UNIFY THE PERDIOD MACRO VARIABLES WITH BENEFICIARY REPORT CARDS PROGRAMS
*          CURRNT  ===> PERIOD4
*          CURRNTQ ===> PERIOD4Q
*          PREV1   ===> PERIOD3
*          PREV1Q  ===> PERIOD3Q
*          PREV2   ===> PERIOD2
*          PREV2Q  ===> PERION2Q
*          PREV3   ===> PERIOD1
*          PREV3Q  ===> PERIOND1Q
*
* INPUT  : DATA FROM CONSUMER REPORTS: ..\..\PROGRAMS\LOADWEB\CONUS_Q.SD2
*
* OUTPUT : INTO EXCEL SPREADSHEET
*
* PROGRAM TO CALL: CONSUMERWATCH-MACRO.INC
*******************************************************************************;


/****************************/
/* UPDATE REGIONAL LIBNAMES */
/****************************/

/* LIBNAMES for Regional Consumer Watch */
LIBNAME CURNTR '..\LOADWEB';


LIBNAME IN    '.';


/*****************************************/
/* TIME PERIOD MACROS: UPDATE EACH QUARTER */
/*****************************************/

*starting 2006, the period is changed to fiscal year, LLU 4/5/06;


%LET PERIOD4    = 'July, 2007';   *CURRENT QUARTER;
%LET PERIOD4Q   = Q4;

%LET PERIOD3    = 'April, 2007';
%LET PERIOD3Q   = Q3;

%LET PERIOD2    = 'January, 2007';
%LET PERIOD2Q   = Q2;

%LET PERIOD1    = 'October, 2006';
%LET PERIOD1Q   = Q1;



%LET POP= Prime Enrollees;
```

```
TITLE "6244-420 DOD CONSUMER WATCH &PERIOD4Q FY 2007";

%INCLUDE "CONSUMERWATCH-MACRO.INC"/SOURCE2;


%RUNCW(AREA=NORTH,
       FOLDER=North,
       CURRENT=CURNTR.TOTAL_Q);
%RUNCW(AREA=SOUTH,
       FOLDER=South,
       CURRENT=CURNTR.TOTAL_Q);
%RUNCW(AREA=WEST,
       FOLDER=West,
       CURRENT=CURNTR.TOTAL_Q);
%RUNCW(AREA=Overseas Europe,
       FOLDER=Europe,
       CURRENT=CURNTR.TOTAL_Q);
%RUNCW(AREA=Overseas Pacific,
       FOLDER=Pacific,
       CURRENT=CURNTR.TOTAL_Q);
```

H.3.C Q4FY2007\PROGRAMS\CONSUMERWATCH\CONSUMERWATCH-S.SAS - RUN SERVICE AFFILIATION TRICARE CONSUMER WATCH REPORTS - RUN QUARTERLY.

```
*******************************************************************************
* PROJECT: 6077-420
* PROGRAM: CONSUMERWATCH-S.SAS
* PURPOSE: CALL CONSUMERWATCH MACRO PROGRAM
*          TO PRODUCE EXCEL TABLE FOR SERVICE AFFILIATION.
*
* WRITTEN: 02/10/2005 BY LUCY LU FOR Q4 2004 DATA.
*
* UPDATE:  4/26/2005 FOR Q1 2005.
* UPDATE:  8/4/2005 FOR Q2 2005.
* UPDATE:  12/15/05 FOR Q4 2005.
* UPDATE:  04/04/2006 FOR Q2 FISCAL YEAR 2006, LUCY Lu. STARTING THIS QUARTER,
*          THE PERIOD IS CHANGED TO FISCAL YEAR.
* UPDATE:  09/01/2006 FOR Q3 FISCAL YEAR 2006, LUCY Lu.
* MODIFIED 7/30/2007 BY LUCY LU
*          UNIFY THE PERDIOD MACRO VARIABLES WITH BENEFICIARY REPORT CARDS PROGRAMS
*          CURRNT  ===> PERIOD4
*          CURRNTQ ===> PERIOD4Q
*          PREV1   ===> PERIOD3
*          PREV1Q  ===> PERIOD3Q
*          PREV2   ===> PERIOD2
*          PREV2Q  ===> PERION2Q
*          PREV3   ===> PERIOD1
*          PREV3Q  ===> PERIOND1Q
*
*
* INPUT  : DATA FROM CONSUMER REPORTS: ..\..\PROGRAMS\LOADWEB\CONUS_Q.SD2
*
*
* OUTPUT : INTO EXCEL SPREADSHEET
*
* PROGRAM TO CALL: CONSUMERWATCH-MACRO.INC
*******************************************************************************;


LIBNAME CURNTR '..\LOADWEB';

LIBNAME IN    '.';


/*****************************************/
/* TIME PERIOD MACROS: UPDATE EACH QUARTER */
/*****************************************/


*starting 2006, the period is changed to fiscal year, LLU 4/5/06;


%LET PERIOD4    = 'July, 2007';    *CURRENT QUARTER;
%LET PERIOD4Q   = Q4;

%LET PERIOD3    = 'April, 2007';
%LET PERIOD3Q   = Q3;

%LET PERIOD2    = 'January, 2007';
%LET PERIOD2Q   = Q2;

%LET PERIOD1    = 'October, 2006';
%LET PERIOD1Q   = Q1;



%LET POP= Prime Enrollees;

TITLE "6244-420 DOD CONSUMER WATCH &PERIOD4Q FY 2007";

%INCLUDE "CONSUMERWATCH-MACRO.INC";

%RUNCW(AREA=NAVY,
```

```
       FOLDER=Navy,
       CURRENT=CURNTR.TOTAL_Q);
%RUNCW(AREA=AIR FORCE,
       FOLDER=AirForce,
       CURRENT=CURNTR.TOTAL_Q);
%RUNCW(AREA=ARMY,
       FOLDER=Army,
       CURRENT=CURNTR.TOTAL_Q);
```

H.4 Q4FY2007\PROGRAMS\CONSUMERWATCH\CONSUMERWATCH-MACRO.INC - PRODUCE NUMBERS FOR QUARTERLY CONSUMER WATCH REPORTS.

```
*******************************************************************************
* PROJECT: 6077-420
* PROGRAM: CONSUMERWATCH-MACRO.INC
* PURPOSE: To produce numbers that go into data sheet in Excel to produce graphs
*          for regional consumer watch
* AUTHOR : MIKI SATAKE
* DATE   : 4/24/01
* UPDATED: 7/16/01 FOR QUARTER 2 BY NATALIE JUSTH
* UPDATED: 10/16/01 FOR QUARTER 3 BY NATALIE JUSTH
* UPDATED: 1/11/02 FOR QUARTER 4 BY NATALIE JUSTH
* UPDATED AND RENAMED: 4/9/02 FOR QUARTER 1 2002 BY NATALIE JUSTH
* UPDATED: 7/5/02 FOR QUARTER 2 2002 BY NATALIE JUSTH
* UPDATED: 7/15/02 FOR QUARTER 3 2002 BY NATALIE JUSTH
* UPDATED: 11/12/02 FOR QUARTER 4 2002 BY NATALIE JUSTH
* UPDATED: 4/3/03 FOR QUARTER 1 2003 BY NATALIE JUSTH
* UPDATED: 5/19/03 FOR QUARTER 2 2003 BY NATALIE JUSTH
* UPDATED: 8/28/03 FOR QUARTER 3 2003 BY NATALIE JUSTH
* UPDATED: 11/14/03 FOR QUARTER 4 2003 BY NATALIE JUSTH
* UPDATED: 05/18/2004 FOR QUARTER 1 2004 BY KEITH RATHBUN
* UPDATED: 06/30/2004 FOR QUARTER 2 2004 BY LUCY LU
* UPDATED: 06/30/2004 FOR QUARTER 3 2004 BY LUCY LU. CHANGING XREGION TO XTNEXREG.
* UPDATED: 10/07/2004 BY LUCY LU. ADD THE CODE TO COMPARE CONSUMER WATCH
*          WITH REPORT CARDS IN SCORES AND SIGNIFICANCE.*
* MODIFIED 2/10/05 BY LUCY LU:
*          1). CREATE UNIVERSAL MACRO PROGRAM BASED ON PROGRAM CONSUMERWATCH-R.SAS
*              TO ELIMINATE REDUNDANCY AND INCREASE THE EFFECTIVENESS OF PROGRAMMING.
*          2). ADD ADDITIONAL PREVENTION MEASURE "SMOKING CESSATION"
*              INTO PREVENTIVE CARE TABLE.
* MODIFIED 06/2/2005 BY LUCY LU FOR Q1 2005:
*          1). REMOVE CHOLESTEROL MEASUREMENT AND ADD BMI MEASUREMENT
*          2). COMMENT OUT DISENROLL CODE--NO DISENROLL DATA IN Q1 2005
*          3). ADD SPECIALIST RATING.
* MODIFIED 11/16/2006 BY LUCY LU FOR FY Q4 2006
*           ADD PURCHASE CARE VERSION-- CHANGE PRIME ENROLLEE TO
*           Enrollees with Civilian PCM.
* MODIFIED 6/4/2007 BY LUCY LU. UNIFY THE MACRO PROGRAMS FOR CONSUMER WATCH.
*          !! NEED TO DEFIND MACRO VARIABLE &POP IN SAS PROGRAMS:
*          DIRECT CARE CONSUMDER WATCH:  &POP=='Prime Enrollees'
*          PURCHASE CARE CONSUMDER WATCH:  &POP=='Enrollees with Civilian PCM'
* MODIFIED 7/30/2007 BY LUCY LU
*          UNIFY THE PERDIOD MACRO VARIABLES WITH BENEFICIARY REPORT CARDS PROGRAMS
*          CURRNT  ===> PERIOD4
*          CURRNTQ ===> PERIOD4Q
*          PREV1   ===> PERIOD3
*          PREV1Q  ===> PERIOD3Q
*          PREV2   ===> PERIOD2
*          PREV2Q  ===> PERION2Q
*          PREV3   ===> PERIOD1
*          PREV3Q  ===> PERIOND1Q
 MODIFIED 8/29/07 BY LUCY LU
*          CREATE DUMMY ID FOR MERGE. SAS 9 doesn't allow merge without by variable
*
* INPUT  : DATA FROM CONSUMER REPORTS: ..\..\PROGRAMS\LOADWEB\TOTAL_Q.SD2
*
* OUTPUT : INTO EXCEL SPREADSHEET
*******************************************************************************;

OPTIONS PS=60 LS=120 ERRORS=2 NOCENTER NOFMTERR NOXWAIT SPOOL /*MPRINT*/;


%MACRO RUNCW (AREA=,         /* Region/Service/conus                        */
              FOLDER=,       /* Folder containing excel template            */
              CURRENT=,      /* Libname and dataset for the current quarter */
              );


/* Change parameter for each area */
%LET VAL = &AREA.;
```

```
    x "COPY TEMPLATE.XLS &FOLDER.\&FOLDER..XLS";
    DATA _NULL_;
       X=SLEEP(3);
    RUN;

    X "START &FOLDER.\&FOLDER..XLS";
    DATA _NULL_;
       X=SLEEP(3);
    RUN;

    TITLE2 "&AREA.";

    /* This macro pulls data from the specified dataset to be used in the Consumer Watch */
    %MACRO GETDATA (DATASET=,    /* Current quarter data set  */
                    MAJGRP=,     /* Value of variable MAJGRP  */
                    REGION=,     /* Value of variable REGION  */
                    REGCAT=,     /* Value of variable REGCAT  */
                    BENEFIT=,    /* Value of variable BENEFIT */
                    BENTYPE=,    /* Value of variable BENTYPE */
                    TIMEPD=,     /* Value of variable TIMEPD  */
                    OUTDATA=     /* Name of output data set   */
                    );
    PROC FREQ NOPRINT DATA=&DATASET;
       WHERE MAJGRP = &MAJGRP
         AND REGION IN &REGION
         AND REGCAT IN &REGCAT
         AND BENEFIT IN &BENEFIT
         AND BENTYPE = &BENTYPE
         AND TIMEPD = &TIMEPD;
       TABLES  MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SCORE*N_OBS*N_WGT*SIG/  OUT=&OUTDATA(DROP=COUNT
PERCENT);
    RUN;
    %MEND GETDATA;

    /* This macro re-calculates SCORE based on the quarterly benchmark */
    %MACRO   NEWSCORE   (FIGURE=,             /*   Figure   number   in   consumer   watch   reports
*/
                         QUARTER=     /* Data is processed for current quarter and each of 3 previous
quarters */
                         );
    DATA FIG&FIGURE&QUARTER FIGB&QUARTER(KEEP=SCORE N);
       SET FIG&FIGURE&QUARTER;
    N=1;
       IF REGION='Benchmark' THEN OUTPUT FIGB&QUARTER;
          ELSE OUTPUT FIG&FIGURE&QUARTER;

    RUN;

    /*ADD CODE HERE TO PRESERVE ABOVE DATASET FOR LATER COMPARISON. LLU 10/7/04*/

    DATA CFIG&FIGURE&QUARTER;
       SET FIG&FIGURE&QUARTER;

    KEEP MAJGRP REGION BENEFIT BENTYPE TIMEPD SCORE SIG;
    RUN;


    DATA FIG&FIGURE&QUARTER(DROP=RSCORE);
       MERGE FIGB&QUARTER(RENAME=(SCORE=RSCORE))
             FIG&FIGURE&QUARTER;
    BY N;
       SCORE=SCORE-RSCORE;
    RUN;
    %MEND NEWSCORE;

    %MACRO COMBDATA (FIGURE=   /* Figure number in consumer watch reports */
                    );
    DATA FIG&FIGURE(DROP=BSCORE);
       SET BENCH FIG&FIGURE.Q1 FIG&FIGURE.Q4 FIG&FIGURE.Q3 FIG&FIGURE.Q2;
       RETAIN BSCORE;
       IF REGION = 'Benchmark' THEN DO;
          ROW = 3;
```

```
      BSCORE=SCORE;
   END;
   ELSE IF TIMEPD = &PERIOD1 THEN DO;
      ROW = 4;
      SCORE=SCORE+BSCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE=.;
   END;
   ELSE IF TIMEPD = &PERIOD2 THEN DO;
      ROW = 5;
      SCORE=SCORE+BSCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE=.;
   END;
   ELSE IF TIMEPD = &PERIOD3 THEN DO;
      ROW = 6;
      SCORE=SCORE+BSCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE=.;
   END;
   ELSE IF TIMEPD = &PERIOD4 THEN DO;
      ROW=7;
      SCORE=SCORE+BSCORE;
   END;
   COL2 = SCORE / 100;
   COL3 = SIG;
RUN;
PROC SORT;
   BY ROW;
RUN;
%MEND COMBDATA;

*******************************************************************************
* FIGURE 1: Health Care Rating
*******************************************************************************;
TITLE2 'Figure 1: Health Care Rating';
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('Health Care'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD4,
          OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Health Care'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD4,
          OUTDATA=FIG1&PERIOD4Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Health Care'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD3,
          OUTDATA=FIG1&PERIOD3Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Health Care'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD2,
          OUTDATA=FIG1&PERIOD2Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Health Care'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD1,
          OUTDATA=FIG1&PERIOD1Q);
```

```
%NEWSCORE (FIGURE=1,
           QUARTER=&PERIOD4Q);
%NEWSCORE (FIGURE=1,
           QUARTER=&PERIOD3Q);
%NEWSCORE (FIGURE=1,
           QUARTER=&PERIOD2Q);
%NEWSCORE (FIGURE=1,
           QUARTER=&PERIOD1Q);

%COMBDATA (FIGURE=1);



*****************************************************************************
* DDE LINK
*****************************************************************************;
FILENAME TBL DDE "EXCEL|RATINGS!R18C2:R22C3";

DATA _NULL_;
   SET FIG1;
   FILE TBL NOTAB LRECL=200;
   PUT COL2 '09'X COL3;
RUN;

******************************************************************************
* FIGURE 2: Health Plan Rating
******************************************************************************;
TITLE2 'Figure 2: Health Plan Rating';
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('Health Plan'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD4,
          OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Health Plan'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD4,
          OUTDATA=FIG2&PERIOD4Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Health Plan'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD3,
          OUTDATA=FIG2&PERIOD3Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Health Plan'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD2,
          OUTDATA=FIG2&PERIOD2Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Health Plan'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD1,
          OUTDATA=FIG2&PERIOD1Q);

%NEWSCORE (FIGURE=2,
           QUARTER=&PERIOD4Q);
%NEWSCORE (FIGURE=2,
```

```
           QUARTER=&PERIOD3Q);
%NEWSCORE (FIGURE=2,
           QUARTER=&PERIOD2Q);
%NEWSCORE (FIGURE=2,
           QUARTER=&PERIOD1Q);

%COMBDATA (FIGURE=2);



*****************************************************************************
* DDE LINK (EXCEL file has to be open )
*****************************************************************************;
FILENAME TBL DDE "EXCEL|RATINGS!R18C6:R22C7";

DATA _NULL_;
   SET FIG2;
   FILE TBL NOTAB LRECL=200;
   PUT COL2 '09'X COL3;
RUN;

******************************************************************************
* FIGURE 3: Personal Provider Rating
******************************************************************************;
TITLE2 'Figure 3: Personal Provider Rating';
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('Personal Doctor'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD4,
          OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Personal Doctor'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD4,
          OUTDATA=FIG3&PERIOD4Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Personal Doctor'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD3,
          OUTDATA=FIG3&PERIOD3Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Personal Doctor'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD2,
          OUTDATA=FIG3&PERIOD2Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Personal Doctor'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD1,
          OUTDATA=FIG3&PERIOD1Q);

%NEWSCORE (FIGURE=3,
           QUARTER=&PERIOD4Q);
%NEWSCORE (FIGURE=3,
           QUARTER=&PERIOD3Q);
%NEWSCORE (FIGURE=3,
           QUARTER=&PERIOD2Q);
%NEWSCORE (FIGURE=3,
```

```
           QUARTER=&PERIOD1Q);

%COMBDATA (FIGURE=3);


*****************************************************************************
* DDE LINK (EXCEL file has to be open )
*****************************************************************************;
FILENAME TBL DDE "EXCEL|RATINGS!R18C10:R22C11";

DATA _NULL_;
   SET FIG3;
   FILE TBL NOTAB LRECL=200;
   PUT COL2 '09'X COL3;
RUN;

******************************************************************************
* FIGURE 4: Specialist Rating--added for Q1 2005, LLu 6/2/05
******************************************************************************;
TITLE2 'Figure 4: Specialist Rating';
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('Specialty Care'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD4,
          OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Specialty Care'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD4,
          OUTDATA=FIG4&PERIOD4Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Specialty Care'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD3,
          OUTDATA=FIG4&PERIOD3Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Specialty Care'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD2,
          OUTDATA=FIG4&PERIOD2Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Specialty Care'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD1,
          OUTDATA=FIG4&PERIOD1Q);

%NEWSCORE (FIGURE=4,
           QUARTER=&PERIOD4Q);
%NEWSCORE (FIGURE=4,
           QUARTER=&PERIOD3Q);
%NEWSCORE (FIGURE=4,
           QUARTER=&PERIOD2Q);
%NEWSCORE (FIGURE=4,
           QUARTER=&PERIOD1Q);

%COMBDATA (FIGURE=4);
```

```
*****************************************************************************
* DDE LINK (EXCEL file has to be open )
*****************************************************************************;
FILENAME TBL DDE "EXCEL|RATINGS!R18C14:R22C15";

DATA _NULL_;
   SET FIG4;
   FILE TBL NOTAB LRECL=200;
   PUT COL2 '09'X COL3;
RUN;

/*no disenroll data for Q1 2005, LLu 6/2/05*/
*****************************************************************************
* FIGURE 4: Intent to Disenroll
*****************************************************************************;
/*
TITLE2 'Figure 4: Intent to Disenroll';
PROC FREQ NOPRINT DATA=IN.DISENRL;
   WHERE BENTYPE = &PERIOD4
     AND FIGURE='INTENT TO DISENROLL'
     AND REGION = "&VAL";
   TABLES BENTYPE*REGION*FIGURE*COL3*COL4*ROW/ OUT=FIG4&PERIOD4Q(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=IN.DISENRL;
   WHERE BENTYPE = &PERIOD4
     AND FIGURE='INTENT TO DISENROLL'
     AND COL2 NE .;
   TABLES BENTYPE*REGION*FIGURE*COL2*ROW/ OUT=FIG4&PERIOD4Q.C(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=IN.DISENRL;
   WHERE BENTYPE = &PERIOD3
     AND FIGURE='INTENT TO DISENROLL'
     AND REGION = "&VAL";
   TABLES BENTYPE*REGION*FIGURE*COL3*COL4*ROW/ OUT=FIG4&PERIOD3Q(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=IN.DISENRL;
   WHERE BENTYPE = &PERIOD3
     AND FIGURE='INTENT TO DISENROLL'
     AND COL2 NE .;
   TABLES BENTYPE*REGION*FIGURE*COL2*ROW/ OUT=FIG4&PERIOD3Q.C(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=IN.DISENRL;
   WHERE BENTYPE = &PERIOD2
     AND FIGURE='INTENT TO DISENROLL'
     AND REGION = "&VAL";
   TABLES BENTYPE*REGION*FIGURE*COL3*COL4*ROW/ OUT=FIG4&PERIOD2Q(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=IN.DISENRL;
   WHERE BENTYPE = &PERIOD2
     AND FIGURE='INTENT TO DISENROLL'
     AND COL2 NE .;
   TABLES BENTYPE*REGION*FIGURE*COL2*ROW/ OUT=FIG4&PERIOD2Q.C(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=IN.DISENRL;
   WHERE BENTYPE = &PERIOD1
     AND FIGURE='INTENT TO DISENROLL'
     AND REGION = "&VAL";
   TABLES BENTYPE*REGION*FIGURE*COL3*COL4*ROW/ OUT=FIG4&PERIOD1Q(DROP=COUNT PERCENT);
RUN;
PROC FREQ NOPRINT DATA=IN.DISENRL;
   WHERE BENTYPE = &PERIOD1
     AND FIGURE='INTENT TO DISENROLL'
     AND COL2 NE .;
   TABLES BENTYPE*REGION*FIGURE*COL2*ROW/ OUT=FIG4&PERIOD1Q.C(DROP=COUNT PERCENT);
RUN;

DATA COL2(DROP=COL3 COL4)
     COL3(DROP=COL2 COL4)
     COL4(DROP=COL2 COL3);
   SET FIG4Q1 FIG4Q1C FIG4Q4 FIG4Q4C FIG4Q3 FIG4Q3C FIG4Q2 FIG4Q2C;

   IF COL2>=0 THEN OUTPUT COL2;
```

```
   IF COL3>=0 THEN OUTPUT COL3;
   IF COL4>=-1 THEN OUTPUT COL4;
RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;


DATA FIG4;
   MERGE COL2 COL3 COL4;
   BY ROW;
RUN;

*/
*****************************************************************************
* DDE LINK (EXCEL file has to be open )
*****************************************************************************;
/*
FILENAME TBL DDE "EXCEL|DISENROLL!R19C2:R22C4";

DATA _NULL_;
   SET FIG4;
   FILE TBL NOTAB LRECL=200;
   PUT COL2 '09'X COL3 '09'X COL4;
RUN;  */

******************************************************************************
* FIGURE 5: Access Composites
******************************************************************************;
TITLE2 'Figure 5: Access Composites';
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD4,
          OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD4,
          OUTDATA=FIG5&PERIOD4Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD3,
          OUTDATA=FIG5&PERIOD3Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD2,
          OUTDATA=FIG5&PERIOD2Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Getting Needed Care','Getting Care Quickly'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD1,
          OUTDATA=FIG5&PERIOD1Q);
```

```
    %MACRO COMPSCORE (QUARTER=,     /*Data is processed for current quarter and each of 3 previous
quarters*/
                      FIGNUM=                   /*Use   macro   for   figures   5,   6,   and   7
*/
                     );
    DATA FIG&FIGNUM.Q&QUARTER FIGB&QUARTER(KEEP=SCORE BENEFIT SIG);
       SET FIG&FIGNUM.Q&QUARTER;
       IF REGION = 'Benchmark' THEN OUTPUT FIGB&QUARTER;
          ELSE OUTPUT FIG&FIGNUM.Q&QUARTER;
    RUN;
    PROC SORT DATA=FIG&FIGNUM.Q&QUARTER;
       BY BENEFIT;
    RUN;
    PROC SORT DATA=FIGB&QUARTER;
       BY BENEFIT;
    RUN;


    /*ADD CODE HERE TO PRESERVE THE SCORES IN CONUS_Q DATASET FOR LATER COMPARISON. LLU 10/7/04*/

    DATA CFIG&FIGNUM.Q&QUARTER;
       SET FIG&FIGNUM.Q&QUARTER;

    KEEP MAJGRP REGION BENEFIT BENTYPE TIMEPD SCORE SIG;
    RUN;


    DATA FIG&FIGNUM.Q&QUARTER(DROP=RSCORE);
       MERGE FIGB&QUARTER(RENAME=(SCORE=RSCORE))
             FIG&FIGNUM.Q&QUARTER;
       BY BENEFIT;
       SCORE=SCORE-RSCORE;
    RUN;
    %MEND COMPSCORE;

    %COMPSCORE (QUARTER=1,
                FIGNUM=5);
    %COMPSCORE (QUARTER=2,
                FIGNUM=5);
    %COMPSCORE (QUARTER=3,
                FIGNUM=5);
    %COMPSCORE (QUARTER=4,
                FIGNUM=5);


    DATA COL2(DROP=SCORE RENAME=(SCORE1=COL2))
         COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
         COL4(DROP=SCORE  RENAME=(SCORE1=COL4))           /*LLU 10/8/04, TO PRESERVE KEY VARS FOR
LATER COMPARISON*/
         COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
         COL6(KEEP=ROW SIG RENAME=(SIG=COL6))
         COL7(kEEP=ROW SIG RENAME=(SIG=COL7))
         ;
       SET BENCH FIG5Q4 FIG5Q3 FIG5Q2 FIG5Q1;
       BY BENEFIT;
       RETAIN BSCORE;
       IF REGION = 'Benchmark' THEN DO;
          BSCORE=SCORE;
          ROW = 18;
          SCORE1 = SCORE;
       END;
       ELSE IF TIMEPD = &PERIOD1 THEN DO;
          ROW = 18;
          SCORE=BSCORE+SCORE;
          IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
             ELSE SCORE1=SCORE;
       END;
       ELSE IF TIMEPD = &PERIOD2 THEN DO;
          ROW = 19;
          SCORE=BSCORE+SCORE;
          IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
             ELSE SCORE1=SCORE;
       END;
```

```
   ELSE IF TIMEPD = &PERIOD3 THEN DO;
      ROW = 20;
      SCORE=BSCORE+SCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
         ELSE SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = &PERIOD4 THEN DO;
      ROW = 21;
      SCORE=BSCORE+SCORE;
      SCORE1 = SCORE;
   END;

   IF (BENEFIT = 'Getting Needed Care' AND REGION NE 'Benchmark') THEN OUTPUT COL2 COL6;
   IF (BENEFIT = 'Getting Needed Care' AND REGION = 'Benchmark') THEN OUTPUT COL3;
   IF (BENEFIT = 'Getting Care Quickly' AND REGION NE 'Benchmark') THEN OUTPUT COL4 COL7;
   IF (BENEFIT = 'Getting Care Quickly' AND REGION = 'Benchmark') THEN OUTPUT COL5;

RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;


/*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 5. LLU 10/7/04*/

DATA FIG5A;
   MERGE COL2 COL6;
  BY ROW;
RUN;

DATA FIG5B;
   MERGE  COL4 COL7;
  BY ROW;
RUN;

DATA FIG5AB;
   SET FIG5A FIG5B;
  BY ROW;
RUN;



DATA FIG5;
   MERGE COL2 COL3 COL4(KEEP=ROW COL4)
         COL5 COL6 COL7;
   BY ROW;
RUN;


*****************************************************************************
* DDE LINK (EXCEL file has to be open )
*****************************************************************************;
FILENAME TBL DDE "EXCEL|COMPOSITES!R18C2:R21C2";

DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   PUT COL2;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C3:R18C3";

DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   PUT COL3;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C4:R21C4";
```

```
DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   PUT COL4;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C5:R18C5";

DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   PUT COL5;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R23C2:R26C4";

DATA _NULL_;
   SET FIG5;
   FILE TBL NOTAB LRECL=200;
   PUT COL6 '09'X '09'X COL7;
RUN;

*******************************************************************************
* FIGURE 6: Office Composites
*******************************************************************************;
TITLE2 'Figure 6: Office Composites';
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('Courteous and Helpful Office Staff','How Well Doctors Communicate'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD4,
          OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Courteous and Helpful Office Staff','How Well Doctors Communicate'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD4,
          OUTDATA=FIG6&PERIOD4Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Courteous and Helpful Office Staff','How Well Doctors Communicate'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD3,
          OUTDATA=FIG6&PERIOD3Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Courteous and Helpful Office Staff','How Well Doctors Communicate'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD2,
          OUTDATA=FIG6&PERIOD2Q);
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=("&VAL",'Benchmark'),
          REGCAT=("&VAL",'Benchmark'),
          BENEFIT=('Courteous and Helpful Office Staff','How Well Doctors Communicate'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD1,
          OUTDATA=FIG6&PERIOD1Q);

%COMPSCORE (QUARTER=1,
            FIGNUM=6);
%COMPSCORE (QUARTER=2,
            FIGNUM=6);
%COMPSCORE (QUARTER=3,
```

```
                FIGNUM=6);
    %COMPSCORE (QUARTER=4,
                FIGNUM=6);



    DATA COL2(DROP=SCORE RENAME=(SCORE1=COL2))
         COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
         COL4(DROP=SCORE  RENAME=(SCORE1=COL4))           /*LLU 10/8/04, TO PRESERVE KEY VARS FOR
LATER COMPARISON*/
         COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
         COL6(KEEP=ROW SIG RENAME=(SIG=COL6))
         COL7(kEEP=ROW SIG RENAME=(SIG=COL7))
         ;
       SET BENCH FIG6Q4 FIG6Q3 FIG6Q2 FIG6Q1;
       BY BENEFIT;
       RETAIN BSCORE;
       IF REGION = 'Benchmark' THEN DO;
          BSCORE=SCORE;
          ROW = 18;
          SCORE1 = SCORE;
       END;
       ELSE IF TIMEPD = &PERIOD1 THEN DO;
          ROW = 18;
          SCORE=BSCORE+SCORE;
          IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
             ELSE SCORE1=SCORE;
       END;
       ELSE IF TIMEPD = &PERIOD2 THEN DO;
          ROW = 19;
          SCORE=BSCORE+SCORE;
          IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
             ELSE SCORE1=SCORE;
       END;
       ELSE IF TIMEPD = &PERIOD3 THEN DO;
          ROW = 20;
          SCORE=BSCORE+SCORE;
          IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
             ELSE SCORE1=SCORE;
       END;
       ELSE IF TIMEPD = &PERIOD4 THEN DO;
          ROW = 21;
          SCORE=BSCORE+SCORE;
          SCORE1 = SCORE;
       END;

       IF (BENEFIT = 'Courteous and Helpful Office Staff' AND REGION NE 'Benchmark') THEN OUTPUT
COL2 COL6;
       IF (BENEFIT = 'Courteous and Helpful Office Staff' AND REGION = 'Benchmark') THEN OUTPUT
COL3;
       IF (BENEFIT = 'How Well Doctors Communicate' AND REGION NE 'Benchmark') THEN OUTPUT COL4
COL7;
       IF (BENEFIT = 'How Well Doctors Communicate' AND REGION = 'Benchmark') THEN OUTPUT COL5;

    RUN;

    PROC SORT DATA=COL2; BY ROW; RUN;
    PROC SORT DATA=COL3; BY ROW; RUN;
    PROC SORT DATA=COL4; BY ROW; RUN;
    PROC SORT DATA=COL5; BY ROW; RUN;
    PROC SORT DATA=COL6; BY ROW; RUN;
    PROC SORT DATA=COL7; BY ROW; RUN;



    /*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 6. LLU 10/7/04*/

    DATA FIG6A;
       MERGE COL2 COL6;
      BY ROW;
    RUN;
```

```
DATA FIG6B;
   MERGE  COL4 COL7;
  BY ROW;
RUN;

DATA FIG6AB;
   SET FIG6A FIG6B;
  BY ROW;
RUN;


DATA FIG6;
   MERGE COL2 COL3 COL4(KEEP=ROW COL4)
         COL5 COL6 COL7;
   BY ROW;
RUN;

*****************************************************************************
* DDE LINK (EXCEL file has to be open )
*****************************************************************************;
FILENAME TBL DDE "EXCEL|COMPOSITES!R18C8:R21C8";

DATA _NULL_;
   SET FIG6;
   FILE TBL NOTAB LRECL=200;
   PUT COL2;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C9:R18C9";

DATA _NULL_;
   SET FIG6;
   FILE TBL NOTAB LRECL=200;
   PUT COL3;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C10:R21C10";

DATA _NULL_;
   SET FIG6;
   FILE TBL NOTAB LRECL=200;
   PUT COL4;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C11:R18C11";

DATA _NULL_;
   SET FIG6;
   FILE TBL NOTAB LRECL=200;
   PUT COL5;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R23C8:R26C10";

DATA _NULL_;
   SET FIG6;
   FILE TBL NOTAB LRECL=200;
   PUT COL6 '09'X '09'X COL7;
RUN;

******************************************************************************
* FIGURE 7: Claims/Service Composites
******************************************************************************;
TITLE2 'Figure 7: Claims/Service Composites';
%GETDATA (DATASET=&CURRENT,
          MAJGRP="&POP",
          REGION=('Benchmark'),
          REGCAT=('Benchmark'),
          BENEFIT=('Customer Service','Claims Processing'),
          BENTYPE=('Composite'),
          TIMEPD=&PERIOD4,
          OUTDATA=BENCH);
%GETDATA (DATASET=&CURRENT,
```

```
            MAJGRP="&POP",
            REGION=("&VAL",'Benchmark'),
            REGCAT=("&VAL",'Benchmark'),
            BENEFIT=('Customer Service','Claims Processing'),
            BENTYPE=('Composite'),
            TIMEPD=&PERIOD4,
            OUTDATA=FIG7&PERIOD4Q);
    %GETDATA (DATASET=&CURRENT,
            MAJGRP="&POP",
            REGION=("&VAL",'Benchmark'),
            REGCAT=("&VAL",'Benchmark'),
            BENEFIT=('Customer Service','Claims Processing'),
            BENTYPE=('Composite'),
            TIMEPD=&PERIOD3,
            OUTDATA=FIG7&PERIOD3Q);
    %GETDATA (DATASET=&CURRENT,
            MAJGRP="&POP",
            REGION=("&VAL",'Benchmark'),
            REGCAT=("&VAL",'Benchmark'),
            BENEFIT=('Customer Service','Claims Processing'),
            BENTYPE=('Composite'),
            TIMEPD=&PERIOD2,
            OUTDATA=FIG7&PERIOD2Q);
    %GETDATA (DATASET=&CURRENT,
            MAJGRP="&POP",
            REGION=("&VAL",'Benchmark'),
            REGCAT=("&VAL",'Benchmark'),
            BENEFIT=('Customer Service','Claims Processing'),
            BENTYPE=('Composite'),
            TIMEPD=&PERIOD1,
            OUTDATA=FIG7&PERIOD1Q);

    %COMPSCORE (QUARTER=1,
             FIGNUM=7);
    %COMPSCORE (QUARTER=2,
             FIGNUM=7);
    %COMPSCORE (QUARTER=3,
             FIGNUM=7);
    %COMPSCORE (QUARTER=4,
             FIGNUM=7);

    DATA COL2(DROP=SCORE RENAME=(SCORE1=COL2))
         COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
         COL4(DROP=SCORE  RENAME=(SCORE1=COL4))           /*LLU 10/8/04, TO PRESERVE KEY VARS FOR
LATER COMPARISON*/
         COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
         COL6(KEEP=ROW SIG RENAME=(SIG=COL6))
         COL7(kEEP=ROW SIG RENAME=(SIG=COL7));
       SET BENCH FIG7Q4 FIG7Q3 FIG7Q2 FIG7Q1;
       BY BENEFIT;
       RETAIN BSCORE;
       IF REGION = 'Benchmark' THEN DO;
          BSCORE=SCORE;
          ROW = 18;
          SCORE1 = SCORE;
       END;
       ELSE IF TIMEPD = &PERIOD1 THEN DO;
          ROW = 18;
          SCORE=BSCORE+SCORE;
          IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
             ELSE SCORE1=SCORE;
       END;
       ELSE IF TIMEPD = &PERIOD2 THEN DO;
          ROW = 19;
          SCORE=BSCORE+SCORE;
          IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
             ELSE SCORE1=SCORE;
       END;
       ELSE IF TIMEPD = &PERIOD3 THEN DO;
          ROW = 20;
          SCORE=BSCORE+SCORE;
          IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
             ELSE SCORE1=SCORE;
```

```
   END;
   ELSE IF TIMEPD = &PERIOD4 THEN DO;
      ROW = 21;
      SCORE=BSCORE+SCORE;
      SCORE1 = SCORE;
   END;

   IF (BENEFIT = 'Customer Service' AND REGION NE 'Benchmark') THEN OUTPUT COL2 COL6;
   IF (BENEFIT = 'Customer Service' AND REGION = 'Benchmark') THEN OUTPUT COL3;
   IF (BENEFIT = 'Claims Processing' AND REGION NE 'Benchmark') THEN OUTPUT COL4 COL7;
   IF (BENEFIT = 'Claims Processing' AND REGION = 'Benchmark') THEN OUTPUT COL5;

RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;


/*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 7. LLU 10/7/04*/

DATA FIG7A;
   MERGE COL2 COL6;
  BY ROW;
RUN;

DATA FIG7B;
   MERGE  COL4 COL7;
  BY ROW;
RUN;

DATA FIG7AB;
   SET FIG7A FIG7B;
  BY ROW;
RUN;


DATA FIG7;
   MERGE COL2 COL3 COL4(KEEP=ROW COL4) COL5 COL6 COL7;
   BY ROW;
RUN;


******************************************************************************
* DDE LINK (EXCEL file has to be open )
******************************************************************************;
FILENAME TBL DDE "EXCEL|COMPOSITES!R18C14:R21C14";

DATA _NULL_;
   SET FIG7;
   FILE TBL NOTAB LRECL=200;
   PUT COL2;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C15:R18C15";

DATA _NULL_;
   SET FIG7;
   FILE TBL NOTAB LRECL=200;
   PUT COL3;
RUN;

FILENAME TBL DDE "EXCEL|COMPOSITES!R18C16:R21C16";

DATA _NULL_;
   SET FIG7;
   FILE TBL NOTAB LRECL=200;
   PUT COL4;
RUN;
```

```
    FILENAME TBL DDE "EXCEL|COMPOSITES!R18C17:R18C17";

    DATA _NULL_;
       SET FIG7;
       FILE TBL NOTAB LRECL=200;
       PUT COL5;
    RUN;

    FILENAME TBL DDE "EXCEL|COMPOSITES!R23C14:R26C16";

    DATA _NULL_;
       SET FIG7;
       FILE TBL NOTAB LRECL=200;
       PUT COL6 '09'X '09'X COL7;
    RUN;

    ******************************************************************************
    * TABLE 1: Preventive Care
    ******************************************************************************;
    PROC FREQ NOPRINT DATA=&CURRENT;
       WHERE MAJGRP IN ("&POP",'Benchmark')
         AND REGION = "&VAL"
         AND REGCAT = "&VAL"
         AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
         AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                         'Percent Not Obese', 'Non-Smoking Rate','Counselled To Quit')
         AND TIMEPD = &PERIOD4;
       TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/ OUT=TAB1_&PERIOD4Q(DROP=COUNT
PERCENT);
       TABLES   MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*N_OBS/   OUT=TAB2_&PERIOD4Q(DROP=COUNT
PERCENT);
    RUN;
    PROC FREQ NOPRINT DATA=&CURRENT;
       WHERE MAJGRP = "&POP"
         AND REGION = "&VAL"
         AND REGCAT = "&VAL"
         AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
         AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                       'Percent Not Obese','Non-Smoking Rate','Counselled To Quit')
         AND TIMEPD = &PERIOD3;
       TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/ OUT=TAB1_&PERIOD3Q(DROP=COUNT
PERCENT);
    RUN;
    PROC FREQ NOPRINT DATA=&CURRENT;
       WHERE MAJGRP = "&POP"
         AND REGION = "&VAL"
         AND REGCAT = "&VAL"
         AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
         AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                         'Percent Not Obese','Non-Smoking Rate','Counselled To Quit')
         AND TIMEPD = &PERIOD2;
       TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/ OUT=TAB1_&PERIOD2Q(DROP=COUNT
PERCENT);
    RUN;
    PROC FREQ NOPRINT DATA=&CURRENT;
       WHERE MAJGRP = "&POP"
         AND REGION = "&VAL"
         AND REGCAT = "&VAL"
         AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
         AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
                         'Percent Not Obese','Non-Smoking Rate','Counselled To Quit')
         AND TIMEPD = &PERIOD1;
       TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/ OUT=TAB1_&PERIOD1Q(DROP=COUNT
PERCENT);
    RUN;
    DATA TAB1&PERIOD4Q;
       SET TAB1_&PERIOD4Q;
       IF MAJGRP = 'Benchmark' THEN DO;
          ROW=42;
          IF BENTYPE='Mammography' THEN COL2=SCORE;
             ELSE IF BENTYPE='Pap Smear' THEN COL3=SCORE;
             ELSE IF BENTYPE='Hypertension' THEN COL4=SCORE;
             ELSE IF BENTYPE='Prenatal Care' THEN COL5=SCORE;
```

```
         ELSE IF BENTYPE='Percent Not Obese' THEN COL6=SCORE;
         ELSE IF BENTYPE = 'Non-Smoking Rate' THEN COL7=SCORE;
         ELSE IF BENTYPE ='Counselled To Quit' THEN COL8=SCORE;
   END;
      ELSE DO;
      ROW = 40;
      IF BENTYPE='Mammography' THEN DO;
         COL2=SCORE;
         COL9=SIG;
      END;
      ELSE IF BENTYPE='Pap Smear' THEN DO;
         COL3=SCORE;
         COL10=SIG;
      END;
      ELSE IF BENTYPE='Hypertension' THEN DO;
         COL4=SCORE;
         COL11=SIG;
      END;
      ELSE IF BENTYPE='Prenatal Care' THEN DO;
         COL5=SCORE;
         COL12=SIG;
      END;
      ELSE IF BENTYPE='Percent Not Obese' THEN DO;
         COL6=SCORE;
         COL13=SIG;
      END;
      ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
         COL7=SCORE;
         COL14=SIG;
      END;
      ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
         COL8=SCORE;
         COL15=SIG;
      END;
    END;
   PROC SORT;
   BY ROW;
RUN;
DATA TAB2&PERIOD4Q;
   SET TAB2_&PERIOD4Q;
   ROW=41;
   IF MAJGRP="&POP";
   IF BENTYPE='Mammography' THEN COL2=N_OBS;
      ELSE IF BENTYPE='Pap Smear' THEN COL3=N_OBS;
      ELSE IF BENTYPE='Hypertension' THEN COL4=N_OBS;
      ELSE IF BENTYPE='Prenatal Care' THEN COL5=N_OBS;
      ELSE IF BENTYPE='Percent Not Obese' THEN COL6=N_OBS;
      ELSE IF BENTYPE='Non-Smoking Rate' THEN COL7=N_OBS;
       ELSE IF BENTYPE='Counselled To Quit' THEN COL8=N_OBS;
   PROC SORT;
   BY ROW;
RUN;
DATA TAB1&PERIOD3Q;
   SET TAB1_&PERIOD3Q;
   ROW=39;
      IF BENTYPE='Mammography' THEN DO;
         COL2=SCORE;
         COL9=SIG;
      END;
      ELSE IF BENTYPE='Pap Smear' THEN DO;
         COL3=SCORE;
         COL10=SIG;
      END;
      ELSE IF BENTYPE='Hypertension' THEN DO;
         COL4=SCORE;
         COL11=SIG;
      END;
      ELSE IF BENTYPE='Prenatal Care' THEN DO;
         COL5=SCORE;
         COL12=SIG;
      END;
      ELSE IF BENTYPE='Percent Not Obese' THEN DO;
         COL6=SCORE;
```

```
         COL13=SIG;
      END;
      ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
         COL7=SCORE;
         COL14=SIG;
      END;
      ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
         COL8=SCORE;
         COL15=SIG;
      END;
   PROC SORT;
   BY ROW;
RUN;
DATA TAB1&PERIOD2Q;
   SET TAB1_&PERIOD2Q;
   ROW=38;
      IF BENTYPE='Mammography' THEN DO;
         COL2=SCORE;
         COL9=SIG;
      END;
      ELSE IF BENTYPE='Pap Smear' THEN DO;
         COL3=SCORE;
         COL10=SIG;
      END;
      ELSE IF BENTYPE='Hypertension' THEN DO;
         COL4=SCORE;
         COL11=SIG;
      END;
      ELSE IF BENTYPE='Prenatal Care' THEN DO;
         COL5=SCORE;
         COL12=SIG;
      END;
      ELSE IF BENTYPE='Percent Not Obese' THEN DO;
         COL6=SCORE;
         COL13=SIG;
      END;
  ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
         COL7=SCORE;
         COL14=SIG;
      END;
      ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
         COL8=SCORE;
         COL15=SIG;
      END;
   PROC SORT;
   BY ROW;

RUN;
DATA TAB1&PERIOD1Q;
   SET TAB1_&PERIOD1Q;
   ROW=37;
      IF BENTYPE='Mammography' THEN DO;
         COL2=SCORE;
         COL9=SIG;
      END;
      ELSE IF BENTYPE='Pap Smear' THEN DO;
         COL3=SCORE;
         COL10=SIG;
      END;
      ELSE IF BENTYPE='Hypertension' THEN DO;
         COL4=SCORE;
         COL11=SIG;
      END;
      ELSE IF BENTYPE='Prenatal Care' THEN DO;
         COL5=SCORE;
         COL12=SIG;
      END;
      ELSE IF BENTYPE='Percent Not Obese' THEN DO;
         COL6=SCORE;
         COL13=SIG;
      END;
    ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
         COL7=SCORE;
```

```
         COL14=SIG;
      END;
      ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
         COL8=SCORE;
         COL15=SIG;
      END;
   PROC SORT;
   BY ROW;
RUN;

DATA TAB1;
   MERGE TAB1&PERIOD1Q TAB1&PERIOD2Q TAB1&PERIOD3Q TAB1&PERIOD4Q TAB2&PERIOD4Q;
   BY ROW;
RUN;
DATA COL2(DROP=COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL3(DROP=COL2 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL4(DROP=COL2 COL3 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL5(DROP=COL2 COL3 COL4 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL6(DROP=COL2 COL3 COL4 COL5 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL7(DROP=COL2 COL3 COL4 COL5 COL6 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL8(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL9(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL10 COL11 COL12 COL13 COL14 COL15)
     COL10(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL11 COL12 COL13 COL14 COL15)
     COL11(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL12 COL13 COL14 COL15)
     COL12(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL13 COL14 COL15)
  COL13(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL14 COL15)
    COL14(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL15)
    COL15(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14);

   SET TAB1;

   IF COL2 NE . THEN OUTPUT COL2;
   IF COL3 NE . THEN OUTPUT COL3;
   IF COL4 NE . THEN OUTPUT COL4;
   IF COL5 NE . THEN OUTPUT COL5;
   IF COL6 NE . THEN OUTPUT COL6;
   IF COL7 NE . THEN OUTPUT COL7;
   IF COL8 NE . THEN OUTPUT COL8;
   IF COL9 NE . THEN OUTPUT COL9;
   IF COL10 NE . THEN OUTPUT COL10;
   IF COL11 NE . THEN OUTPUT COL11;
   IF COL12 NE . THEN OUTPUT COL12;
   IF COL13 NE . THEN OUTPUT COL13;
   IF COL14 NE . THEN OUTPUT COL14;
   IF COL15 NE . THEN OUTPUT COL15;
RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;
PROC SORT DATA=COL8; BY ROW; RUN;
PROC SORT DATA=COL9; BY ROW; RUN;
PROC SORT DATA=COL10; BY ROW; RUN;
PROC SORT DATA=COL11; BY ROW; RUN;
PROC SORT DATA=COL12; BY ROW; RUN;
PROC SORT DATA=COL13; BY ROW; RUN;
PROC SORT DATA=COL14; BY ROW; RUN;
PROC SORT DATA=COL15; BY ROW; RUN;

DATA TABLE1;
   MERGE COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15;
   BY ROW;
RUN;

*****************************************************************************
* DDE LINK (EXCEL file has to be open )
*****************************************************************************;
FILENAME TBL DDE "EXCEL|TABLES!R3C10:R8C24";

DATA _NULL_;
```

```
        SET TABLE1;
        FILE TBL NOTAB LRECL=200;
        IF ROW NE 42 THEN DO;
        PUT COL2 '09'X COL3 '09'X COL4 '09'X COL5 '09'X COL6 '09'X COL7 '09'X COL8 '09'X COL9 '09'X
COL10
            '09'X COL11 '09'X COL12 '09'X COL13 '09'X COL14 '09'X COL15;
        END;
        ELSE DO;    *no benchmark for counselling;
        PUT COL2 '09'X COL3 '09'X COL4 '09'X COL5 '09'X COL6 '09'X COL7 '09'X '-' '09'X COL9 '09'X
COL10
            '09'X COL11 '09'X COL12 '09'X COL13 '09'X COL14 '09'X COL15;
        END;
    RUN;

    /*Run Excel macro signif,  May 9 2006, LLU*/

    options noxsync;
    *-- Specify XL filename ;

    *%let excelf = &FOLDER..XLS ;

    *-- Specify XL macro name ;
    %let macron = signif ;


    FILENAME CMDS DDE "EXCEL|SYSTEM";


    DATA _NULL_;
      FILE CMDS;
      DDECommand = '[Run("' || "&macron" || '",0)]' ;
      put DDEcommand ;

    RUN;


    DATA _NULL_;
       FILE CMDS;
       PUT '[SAVE]';
       PUT '[QUIT]';
    RUN;



    ******************************************************************************
           COMPARE SCORES AND SIG B/T CONSUMER WATCH AND REPORT CARDS.
           SET 0.015 DIFFERENCE AS THRESHOLD.
           LUCY LU 10/07/2004
    ******************************************************************************;

    PROC SORT DATA=FIG1(DROP=SCORE);               *FROM CONSUMER WATCH. LLU 10/8/04;
    BY BENEFIT TIMEPD REGION;

    PROC SORT DATA=FIG2(DROP=SCORE);
    BY BENEFIT TIMEPD REGION;

    PROC SORT DATA=FIG3(DROP=SCORE);
    BY BENEFIT TIMEPD REGION;

    PROC SORT DATA=FIG5AB OUT=FIG5;
    BY BENEFIT TIMEPD REGION;

    PROC SORT DATA=FIG6AB OUT=FIG6;
    BY BENEFIT TIMEPD REGION;

    PROC SORT DATA=FIG7AB OUT=FIG7;
    BY BENEFIT TIMEPD REGION;
    RUN;



    %MACRO COMPARE(I=, TITL=);
```

```
DATA CFIG&I;                  *FROM CONUS. LLU 10/8/04;

  SET CFIG&I.Q1
      CFIG&I.Q2
      CFIG&I.Q3
      CFIG&I.Q4
      ;
RUN;


PROC SORT DATA=FIG&I;
BY BENEFIT TIMEPD REGION;
RUN;

PROC SORT DATA=CFIG&I;
BY BENEFIT TIMEPD REGION;
RUN;

DATA COMBFIG&I;
   MERGE CFIG&I.(IN=F1) FIG&I(IN=F2);
BY BENEFIT TIMEPD REGION;


IF F1 AND F2;

FIG = &I;

IF FIG <=4 THEN DO;
   SCORE2=COL2*100;
   SIG2=COL3;
END;

ELSE IF FIG >4 THEN DO;
   IF COL2 >= 0 THEN SCORE2=COL2;
   ELSE IF COL4 >0 THEN SCORE2=COL4;

   IF COL6 >= .Z THEN SIG2=COL6;
   ELSE IF COL7>=.Z THEN SIG2=COL7;
END;


   SCOREDIF=SCORE2-SCORE;
   SIGDIF=SIG2-SIG;


IF ABS(SCOREDIF)>.015 OR SIGDIF>0 THEN FLAG=1;
ELSE FLAG=0;

KEEP BENEFIT TIMEPD REGION SCORE SIG SCORE2 SIG2 SCOREDIF SIGDIF FLAG;

LABEL
FLAG="DIFF IN SCORES >0.015 OR/AND DIFF IN SIG >0"
SCORE="SCORES FROM CONUS"
SCORE2="SCORES FROM CONSUMER WATCH"
SIG="SIG FROM CONUS"
SIG2="SIG FROM CONSUMER WATCH"
;


TITLE  "  ";
TITLE2 "*********************************************************";
TITLE3 "CONSUMER WATCH, &AREA ";

PROC PRINT L NOOBS;
TITLE4 "Compare &TITL.";
RUN;


%MEND COMPARE;
```

```
%COMPARE(I=1, TITL=Health Care Rating);
%COMPARE(I=2, TITL=Health Plan Rating);
%COMPARE(I=3, TITL=Personal Provider Rating);
%COMPARE(I=4, TITL=Specialist Rating);

%COMPARE(I=5, TITL=Access composites);

%COMPARE(I=6, TITL=Office composites);
%COMPARE(I=7, TITL=Claims/Service composites);



%MEND RUNCW;
```

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APPENDIX I

SAS CODE FOR STATISTICAL AND WEB SPECIFICATIONS FOR THE 2007 TRICARE PURCHASED CARE BENEFICIARY REPORTS - QUARTERS I-IV

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I.1.A Q4FY2007\PROGRAMS\PURCHASEDREPORTCARDS\CAHPS_ADULTQ4FY2007\STEP1Q.SAS - CREATE AND RECODE VARIABLES USED IN ADULT BENEFICIARY REPORTS - RUN QUARTERLY.

```
*****************************************************************************
*
*  PROJECT:  DoD - Quarterly Adult Report Cards
*  PROGRAM:  STEP1Q.SAS
*  PURPOSE:  Create Dummy and Recode Variables used in Adult Report Card
*         Create a Female dummy variable
*         Create an Education dummy variable
*         Create 15 region dummies combining regions.
*      7 & 8 into region 8. That is, there
*      isn't a region 7 dummy.
*         Create 7 age dummy variables.
*
*  We require the most desired code to be the highest value.
*  Recode the dependent variables into:
*         1 - the least desirable value
*         2 - the 2nd least desirable value
*         3 - the most desirable value
*         . - missing
*
*  Create 7 variables GROUP1 - GROUP7
*        IF (XINS_COV IN (1,2,6) AND H07007>=2) THEN GROUP1 = 1
*        IF (XENR_PCM IN (1,2,6) AND H07007>=2) THEN GROUP2 = 1
*        IF (XENR_PCM = 3,7      AND H07007>=2) THEN GROUP3 = 1
*        IF XINS_COV IN (3) THEN GROUP4 = 1
*       /*JSO 08/24/2006, Deleted 4,5*/
*        IF XBNFGRP = 1     THEN GROUP5 = 1
*        IF XBNFGRP = 2     THEN GROUP6 = 1
*        IF XBNFGRP IN (3,4)THEN GROUP7 = 1
*        GROUP8 is output for all beneficiaries
*
*  MODIFIED: 1) February 2001 By Keith Rathbun, Update for quarterly
*     adult report cards.  Removed permanent dataset ENTIRE.SD2.
*  2) August 2001 By Keith Rathbun, Updated DSN and LIBNAME
*     for 3rd quarter adult report cards.
*  3) OCTOBER 2001 BY DANIELE BEAHM, Because there was no post-
*     stratification done in Q3, changed all references of the
*     POSTSTR variable to ADJ_CELL
*  4) JANUARY 2002 BY DANIELE BEAHM, Modified group3 to include
*     XENR_PCM
*  5) April 2002 By Mike Scott, Updated variable names for 2002
*     survey.
*  6) July 2002 By Mike Scott: See Note #2.  Replaced variable
*     S02S01 with H04075 (new health status variable), deleted
*     code to recode S02S01 to H00077, and changed H00077/R00077
*     rename/recode to H04075/R04075 rename/recode.  The Hispanic/
*     Latino variable is not present.
*  7) January 2003 By Mike Scott, Changed ADJ_CELL to COM_SAMP.
*  8) March 2003 By Mike Scott, Updated variable names for 2003
*     survey.
*  9) June 2003 By Mike Scott, Updated for Q2 2003.
* 10) July 2003 By Mike Scott, Changed COM_SAMP to ADJ_CELL.
* 11) October 2003 By Mike Scott, Updated for Q3 2003.
* 12) January 2004 By Mike Scott, Updated for Q4 2003, and changed
*     DAGEQY to FIELDAGE.
* 13) March 2004 By Mike Scott, Updated for Q1 2004.
* 14) April 2004 By Keith Rathbun, Removed reverse coding for
*     H04031.  2004 survey question wording is 'Within 15 minutes'
*     instead of "More than 15 Minutes".  Added service affiliation
*     variables so only one version of this program is needed to
*     handle the consumer watch processing.
*           15) June 2004 by Regina Gramss, Updated for Q2 2004.
* 16) Sept 2004 by Regina Gramss, changed XRegion to xtenxreg, updated for Q3 2004.
* 17) Jan 2005 by Regina Gramss, changed XTENXREG to XSERVREG to include
*     service affiliation.  Regions have been changed from 4 categories to 16.
* 18) Apr 2005 by Regina Gramss, updated field names for 2005 data.
* 19) Jul 2005 by Regina Gramss, updated for Q2 2005
* 20) Oct 2005 by Regina Gramss, updated for Q3 2005
* 21) Dec 2005 by Regina Gramss, updated for Q4 2005
* 22) March 21, 2006 by Keith Rathbun, updated variable names
```

```
*     for Q2 FY 2006.  Changed references to ADJ_CELL to be STRATUM.
* 23) July 12, 2006 by Justin Oh, updated for Q3 FY 2006
* 24) Aug 22, 2006 by Justin Oh, changed overseas to 3 regions.
*     Regions have been changed from 16 categories to 24.
*     Added XOCONUS to the Keep statement for Overseas classifications.
*     Changed XSERVREG for Overseas (Europe,Pacific,Latin America).
*     Changed IF XINS_COV IN (3,4,5) THEN GROUP4 = 1 to
*   IF XINS_COV IN (3)     THEN GROUP4 = 1
*     Since only XINS_COV IN (1,2,3,6) is kept, (4,5) not needed.
* 25) Oct 03, 2006 by Justin Oh, changed input data HCS063_1 to HCS064_1
*     for Q4FY2006 reports.
* 26) Apr 05, 2007 by Justin Oh, Added %LET BCHTYPE to select BCH types
*     Benchmark OR PurchasedBenchmark.
* 27) Apr 05, 2007 by Justin Oh, Added changes to select RC types
*     ReportCards OR PurchasedReportCards.
* 28) Apr 26, 2007 by Justin Oh, Added codes, variables for new
*     reservists logic.
* 29) May 15, 2007 by Justin Oh, Changed XINS_COV to NXNS_COV to assign
*     Groups 1,3, and 4 for new reservists logic.
* 30) Jul 30, 2007 by Justin Oh, Added added DBENCAT conditions to assign
*     Groups All, 4, 5, and 6.
* 31) Oct 02, 2007 by Justin Oh, changed input data HCS073_1 to HCS074_1
*     for Q4FY2007 reports.
*
*
*  INPUTS:   1) HCSyyq_1 - DoD Quarterly HCS Database
*
*  OUTPUTS:  1) GROUP1-8.SD2 - DoD Quarterly GROUP files as defined above
*
*  INCLUDES: 1) CONVERT.SAS - Convert item responses to proportional
*         values for consistency w/ TOPS
*
*  NOTES:    1) Groups 1-3 modified 10/09/2000
*
*  2) In Q1_2002, S02S01 was renamed and recoded to H00077 (health
*     status variable for 2000).  H02077 was the Hispanic/Latino
*     variable.  In Q2_2002, H02077 is health status, and H02079
*     is the Hispanic/Latino variable.  To make the Quarter 2 data
*     file (HSC022_1.sd2) more consistent with the Quarter 1 file,
*     the health status variable which was H02077 is now H04075,
*     and the Hispanic/Latino variable which was H02079 is now
*     H02077.
*
*****************************************************************************;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards      ***/
%LET RCTYPE = PurchasedReportCards;

OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMTERR NOOVP COMPRESS=YES;
LIBNAME OUT V612 "DATA";
LIBNAME IN1 V612 "..\..\..\Data\AFinal";
LIBNAME LIBRARY  "..\..\..\Data\Afinal\fmtlib";

TITLE1    'Program Saved as: STEP1Q.SAS';

%LET WGT = FWRWT;

proc format;
     value servreg 1 = 'North Army'
         2 = 'North Air Force'
         3 = 'North Navy'
         4 = 'North Other'
         5 = 'South Army'
         6 = 'South Air Force'
         7 = 'South Navy'
         8 = 'South Other'
         9 = 'West Army'
        10 = 'West Air Force'
        11 = 'West Navy'
        12 = 'West Other'
        13 = 'Europe Army'
        14 = 'Europe Air Force'
        15 = 'Europe Navy'
```

```
        16 = 'Europe Other'
        17 = 'Pacific Army'
        18 = 'Pacific Air Force'
        19 = 'Pacific Navy'
        20 = 'Pacific Other'
        21 = 'Latin America Army'
        22 = 'Latin America Air Force'
        23 = 'Latin America Navy'
        24 = 'Latin America Other';

DATA ENTIRE;
   SET IN1.HCS074_1(KEEP=
       MPRID
       FIELDAGE   /*MJS 01/26/04*/
       XTNEXREG
       SERVAFF    /*KRR 04/09/04*/
       DBENCAT    /*JSO 04/26/2007, added for reservists logic*/
       CONUS
       ENBGSMPL
       SREDA
       XSEXA
       XBNFGRP
       STRATUM    /*KRR 04/03/2006, changed from ADJ_CELL*/
       XINS_COV
       XENR_PCM
       XOCONUS    /*JSO 08/24/2006, Overseas Region Indicator*/
       &WGT.
       H07028
       /* Getting Needed Care */
       H07011
       H07013
       H07027
       H07029
       /* Getting Care Quickly */
       H07017
       H07022
       H07019
       H07030
       /* How Well Doctors Communicate */
       H07033
       H07034
       H07035
       H07036
       /* Courteous and Helpful Office Staff */
       H07031
       H07032
       /* Customer Service */
       H07043
       H07045
       H07047
       /* Claims Processing */
       H07040
       H07041 /*****************************/
       H07066 /* Health Status   */
       H07037 /* Health Care Rating        */
       H07048 /* Health Plan Rating        */
       H07009 /* Personal Doctor Rating    */
       H07015 /* Specialist Rating         */
       H07006 /* Health Plan Used*//*JSO 04/26/2007, added for reservists logic*/
       H07007 /* How Long in Health Plan   */
    /*****************************/
      );
    FORMAT _ALL_;
    IF SERVAFF='A' THEN XSERVAFF=1;    *Army;
       ELSE IF SERVAFF='F' THEN XSERVAFF=2;      *Air Force;
       ELSE IF SERVAFF='N' THEN XSERVAFF=3;      *Navy;
       ELSE XSERVAFF=4;      *Other;

    IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

    IF XTNEXREG = . THEN DELETE;  /* RSG 02/2005 USE CACSMPL TO DELETE MISSING FIELDS*/

    IF XINS_COV NOT IN(1,2,3,6,9) THEN DELETE;  /*JSO 07/30/2007, Added 9*/
```

```
    NXNS_COV = XINS_COV;    /*JSO 04/26/2007 added for reservists logic*/
        /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
    IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
    IF DBENCAT IN('GRD','IGR') AND H07006 = 3 THEN DO;
       NXNS_COV = 3;
       XENR_PCM = .;
    END;
   /* Note:  use tmp_cell in step2q.sas */
    LENGTH TMP_CELL XSERVREG 8;
    TMP_CELL = STRATUM; /*KRR 04/03/2006, changed from ADJ_CELL*/

    IF XTNEXREG = 1 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 1;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
       ELSE XSERVREG = 4;
    END;

    IF XTNEXREG = 2 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 5;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
       ELSE XSERVREG = 8;
    END;

    IF XTNEXREG = 3 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 9;
       ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
       ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
       ELSE XSERVREG = 12;
    END;

    IF XTNEXREG = 4 THEN DO; /*JSO 08/24/2006, Changed Overseas Regions*/
       IF XOCONUS = 1 THEN DO;
IF      XSERVAFF = 1 THEN XSERVREG = 13;
ELSE IF XSERVAFF = 2 THEN XSERVREG = 14;
ELSE IF XSERVAFF = 3 THEN XSERVREG = 15;
ELSE  XSERVREG = 16;
       END;
       IF XOCONUS = 2 THEN DO;
IF      XSERVAFF = 1 THEN XSERVREG = 17;
ELSE IF XSERVAFF = 2 THEN XSERVREG = 18;
ELSE IF XSERVAFF = 3 THEN XSERVREG = 19;
ELSE  XSERVREG = 20;
       END;
       IF XOCONUS = 3 THEN DO;
IF      XSERVAFF = 1 THEN XSERVREG = 21;
ELSE IF XSERVAFF = 2 THEN XSERVREG = 22;
ELSE IF XSERVAFF = 3 THEN XSERVREG = 23;
ELSE  XSERVREG = 24;
       END;
    END;

RUN;

*************************************************************************
* Create AGE, FEMALE and GROUP (Beneficiary/Enrollment)
* subsets. Create the region dummies.  Recode region 7 to region 8.
*************************************************************************;
DATA ENTIRE;
   SET ENTIRE;
   LENGTH DEFAULT = 4;
   IF FIELDAGE NE "  " THEN DO;   /*MJS 01/26/04*/
      AGE1824=0;
      AGE2534=0;
      AGE3544=0;
      AGE4554=0;
      AGE5564=0;
      AGE6574=0;
      AGE75UP=0;
      IF      ( '018' <= FIELDAGE <= '024' ) THEN AGE1824=1;   /*MJS 01/26/04*/
      ELSE IF ( '025' <= FIELDAGE <= '034' ) THEN AGE2534=1;
```

```
      ELSE IF ( '035' <= FIELDAGE <= '044' ) THEN AGE3544=1;
      ELSE IF ( '045' <= FIELDAGE <= '054' ) THEN AGE4554=1;
      ELSE IF ( '055' <= FIELDAGE <= '064' ) THEN AGE5564=1;
      ELSE IF ( '065' <= FIELDAGE <= '074' ) THEN AGE6574=1;
      ELSE IF (FIELDAGE  > '074' ) THEN AGE75UP=1;
   END;

  * IF H02047=2 THEN H02048=1;
   ************************************************************************
   * Create the FEMALE dummy variable.
   ************************************************************************;
   IF XSEXA = 2 THEN
      FEMALE = 1;
   ELSE
      FEMALE = 0;

   ************************************************************************
   * Create the beneficiary group/enrollment group subsets.
   ************************************************************************;
   GROUP1 = 0;
   GROUP2 = 0;
   GROUP3 = 0;
   GROUP4 = 0;
   GROUP5 = 0;
   GROUP6 = 0;
   GROUP7 = 0;
   GROUP8 = 1;     * EVERYONE;

   IF (NXNS_COV IN (1,2,6)  AND H07007>=2) THEN GROUP1 = 1;
   IF (XENR_PCM IN (1,2,6)  AND H07007>=2) THEN GROUP2 = 1;
   /* JSO 04/05/2007 conditions to run RC type */
   IF "&RCTYPE" = 'ReportCards' AND (XENR_PCM IN (3,7) AND H07007>=2) THEN GROUP3 = 1;
   ELSE  IF  "&RCTYPE"  =  'PurchasedReportCards'  AND  ((XENR_PCM  IN  (3,7)  AND  H07007>=2)  OR
NXNS_COV IN (3,9)) THEN GROUP3 = 1;
   IF NXNS_COV IN  (3,9)     THEN GROUP4 = 1; /*JSO 08/24/2006, Deleted 4,5*//*JSO 07/30/2007,
Added 9*/
   IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN GROUP5 = 1;
     /*JSO 07/30/2007, added DBENCAT conditions*/
   IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN GROUP6 = 1;
     /*JSO 07/30/2007, added DBENCAT conditions*/
   IF XBNFGRP IN (3,4)      THEN GROUP7 = 1;

   ************************************************************************
   * Recode variables with Never, Sometimes, Usually and Always:
   *    Recode Never & Sometimes (1 & 2) to 1.
   *    Recode Usually (3) to 2.
   *    Recode Always (4) to 3.
   ************************************************************************;
   IF H07028 = 2 THEN H07029=3; /* ES 4/28/04 - Change in scoring method*/

   IF H07017 = 1      THEN R07017 = 1;
   ELSE IF H07017 = 2 THEN R07017 = 1;
   ELSE IF H07017 = 3 THEN R07017 = 2;
   ELSE IF H07017 = 4 THEN R07017 = 3;
   ELSE IF H07017 < 0 THEN R07017 = .;

   IF H07022 = 1      THEN R07022 = 1;
   ELSE IF H07022 = 2 THEN R07022 = 1;
   ELSE IF H07022 = 3 THEN R07022 = 2;
   ELSE IF H07022 = 4 THEN R07022 = 3;
   ELSE IF H07022 < 0 THEN R07022 = .;

   IF H07019 = 1      THEN R07019 = 1;
   ELSE IF H07019 = 2 THEN R07019 = 1;
   ELSE IF H07019 = 3 THEN R07019 = 2;
   ELSE IF H07019 = 4 THEN R07019 = 3;
   ELSE IF H07019 < 0 THEN R07019 = .;

   IF H07030 = 1      THEN R07030 = 1;
   ELSE IF H07030 = 2 THEN R07030 = 1;
   ELSE IF H07030 = 3 THEN R07030 = 2;
   ELSE IF H07030 = 4 THEN R07030 = 3;
   ELSE IF H07030 < 0 THEN R07030 = .;
```

```
IF H07031 = 1      THEN R07031 = 1;
ELSE IF H07031 = 2 THEN R07031 = 1;
ELSE IF H07031 = 3 THEN R07031 = 2;
ELSE IF H07031 = 4 THEN R07031 = 3;
ELSE IF H07031 < 0 THEN R07031 = .;

IF H07032 = 1      THEN R07032 = 1;
ELSE IF H07032 = 2 THEN R07032 = 1;
ELSE IF H07032 = 3 THEN R07032 = 2;
ELSE IF H07032 = 4 THEN R07032 = 3;
ELSE IF H07032 < 0 THEN R07032 = .;

IF H07033 = 1      THEN R07033 = 1;
ELSE IF H07033 = 2 THEN R07033 = 1;
ELSE IF H07033 = 3 THEN R07033 = 2;
ELSE IF H07033 = 4 THEN R07033 = 3;
ELSE IF H07033 < 0 THEN R07033 = .;

IF H07034 = 1      THEN R07034 = 1;
ELSE IF H07034 = 2 THEN R07034 = 1;
ELSE IF H07034 = 3 THEN R07034 = 2;
ELSE IF H07034 = 4 THEN R07034 = 3;
ELSE IF H07034 < 0 THEN R07034 = .;

IF H07035 = 1      THEN R07035 = 1;
ELSE IF H07035 = 2 THEN R07035 = 1;
ELSE IF H07035 = 3 THEN R07035 = 2;
ELSE IF H07035 = 4 THEN R07035 = 3;
ELSE IF H07035 < 0 THEN R07035 = .;

IF H07036 = 1      THEN R07036 = 1;
ELSE IF H07036 = 2 THEN R07036 = 1;
ELSE IF H07036 = 3 THEN R07036 = 2;
ELSE IF H07036 = 4 THEN R07036 = 3;
ELSE IF H07036 < 0 THEN R07036 = .;

IF H07040 = 1      THEN R07040 = 1;
ELSE IF H07040 = 2 THEN R07040 = 1;
ELSE IF H07040 = 3 THEN R07040 = 2;
ELSE IF H07040 = 4 THEN R07040 = 3;
ELSE IF H07040 < 0 THEN R07040 = .;

IF H07041 = 1      THEN R07041 = 1;
ELSE IF H07041 = 2 THEN R07041 = 1;
ELSE IF H07041 = 3 THEN R07041 = 2;
ELSE IF H07041 = 4 THEN R07041 = 3;
ELSE IF H07041 < 0 THEN R07041 = .;

************************************************************************
* Recode variables to one missing condition ".".
* This also renames all the "H0xxxx" to "R0xxxx".
************************************************************************;
R07011 = H07011;  IF R07011 < 0 THEN R07011 = .;
R07009 = H07009;  IF R07009 < 0 THEN R07009 = .;
R07013 = H07013;  IF R07013 < 0 THEN R07013 = .;
R07015 = H07015;  IF R07015 < 0 THEN R07015 = .;
R07027 = H07027;  IF R07027 < 0 THEN R07027 = .;
R07029 = H07029;  IF R07029 < 0 THEN R07029 = .;
R07037 = H07037;  IF R07037 < 0 THEN R07037 = .;
R07043 = H07043;  IF R07043 < 0 THEN R07043 = .;
R07045 = H07045;  IF R07045 < 0 THEN R07045 = .;
R07047 = H07047;  IF R07047 < 0 THEN R07047 = .;
R07048 = H07048;  IF R07048 < 0 THEN R07048 = .;
R07066 = H07066;  IF R07066 < 0 THEN R07066 = .;

***********************************************************************
* Create region and service affiliation dummies.
***********************************************************************;
IF XSERVREG NE . THEN DO;  /*JSO 08/24/2006, Changed 16 to 24*/
   ARRAY REGDUMS (24) REG01 REG02 REG03 REG04 REG05 REG06
  REG07 REG08 REG09 REG10 REG11 REG12
  REG13 REG14 REG15 REG16 REG17 REG18
```

```
     REG19 REG20 REG21 REG22 REG23 REG24;
      DO I = 1 TO 24;
         REGDUMS(I)=0;
      END;
      IF       XSERVREG= 1  THEN REG01  =1;
      ELSE IF  XSERVREG= 2  THEN REG02  =1;
      ELSE IF  XSERVREG= 3  THEN REG03  =1;
      ELSE IF  XSERVREG= 4  THEN REG04  =1;
      ELSE IF  XSERVREG= 5  THEN REG05  =1;
      ELSE IF  XSERVREG= 6  THEN REG06  =1;
      ELSE IF  XSERVREG= 7  THEN REG07  =1;
      ELSE IF  XSERVREG= 8  THEN REG08  =1;
      ELSE IF  XSERVREG= 9  THEN REG09  =1;
      ELSE IF  XSERVREG= 10 THEN REG10  =1;
      ELSE IF  XSERVREG= 11 THEN REG11  =1;
      ELSE IF  XSERVREG= 12 THEN REG12  =1;
      ELSE IF  XSERVREG= 13 THEN REG13  =1;
      ELSE IF  XSERVREG= 14 THEN REG14  =1;
      ELSE IF  XSERVREG= 15 THEN REG15  =1;
      ELSE IF  XSERVREG= 16 THEN REG16  =1;
      ELSE IF  XSERVREG= 17 THEN REG17  =1;
      ELSE IF  XSERVREG= 18 THEN REG18  =1;
      ELSE IF  XSERVREG= 19 THEN REG19  =1;
      ELSE IF  XSERVREG= 20 THEN REG20  =1;
      ELSE IF  XSERVREG= 21 THEN REG21  =1;
      ELSE IF  XSERVREG= 22 THEN REG22  =1;
      ELSE IF  XSERVREG= 23 THEN REG23  =1;
      ELSE IF  XSERVREG= 24 THEN REG24  =1;

      ARRAY SRVDUMS (4) SRV01 SRV02 SRV03 SRV04;
      DO I = 1 TO 4;    /*Needed for consumer watch ONLY */
         SRVDUMS(I)=0;
      END;
      IF       XSERVAFF = 1 THEN SRV01 = 1;
      ELSE IF  XSERVAFF = 2 THEN SRV02 = 1;
      ELSE IF  XSERVAFF = 3 THEN SRV03 = 1;
      ELSE IF  XSERVAFF = 4 THEN SRV04 = 1;

   END;

RUN;

*************************************************************************
* Recode item responses to proportional values using CONVERT.SAS.
*************************************************************************;
%INCLUDE "CONVERT.SAS";

%CONT1(DSN=ENTIRE, NUM=7,  Y=R07011 R07013 R07027 R07029
         R07043 R07045 R07047);
%CONT2(DSN=ENTIRE, NUM=4,  Y=R07037 R07048 R07009 R07015);
%CONT3(DSN=ENTIRE, NUM=12, Y=R07017 R07022 R07019 R07030
         R07033 R07034 R07035 R07036
         R07031 R07032 R07040 R07041);

*************************************************************************
* Sort the main file to reorder it by MPRID.
*************************************************************************;
PROC SORT DATA=ENTIRE; BY MPRID; RUN;

*************************************************************************
* Print the contents of ENTIRE dataset.
*************************************************************************;
PROC CONTENTS DATA=ENTIRE;
   TITLE2 'Contents of ENTIRE';
RUN;


*************************************************************************
* Print some of the recoded records.
*************************************************************************;
PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of AGE and SEX dummies';
   VAR MPRID
```

```
       FIELDAGE   /*MJS 01/26/04*/
       XTNEXREG
       XSERVAFF
       XSERVREG
       CONUS
       ENBGSMPL
       XSEXA
       STRATUM   /*KRR 04/03/2006 Changed from ADJ_CELL*/
       XINS_COV
       NXNS_COV  /*JSO 04/26/2007, added for reservists logic*/
       DBENCAT   /*JSO 04/26/2007, added for reservists logic*/
       XENR_PCM
       &WGT.
      ;
RUN;

*************************************************************************
* Print some of the recoded records.
*************************************************************************;
PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of AGE and SEX dummies';
   VAR FIELDAGE   /*MJS 01/26/04*/
       AGE1824
       AGE2534
       AGE3544
       AGE4554
       AGE5564
       AGE6574
       AGE75UP

       XSEXA
       FEMALE

       ENBGSMPL
       XINS_COV
       NXNS_COV
       XENR_PCM
       XBNFGRP
       GROUP1
       GROUP2
       GROUP3
       GROUP4
       GROUP5
       GROUP6
       GROUP7
      ;
RUN;

PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of recoded question variables';
   VAR H07011  R07011   /*MJS 03/24/04 Changed 2003 to 2004 variable names*/
       H07009  R07009
       H07013  R07013
       H07015  R07015
       H07017  R07017
       H07022  R07022
       H07019  R07019
       H07027  R07027
       H07029  R07029
       H07030  R07030
       H07031  R07031
       H07032  R07032
       H07033  R07033
       H07034  R07034
      ;
RUN;


PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of recoded question variables';
   VAR H07035  R07035
       H07036  R07036
       H07037  R07037
```

```
       H07040  R07040
       H07041  R07041
       H07043  R07043
       H07045  R07045
       H07047  R07047
       H07048  R07048
       H07066  R07066
      ;
RUN;

/*JSO 08/24/2006, Changed 16 to 24*/
PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of recoded REGION variables';
   VAR XSERVREG
       REG01
       REG02
       REG03
       REG04
       REG05
       REG06
       REG07
       REG08
       REG09
       REG10
       REG11
       REG12
       REG13
       REG14
       REG15
       REG16
       REG17
       REG18
       REG19
       REG20
       REG21
       REG22
       REG23
       REG24;
RUN;


PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of recoded service affiliation variables';
   VAR XSERVREG
       XSERVAFF
       XOCONUS /*JSO 08/24/2006, Changed Overseas Regions*/
       SRV01
       SRV02
       SRV03
       SRV04
      ;
RUN;

***************************************************************************
* Create the 7 subgroups for processing by STEP2.SAS.
***************************************************************************;
DATA OUT.GROUP1
     OUT.GROUP2
     OUT.GROUP3
     OUT.GROUP4
     OUT.GROUP5
     OUT.GROUP6
     OUT.GROUP7
     OUT.GROUP8;

     SET ENTIRE;

     DROP
        H07011
        H07009
        H07013
        H07015
        H07017
```

```
        H07022
        H07019
        H07027
        H07029
        H07030
        H07031
        H07032
        H07033
        H07034
        H07035
        H07036
        H07037
        H07040
        H07041
        H07043
        H07045
        H07047
        H07048
        H07066
        ;
      IF GROUP1 = 1 THEN OUTPUT OUT.GROUP1;
      IF GROUP2 = 1 THEN OUTPUT OUT.GROUP2;
      IF GROUP3 = 1 THEN OUTPUT OUT.GROUP3;
      IF GROUP4 = 1 THEN OUTPUT OUT.GROUP4;
      IF GROUP5 = 1 THEN OUTPUT OUT.GROUP5;
      IF GROUP6 = 1 THEN OUTPUT OUT.GROUP6;
      IF GROUP7 = 1 THEN OUTPUT OUT.GROUP7;
      OUTPUT OUT.GROUP8;
RUN;
```

I.1.B Q4FY2007\PROGRAMS\PURCHASEDREPORTCARDS\CAHPS_ADULTQ4FY2007\CONVERT.SAS - CONVERT ITEM RESPONSES TO PROPORTIONAL VALUES.

```
***************************************************************************
*
* PROGRAM:  CONVERT.SAS
* TASK:     DOD HEALTH CARE SURVEY ANALYSIS (8687-330)
* PURPOSE:  CONVERT ITEM RESPONSES TO PROPORTIONAL VALUES FOR CONSISTENCY
* WITH THE TOPS SURVEY.
* WRITTEN:  October 2000 BY ERIC SCHONE
*
* MODIFIED: October 2000 BY KEITH RATHBUN, Added PROLOG.  Also, added DSN
* to argument lists.
*
* INPUTS:  1) User-specified SAS Dataset
*
* OUTPUTS: 1) User-specified SAS Dataset with recoded values
*
* NOTES:
*
* 1) Arguments for the CONT1-CONT3 macros are as follows:
*    a) SAS dataset name (dsn)
*    b) Number of variables to be converted (num)
*    c) List of variables to be converted (y)
* 2) These macros assume that the response items have already been
*    converted/recoded to CAHPS scales.
*
***************************************************************************
* CONT1 - Convert big problem, small problem, not a problem questions to
*         proportional values.
***************************************************************************;
%macro cont1(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i = 1 to &num;
      if vars(i) ne . and vars(i) ne 3 then vars(i) = 0;
      if vars(i) = 3 then vars(i) = 1;
   end;
run;
%mend cont1;

***************************************************************************
* CONT2 - Convert rating questions to proportional values.
***************************************************************************;
%macro cont2(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i=1 to &num;
      if vars(i) ne . and vars(i) < 8 then vars(i) = 0;
      if vars(i) in (8,9,10) then vars(i) = 1;
   end;
run;
%mend cont2;

***************************************************************************
* CONT3 - Convert Never, Sometimes, Usually, Always questions to
*         proportional values.
***************************************************************************;
%macro cont3(dsn=, num=, y=);
data &dsn(drop=i);
   set &dsn;
   array vars &y;
   do i=1 to &num;
      if vars(i) ne . and vars(i) >= 2 then vars(i) = 2;
      vars(i) = vars(i) - 1;
   end;
run;
%mend cont3;
```

I.1.C Q4FY2007\PROGRAMS\PURCHASEDREPORTCARDS\CAHPS_ADULTQ4FY2007\STEP2Q.SAS - CALCULATE CAHPS ADJUSTED SCORES - RUN QUARTERLY.

```
*****************************************************************************
*
*  Project:  DoD - Quarterly Adult Report Cards
*  Program:  STEP2Q.SAS
*  Purpose:  Generate risk-adjusted CAHPS Scores for Adult Report Card.
*
*  Requires: Program STEP1Q.SAS must be run prior to running this program.
*
*  The adult report card contains a large number of risk-adjusted scores.
*  Some scores are calculated from responses to individual survey questions.
*  Composite scores are calculated by combining scores from individual
*  questions.  The scores then are compared with external civilian
*  benchmarks.  The programming tasks involved in building the report
*  card are:
*
*       1) Preparing data for analyses
*       2) Estimating risk adjustment models
*       3) Calculating risk-adjusted values and variances
*       4) Calculating benchmarks
*       5) Comparing risk-adjusted values to benchmarks
*and hypothesis testing
*
*  Subgroup Definitions:
*  ____________________________________________________________
*     Seven SubgroupsDefinitions
*  ____________________________________________________________
*  1. Prime enrolleesXINS_COV IN (1,2,6) AND H07007>=2
*  2. Enrollees w/mil PCM      XENR_PCM IN (1,2,6) AND H07007>=2
*  3. Enrollees w/civ PCM      XENR_PCM = 3        AND H07007>=2
*  4. Nonenrollees   XINS_COV IN (3) /*JSO 08/24/2006, Deleted 4,5*/
*  5. Active duty    XBNFGRP = 1
*  6. Active duty dependents   XBNFGRP = 2
*  7. Retirees and dependents  XBNFGRP IN (3,4)
*
*  Previous Program:  STEP1Q.SAS
*
*  Modified: 1) 04/10/02 By Mike Scott, Updated variable names for 2002
*     survey.
*  2) 07/11/02 By Mike Scott, Changed R00077 to R04075, since
*     H02077 (health status) is back and was recoded to R04075
*     in STEP1Q.
*  3) 03/21/03 By Mike Scott, Updated variable names for 2003
*     survey.
*  4) 03/24/04 By Mike Scott, Updated for 2004 survey.
*  5) 09/24/2004 By Regina Gramss, Updated to use XTNEXREG instead of XREGION
*     and to update for Q3 2004 data.
*  6) 01/25/2005 By Regina Gramss, Changed codes to use XSERVREG instead of
*     XTNEXREG to include service affiliation.
*  7) 04/2005 By Regina Gramss, Updated field names from 2004 to 2005
*  8) 07/2005 By Regina Gramss, Updated for Q2 2005
*  9) 10/2005 By Regina Gramss, Updated for Q3 2005
* 10) 12/2005 By Regina Gramss, Updated for Q4 2005
* 11) March 21, 2006 by Keith Rathbun, updated variable names
*     for Q2 FY 2006.
* 12) 07/2006 By Justin Oh, Updated for Q3 FY 2006
* 13) Aug 24, 2006 by Justin Oh, changed overseas to 3 regions.
*     Regions have been changed from 16 categories to 24.
*
*****************************************************************************;
OPTIONS NOCENTER LS=132 PS=79 SOURCE NOOVP COMPRESS=YES mprint mlogic;
LIBNAME IN1  V612 "DATA";
LIBNAME OUT  V612 "DATA";
LIBNAME OUT2 V612 "DATA\ADULTHATFILES";
LIBNAME LIBRARY   "..\..\..\Data\Afinal\fmtlib";

/* RSG 02/2005 hard coded skelreg so data does not have to be copied from quarter to quarter*/
/* JSO 08/24/2006, Changed from 16 to 24 Regions */

DATA SKELREG (COMPRESS=NO);
```

```
   INPUT XSERVREG;
   DATALINES;
      1
      2
      3
      4
      5
      6
      7
      8
      9
      10
      11
      12
      13
      14
      15
      16
      17
      18
      19
      20
      21
      22
      23
      24
;
RUN;

*****************************************************************************
*****************************************************************************
* Set GLOBAL parameters here.
*****************************************************************************
*****************************************************************************;

*****************************************************************************
* Set the number of Dependent variables to process.
* One does not need to start at 1, but the max must be >= min.
*****************************************************************************;
%LET MIN_VAR =  1;
%LET MAX_VAR = 23;

*****************************************************************************
* Set the number of subgroups to process.
*****************************************************************************;
%LET MIN_GRP = 1;
%LET MAX_GRP = 8;

*****************************************************************************
* These are expected to remain the same for a particular dependent
* variable run.
*****************************************************************************;
%LET WGT      = FWRWT;
%LET IND_VAR1 = R07066;
%LET IND_VAR2 =  ;  * FEMALE;
%LET IND_VAR3 =  ;  * SREDHIGH;
%LET DEBUGFLG = 0;  * Set to 1 if you want extra printout;


%LET TITL1 = Prime Enrollees;
%LET TITL2 = Enrollees w/military PCM;
%LET TITL3 = Enrollees w/civilian PCM;
%LET TITL4 = Nonenrollees;
%LET TITL5 = Active Duty;
%LET TITL6 = Active Duty Dependents;
%LET TITL7 = Retirees and Dependents;
%LET TITL8 = All Beneficiaries;


*****************************************************************************
* GETTING NEEDED CARE.
*****************************************************************************;
%LET DEPVAR1 = R07011;
```

```
%LET DEPVAR2 = R07013;
%LET DEPVAR3 = R07027;
%LET DEPVAR4 = R07029;

*****************************************************************************
* GETTING NEEDED CARE QUICKLY.
*****************************************************************************;
%LET DEPVAR5 = R07017;
%LET DEPVAR6 = R07022;
%LET DEPVAR7 = R07019;
%LET DEPVAR8 = R07030;

*****************************************************************************
* HOW WELL DOCTORS COMMUNICATE.
*****************************************************************************;
%LET DEPVAR9  = R07033;
%LET DEPVAR10 = R07034;
%LET DEPVAR11 = R07035;
%LET DEPVAR12 = R07036;

*****************************************************************************
* COURTEOUS AND HELPFUL OFFICE STAFF.
*****************************************************************************;
%LET DEPVAR13 = R07031;
%LET DEPVAR14 = R07032;

*****************************************************************************
* CUSTOMER SERVICE.
*****************************************************************************;
%LET DEPVAR15 = R07043;
%LET DEPVAR16 = R07045;
%LET DEPVAR17 = R07047;

*****************************************************************************
* CLAIMS PROCESSING.
*****************************************************************************;
%LET DEPVAR18 = R07040;
%LET DEPVAR19 = R07041;

*****************************************************************************
* RATING ALL HEALTH CARE: 0 - 10.
*****************************************************************************;
%LET DEPVAR20 = R07037;

*****************************************************************************
* RATING OF HEALTH PLAN: 0 - 10.
*****************************************************************************;
%LET DEPVAR21 = R07048;

*****************************************************************************
* RATING OF PERSONAL DR: 0 - 10.
*****************************************************************************;
%LET DEPVAR22 = R07009;

*****************************************************************************
* SPECIALITY CARE: 0 - 10.
*****************************************************************************;
%LET DEPVAR23 = R07015;

%MACRO SCORE;
***************************************;
* use this macro for all groups;
* super region variables are to be used     ;
***************************************;
%PUT ******************************************;
%PUT STARTING MACRO SCORE;
%PUT "GROUP    = " GROUP&IGRP;
%PUT "TITLE    = " &&DEPVAR&IVAR  &&TITL&IGRP;
%PUT "DEP_VAR  = " &&DEPVAR&IVAR;
%PUT "IND_VAR1 = " &IND_VAR1;
%PUT "IND_VAR2 = " &IND_VAR2;
%PUT "IND_VAR3 = " &IND_VAR3;
%PUT "WGT      = " &WGT;
```

```
%PUT ****************************************;

*-----------------------------------------------------;
* If the current group is 1 use the skeleton files;
* else used the previous groups output file;
* The mrgfile is added to by each subgroup;
*-----------------------------------------------------;
%LET RMRGFILE = OUT.R_&&DEPVAR&IVAR;
%IF "&IGRP" = "1" %THEN %LET RMRGFILE = SKELREG;

* run regression using the region level variables;
* output a BETA file (1 record) and the subgroup;
* file with residuals attached (many records);
PROC REG DATA = GROUP&IGRP OUTEST=BETAS;
     TITLE2 "Regression Model for GROUP&igrp for regions";
     TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
     WEIGHT &WGT;
     %INCLUDE 'REGRSREG.INC';
     OUTPUT OUT = OUT2.H&IGRP&&DEPVAR&IVAR(KEEP=MPRID &WGT TMP_CELL
   PRED&IGRP RESID&IGRP XSERVREG &&DEPVAR&IVAR)
    P = PRED&IGRP
    R = RESID&IGRP;

RUN;

* print of HCSDB file with the residuals and predicted values;
%IF &DEBUGFLG > 0  %THEN %DO;
    PROC PRINT DATA=OUT2.H&IGRP&&DEPVAR&IVAR (OBS=70);
         TITLE2 "OUT2.H&IGRP&&DEPVAR&IVAR:  file with predicted values and the RESID&IGRP";
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
         VAR MPRID XSERVREG &&DEPVAR&IVAR RESID&IGRP PRED&IGRP;
    RUN;

    PROC PRINT DATA=BETAS;
         TITLE2 "BETAS:  file with coefficients";
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;
%END;


*-----------------------------------------;
*----- get the standard err/variance ----;
*-----------------------------------------;
%LET DEP = &&DEPVAR&IVAR;
%R_SUDAAN(OUT2.H&IGRP&&DEPVAR&IVAR);



* calculate prelim adjusted scores for the risk-adjusters;
* merge adjuster means with the adjuster coefficients;
* then sum their products. Finally add in the intercept;
 DATA ADJUST;
    SET MEANFILE;
    IF _N_ = 1 THEN SET BETAS(DROP = _TYPE_);
    %INCLUDE 'RISKARRY.INC';
    %INCLUDE 'RISKMEAN.INC';
    DO I = 1 TO DIM(COEFFS);
       IF COEFFS(I) = . THEN COEFFS(I) = 0;
       IF MEANS(I) = .  THEN MEANS(I)  = 0;
       ADJUST + ( COEFFS(I) * MEANS(I) );
    END;
    ADJUST = ADJUST + INTERCEPT;
 RUN;


* add the region coefficients to the adjusted value from above;
* output one record per region with the region;
* level adjusted scores;
DATA COEFFREG(KEEP=XSERVREG NEWADJST);
    SET ADJUST;
    %INCLUDE 'REGARRAY.INC';
    LENGTH NAME $8;
    DO I=1 TO DIM(REGRHS);
```

```
       CALL VNAME(REGRHS(I),NAME);
       XSERVREG=INPUT(SUBSTR(NAME,4,2),2.);
       IF REGRHS(I) = . THEN REGRHS(I) = 0;
       NEWADJST=ADJUST + REGRHS(I);
       OUTPUT;
    END;
RUN;


* sum of wgts for each region;
PROC MEANS DATA=GROUP&IGRP NWAY NOPRINT ;
  CLASS XSERVREG;
  VAR   &WGT;
  OUTPUT OUT=REG_WGTS (DROP = _TYPE_ _FREQ_) N=REGCNT&IGRP SUM=REGWGT&IGRP;
RUN;


* merge the COEFFREG file with the region;
* adjusted scores to the region level total weight;
* merge by the region.  Creates a region level;
* file with the total sample weight of the region;
DATA COEFFREG;
      MERGE COEFFREG(IN=IN1)
  REG_WGTS(IN=IN2   KEEP=XSERVREG REGCNT&IGRP REGWGT&IGRP);
      BY XSERVREG;
      IF IN1;
RUN;


%IF &DEBUGFLG > 0  %THEN %DO;
    PROC PRINT DATA=MEANFILE;
         TITLE2 'Print of MEANFILE';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=ADJUST;
         TITLE2 'Print of ADJUST';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=COEFFREG;
         TITLE2 'Print of COEFFREG: Region Adjusted Scores';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=REG_WGTS;
         TITLE2 'Print of REG_WGTS: Region Area Sum of WGTS';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;

    PROC PRINT DATA=COEFFREG;
         TITLE2 'Print of COEFFREG: Regions Adjusted Scores - with sum of wgts and region';
         TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
    RUN;
%END;


* Calculate region level adjusted scores from the;
* region level adjusted scores in COEFFREG;
PROC MEANS DATA=COEFFREG NWAY NOPRINT;
  WEIGHT REGWGT&IGRP;
  CLASS  XSERVREG;
  VAR    NEWADJST;
  OUTPUT OUT=REGFILE1 (DROP = _TYPE_ _FREQ_) MEAN=ADJ&IGRP;
RUN;


%IF &DEBUGFLG > 0  %THEN %DO;
   PROC PRINT DATA=REGFILE1;
        TITLE2 'Print of REGFILE1: Region Scores';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;
```

```
* merge the previous groups region results (if any);
* with the region level std errs and the region;
* level results from catchment results collapsed to region;
DATA OUT.R_&&DEPVAR&IVAR;
     MERGE &RMRGFILE(IN=INS)
 R&IGRP&&DEPVAR&IVAR
 REG_WGTS(KEEP = REGCNT&IGRP REGWGT&IGRP XSERVREG)
 REGFILE1(KEEP = ADJ&IGRP XSERVREG);
     BY XSERVREG;
     DEPENDNT = "&&DEPVAR&IVAR";
     IF INS;
RUN;

* merge the previous groups regional results (if any);
* with the region level std err and the region;
* level results from the current group/dependent var;
DATA OUT.R_&&DEPVAR&IVAR;
    MERGE OUT.R_&&DEPVAR&IVAR(IN=INS)
R&IGRP&&DEPVAR&IVAR    /*KRR - removed perm dataset ref to OUT2 */
REG_WGTS
REGFILE1;
    BY XSERVREG;
    DEPENDNT = "&&DEPVAR&IVAR";
    IF INS;
RUN;

PROC PRINT DATA=OUT.R_&&DEPVAR&IVAR;
     TITLE2 "Print of XSERVREG variables in &&DEPVAR&IVAR";
     TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
RUN;
%MEND SCORE;

%MACRO MAKE_INC;
****************************************;
* creates include files for later Procs;
* Needs to be run each time.  Called   ;
* in the outer (beneficiary loop).     ;
* I chose this method because it was   ;
* clearer(to me at least).   ;
* This macro needs to be run once per  ;
* Dep var per subgroup.      ;
****************************************;

* Drop records where the dependent var is missing;
* Drop records with missing catchment or region values;
  DATA GROUP&IGRP;
       SET IN1.GROUP&IGRP;
       IF &&DEPVAR&IVAR NOT = .;
  RUN;

 DATA _NULL_;
      SET GROUP&IGRP END = EOF;
      IF &&DEPVAR&IVAR NOT = .;

      ARRAY AGECNT(7) 8 aCNT1 - aCNT7;
      RETAIN AGECNT 0;
      RETAIN CNT 0;
      ARRAY AGENAM(7)  $8 AGENAM1 - AGENAM7;
      ARRAY AGENAMX(7) $8 AGENAMX1 - AGENAMX7;
      RETAIN AGENAM;
      RETAIN AGENAMX;
      ARRAY REGCNT(24)  8 REGCNT01- REGCNT24; /*JSO 08/24/2006, Changed from 16 to 24*/
      RETAIN CATCNT 0;
      RETAIN REGCNT 0;

      * create a name array for the parent age dummies;
      IF _N_ = 1 THEN DO;
         AGENAM(1) = "AGE1824";
         AGENAM(2) = "AGE2534";
         AGENAM(3) = "AGE3544";
         AGENAM(4) = "AGE4554";
         AGENAM(5) = "AGE5564";
```

```
         AGENAM(6) = "AGE6574";
         AGENAM(7) = "AGE75UP";
      END;

      * total record count;
      CNT + 1;

      * count records in each age group;
      * we will use only age groups with more;
      * than 2 obs;
      IF AGE1824  = 1 THEN AGECNT(1) + 1;
      IF AGE2534  = 1 THEN AGECNT(2) + 1;
      IF AGE3544  = 1 THEN AGECNT(3) + 1;
      IF AGE4554  = 1 THEN AGECNT(4) + 1;
      IF AGE5564  = 1 THEN AGECNT(5) + 1;
      IF AGE6574  = 1 THEN AGECNT(6) + 1;
      IF AGE75UP  = 1 THEN AGECNT(7) + 1;

      * count records in each XSERVREG group;
      * we will only use XSERVREGs with more than than 2 obs;
      * I am using the region value as the subscript;
      * to make the code simpler and more readable;
      IF 1<= XSERVREG <=24  THEN DO; /*JSO 08/24/2006, Changed from 16 to 24*/
         REGCNT(XSERVREG) = REGCNT(XSERVREG) + 1;
      END;

      IF EOF THEN GOTO ENDFILE;
      RETURN;

ENDFILE:
     * create a title common to all procs in the current group;
     TITLE  " &&DEPVAR&IVAR  &&TITL&IGRP";

     * display counts in the log;
     %IF &DEBUGFLG > 0  %THEN %DO;
        PUT ' ';
        PUT 'AT EOF:';
        PUT "TOTAL CNT = "    CNT;
        PUT AGENAM(1) "  " AGECNT(1)=;
        PUT AGENAM(2) "  " AGECNT(2)=;
        PUT AGENAM(3) "  " AGECNT(3)=;
        PUT AGENAM(4) "  " AGECNT(4)=;
        PUT AGENAM(5) "  " AGECNT(5)=;
        PUT AGENAM(6) "  " AGECNT(6)=;
        PUT AGENAM(7) "  " AGECNT(7)=;
        PUT " ";

        DO I = 1 TO 24;  /*JSO 08/24/2006, Changed from 16 to 24*/
 IF(REGCNT(I) > 0) THEN DO;
    PUT  'REG' I Z2. REGCNT(I) 6.;
 END;
        END;
        PUT ' ';


      %END;    *** of debug test;

     *-------------------------------------------------------;
     * This include is for the regression using regions;
     * in this case we drop the last XSERVREG;
     FILE 'REGRSREG.INC';
     PUT @6  "MODEL  &&DEPVAR&IVAR = ";
     IF "&IND_VAR1" NE "" THEN PUT @12 "&IND_VAR1"; /* KRR - only output when present */
     IF "&IND_VAR2" NE "" THEN PUT @12 "&IND_VAR2"; /* KRR - only output when present */
     IF "&IND_VAR3" NE "" THEN PUT @12 "&IND_VAR3"; /* KRR - only output when present */

     CNT2 = 0;
     * setup an array of those age groups that have > 1 obs;
     DO I = 1 TO 7;
        IF AGECNT(I) > 1 THEN DO;
 CNT2 + 1;
 AGENAMX(CNT2) = AGENAM(I);
        END;
```

```
    END;

    * now drop the last category to create;
    * an omitted category which is required;
    * to solve the regression properly;
    DO I = 1 TO CNT2-1;
       PUT @12 AGENAMX(I);
    END;

    * ditto for the catchment areas with > 0 obs;
    * in this case we drop the the first USABLE category;
    * this is not consistent with the catchment area code;
    * but this is the method that Portia used;
    FIRST = 0;        /*JSO 08/24/2006, Changed from 16 to 24*/
    DO I = 1 TO 24;   * skip the 1st region with 1+ obs;
       IF REGCNT(I) > 0 THEN DO;
IF FIRST = 1 THEN PUT @12 'REG' I Z2.;
FIRST = 1;
       END;
    END;
    PUT @11 ';';


    *-------------------------------------------------------;
    * now create the complete var statement;
    * for the Proc MEANS used to replace the;
    * independent variables missing values;
    * we assume the age groups will always be used;
    * These are also called the RISK FACTORS;
    FILE 'RISKVARS.INC';
    PUT @10  "VAR";
    DO I = 1 TO CNT2;
       PUT @12 AGENAMX(I);
    END;

    * not all the other dependent variables will be used;
    * only write them out if they are not null;
    CNT3 = 0;
    IF "&IND_VAR1" NE "" THEN DO;
        CNT3 + 1;
        PUT @12 "&IND_VAR1";
    END;

    IF "&IND_VAR2" NE "" THEN DO;
        CNT3 + 1;
        PUT @12 "&IND_VAR2";
    END;

    IF "&IND_VAR3" NE "" THEN DO;
        CNT3 + 1;
        PUT @12 "&IND_VAR3";
    END;
    PUT @11 ';';


    *-------------------------------------------------------;
    * create an ARRAY statement of the desired risk factors;
    * called adjusters in the specs and in the code;
    FILE 'RISKARRY.INC';
    PUT @10  "ARRAY COEFFS(*) $8";
    DO I = 1 TO CNT2;
       PUT @12 AGENAMX(I);
    END;

    CNT3 = 0;
    IF "&IND_VAR1" NE "" THEN DO;
        CNT3 + 1;
        PUT @12 "&IND_VAR1";
    END;

    IF "&IND_VAR2" NE "" THEN DO;
        CNT3 + 1;
        PUT @12 "&IND_VAR2";
```

```
     END;

     IF "&IND_VAR3" NE "" THEN DO;
         CNT3 + 1;
         PUT @12 "&IND_VAR3";
     END;
     PUT @11 ';';


     *-------------------------------------------------------;
     * create an ARRAY of mean names for the output;
     * from a proc MEANS of the Risk Factors in RISKARRY;
     FILE 'RISKMEAN.INC';
     IND_CNT = CNT2 + CNT3;
     PUT @6 "ARRAY MEANS(*) $8";
     DO I = 1 TO IND_CNT;
        PUT @12 "MEAN" I Z2.;
     END;
     PUT @11 ';';

*   ----------------------------------------------------;
*   create the equivalent of the following statement;
*   OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN=MEAN1-MEAN&MEAN_CNT;
     FILE 'MEANFILE.INC';
     PUT @6 "OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN = ";
     DO I = 1 TO IND_CNT;
        PUT @12 "MEAN" I Z2.;
     END;
     PUT @11 ';';

     *-------------------------------------------------------;
     * create a super region area array;
     * with at least ONE obs;
     FILE 'REGARRAY.INC';
     PUT @10  "ARRAY REGRHS(*) $8";
     DO I = 1 TO 24;    /*JSO 08/24/2006, Changed from 16 to 24*/
        IF REGCNT(I) > 0 THEN DO; *** ems 7/12/00 changed "> 1" to "> 0";
 PUT  @16 'REG' I Z2.;
        END;
     END;
     PUT @11 ';';
 RUN;

 * Create the means of the adjuster variables;
 * They will be used to replace missing adjuster variables;
 * calculate weighted means;
 PROC MEANS DATA=GROUP&IGRP;
   WEIGHT &WGT;
   %INCLUDE 'RISKVARS.INC';
   %INCLUDE 'MEANFILE.INC';
 RUN;



%IF &DEBUGFLG > 0  %THEN %DO;
   PROC PRINT DATA=MEANFILE;
        TITLE2 "Print of MEANFILE for Risk Adjuster variables";
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;

DATA GROUP&IGRP;
     SET GROUP&IGRP;
     IF _N_ = 1 THEN SET MEANFILE;
     %INCLUDE 'RISKARRY.INC';
     %INCLUDE 'RISKMEAN.INC';
     DO I = 1 TO DIM(COEFFS);
        IF COEFFS(I) = . THEN DO;
 COEFFS(I) = MEANS(I);
        END;
     END;
RUN;
/* PROC MEANS DATA=out.group8;
```

```
   WEIGHT &WGT;
   %INCLUDE 'RISKVARS.INC';
   %INCLUDE 'MEANFILE.INC';
 RUN;*/
%MEND MAKE_INC;

%MACRO R_SUDAAN(INFILE);
*****************************************************
* Use this macro to create standard err (variances)
* for XSERVREGs.
*****************************************************;
%PUT ****************************************;
%PUT STARTING MACRO R_SUDAAN (XSERVREG);
%PUT ****************************************;

DATA &INFILE;
   SET &INFILE;
   IF 1<= XSERVREG <= 24;  /*JSO 08/24/2006, Changed from 16 to 24*/
RUN;


* Sort data by TMP_CELL;
PROC SORT DATA=&INFILE;
   BY TMP_CELL;
RUN;

%IF &DEBUGFLG > 5  %THEN %DO;
   PROC PRINT DATA=&INFILE(OBS=5);
        TITLE2 'Print of the input file to SUDAAN (XSERVREG)';
        TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;
%END;


* Calculate values for super regions;
PROC DESCRIPT DATA=&INFILE DESIGN=STRWR NOPRINT;
   WEIGHT &WGT;
   SETENV DECWIDTH=4;
   NEST TMP_CELL / missunit;
   VAR RESID&IGRP;
   TABLES XSERVREG;
   SUBGROUP XSERVREG;
   LEVELS 24;   /*JSO 08/24/2006, Changed from 16 to 24*/
   OUTPUT  SEMEAN
         / REPLACE TABLECELL=DEFAULT
 FILENAME=RS&DEP;
   RUN;

   DATA R&IGRP&&DEPVAR&IVAR;
        SET RS&DEP;
        KEEP XSERVREG SEMEAN;
        IF SEMEAN NE .;
        RENAME SEMEAN = SEMEAN&IGRP;
   RUN;


   PROC PRINT DATA=R&IGRP&&DEPVAR&IVAR;
      TITLE2 "Print XSERVREG DESCRIPT DATA=R&IGRP&&DEPVAR&IVAR";
      TITLE3 "Beneficiary group&igrp:  &&TITL&IGRP";
   RUN;

%MEND  R_SUDAAN;


%***********************************;
%*  call the macros;
%***********************************;

%MACRO MAINLOOP(MIN_VAR,MAX_VAR,MIN_GRP,MAX_GRP);
    %* loop over the set of dependent variables;
       %DO IVAR = &MIN_VAR %TO &MAX_VAR;
%DO IGRP = &MIN_GRP %TO &MAX_GRP;
   %MAKE_INC;
```

```
   %SCORE;
%END;
       %END;

%MEND;

%MAINLOOP(&MIN_VAR,&MAX_VAR,&MIN_GRP,&MAX_GRP);
```

I.1.D Q4FY2007\PROGRAMS\PURCHASEDREPORTCARDS\CAHPS_ADULTQ4FY2007\REGRSREG.INC - INCLUDE FILE1 IN STEP2Q.SAS.

```
    MODEL  R07015 =
R07066
AGE1824
AGE2534
AGE3544
AGE4554
REG02
REG03
REG04
REG05
REG06
REG07
REG08
REG09
REG10
REG11
REG12
REG13
REG14
REG15
REG16
REG17
REG18
REG19
REG20
REG21
REG24
;
```

I.1.E Q4FY2007\PROGRAMS\PURCHASEDREPORTCARDS\CAHPS_ADULTQ4FY2007\RISKARRY.INC - INCLUDE FILE2 IN STEP2Q.SAS.

```
        ARRAY COEFFS(*) $8
 AGE1824
 AGE2534
 AGE3544
 AGE4554
 AGE5564
 R07066
;
```

I.1.F Q4FY2007\PROGRAMS\PURCHASEDREPORTCARDS\CAHPS_ADULTQ4FY2007\RISKMEAN.INC - INCLUDE FILE3 IN STEP2Q.SAS.

```
    ARRAY MEANS(*) $8
 MEAN01
 MEAN02
 MEAN03
 MEAN04
 MEAN05
 MEAN06
;
```

I.1.G Q4FY2007\PROGRAMS\PURCHASEDREPORTCARDS\CAHPS_ADULTQ4FY2007\REGARRAY.INC - INCLUDE FILE4 IN STEP2Q.SAS.

```
    ARRAY REGRHS(*) $8
  REG01
  REG02
  REG03
  REG04
  REG05
  REG06
  REG07
  REG08
  REG09
  REG10
  REG11
  REG12
  REG13
  REG14
  REG15
  REG16
  REG17
  REG18
  REG19
  REG20
  REG21
  REG24
;
```

I.1.H Q4FY2007\PROGRAMS\PURCHASEDREPORTCARDS\CAHPS_ADULTQ4FY2007\RISKVARS.INC - INCLUDE FILE5 IN STEP2Q.SAS.

```
        VAR
 AGE1824
 AGE2534
 AGE3544
 AGE4554
 AGE5564
 R07066
;
```

I.1.I Q4FY2007\PROGRAMS\PURCHASEDREPORTCARDS\CAHPS_ADULTQ4FY2007\MEANFILE.INC - INCLUDE FILE6 IN STEP2Q.SAS.

```
    OUTPUT OUT=MEANFILE(DROP = _TYPE_) MEAN =
MEAN01
MEAN02
MEAN03
MEAN04
MEAN05
MEAN06
;
```

I.1.J Q4FY2007\PROGRAMS\PURCHASEDREPORTCARDS\CAHPS_ADULTQ4FY2007\COMPOSIT.SAS - CALCULATE CAHPS COMPOSITE SCORES - RUN QUARTERLY.

```
*****************************************************************************
* Project:  DoD - Quarterly Adult Report Cards
* Program:  COMPOSIT.SAS
* Purpose:  Generate Quarterly Adult Report Card composite scores
* Requires: Programs STEP1Q.SAS and STEP2Q.SAS must be run prior
* to this program.
*
* Modified: 1) 02/27/2001 By Keith Rathbun, Small changes to input DSNs to
*    accommodate the move of ALLSCORE.SAS functionality into the
*    STEP2Q.SAS program.
* 2) 01/08/2002 By Daniele Beahm, Changed versions in libname statements
*    so program can be run with SAS v8 and still produce SAS v612 datasets.
* 3) 04/10/2002 By Mike Scott, Updated variable names for 2002
*    survey.
* 4) 03/21/2003 By Mike Scott, Updated variable names for 2003
*    survey.
* 5) 03/24/2004 By Mike Scott, Updated for 2004.
* 6) 06/15/2004 By Regina Gramss, Update for Q2, added in
*    codes to compensate for any negative trend and to
*    print out the number of nonmissing data producing the
*    negative trend - those equal to or more than 30 nonmissing
*    data need to be further evaluated.
* 7) 09/2004 By Regina Gramss, Update for Q3, added in codes to
*    use XTNEXREG field instead of XREGION.
* 8) 01/2005 By Regina Gramss, Changed codes to use XSERVREG instead of
*    XTNEXREG, to incorporate service affliliation.
* 9) 04/2005 By Regina Gramss, Updated field names from 2004 to 2005.
*10) 01/31/2006 By Regina Gramss, deleted following lines for "data r_&var1":
*    "%if &i~=8 %then %do" (keep set statement then delete the following:)
*    "%end
*     %else %do
*              set   in2.h5&var1(rename=(resid5=r_&var1))   in2.h6&var1(rename=(resid6=r_&var1))
in2.h7&var1(rename=(resid7=r_&var1))
*     %end"
*11) 03/21/2006 By Keith Rathbun, Updated variable names for 2003
*    survey.
*
*****************************************************************************;
OPTIONS NOCENTER LS=132 PS=78 SOURCE SOURCE2 MLOGIC MPRINT NOOVP COMPRESS=YES NOFMTERR;
libname in  v612 "data";
libname in2 v612 "data\adulthatfiles";
libname out v612 "data";
LIBNAME LIBRARY   "..\..\..\DATA\AFINAL\FMTLIB";

%LET WGT = FWRWT;

 %MACRO COMPOSIT (TYPE=,COMPOS=,VAR1=,VAR2=,VAR3=,VAR4=,QCOUNT=);

  DATA _NULL_;
   %IF "&TYPE" = "R" %THEN %DO;
       CALL SYMPUT ('BYVAR','XSERVREG');
   %END; %ELSE
   %IF "&TYPE" = "C" %THEN %DO;
       CALL SYMPUT ('BYVAR','CACSMPL');
   %END;

 ****************************************;
 *   Create a Composite Score  ;
 ****************************************;
 DATA _NULL_;
     FILE 'FILES.INC';
     PUT @6 'SET';
     IF "&VAR1" NE '' THEN PUT @8 "IN.&TYPE._&VAR1";
     IF "&VAR2" NE '' THEN PUT @8 "IN.&TYPE._&VAR2";
     IF "&VAR3" NE '' THEN PUT @8 "IN.&TYPE._&VAR3";
     IF "&VAR4" NE '' THEN PUT @8 "IN.&TYPE._&VAR4";
     PUT @8 ';';
 RUN;
```

```
 DATA COMPOS&COMPOS;
      LENGTH DEPENDNT $ 8;
      %INCLUDE 'FILES.INC';
      DEPENDNT = "&TYPE.COMPOS&COMPOS";
 RUN;

 PROC SORT DATA=COMPOS&COMPOS;
      BY &BYVAR;
 RUN;

 PROC PRINT DATA=COMPOS&COMPOS(OBS=60);
      TITLE "Print of COMPOS&COMPOS after sort";
 RUN;

 DATA COMPOS&COMPOS;
      SET COMPOS&COMPOS;
      BY &BYVAR;
   %IF "&TYPE" = "R" %THEN %DO;
       ARRAY N(*) REGCNT1 - REGCNT8;
       ARRAY W(*) REGWGT1 - REGWGT8;
       ARRAY TN(*) TOTCNT1 - TOTCNT8;
       ARRAY TW(*) TOTWGT1 - TOTWGT8;
   %END; %ELSE
   %IF "&TYPE" = "C" %THEN %DO;
       ARRAY N(*) CATCNT1 - CATCNT8;
       ARRAY W(*) CATWGT1 - CATWGT8;
       ARRAY TN(*) TOTCNT1 - TOTCNT8;
       ARRAY TW(*) TOTWGT1 - TOTWGT8;
   %END;
      ARRAY ADJ(*)    ADJ1 - ADJ8;
      ARRAY TOTADJ(*) TOTADJ1 - TOTADJ8;
      ARRAY AVGADJ(*) AVJADJ1 - AVJADJ8;
      RETAIN TOTADJ TN TW;
      RETAIN AVGADJ;

      IF FIRST.&BYVAR THEN DO;
         DO I = 1 TO DIM(TOTADJ);
  TOTADJ(I) = 0; TN(I)=0; TW(I)=0;
         END;
      END; DROP I;

      PUT ' ';
      PUT ' --- STARTING LOOP1: ' &BYVAR=;
      DO I = 1 TO DIM(TOTADJ);
         PUT I= ADJ(I)=;
         IF ADJ(I) NE . THEN DO;
  TOTADJ(I) = TOTADJ(I) + ADJ(I);
  TN(I)=TN(I)+N(I);
  TW(I)=TW(I)+W(I);
         END;
         PUT I= ADJ(I)= TOTADJ(I)=;
      END;


      PUT ' ';
      PUT ' --- STARTING LOOP2: ' &BYVAR=;
      IF LAST.&BYVAR THEN DO;
         DO I = 1 TO DIM(TOTADJ);
  PUT I= ADJ(I)= TOTADJ(I)= AVGADJ(I)=;
  AVGADJ(I) = TOTADJ(I)/&QCOUNT;
  adj(i)=avgadj(i);
  N(I)=TN(I)/&QCOUNT;
  W(I)=TW(I)/&QCOUNT;
         END;
         OUTPUT;
      END;

 RUN;

%do i=1 %to 8;
/* Collect Standard Errors and residuals from variables in composite */
%if &type=R|(&i=1|&i=2|&i>4) %then %do;
```

```
%if &var1~= %then %do;
%let n=r_&var1;
%let m=s_&var1;

data s_&var1(rename=(semean&i=s_&var1));
set in.&type._&var1(keep=semean&i &byvar);
proc sort; by &byvar;
data r_&var1;
set in2.h&i.&var1(rename=(resid&i=r_&var1));
proc sort data=r_&var1; by mprid;
%end;
%if &var2~= %then %do;
%let n=%str(&n r_&var2);
%let m=%str(&m s_&var2);
data s_&var2(rename=(semean&i=s_&var2));
set in.&type._&var2(keep=semean&i &byvar);
proc sort; by &byvar;
data r_&var2;
set in2.h&i.&var2(rename=(resid&i=r_&var2));
proc sort data=r_&var2; by mprid;
%end;
%if &var3~= %then %do;
%let n=%str(&n r_&var3);
data s_&var3(rename=(semean&i=s_&var3));
set in.&type._&var3(keep=semean&i &byvar);
proc sort; by &byvar;
data r_&var3;
set in2.h&i.&var3(rename=(resid&i=r_&var3));
proc sort data=r_&var3; by mprid;
%let m=%str(&m s_&var3); %end;

%if &var4~= %then %do;
%let n=%str(&n r_&var4);
data s_&var4(rename=(semean&i=s_&var4));
set in.&type._&var4(keep=semean&i &byvar);
proc sort; by &byvar;
data r_&var4;
set in2.h&i.&var4(rename=(resid&i=r_&var4));
%let m=%str(&m s_&var4);
proc sort data=r_&var4; by mprid;
%end;
/* Merge residual files and estimate correlations */
data infile;
merge &n; by mprid;
proc sort; by &byvar;
proc corr  outp=outf noprint;
by &byvar;
var &n;
weight &WGT.;
data outf;
set outf; by &byvar;
where _type_='CORR';
/*  sum standard error of a row variable times correlation times standard error of each column
variable, then sum sums and take square root, divide by number of variables */
data final;
merge &m outf; by &byvar;
data final;
set final; by &byvar;
array r_val &n;
array s_val &m;
sde=0;
do i=1 to dim(s_val);
%do j=1 %to &qcount;
if _name_="R_&&var&j" then
sde=sum(sde,r_val(i)*s_&&var&j*s_val(i));
%end;
end;
data sefin&compos._&i ERROR;
set final;
by &byvar;
if first.&byvar then tv=0;
 tv+sde;
if last.&byvar then do;
```

```
     if tv >= 0 then sde&i=(tv**.5)/&qcount; /* RSG 06/22/2004 change to only do the power
calculation if the tv value is nonnegative*/
     else if tv < 0 then do;   /* RSG 06/22/2004 those with negative trend is set aside to print
out*/
       output error;/*        and determine whether it is from nonmissing data of 30 or more*/
       sde&i=.;
     end;
     output sefin&compos._&i;
    end;
    run;
    /* RSG 06/22/2004 - count how many nonmissing values are in the trend data
       to determine whether the negative trend in above datastep
       (tv < 0) is something to be concerned about */
    proc means data=infile noprint;
    by &byvar;
    var &n;
    output out=miss (drop=_type_ _freq_) n=;
    data error2;
    merge error(in=a drop=&n) miss(in=b);
    by &byvar;
    if a;
    run;
    proc print data=error2; /* RSG 06/22/2004   print out negative trend data and count of
nonmissing data*/
    var &byvar tv &n;
    title "ERROR - NEGAVTIVE TREND FOR &N IN GROUP=&I. AND COMPOSE=&COMPOS.";
    run;
    title ' '; /** RSG 06/22/2004 - BLANK OUT TITLE FOR NEXT LOOP **/

    %if &i=1 %then %do;
    data sefin&compos;
    set sefin&compos._1(keep=&byvar sde&i); by &byvar;
    rename sde&i=semean&i;
    run;
    %end;
    %else %do;
    data sefin&compos;
    merge sefin&compos sefin&compos._&i(keep=&byvar sde&i); by &byvar;
    rename sde&i=semean&i;
    run;
    %end;


    %end;
    %end;

    data out.&type.compos&compos;
    merge compos&compos sefin&compos; by &byvar;
    run;
    PROC PRINT DATA=OUT.&TYPE.COMPOS&COMPOS;
          TITLE1 COMPTITL;
     RUN;
    %MEND COMPOSIT;

    *-------------------------------------;
    *-       set the parameters here      -;
    *-------------------------------------;
    ************************************;
    * Call the macro for each composite ;
    ************************************;
    %COMPOSIT (type=R,compos=1,var1=R07011,var2=R07013,var3=R07027,var4=R07029,qcount=4);
    %COMPOSIT (type=R,compos=2,var1=R07017,var2=R07022,var3=R07019,var4=R07030,qcount=4);
    %COMPOSIT (type=R,compos=3,var1=R07033,var2=R07034,var3=R07035,var4=R07036,qcount=4);
    %COMPOSIT (type=R,compos=4,var1=R07031,var2=R07032,qcount=2);
    %COMPOSIT (type=R,compos=5,var1=R07043,var2=R07045,var3=R07047,qcount=3);
    %COMPOSIT (type=R,compos=6,var1=R07040,var2=R07041,qcount=2);
```

I.1.K Q4FY2007\PROGRAMS\PURCHASEDREPORTCARDS\CAHPS_ADULTQ4FY2007\FILES.INC - INCLUDE FILE IN COMPOSIT.SAS.

```
SET
  IN.R_R07040
  IN.R_R07041
  ;
```

I.2.A Q4FY2007\PROGRAMS\PURCHASEDLOADWEB\CAHPS_ADULTQ4FY2007\LOADCAHQ.SAS - CONVERT CAHPS SCORES INTO WEB LAYOUT - RUN QUARTERLY.

```
*************************************************************************
*
* PROGRAM:  LOADCAHQ.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
* PURPOSE:  Convert the CAHPS Scores Database into the WEB layout
*
* WRITTEN:  11/09/2000 BY KEITH RATHBUN, Adapted from LOADCAHP.SAS.
*
* INPUTS:   1) CAHPS Individual and Composite data sets with adjusted scores
*
* OUTPUT:   1) LOADCAHQ.SD2 - Combined CAHPS Scores Database in WEB layout
*
* INCLUDES: 1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*    and composite data sets
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - STEP1Q.SAS - Recode questions and generate group files
*    - STEP2Q.SAS - Calculate individual adjusted scores for group 1-7
*    - COMPOSIT.SAS - Calculate composite adjusted scores for group 1-8
*
* 2) The output file (LOADCAHQ.SD2) will be run through the
*    MAKEHTMQ.SAS program to generate the WEB pages.
*
* MODIFIED:
*
*  1) 04/10/2002 BY MIKE SCOTT, Updated variable names for 2002 survey.
*  2) 03/21/2003 BY MIKE SCOTT, Updated variable names for 2003 survey.
*  3) 06/25/2003 BY MIKE SCOTT, Updated for Q2 2003.
*  4) 07/03/2003 BY MIKE SCOTT, Added TIMEPD variable to be set to the period
*     or 'Trend'.  Changed from setting BENTYPE to the period or 'Trend' to
*     setting to 'Composite'.
*  5) 10/21/2003 BY MIKE SCOTT, Updated for Q3 2003.
*  6) 01/07/2004 BY MIKE SCOTT, Updated for Q4 2003.
*  7) 03/23/2004 BY MIKE SCOTT, Updated for Q1 2004.
*  8) 06/15/2004 BY REGINA GRAMSS, Updated for q2 2004.
*  9) 09/2004 BY REGINA GRAMSS, Updated for Q3 2004, changed all reference
*     to XREGION to XTNEXREG.
* 10) 01/2005 BY REGINA GRAMSS, Changed XTNEXREG to XSERVREG to include
*     service affiliation into regions.
* 11) 04/2005 BY REGINA GRAMSS, Updated 2004 field names for 2005.
* 12) 07/2005 BY REGINA GRAMSS, updated for Q2 2005.
* 13) 10/2005 BY REGINA GRAMSS, Updated for Q3 2005
* 14) 12/2005 BY REGINA GRAMSS, Updated for Q4 2005
* 15) 03/21/2006 BY KEITH RATHBUN, Updated variable names for 2006 survey.
* 16) 07/12/2006 by Justin Oh, updated for Q3 FY 2006
* 17) 10/03/2006 by Justin Oh - Updated BENTYPE composite year to 2006 Q3
*     Changed Libname IN for Q4FY2006.
* 18) 12/15/2006 by Justin Oh - Updated BENTYPE composite year to 2006 Q4
*     Changed Libname IN for Q1FY2007.
* 19) 04/05/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q1
*     Changed Libname IN for Q2FY2007.
* 20) 04/05/2007 by Justin Oh - Added %LET RCTYPE to select RC types
*     ReportCards OR PurchasedReportCards.
* 21) 09/04/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q3
*     Changed Libname IN for Q4FY2007.
*
*************************************************************************
* Assign data libraries and options
*************************************************************************;
/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards      ***/
%LET RCTYPE = PurchasedReportCards;

LIBNAME IN  v612  "..\..\&RCTYPE\CAHPS_ADULTQ4FY2007\DATA";
LIBNAME OUT v612  "DATA";
LIBNAME LIBRARY   "..\..\..\DATA\AFINAL\FMTLIB";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;
```

```
*************************************************************************
* Load Format definitions for CAHPS Individual and composite data sets.
*************************************************************************;
%INCLUDE "..\LOADCAHQ.INC";

*************************************************************************
*************************************************************************
*
* Process Macro Input Parameters:
*
* 1) QUESTION = Variable Question Name (DSN).
*    - For individual Questions it is the variable name
*    - For composite Questions it is called xCOMPOSn
*      where n = a predefined composite # and
*  x = R (Region) or C (Catchment)
* 2) TYPE = Type of Score (COMPOSITE or INDIVIDUAL)
* 3) REGCAT = Region/Catchment Area
*
*************************************************************************
*************************************************************************;
%MACRO PROCESS(QUESTION=,TYPE=);
*************************************************************************
* Assign value for BENTYPE composite year
*************************************************************************;
%LET YEAR = "2007 Q3"; * Note that this is based on Calendar Year here;

*************************************************************************
* Assign prefix for weighted/unweighted count variables.
* Unweighted counts is REGCNTn where n=group number.
* Weighted counts is REGWGTn where n=group number.
*************************************************************************;
%LET PREFIX = REG;

*************************************************************************
*
* Convert the CAHPS individual Scores Record into WEB layout.
* There are 8 logical records (adjusted scores) per physical record:
*
* ____________________________________________________________
*    Adjusted Score Definitions
*    Group Number
* ____________________________________________________________
* 1. Prime enrolleesXINS_COV IN (1,2,6) AND H07007>=2
* 2. Enrollees w/mil PCM      XENR_PCM IN (1,2,6) AND H07007>=2
* 3. Enrollees w/civ PCM      XENR_PCM = 3        AND H07007>=2
* 4. Nonenrollees   XINS_COV IN (3) /*JSO 08/24/2006, Deleted 4,5*/
* 5. Active duty    XBNFGRP = 1
* 6. Active duty dependents   XBNFGRP = 2
* 7. Retirees and dependents  XBNFGRP IN (3,4)
*
*************************************************************************;
DATA &QUESTION;
   SET IN.&QUESTION;

   LENGTH MAJGRP  $30;
   LENGTH REGION  $25; **RSG 01/2005 - Changed format to be large enough to include service
affiliation;
   LENGTH REGCAT  $26;
   LENGTH BENTYPE $50;
   LENGTH BENEFIT $34;
   LENGTH TIMEPD  $35; **MJS 07/03/03 Added line;

   ********************************************************************
   * Assign Region
   ********************************************************************;
   REGION  = PUT(XSERVREG,SERVREGF.);
   ********************************************************************
   * Assign benefit and benefit type
   ********************************************************************;
   IF "&TYPE" = "INDIVIDUAL" THEN DO;
      IF DEPENDNT IN("R07037","R07048","R07009","R07015") THEN
         BENTYPE = "Composite";   ***MJS 07/03/03 Changed from BENTYPE = PUT(&YEAR,$BENTYPF.);
```

```
   ELSE
      BENTYPE = PUT(DEPENDNT,$BENTYPF.);
   BENEFIT = PUT(DEPENDNT,$BENEF.);
   TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added line;
END;
ELSE IF "&TYPE" = "COMPOSITE" THEN DO;
   BENTYPE = "Composite";   ***MJS 07/03/03 Changed from BENTYPE = PUT(&YEAR,$BENTYPF.);
   BENEFIT = PUT(DEPENDNT,$BENEF.);
   TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added line;
END;
ELSE PUT "ERROR - Invalid TYPE = &TYPE";

*********************************************************************
* For now, Initialize Significance test to zero.
*********************************************************************;
SIG = 0;
*********************************************************************
* Assign Region
*********************************************************************;
REGCAT = PUT(XSERVREG,SERVREGF.);

*********************************************************************
* 1 = Prime Enrollees
*********************************************************************;
MAJGRP = PUT(1,MAJGRPF.);
SCORE = ADJ1;
SEMEAN = SEMEAN1;
N_OBS = &PREFIX.CNT1;
N_WGT = &PREFIX.WGT1;
OUTPUT;

*********************************************************************
* 2 = Enrollees with Military PCM
*********************************************************************;
MAJGRP = PUT(2,MAJGRPF.);
SCORE = ADJ2;
SEMEAN = SEMEAN2;
N_OBS = &PREFIX.CNT2;
N_WGT = &PREFIX.WGT2;
OUTPUT;

*********************************************************************
* 3 = Enrollees with Civilian PCM
*********************************************************************;
MAJGRP = PUT(3,MAJGRPF.);
SCORE = ADJ3;
SEMEAN = SEMEAN3;
N_OBS = &PREFIX.CNT3;
N_WGT = &PREFIX.WGT3;
OUTPUT;

*********************************************************************
* 4 = Non-enrolled Beneficiaries
*********************************************************************;
MAJGRP = PUT(4,MAJGRPF.);
SCORE = ADJ4;
SEMEAN = SEMEAN4;
N_OBS = &PREFIX.CNT4;
N_WGT = &PREFIX.WGT4;
OUTPUT;

*********************************************************************
* 5 = Active Duty
*********************************************************************;
MAJGRP = PUT(5,MAJGRPF.);
SCORE = ADJ5;
SEMEAN = SEMEAN5;
N_OBS = &PREFIX.CNT5;
N_WGT = &PREFIX.WGT5;
OUTPUT;

*********************************************************************
* 6 = Active Duty Dependents
```

```
   ********************************************************************;
   MAJGRP = PUT(6,MAJGRPF.);
   SCORE = ADJ6;
   SEMEAN = SEMEAN6;
   N_OBS = &PREFIX.CNT6;
   N_WGT = &PREFIX.WGT6;
   OUTPUT;

   *******************************************************************
   * 7 = Retirees and Dependents
   ********************************************************************;
   MAJGRP = PUT(7,MAJGRPF.);
   SCORE = ADJ7;
   SEMEAN = SEMEAN7;
   N_OBS = &PREFIX.CNT7;
   N_WGT = &PREFIX.WGT7;
   OUTPUT;

   *******************************************************************
   * 8 = All Beneficiaries    ALL Beneficiaries
   ********************************************************************;
   MAJGRP = PUT(8,MAJGRPF.);
   SCORE  = ADJ8;
   SEMEAN = SEMEAN8;
   N_OBS = &PREFIX.CNT8;
   N_WGT = &PREFIX.WGT8;
   OUTPUT;

KEEP MAJGRP
     REGION
     REGCAT
     BENTYPE
     BENEFIT
     TIMEPD   /*MJS 07/03/03 Added*/
     SCORE
     SEMEAN
     N_OBS
     N_WGT
     SIG
   ;
RUN;

%MEND;

*************************************************************************
* COMPOSITE # 1.
* GETTING NEEDED CARE VARIABLES.
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS1,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R07011,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07013,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07027,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07029,TYPE=INDIVIDUAL);

*************************************************************************
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS2,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R07017,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07022,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07019,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07030,TYPE=INDIVIDUAL);

*************************************************************************
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS3,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R07033,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07034,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07035,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07036,TYPE=INDIVIDUAL);
```

```
*************************************************************************
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS4,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R07031,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07032,TYPE=INDIVIDUAL);

*************************************************************************
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS5,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R07043,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07045,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07047,TYPE=INDIVIDUAL);

*************************************************************************
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS6,TYPE=COMPOSITE );
%PROCESS(QUESTION=R_R07040,TYPE=INDIVIDUAL);
%PROCESS(QUESTION=R_R07041,TYPE=INDIVIDUAL);

*************************************************************************
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*************************************************************************;
%PROCESS(QUESTION=R_R07037,TYPE=INDIVIDUAL);

*************************************************************************
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*************************************************************************;
%PROCESS(QUESTION=R_R07048,TYPE=INDIVIDUAL);

*************************************************************************
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*************************************************************************;
%PROCESS(QUESTION=R_R07009,TYPE=INDIVIDUAL);

*************************************************************************
* INDIVIDUAL # 4.
* SPECIALTY CARE: 0 - 10.
*************************************************************************;
%PROCESS(QUESTION=R_R07015,TYPE=INDIVIDUAL);

*************************************************************************
*************************************************************************
* STACK up all of the files into one final output dataset.
*************************************************************************
*************************************************************************;
DATA OUT.LOADCAHQ;
   SET R_R07011
       R_R07013
       R_R07027
       R_R07029
       R_R07017
       R_R07022
       R_R07019
       R_R07030
       R_R07033
       R_R07034
       R_R07035
       R_R07036
       R_R07031
       R_R07032
       R_R07043
       R_R07045
       R_R07047
```

```
       R_R07040
       R_R07041
       R_R07037
       R_R07048
       R_R07009
       R_R07015
       RCOMPOS1
       RCOMPOS2
       RCOMPOS3
       RCOMPOS4
       RCOMPOS5
       RCOMPOS6
    ;
    IF SCORE = . THEN DELETE;
RUN;

TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6244-410)";
TITLE2 "Program Name: LOADCAHQ.SAS By Keith Rathbun";
TITLE3 "Program Inputs: CAHPS Individual and Composite data sets with adjusted scores";
TITLE4 "Program Outputs: LOADCAHQ.SD2 - Combined CAHPS Scores Database in WEB layout";

PROC FREQ;
TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT
       REGION*REGCAT
      /MISSING LIST;
RUN;
```

I.2.B Q4FY2007\PROGRAMS\PURCHASEDLOADWEB\LOADCAHQ.INC - FORMAT DEFINITIONS FOR CONVERTING THE SCORES DATABASE INTO THE WEB LAYOUT - RUN QUARTERLY.

```
*****************************************************************************
*
* PROGRAM:  LOADCAHQ.INC
* TASK:     QUARTERLY DOD HEALTH CARE SURVEY ANALYSIS (8860-410)
* PURPOSE:  Format definitions for converting the CAHPS Scores Database
* into the WEB layout.
*
* WRITTEN:  11/09/2000 BY KEITH RATHBUN, Adapted from LOADCAHP.INC.
*
* MODIFIED: 1) 08/13/2001 BY KEITH RATHBUN, Added XSERVAFF format to
*    accommodate the short reports.
* 2) 01/24/2002 BY KEITH RATHBUN, Added BENTYPF = 1998,1999,2000
*    added catchment composites.
* 3) 04/10/2002 BY KEITH RATHBUN, Added parameters for 2002 survey.
* 4) 04/03/2003 BY MIKE SCOTT, Added parameters for 2003 survey.
* 5) 07/08/2003 BY MIKE SCOTT, Added formats GETNCARE, GETCAREQ,
*    CRTSHELP, HOWWELL, CUSTSERV, CLMSPROC, and PREVCARE.
* 6) 03/22/2004 BY KEITH RATHBUN, Added parameters for 2004 survey.
*    Changed R04031 to be "Wait Less than 15 Minutes For Appointment".
* 7) 05/06/2004 BY MIKE SCOTT, Changed R04031 back to 2003 version of
*    the label ("Wait More than 15 Minutes Past Appointment") so that
*    the Q1 2004 version of the question is consistent with past
*    versions.  The label will be changed to the new version ("Waiting
*    in the Doctor's Office") in Makehtmq.sas.
* 8) 02/2006 BY REGINA GRAMSS, Changed date format to fielding dates.
* 9) 03/21/2006 BY KEITH RATHBUN, Added parameters for 2006 survey.
*10) 08/22/2006 BY JUSTIN OH, Changed SERVREGF format for Overseas.
*11) 12/15/2006 BY JUSTIN OH, Added parameters for 2007 survey.
*12) 02/02/2007 BY JUSTIN OH, Added "s" in Healthy Behaviors in VALUE BEN.
*
* INPUTS:   No direct input
*
* OUTPUT:   No direct output
*
* NOTES:    1) Under the new contract (8860), the survey year was changed
*    to be based on the year the survey is administered (2002)
*    as opposed to the questioning reference frame (2001).  This
*    include file contains variable names for both the 2001
*    survey administration year and the the 2002 administration
*    year surveys.
*
*****************************************************************************
;
*****************************************************************************
* FORMAT Definitions
*****************************************************************************;
PROC FORMAT;
   VALUE MAJGRPF
      1 = "Prime Enrollees  "
      2 = "Enrollees with Military PCM"
      3 = "Enrollees with Civilian PCM"
      4 = "Non-enrolled Beneficiaries "
      5 = "Active Duty      "
      6 = "Active Duty Dependents     "
      7 = "Retirees and Dependents    "
      8 = "All Beneficiaries"
   ;
   VALUE XSERVAFF
      1 = "ARMY"
      2 = "AIR FORCE"
      3 = "NAVY"
      4 = "OTHER"
   ;
   VALUE REGIONF
      0 = "CONUS MHS "
      1 = "North"
      2 = "South"
      3 = "West"
      4 = "Overseas"
```

```
   ;

/*JSO 08/24/2006, Changed Overseas to Service for Europe,Pacific,Latin*/
   VALUE SERVREGF
      1 = "North Army"
      2 = "North Air Force"
      3 = "North Navy"
      4 = "North Other"
      5 = "South Army"
      6 = "South Air Force"
      7 = "South Navy"
      8 = "South Other"
      9 = "West Army"
     10 = "West Air Force"
     11 = "West Navy"
     12 = "West Other"
     13 = "Europe Army"
     14 = "Europe Air Force"
     15 = "Europe Navy"
     16 = "Europe Other"
     17 = "Pacific Army"
     18 = "Pacific Air Force"
     19 = "Pacific Navy"
     20 = "Pacific Other"
     21 = "Latin America Army"
     22 = "Latin America Air Force"
     23 = "Latin America Navy"
     24 = "Latin America Other"
     25 = "CONUS ARMY"
     26 = "CONUS AIR FORCE"
     27 = "CONUS NAVY"
     28 = "CONUS OTHER";

/*JSO 08/24/2006, Changed Overseas to Europe,Pacific,Latin*/
   VALUE SERVREGO
      1 = "North Army"
      2 = "North Air Force"
      3 = "North Navy"
      4 = "North Other"
      5 = "South Army"
      6 = "South Air Force"
      7 = "South Navy"
      8 = "South Other"
      9 = "West Army"
     10 = "West Air Force"
     11 = "West Navy"
     12 = "West Other"
     13 = "Overseas Europe"
     14 = "Overseas Pacific"
     15 = "Overseas Latin America";

   VALUE $BENTYPF
    "1998    " = "1998  "
    "1999    " = "1999  "
    "2000    " = "2000  "
    "2001    " = "2001  "
    "2002    " = "2002  "
    "2003    " = "2003  "
    "2004    " = "2004  "
    "2005    " = "2005  "
    "2006    " = "2006  "
    "2000 Q1 " = "January, 2000 to December, 2000     "
    "2000 Q2 " = "April, 2000 to March, 2001"
    "2000 Q3 " = "July, 2000 to June, 2001  "
    "2000 Q4 " = "October, 2000 to September, 2001    "
    "2002 Q1 " = "January, 2001 to December, 2001     "
    "2002 Q2 " = "April, 2001 to March, 2002"
    "2002 Q3 " = "July, 2001 to June, 2002  "
    "2002 Q4 " = "October, 2001 to September, 2002    "
    "2003 Q1 " = "January, 2002 to December, 2002     "
    "2003 Q2 " = "April, 2002 to March, 2003"
    "2003 Q3 " = "July, 2002 to June, 2003  "
    "2003 Q4 " = "October, 2002 to September, 2003    "
```

```
        "2004 Q1 " = "January, 2003 to December, 2003     "
        "2004 Q2 " = "April, 2003 to March, 2004"
        "2004 Q3 " = "Quarter 3, CY 2004        "
        "2004 Q4 " = "Quarter 4, CY 2004        "
        "2005 Q1 " = "January, 2005   "
        "2005 Q2 " = "April, 2005     "
        "2005 Q3 " = "July, 2005      "
        "2005 Q4 " = "October, 2005   "
        "2006 Q1 " = "January, 2006   "
        "2006 Q2 " = "April, 2006     "
        "2006 Q3 " = "July, 2006      "
        "2006 Q4 " = "October, 2006   "
        "2007 Q1 " = "January, 2007   "
        "2007 Q2 " = "April, 2007     "
        "2007 Q3 " = "July, 2007      "
        "2007 Q4 " = "October, 2007   "
        /*****************************************************************************/
        /* Admin. Year Defn.      */
        /* 2001        2002        2003       2004      2005      2006      2007    */
        /*****************************************************************************/
        "R00007   ", "R02009   ", "R03009   ", "R04011", "R05011", "R06011", "R07011" = "Problems
Getting Personal Doctor/Nurse         "
        "R00014   ", "R02016   ", "R03013   ", "R04013", "R05013", "R06013", "R07013" = "Problems
Getting Referral to Specialist       "
        "R00028   ", "R02030   ", "R03027   ", "R04028", "R05027", "R06027", "R07027" = "Problems
Getting Necessary Care     "
        "R00029   ", "R02031   ", "R03028   ", "R04030", "R05029", "R06029", "R07029" = "Delays in
Care while Awaiting Approval        "
        "R00019   ", "R02021   ", "R03018   ", "R04018", "R05017", "R06017", "R07017" = "Advice over
Telephone     "
        "R00021   ", "R02023   ", "R03020   ", "R04023", "R05022", "R06022", "R07022" = "Wait for
Routine Visit    "
        "R00024   ", "R02026   ", "R03023   ", "R04020", "R05019", "R06019", "R07019" = "Wait for
Urgent Care      "
        "R00030   ", "R02032   ", "R03029   ", "R04031", "R05030", "R06030", "R07030" = "Wait More
than 15 Minutes Past Appointment    "
        "R00033   ", "R02035   ", "R03032   ", "R04034", "R05033", "R06033", "R07033" = "Listens
Carefully         "
        "R00034   ", "R02036   ", "R03033   ", "R04035", "R05034", "R06034", "R07034" = "Explains so
You can Understand      "
        "R00035   ", "R02037   ", "R03034   ", "R04036", "R05035", "R06035", "R07035" = "Shows Respect
"
        "R00036   ", "R02038   ", "R03035   ", "R04037", "R05036", "R06036", "R07036" = "Spends Time
with You      "
        "R00031   ", "R02033   ", "R03030   ", "R04032", "R05031", "R06031", "R07031" = "Courteous and
Respectful  "
        "R00032   ", "R02034   ", "R03031   ", "R04033", "R05032", "R06032", "R07032" = "Helpful
"
        "R00048   ", "R02048   ", "R03044   ", "R04045", "R05043", "R06043", "R07043" = "Problem
Finding/Understanding Written Material"
        "R00050   ", "R02050   ", "R03046   ", "R04047", "R05045", "R06045", "R07045" = "Problem
Getting Help from Customer Service    "
        "R00055   ", "R02055   ", "R03051   ", "R04053", "R05047", "R06047", "R07047" = "Problem with
Paperwork    "
        "R00044   ", "R02044   ", "R03040   ", "R04041", "R05040", "R06040", "R07040" = "Claims
Handled in a Reasonable Time "
        "R00045   ", "R02045   ", "R03041   ", "R04042", "R05041", "R06041", "R07041" = "Claims
Handled Correctly  "
        "R00037   ", "R02039   ", "R03036   ", "R04038", "R05037", "R06037", "R07037" = "Health Care
"
        "R00056   ", "R02056   ", "R03052   ", "R04054", "R05048", "R06048", "R07048" = "Health Plan
"
        "R00009   ", "R02011   ", "R03011   ", "R04009", "R05009", "R06009", "R07009" = "Primary Care
Manager      "
        "R00016   ", "R02018   ", "R03015   ", "R04015", "R05015", "R06015", "R07015" = "Specialty
Care  "
            "PHYSIC  " = "Physical        "
            "MENTAL  " = "Mental"
       ;
       VALUE $BENEF
        "RCOMPOS1","CCOMPOS1","R00007","R00014","R00028","R00029",
          "R02009","R02016","R02030","R02031",
          "R03009","R03013","R03027","R03028",
```

```
          "R04011","R04013","R04028","R04030",
          "R05011","R05013","R05027","R05029",
          "R06011","R06013","R06027","R06029",
          "R07011","R07013","R07027","R07029"
        = "Getting Needed Care  "

        "RCOMPOS2","CCOMPOS2","R00019","R00021","R00024","R00030",
          "R02021","R02023","R02026","R02032",
          "R03018","R03020","R03023","R03029",
          "R04018","R04023","R04020","R04031",
          "R05017","R05022","R05019","R05030",
          "R06017","R06022","R06019","R06030",
          "R07017","R07022","R07019","R07030"
        = "Getting Care Quickly "

        "RCOMPOS3","CCOMPOS3","R00033","R00034","R00035","R00036",
          "R02035","R02036","R02037","R02038",
          "R03032","R03033","R03034","R03035",
          "R04034","R04035","R04036","R04037",
          "R05033","R05034","R05035","R05036",
          "R06033","R06034","R06035","R06036",
          "R07033","R07034","R07035","R07036"
        = "How Well Doctors Communicate "

        "RCOMPOS4","CCOMPOS4","R00031","R00032",
          "R02033","R02034",
          "R03030","R03031",
          "R04032","R04033",
          "R05031","R05032",
          "R06031","R06032",
          "R07031","R07032"
        = "Courteous and Helpful Office Staff "

        "RCOMPOS5","CCOMPOS5","R00048","R00050","R00055",
          "R02048","R02050","R02055",
          "R03044","R03046","R03051",
          "R04045","R04047","R04053",
          "R05043","R05045","R05047",
          "R06043","R06045","R06047",
          "R07043","R07045","R07047"
        = "Customer Service"

        "RCOMPOS6","CCOMPOS6","R00044","R00045",
          "R02044","R02045",
          "R03040","R03041",
          "R04041","R04042",
          "R05040","R05041",
          "R06040","R06041",
          "R07040","R07041"
        = "Claims Processing        "
        "RCOMPOS11","COMPOS11","MENTAL","PHYS"
        = "Health Status  "
        /*************************************************************************/
        /* Admin. Year Defn.    */
        /* 2001      2002      2003      2004      2005      2006      2007       */
        /*************************************************************************/
        "R00037", "R02039", "R03036", "R04038", "R05037", "R06037", "R07037" = "Health Care   "
        "R00056", "R02056", "R03052", "R04054", "R05048", "R06048", "R07048" = "Health Plan   "
        "R00009",  "R02011",  "R03011",  "R04009",  "R05009",  "R06009",  "R07009"  =  "Primary  Care
Manager    "
        "R00016", "R02018", "R03015", "R04015", "R05015", "R06015", "R07015" = "Specialty Care"
       ;
    VALUE BEN
    /*  0 = 'Total'  deleted no longer calculating total 04/2005 RSG ***/
      1 = 'Getting Needed Care'
      2 = 'Getting Care Quickly'
      3 = 'Courteous and Helpful Office Staff'
      4 = 'How Well Doctors Communicate'
      5 = 'Customer Service'
      6 = 'Claims Processing'
      7 = 'Health Plan'
      8 = 'Health Care'
      9 = 'Primary Care Manager'
```

```
 10 = 'Specialty Care'
 11 = 'Preventive Care'
 12 = 'Healthy Behaviors';

  VALUE MAJOR
  1 = "Prime Enrollees  "
  2 = "Enrollees with Military PCM"
  3 = "Enrollees with Civilian PCM"
  4 = "Non-enrolled Beneficiaries "
  5 = "Active Duty      "
  6 = "Active Duty Dependents     "
  7 = "Retirees and Dependents    "
  8 = "All Beneficiaries";

  VALUE GETNCARE
  1 = "Problems Getting Personal Doctor/Nurse"
  2 = "Problems Getting Referral to Specialist"
  3 = "Problems Getting Necessary Care"
  4 = "Delays in Care while Awaiting Approval"
  5 = "Composite";

  VALUE GETCAREQ
  1 = "Advice over Telephone"
  2 = "Wait for Routine Visit"
  3 = "Wait for Urgent Care"
  4 = "Wait More than 15 Minutes Past Appointment"
  5 = "Composite";

  VALUE CRTSHELP
  1 = "Courteous and Respectful"
  2 = "Helpful"
  3 = "Composite";

  VALUE HOWWELL
  1 = "Listens Carefully"
  2 = "Explains so You can Understand"
  3 = "Shows Respect"
  4 = "Spends Time with You"
  5 = "Composite";

  VALUE CUSTSERV
  1 = "Problem Finding/Understanding Written Material"
  2 = "Problem Getting Help from Customer Service"
  3 = "Problem with Paperwork"
  4 = "Composite";

  VALUE CLMSPROC
  1 = "Claims Handled in a Reasonable Time"
  2 = "Claims Handled Correctly"
  3 = "Composite";

  VALUE PREVCARE
  1 = "Mammography"
  2 = "Pap Smear"
  3 = "Hypertension"
  4 = "Prenatal Care"
  5 = "Composite";

  VALUE SMOKEF
  1 = "Non-Smoking Rate"
  2 = "Counselled To Quit"
  3 = "Percent Not Obese"
  4 = "Composite";
RUN;
```

I.3.A Q1FY2007\PROGRAMS\BENCHMARK\BENCHA01.SAS - EXTRACT ADULT CAHPS QUESTIONS FROM NCBD - RUN QUARTERLY.

```
*****************************************************************************
*
* PROGRAM:  BENCHA01.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Extract Adult CAHPS Questions
*
* WRITTEN:  06/02/2000 BY KEITH RATHBUN
*
* INPUTS:   1) AC2006DB.SD2 - 2006 Adult CAHPS Questions
*
* OUTPUT:   1) BENCHA01.SD2 - 2006 Adult CAHPS Questions Renamed to be
*    consistent with the 2006 MPR DOD Survey.
*
* MODIFIED: 1) 12/19/2000 BY KEITH RATHBUN for Q1 2000 Survey.
* 2) 04/11/2002 BY MIKE SCOTT, Updated variable names for 2002
*    Survey.
* 3) 07/30/2002 BY MIKE SCOTT, Updated to use 2001 NCBD.
* 4) 03/21/2003 BY MIKE SCOTT, Updated for 2003 survey.
* 5) 05/06/2003 BY MIKE SCOTT, Updated for 2002 benchmarks.
* 6) 03/23/2004 BY MIKE SCOTT, Updated for Q1 2004.
* 7) 04/16/2004 BY KEITH RATHBUN, Updated to use 2003 NCBD.
* 8) 05/17/2005 BY REGINA GRAMSS, Updated for Q1 2005.
* 9) 03/24/2006 BY KEITH RATHBUN, Updated for Q2 FY 2006.
*    Changed variable names to match the 2006 HCSDB survey.
*    Changed CAHPS variable names to match those in 2005 NCBD.
*10) 02/21/2007 BY JUSTIN OH, Updated for Q1 FY 2007.
*    Changed variable names to match the 2006 HCSDB survey.
*    Changed CAHPS variable names to match those in 2006 NCBD.
*    Changed SREDHIGH varible AC60_05 to AC58_06
*
* NOTES:
*
* 1) This program will generate the input for BENCHA02.SAS.
*
*****************************************************************************
* Assign data libraries and options
*****************************************************************************;
LIBNAME IN  V612 "..\..\..\2006AdultChildNCBD\AC";
LIBNAME OUT V612 "data";
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

DATA OUT.BENCHA01;
   SET IN.AC2006DB (RENAME=(BIRTHYY=YOB));
   FORMAT _ALL_;
   *******************************************
   * Getting Needed Care
   *******************************************;
   H07028   = AC25_06;
   H07011   = AC07_06;
   H07013   = AC09_06;
   H07027   = AC24_06;
   H07029   = AC26_06;
   *******************************************
   * Getting Care Quickly
   *******************************************;
   H07017   = AC14_06;
   H07022   = AC19_06;
   H07019   = AC16_06;
   H07030   = AC27_06;
   *******************************************
   * How Well Doctors Communicate
   *******************************************;
   H07033   = AC30_06;
   H07034   = AC31_06;
   H07035   = AC32_06;
   H07036   = AC33_06;
   *******************************************
   * Courteous and Helpful Office Staff
   *******************************************;
```

```
  H07031   = AC28_06;
  H07032   = AC29_06;
  *******************************************
  * Customer Service
  *******************************************;
  H07043   = AC40_06;
  H07045   = AC42_06;
  H07047   = AC48_06;
  *******************************************
  * Claims Processing
  *******************************************;
  H07040   = AC36_06;
  H07041   = AC37_06;
  *******************************************
  * Health Care Rating
  *******************************************;
  H07037   = AC34_06;
  *******************************************
  * Health Plan Rating
  *******************************************;
  H07048   = AC49_06;
  *******************************************
  * Personal Doctor Rating
  *******************************************;
  H07009   = AC05_06;
  *******************************************
  * Specialist Rating
  *******************************************;
  H07015   = AC11_06;
  *******************************************
  * Health Status
  *******************************************;
  H07066   = AC50_06;
  H07008   = AC04_06;
  AGEGROUP = AGE;   *NEED TO USE USE THIS DIRECTLY (already grouped);
  XSEXA    = GENDER;
  SREDHIGH = AC58_06;       /*JSO 02/21/06 chged AC60_05 to AC58_06 */
  if product in (7,9) then model=4;   /*MJS 05/06/03 product now numeric*/
  if product=3 then model=2;/*coded according to AC FORMATS.SAS*/
  if product=1 then model=1;
  if product=4 then model=6;
  if product=8 then model=5;
  if product=2 then model=3;
  nproduct=planid+0; /*MJS 05/06/03 was plnid now planid*/

LABEL  H07011    = "AC07_06 - CAHPS variable"
       H07013    = "AC09_06 - CAHPS variable"
       H07027    = "AC24_06 - CAHPS variable"
       H07028    = "AC25_06 - CAHPS variable"
       H07029    = "AC26_06 - CAHPS variable"
       H07017    = "AC14_06 - CAHPS variable"
       H07022    = "AC19_06 - CAHPS variable"
       H07019    = "AC16_06 - CAHPS variable"
       H07030    = "AC27_06 - CAHPS variable"
       H07033    = "AC30_06 - CAHPS variable"
       H07034    = "AC31_06 - CAHPS variable"
       H07035    = "AC32_06 - CAHPS variable"
       H07036    = "AC33_06 - CAHPS variable"
       H07031    = "AC28_06 - CAHPS variable"
       H07032    = "AC29_06 - CAHPS variable"
       H07043    = "AC40_06 - CAHPS variable"
       H07045    = "AC42_06 - CAHPS variable"
       H07047    = "AC48_06 - CAHPS variable"
       H07040    = "AC36_06 - CAHPS variable"
       H07041    = "AC37_06 - CAHPS variable"
       H07037    = "AC34_06 - CAHPS variable"
       H07048    = "AC49_06 - CAHPS variable"
       H07009    = "AC05_06 - CAHPS variable"
       H07015    = "AC11_06 - CAHPS variable"
       H07066    = "AC50_06 - CAHPS variable"
       H07008    = "AC04_06 - CAHPS variable"
       AGEGROUP  = "AGE - CAHPS variable"
       XSEXA     = "GENDER - CAHPS variable"
```

```
        SREDHIGH  = "AC58_06 - CAHPS variable"   /*JSO 02/21/06 chged AC60_05 to AC58_06 */
       ;
 KEEP   H07011
        H07013
        H07027
        H07028
        H07029
        H07017
        H07022
        H07019
        H07030
        H07033
        H07034
        H07035
        H07036
        H07031
        H07032
        H07043
        H07045
        H07047
        H07040
        H07041
        H07037
        H07048
        H07009
        H07015
        H07066
        H07008
        AGEGROUP
        XSEXA
        SREDHIGH
        MODEL
        NPRODUCT
        AC03_06
        DISP
        YOB
       ;
RUN;

TITLE1 "Extract Adult CAHPS Questions (DoD)";
TITLE2 "Program Name: BENCHA01.SAS By Keith Rathbun";
TITLE3 "Program Input: AC2006DB.sd2";
TITLE4 "Program Output: BENCHA01.sd2";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES _ALL_ /MISSING LIST;
RUN;
```

I.3.B Q1FY2007\PROGRAMS\BENCHMARK\BENCHA02.SAS - RECODE ADULT CAHPS QUESTIONS FROM NCBD TO BE CONSISTENT WITH THE HCSDB - RUN QUARTERLY.

```
*************************************************************************
*
* PROGRAM:  BENCHA02.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Recode Adult CAHPS Questions
*
* WRITTEN:  06/02/2000 BY KEITH RATHBUN
*
* INPUT:    1) BENCHA01.SD2 - Adult CAHPS Questions Renamed to be
*    consistent with the MPR DOD Survey.
*
* OUTPUT:   1) BENCHA02.SD2 - Recoded Adult CAHPS Questions Renamed
*    to be consistent with the MPR DOD Survey.
*
* MODIFIED: 1) 12/19/2000 BY KEITH RATHBUN for Q1 2000 Survey.
* 2) 04/11/2002 BY MIKE SCOTT, Updated variable names for 2002
*    Survey.
* 3) 07/30/2002 BY MIKE SCOTT, Updated to use 2001 NCBD.
* 4) 03/21/2003 BY MIKE SCOTT, Updated for 2003 survey.
* 5) 05/06/2003 BY MIKE SCOTT, Changed labels from _01 to _02.
* 6) 03/23/2004 BY MIKE SCOTT, Updated for Q1 2004.
* 7) April 2004 By Keith Rathbun, Removed reverse coding for
*    H04031.  2004 survey question wording is 'Within 15 minutes'
*    instead of "More than 15 Minutes".  Updated CAHPS variable
*    labels to be consistent with 2003 NCBD.
* 8) 06/2005 By Regina Gramss, Updated codes with 2005 variable
*    names/labels.
* 9) 03/24/2006 BY KEITH RATHBUN, Updated for 2006 survey.
*    Changed CAHPS variable names to match those in 2005 NCBD.
*
* NOTES:
*
* 1) Run this program after BENCHA01.SAS.
* 2) This program will generate the input for BENCHA03.SAS.
*
*************************************************************************
* Assign data libraries and options
*************************************************************************;
LIBNAME IN      "data";
LIBNAME OUT     "data";
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

DATA OUT.BENCHA02(rename=(nproduct=product));
   SET IN.BENCHA01;

   ************************************************************************
   * Recode variables with Never, Sometimes, Usually and Always.
   * Recode Never & Sometimes (1 & 2) to 1.
   * Recode Usually (3) to 2.
   * Recode Always (4) to 3.
   ************************************************************************;
   IF H07028 = 2      THEN H07029=3;     /* ES 4/28/04  Change in scoring logic */

   IF H07022 = 1       THEN R07022 = 1;   /* MJS 03/23/04 Changed 2003 to 2004 variables names
*/
   ELSE IF H07022 = 2 THEN R07022 = 1;
   ELSE IF H07022 = 3 THEN R07022 = 2;
   ELSE IF H07022 = 4 THEN R07022 = 3;
   ELSE IF H07022 < 0 THEN R07022 = .;

   IF H07017 = 1      THEN R07017 = 1;
   ELSE IF H07017 = 2 THEN R07017 = 1;
   ELSE IF H07017 = 3 THEN R07017 = 2;
   ELSE IF H07017 = 4 THEN R07017 = 3;
   ELSE IF H07017 < 0 THEN R07017 = .;

   IF H07019 = 1      THEN R07019 = 1;
   ELSE IF H07019 = 2 THEN R07019 = 1;
   ELSE IF H07019 = 3 THEN R07019 = 2;
```

```
ELSE IF H07019 = 4 THEN R07019 = 3;
ELSE IF H07019 < 0 THEN R07019 = .;

IF H07030 = 1      THEN R07030 = 1;
ELSE IF H07030 = 2 THEN R07030 = 1;
ELSE IF H07030 = 3 THEN R07030 = 2;
ELSE IF H07030 = 4 THEN R07030 = 3;
ELSE IF H07030 < 0 THEN R07030 = .;

IF H07031 = 1      THEN R07031 = 1;
ELSE IF H07031 = 2 THEN R07031 = 1;
ELSE IF H07031 = 3 THEN R07031 = 2;
ELSE IF H07031 = 4 THEN R07031 = 3;
ELSE IF H07031 < 0 THEN R07031 = .;

IF H07032 = 1      THEN R07032 = 1;
ELSE IF H07032 = 2 THEN R07032 = 1;
ELSE IF H07032 = 3 THEN R07032 = 2;
ELSE IF H07032 = 4 THEN R07032 = 3;
ELSE IF H07032 < 0 THEN R07032 = .;

IF H07033 = 1      THEN R07033 = 1;
ELSE IF H07033 = 2 THEN R07033 = 1;
ELSE IF H07033 = 3 THEN R07033 = 2;
ELSE IF H07033 = 4 THEN R07033 = 3;
ELSE IF H07033 < 0 THEN R07033 = .;

IF H07034 = 1      THEN R07034 = 1;
ELSE IF H07034 = 2 THEN R07034 = 1;
ELSE IF H07034 = 3 THEN R07034 = 2;
ELSE IF H07034 = 4 THEN R07034 = 3;
ELSE IF H07034 < 0 THEN R07034 = .;

IF H07035 = 1      THEN R07035 = 1;
ELSE IF H07035 = 2 THEN R07035 = 1;
ELSE IF H07035 = 3 THEN R07035 = 2;
ELSE IF H07035 = 4 THEN R07035 = 3;
ELSE IF H07035 < 0 THEN R07035 = .;

IF H07036 = 1      THEN R07036 = 1;
ELSE IF H07036 = 2 THEN R07036 = 1;
ELSE IF H07036 = 3 THEN R07036 = 2;
ELSE IF H07036 = 4 THEN R07036 = 3;
ELSE IF H07036 < 0 THEN R07036 = .;

IF H07040 = 1      THEN R07040 = 1;
ELSE IF H07040 = 2 THEN R07040 = 1;
ELSE IF H07040 = 3 THEN R07040 = 2;
ELSE IF H07040 = 4 THEN R07040 = 3;
ELSE IF H07040 < 0 THEN R07040 = .;

IF H07041 = 1      THEN R07041 = 1;
ELSE IF H07041 = 2 THEN R07041 = 1;
ELSE IF H07041 = 3 THEN R07041 = 2;
ELSE IF H07041 = 4 THEN R07041 = 3;
ELSE IF H07041 < 0 THEN R07041 = .;

IF H07066 = 1 THEN R07066 = 5;
ELSE IF H07066 = 2      THEN R07066 = 4;
ELSE IF H07066 = 3      THEN R07066 = 3;
ELSE IF H07066 = 4      THEN R07066 = 2;
ELSE IF H07066 = 5      THEN R07066 = 1;
ELSE IF H07066>5|H07066<1 THEN R07066 = .;

************************************************************************
* Recode variables to one missing condition "."
* This also makes all the "H000xx" to "R000xx".
************************************************************************;
R07011 = H07011;  IF R07011 < 0 THEN R07011 = .;
R07009 = H07009;  IF R07009 < 0|R07009>10 THEN R07009 = .;
R07013 = H07013;  IF R07013 < 0 THEN R07013 = .;
R07015 = H07015;  IF R07015 < 0|R07015>10 THEN R07015 = .;
R07027 = H07027;  IF R07027 < 0 THEN R07027 = .;
```

```
   R07029 = H07029;  IF R07029 < 0 THEN R07029 = .;
   R07037 = H07037;  IF R07037 < 0|R07037>10 THEN R07037 = .;
   R07043 = H07043;  IF R07043 < 0 THEN R07043 = .;
   R07045 = H07045;  IF R07045 < 0 THEN R07045 = .;
   R07047 = H07047;  IF R07047 < 0 THEN R07047 = .;
   R07048 = H07048;  IF R07048 < 0|R07048>10 THEN R07048 = .;

   LABEL R07011   = "AC07_05 - Recoded CAHPS variable"
         R07009   = "AC05_05 - Recoded CAHPS variable"
         R07013   = "AC09_05 - Recoded CAHPS variable"
         R07015   = "AC11_05 - Recoded CAHPS variable"
         R07017   = "AC14_05 - Recoded CAHPS variable"
         R07022   = "AC19_05 - Recoded CAHPS variable"
         R07019   = "AC16_05 - Recoded CAHPS variable"
         R07027   = "AC24_05 - Recoded CAHPS variable"
         R07029   = "AC26_05 - Recoded CAHPS variable"
         R07030   = "AC27_05 - Recoded CAHPS variable"
         R07031   = "AC28_05 - Recoded CAHPS variable"
         R07032   = "AC29_05 - Recoded CAHPS variable"
         R07033   = "AC30_05 - Recoded CAHPS variable"
         R07034   = "AC31_05 - Recoded CAHPS variable"
         R07035   = "AC32_05 - Recoded CAHPS variable"
         R07036   = "AC33_05 - Recoded CAHPS variable"
         R07037   = "AC34_05 - Recoded CAHPS variable"
         R07043   = "AC40_05 - Recoded CAHPS variable"
         R07045   = "AC42_05 - Recoded CAHPS variable"
         R07047   = "AC48_05 - Recoded CAHPS variable"
         R07048   = "AC49_05 - Recoded CAHPS variable"
         R07066   = "AC50_05 - Recoded CAHPS variable"
         R07040   = "AC36_05 - Recoded CAHPS variable"
         R07041   = "AC37_05 - Recoded CAHPS variable"

         nPRODUCT  = "Product ID - CAHPS variable";
       ;
       drop product;
RUN;

TITLE1 "Recode Adult CAHPS Questions (6244-410)";
TITLE2 "Program Name: BENCHA02.SAS By Keith Rathbun";
TITLE3 "Program Input: BENCHA01.SD2";
TITLE4 "Program Output: BENCHA02.SD2";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES  AGEGROUP
        XSEXA
        SREDHIGH
        MODEL
        R07011 * H07011
        R07009 * H07009
        R07013 * H07013
        R07015 * H07015
        R07017 * H07017
        R07022 * H07022
        R07019 * H07019
        R07027 * H07027
        R07029 * H07029
        R07030 * H07030
        R07031 * H07031
        R07032 * H07032
        R07033 * H07033
        R07034 * H07034
        R07035 * H07035
        R07036 * H07036
        R07037 * H07037
        R07043 * H07043
        R07045 * H07045
        R07047 * H07047
        R07048 * H07048
        R07066 * H07066
        R07040 * H07040
        R07041 * H07041
```

```
   /MISSING LIST;
RUN;
```

I.3.C Q4FY2007\PROGRAMS\PURCHASEDBENCHMARK\BENCHA03.SAS - CALCULATE CAHPS BENCHMARK DATA FOR HCSDB - RUN QUARTERLY.

```
*****************************************************************************
*
* PROGRAM:  BENCHA03.SAS
* TASK:     2006 DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Adjust Adult CAHPS Benchmarks
*
* WRITTEN:  June 2000 BY ERIC SCHONE
*
* INPUTS:   1) BENCHA02.SD2 - 2005 Adult CAHPS Questions Renamed to be
*    consistent with the 2006 MPR DOD Survey.
* 2) GROUP8.SD2 - CAHPS Group8 (all beneficiaries) Dataset
*
* OUTPUTS:  1) Benchmark Composite Scores Data Sets
*
* MODIFIED: 1) Nov 2000 BY ERIC SCHONE - Output permanent datasets with
*    scores and standard errors and process the rest of the
*    composites and ratings.
* 2) Dec 2000 BY KEITH RATHBUN - Update variable names for
*    Q1 2000 Survey.
* 3) Jan 2002 BY KEITH RATHBUN - Updated to run under SAS
*    version 8 (changed INTERCEP to INTERCEPT).
* 4) Apr 2002 BY MIKE SCOTT - Updated variable names for Q1
*    2002 Survey.
* 5) Jul 2002 BY MIKE SCOTT - Changed R00077 to R04075, since
*    H02077 (health status) is back and was renamed to R04075
*    in HSC022_1.sd2.
* 6) Mar 2003 BY MIKE SCOTT - Updated for 2003 survey.
* 7) May 2003 BY MIKE SCOTT - Changed ac03_01 to ac03_02.
* 8) Jun 2003 BY MIKE SCOTT - Updated for Q2 2003.
* 9) Oct 2003 BY MIKE SCOTT - Updated for Q3 2003.
*10) Mar 2004 BY MIKE SCOTT - Updated for Q1 2004.
*11) April 2004 BY KEITH RATHBUN - Updated to use the CAHPS 2003
*    variable ac03_03.
*          12) June 2004 BY REGINA GRAMSS - Updated to use for Q2 2004
*13) Sept 2004 BY REGINA GRAMSS - Update for Q3 2004
*14) May 2005 BY REGINA GRAMSS - Updated for Q1 2005
*15) Jul 2005 BY REGINA GRAMSS - Updated for Q2 2005
*16) Oct 2005 BY REGINA GRAMSS - Updated for Q3 2005
*17) Dec 2005 BY REGINA GRAMSS - Updated for Q4 2005
*18) 03/24/2006 BY KEITH RATHBUN, Updated for Q2 FY 2006.
*    Changed variable names to match the 2006 HCSDB survey.
*19) 07/12/2006 by Justin Oh - Updated for Q3 FY 2006.
*20) 10/03/2006 by Justin Oh - Changed libname in2 for Q4FY2006.
*    Change the INCLUDE path to CONVERT.sas file.
*21) 12/18/2006 by Justin Oh - Changed libname in2 for Q1FY2007.
*    Change the INCLUDE path to CONVERT.sas file.
*22) 04/05/2007 by Justin Oh - Changed libname in2 for Q2FY2007.
*    Change the INCLUDE path to CONVERT.sas file.
*23) 04/05/2007 by Justin Oh - Added %LET RCTYPE to select RC types
*    ReportCards OR PurchasedReportCards.
*24) 04/05/2007 by Keith Rathbun - Changed libname in2 for Q3FY2007.
*    Change the INCLUDE path to CONVERT.sas file.
*25) 09/04/2007 by Justin Oh - Changed libname in2 for Q4FY2007.
*    Change the INCLUDE path to CONVERT.sas file.
*26) 10/29/2007 by Lucy Lu - add proxy by variables required by
*    SAS 9 version.
*
*
* NOTES:
*
* 1) Run this program after BENCHA01.SAS and BENCHA02.SAS.
* 2) This program will generate the input for BENCHA04.SAS.
*
****************************************************************************
* Assign data libraries and options
****************************************************************************;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards      ***/
%LET RCTYPE =  PurchasedReportCards;
```

```
libname in  V612 '..\..\..\Q1FY2007\Programs\Benchmark\Data';     /*Use BENCHA02.SD2 from Q1*/
libname in2 V612 "..\&RCTYPE\CAHPS_AdultQ4FY2007\Data";
libname out V612 'Data';
LIBNAME LIBRARY   "..\..\DATA\AFINAL\FMTLIB";



%let wgt=fwrwt;

OPTIONS MLOGIC MPRINT NOCENTER LS=132 PS=79;


%macro comb(f,t,q,l);

proc summary data=&f;
 var &t;
 where &q~=.;
 weight &wgt;
 output out=temp mean=&t;
run;

data temp;
 set temp;
 array old &t;
 call symput('z',left(dim(old)));
run;

data temp(drop=_type_ &t);
 set temp;
 array old &t;
 array new var1-var&z;
  do i=1 to &z;
   new(i)=old(i);
  end;
 length _depvar_ $9.0;     *LLU 10/29.07. Add by varaible to merge in SAS 9 version;
   _depvar_= "&q.";
run;

data &q._&l;
 merge temp c_&q;
by _depvar_;      *LLU 10/29.07;
 array coeffs &t;
 array means var1-var&z;
  DO I = 1 TO DIM(COEFFS);
   IF COEFFS(I) = . THEN COEFFS(I) = 0;
   IF MEANS(I) = . THEN MEANS(I) = 0;
   ADJUST + ( COEFFS(I) * MEANS(I) );
  END;

 ADJUST = ADJUST + intercept;
 &q._&l=adjust;

run;

%mend comb;

%macro adjust(x,y);



proc summary data=setup;
where &x>.;
 class product;

 output out=count;
run;

data count count2(rename=(_freq_=denom));
 set count;
 if _type_=0 then output count2;
 else output count;
run;
```

```
data count(keep=pweight product);
 if _n_=1 then set count2;
 set count;
 pweight=denom/_freq_;
run;

data temp;
 merge count  setup; by product;

run;
proc summary data=temp;
where &x>.;
weight pweight;
var &y;
output out=temp2 mean=&y;
data temp2;
 set temp2;
 array old &y;
 call symput('z',left(dim(old)));
run;
data temp2(keep=var1-var&z);
 set temp2;
 array old &y;
 array new var1-var&z;
  do i=1 to &z;
   new(i)=old(i);
  end;
run;
data temp;
set temp;
if _n_=1 then set temp2;
 array old &y;
 array new var1-var&z;
  do i=1 to &z;
  if old(i)=. then
   old(i)=new(i);
  end;
run;
proc reg data=temp outest=c_&x noprint;
 model &x=&y;
 weight pweight;
 output out=r_&x r=r_&x;
run;

proc sort data=r_&x; by product;
run;

PROC DESCRIPT DATA=r_&x DESIGN=STRWR NOPRINT;
 WEIGHT pweight;
 SETENV DECWIDTH=4;
 NEST product / missunit;
 VAR R_&x;
 OUTPUT  SEMEAN / TABLECELL=DEFAULT
 FILENAME=s_&x;
RUN;

data s_&x (rename=(semean=s_&x));
 set s_&x(keep=semean);
 %do i=1 %to 8;
  %if &i=8 %then %do;

   data group8;
    set in2.group5 in2.group6 in2.group7;
   run;
   %comb(group8,&y,&x,8);
  %end;
  %else %do;
   %comb(in2.group&i,&y,&x,&i);
  %end;
 %end;
```

```
%mend adjust;

/* adjust all the variables */

%macro comp(compno,a,b,c,d);
 %if &a~= %then %do;
  %let n=r_&a;
  %let m=s_&a;
  %do i=1 %to 8;
   %let p&i=&a._&i;
  %end;
  %let grpnum=1;
   proc sort data=r_&a;
    by mpid;
   run;
 %end;
 %if &b~= %then %do;
  %let n=%str(&n r_&b);
  %let m=%str(&m s_&b);
  %do i=1 %to 8;
   %let p&i=%str(&&p&i &b._&i);
  %end;
  %let grpnum=2;
   proc sort data=r_&b;
    by mpid;
   run;
 %end;
 %if &c~= %then %do;
  proc sort data=r_&c;
   by mpid;
  run;
  %let grpnum=3;
  %let n=%str(&n r_&c);
  %do i=1 %to 8;
   %let p&i=%str(&&p&i &c._&i);
  %end;
  %let m=%str(&m s_&c); %end;

  %if &d~= %then %do;
   proc sort data=r_&d;
    by mpid;
   run;
   %let grpnum=4;
   %let n=%str(&n r_&d);
    %do i=1 %to 8;
     %let p&i=%str(&&p&i &d._&i);
    %end;

    %let m=%str(&m s_&d);
  %end;

data infile;
 merge &n;
 by mpid;
run;

proc corr outp=outf noprint;
 var &n;
 weight pweight;
run;

data final;
 if _n_=1 then do;
  %if &a~= %then %do;
   set s_&a;
  %end;
  %if &b~= %then %do;
   set s_&b;
  %end;
  %if &c~= %then %do;
   set s_&c;
  %end;
  %if &d~= %then %do;
```

```
   set s_&d;
  %end;
 end;
 set  outf;
 call symput('s'||compress(_n_),substr(_name_,3));
 where _type_='CORR';
run;

data final;
 set final;
 array r_val &n;
 array s_val &m;
 sde=0;
 do i=1 to dim(s_val);
  %do i=1 %to &grpnum;
   if _name_="r_&&s&i" then
   sde=sde+r_val(i)*s_&&s&i*s_val(i);
  %end;
 end;
run;

data sefin&compno;
 set final end=last;
 tv+sde;
 if last then do;
 sde=(tv**.5)/&grpnum;
 n=1;
 output;
end;

%do i=1 %to 8;
 data temp(keep=&&p&i n);
  merge &&p&i;
  by _model_;*llu 10/29/07l;
  n=1;
 run;

data output;
 set &&p&i;
 totadj+adjust;
run;

data output(keep=totadj n);
 set output end=last;
 if last then do;
  totadj=totadj/&grpnum;
  n=1;        *llu 10/29/07l;
  output;
 end;
run;

data out&compno._&i;
 merge output temp;
 by n;      *llu 10/29/07l;
run;

data out.comp&compno._&i(drop=n);
   merge out&compno._&i
         sefin&compno;
 by n;      *llu 10/29/07l;
run;

%end;

%mend comp;

/* create composites */
proc sort data=in.bencha02 out=setup;
 by product;
run;
data setup;
set setup;
if ^(model in (2,4));
```

```
if disp in ('M10','I10')  ;   ***KRR 04/19/04 Changed _02 to _03;
data setup;
 set setup; by product;
 mpid=_n_;
 if agegroup ne . then do;
 age1824=0; age2534=0; age3544=0; age4554=0; age5564=0; age6574=0;

      if agegroup=1 then age1824=1;
 else if agegroup=2 then age2534=1;
 else if agegroup=3 then age3544=1;
 else if agegroup=4 then age4554=1;
 else if agegroup=5 then age5564=1;
 else if agegroup=6 then age6574=1;
 end;
 if agegroup<6;
run;
%INCLUDE "..\REPORTCARDS\CAHPS_AdultQ4FY2007\CONVERT.SAS";

%CONT1(DSN=SETUP, NUM=7,  Y=R07011 R07013 R07027 R07029
        R07043 R07045 R07047);
%CONT2(DSN=SETUP, NUM=4,  Y=R07037 R07048 R07009 R07015);
%CONT3(DSN=SETUP, NUM=12, Y=R07017 R07022 R07019 R07030
        R07033 R07034 R07035 R07036
        R07031 R07032 R07040 R07041);
/* GETTING NEEDED CARE */
%adjust(R07011,age1824 age2534 age3544 age4554  R07066);
%adjust(R07013,age1824 age2534 age3544 age4554  R07066);
%adjust(R07027,age1824 age2534 age3544 age4554  R07066);
%adjust(R07029,age1824 age2534 age3544 age4554  R07066);
%comp(1,R07011,R07013,R07027,R07029);


/* GETTING NEEDED CARE QUICKLY */
%adjust(R07017,age1824 age2534 age3544 age4554  R07066);
%adjust(R07022,age1824 age2534 age3544 age4554  R07066);
%adjust(R07019,age1824 age2534 age3544 age4554  R07066);
%adjust(R07030,age1824 age2534 age3544 age4554  R07066);
%comp(2,R07017,R07022,R07019,R07030);

/* HOW WELL DOCTORS COMMUNICATE */
%adjust(R07033,age1824 age2534 age3544 age4554  R07066);
%adjust(R07034,age1824 age2534 age3544 age4554  R07066);
%adjust(R07035,age1824 age2534 age3544 age4554  R07066);
%adjust(R07036,age1824 age2534 age3544 age4554  R07066);
%comp(3,R07033,R07034,R07035,R07036);

/* COURTEOUS AND HELPFUL OFFICE STAFF */
%adjust(R07031,age1824 age2534 age3544 age4554  R07066);
%adjust(R07032,age1824 age2534 age3544 age4554  R07066);
%comp(4,R07031,R07032);

/* CUSTOMER SERVICE */
%adjust(R07043,age1824 age2534 age3544 age4554  R07066);
%adjust(R07045,age1824 age2534 age3544 age4554  R07066);
%adjust(R07047,age1824 age2534 age3544 age4554  R07066);
%comp(5,R07043,R07045,R07047);

/* CLAIMS PROCESSING */
%adjust(R07040,age1824 age2534 age3544 age4554  R07066);
%adjust(R07041,age1824 age2534 age3544 age4554  R07066);
%comp(6,R07040,R07041);

/* RATING ALL HEALTH CARE: 0 - 10 */
%adjust(R07037,age1824 age2534 age3544 age4554  R07066);
%comp(7,R07037);

/* RATING OF HEALTH PLAN: 0 - 10 */
%adjust(R07048,age1824 age2534 age3544 age4554  R07066);
%comp(8,R07048);

/* RATING OF PERSONAL DR: 0 - 10 */
%adjust(R07009,age1824 age2534 age3544 age4554  R07066);
%comp(9,R07009);
```

```
/* SPECIALTY CARE */
%adjust(R07015,age1824 age2534 age3544 age4554  R07066);
%comp(10,R07015);
```

I.3.D Q4FY2007\PROGRAMS\PURCHASEDBENCHMARK\BENCHA04.SAS - CONVERT THE BENCHMARK SCORES DATABASE INTO THE WEB LAYOUT - RUN QUARTERLY.

```
*************************************************************************
*
* PROGRAM:  BENCHA04.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6244-410)
* PURPOSE:  Convert the Benchmark Scores Database into the WEB layout
*
* WRITTEN:  06/01/2000 BY KEITH RATHBUN
*
* INPUTS:   1) Benchmark data sets with adjusted scores
*    (COMPn_i.SD2 where n = composite number and i = group number)
*
* OUTPUT:   1) BENCHA04.SD2 - Combined Benchmark Scores Database in WEB layout
*
* INCLUDES: 1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*    and composite data sets
*
* MODIFIED: 1) Dec 2000 bY Keith Rathbun: Updated variable names for
*    Q1 2000 Survey.  For the quarterly survey group 8 (all benes)
*    is being used as the benchmark for all groups (1-8).  Thus,
*    this group is copied and output to each of the other 7 groups.
* 2) 01/23/2002 by Mike Scott: Updated variable names to be consistent
*    with 2000 survey.
* 4) 04/15/2002 by Mike Scott - Updated variable names for
*    Q1 2002 Survey.
* 5) 03/21/2003 by Mike Scott - Updated for 2003 survey.
* 6) 06/26/2003 by Mike Scott - Updated for Q2 2003.
* 7) 07/03/2003 by Mike Scott - Added TIMEPD variable to be set to the period
*    or 'Trend'.  Changed from setting BENTYPE to the period or 'Trend' to
*    setting to 'Composite'.
* 8) 07/18/2003 by Mike Scott - Added TIMEPD to FREQ.
* 9) 10/21/2003 by Mike Scott - Updated for Q3 2003.
*10) 03/23/2004 by Mike Scott - Updated for Q1 2004.
*11) 06/15/2004 by Regina Gramss - Updated for Q2 2004.
*12) 09/2004    by Regina Gramss - Updated for Q3 2004.
*13) 05/2005    by Regina Gramss - Updated for Q1 2005.
*14) 10/2005    by Regina Gramss - Updated for Q3 2005.
*15) 03/24/2006 by Keith Rathbun - Updated for Q2 FY 2006.
*    Added MACRO loop to process the 8 groups.
*16) 10/03/2006 by Justin Oh - Updated BENTYPE composite year to 2006 Q3.
*17) 12/18/2007 by Justin Oh - Updated BENTYPE composite year to 2006 Q4.
*18) 04/05/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q1.
*19) 04/05/2007 by Justin Oh - Updated LIBNAME IN2 to be used for purchase RC programs.
*20) 09/04/2007 by Justin Oh - Updated BENTYPE composite year to 2007 Q3.
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - BENCHA01.SAS - Extract Benchmark variables
*    - BENCHA02.SAS - Recode Benchmark variables
*    - BENCHA03.SAS - Construct Scores and SEMEAN datasets
*
* 2) The output file (BENCHA04.SD2) will be run through the
*    MAKEHTML.SAS program to generate the WEB pages.
*
*************************************************************************
* Assign data libraries and options
*************************************************************************;
LIBNAME IN  V612 "DATA";
LIBNAME IN2 V612 "..\Benchmark\qpredtest";
LIBNAME OUT V612 "DATA";
LIBNAME LIBRARY  "..\..\DATA\AFINAL\FMTLIB";


OPTIONS PS=79 LS=132 COMPRESS=NO NOCENTER;

*************************************************************************
* Load Format definitions for CAHPS Individual and composite data sets.
*************************************************************************;
%INCLUDE "..\LOADWEB\LOADCAHQ.INC";
```

```
*************************************************************************
*************************************************************************
*
* Process Macro Input Parameters:
*
* 1) CNUM = Composite or rating variable number (1-10)
* 2) GNUM = Group number (1-8)
* 3) NVAR = Number of variables in the composite
* 4) VARS = List of individual variables for composite
* 5) SE   = List of individual standard error variables
*
* ____________________________________________________________
*    Adjusted Score Definitions
*    Group Number
* ____________________________________________________________
* 1. Prime enrolleesXINS_COV IN (1,2,6) AND H07007_R>=7
* 2. Enrollees w/mil PCM      XENR_PCM IN (1,2,6) AND H07007_R>=7
* 3. Enrollees w/civ PCM      XENR_PCM = 3        AND H07007_R>=7
* 4. Nonenrollees   XINS_COV IN (3,4,5)
* 5. Active duty    BFGROUPP = 1
* 6. Active duty dependents   BFGROUPP = 2
* 7. Retirees and dependents  BFGROUPP IN (3,4)
* 8. All Beneficiaries
*
*************************************************************************;
%MACRO PROCESS(CNUM=, GNUM=, NVAR=, VARS=, SE=);
************************************************************************
* Assign value for BENTYPE composite year
************************************************************************;
%LET YEAR = "2007 Q3"; * Note that this is based on Calendar Year here;

************************************************************************
* Convert benchmark scores datasets into WEB layout.
************************************************************************;
%IF &CNUM<7 %THEN %DO;

  DATA INP;
    SET IN2.COMP&CNUM;
     WHERE X=&GNUM;



   DATA INP;
    SET INP  IN2.PROJERR&GNUM;
    RENAME SE=SESX;
RUN;
%END;
%ELSE %DO;

   DATA INP;
    SET IN2.PROJERR&GNUM;
    RENAME SE=SESX;
RUN;
%END;



   DATA COMP&CNUM._&Gnum;
      SET INP;
     IF _N_=1 THEN
     SET IN.COMP&CNUM._&GNUM;
      LENGTH MAJGRP  $30;
      LENGTH REGION  $25;
      LENGTH REGCAT  $26;
      LENGTH BENTYPE $50;
      LENGTH BENEFIT $34;
      LENGTH TIMEPD  $35;   ***MJS 07/03/03 Added line;

      ********************************************************************
      * For now, assign SIG = 0
      ********************************************************************;
      SIG = 0;
```

```
      ********************************************************************
      * Assign major group
      ********************************************************************;
      MAJGRP  = PUT(&Gnum,MAJGRPF.);

      ********************************************************************
      * Assign Region and Regcat
      ********************************************************************;
      REGION  = "Benchmark";
      REGCAT  = "Benchmark";

      ********************************************************************
      * Assign benefit and benefit type
      ********************************************************************;
      IF      &CNUM = 1  THEN BENEFIT = "Getting Needed Care";
      ELSE IF &CNUM = 2  THEN BENEFIT = "Getting Care Quickly";
      ELSE IF &CNUM = 3  THEN BENEFIT = "How Well Doctors Communicate";
      ELSE IF &CNUM = 4  THEN BENEFIT = "Courteous and Helpful Office Staff";
      ELSE IF &CNUM = 5  THEN BENEFIT = "Customer Service";
      ELSE IF &CNUM = 6  THEN BENEFIT = "Claims Processing";
      ELSE IF &CNUM = 7  THEN BENEFIT = "Health Care";
      ELSE IF &CNUM = 8  THEN BENEFIT = "Health Plan";
      ELSE IF &CNUM = 9  THEN BENEFIT = "Primary Care Manager";
      ELSE IF &CNUM = 10 THEN BENEFIT = "Specialty Care";

      BENTYPE = "Composite";   ***MJS 07/03/03 Changed from BENTYPE = PUT(&YEAR,$BENTYPF.);
      TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added;
       IF &CNUM<7 THEN DO;
IF X=&GNUM THEN DO;
      ********************************************************************
      * Assign composite score and SEMEAN
      ********************************************************************;
  SCORE = TOTADJ;
  SEMEAN = SQRT(SDE**2+SESX**2);

      ********************************************************************
      * Output composite score record for each REGION
      ********************************************************************;
  OUTPUT;
END;
       END;
      ********************************************************************
      * Now, output the individual score records
      ********************************************************************;
      IF &NVAR GT 1|&CNUM>6 THEN DO;
         ARRAY ITEMS &VARS;
         ARRAY SE    &SE;
         LENGTH NAME $8;
         DO I = 1 TO DIM(ITEMS); DROP I;
  CALL VNAME(ITEMS(I),NAME);
  NAME = SUBSTR(NAME,1,6);
  SCORE  = ITEMS(I);
  SEMEAN = SQRT(SE(I)**2+SESX**2);
  IF &NVAR GT 1 THEN
  BENTYPE = PUT(NAME,$BENTYPF.);
  TIMEPD = PUT(&YEAR,$BENTYPF.);   ***MJS 07/03/03 Added;
 IF COMPRESS(UPCASE(NAME))=COMPRESS(UPCASE(VAR)) THEN OUTPUT;
         END;
      END;

   KEEP MAJGRP
        REGION
        REGCAT
        BENTYPE
        BENEFIT
        TIMEPD   /*MJS 07/03/03 Added*/
        SEMEAN
        SCORE
        SIG
      ;
   RUN;
```

```
%MEND;

*****************************************************************************
*****************************************************************************
* Process each of the 8 Groups.
*****************************************************************************
******************************************************************************;
%MACRO DOIT;
%DO I = 1 %TO 8;
   ************************************************************************
   * COMPOSITE # 1.
   * GETTING NEEDED CARE VARIABLES.
   ************************************************************************;
   %PROCESS(CNUM=1, GNUM=&I, NVAR=4, VARS=R07011_&I R07013_&I R07027_&I R07029_&I,
         SE=S_R07011 S_R07013 S_R07027 S_R07029);

   ************************************************************************
   * COMPOSITE # 2.
   * GETTING CARE QUICKLY VARIABLES.
   ************************************************************************;
   %PROCESS(CNUM=2, GNUM=&I, NVAR=4, VARS=R07017_&I R07022_&I R07019_&I R07030_&I,
         SE=S_R07017 S_R07022 S_R07019 S_R07030);

   ************************************************************************
   * COMPOSITE # 3.
   * HOW WELL DOCTORS COMMUNICATE.
   ************************************************************************;
   %PROCESS(CNUM=3, GNUM=&I, NVAR=4, VARS=R07033_&I R07034_&I R07035_&I R07036_&I,
         SE=S_R07033 S_R07034 S_R07035 S_R07036);

   ************************************************************************
   * COMPOSITE # 4.
   * COURTEOUS AND HELPFUL OFFICE STAFF.
   ************************************************************************;
   %PROCESS(CNUM=4, GNUM=&I, NVAR=2, VARS=R07031_&I R07032_&I, SE=S_R07031 S_R07032);

   ************************************************************************
   * COMPOSITE # 5.
   * CUSTOMER SERVICE.
   ************************************************************************;
   %PROCESS(CNUM=5, GNUM=&I, NVAR=3, VARS=R07043_&I R07045_&I R07047_&I,
         SE=S_R07043 S_R07045 S_R07047);

   ************************************************************************
   * COMPOSITE # 6.
   * CLAIMS PROCESSING.
   ************************************************************************;
   %PROCESS(CNUM=6, GNUM=&I, NVAR=2, VARS=R07040_&I R07041_&I, SE=S_R07040 S_R07041);

   ************************************************************************
   * INDIVIDUAL # 1.
   * RATING OF ALL HEALTH CARE: 0 - 10.
   ************************************************************************;
   %PROCESS(CNUM=7, GNUM=&I, NVAR=1, VARS=R07037_&I, SE=S_R07037);

   ************************************************************************
   * INDIVIDUAL # 2.
   * RATING OF HEALTH PLAN: 0 - 10.
   ************************************************************************;
   %PROCESS(CNUM=8, GNUM=&I, NVAR=1, VARS=R07048_&I, SE=S_R07048);

   ************************************************************************
   * INDIVIDUAL # 3.
   * RATING OF PERSONAL DOCTOR: 0 - 10.
   ************************************************************************;
   %PROCESS(CNUM=9, GNUM=&I, NVAR=1, VARS=R07009_&I, SE=S_R07009);

   ************************************************************************
   * INDIVIDUAL # 4.
   * SPECIALTY CARE: 0 - 10.
   ************************************************************************;
   %PROCESS(CNUM=10, GNUM=&I, NVAR=1, VARS=R07015_&I, SE=S_R07015);
%END;
```

```
%MEND DOIT;
%DOIT;

*****************************************************************************
*****************************************************************************
* STACK up all of the files into one final output dataset.
*****************************************************************************
*****************************************************************************;
DATA OUT.BENCHA04;
   SET COMP1_1  COMP1_2  COMP1_3  COMP1_4  COMP1_5  COMP1_6  COMP1_7  COMP1_8
       COMP2_1  COMP2_2  COMP2_3  COMP2_4  COMP2_5  COMP2_6  COMP2_7  COMP2_8
       COMP3_1  COMP3_2  COMP3_3  COMP3_4  COMP3_5  COMP3_6  COMP3_7  COMP3_8
       COMP4_1  COMP4_2  COMP4_3  COMP4_4  COMP4_5  COMP4_6  COMP4_7  COMP4_8
       COMP5_1  COMP5_2  COMP5_3  COMP5_4  COMP5_5  COMP5_6  COMP5_7  COMP5_8
       COMP6_1  COMP6_2  COMP6_3  COMP6_4  COMP6_5  COMP6_6  COMP6_7  COMP6_8
       COMP7_1  COMP7_2  COMP7_3  COMP7_4  COMP7_5  COMP7_6  COMP7_7  COMP7_8
       COMP8_1  COMP8_2  COMP8_3  COMP8_4  COMP8_5  COMP8_6  COMP8_7  COMP8_8
       COMP9_1  COMP9_2  COMP9_3  COMP9_4  COMP9_5  COMP9_6  COMP9_7  COMP9_8
       COMP10_1 COMP10_2 COMP10_3 COMP10_4 COMP10_5 COMP10_6 COMP10_7 COMP10_8
    ;
    IF SCORE = . THEN DELETE;
RUN;

TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6244-410)";
TITLE2 "Program Name: BENCHA04.SAS By Keith Rathbun";
TITLE3 "Program Inputs: Benchmark Individual and Composite data sets with adjusted scores";
TITLE4 "Program Outputs: BENCHA04.SD2 - Combined Benchmark Scores Database in WEB layout";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES TIMEPD BENEFIT BENTYPE MAJGRP REGION REGCAT
       REGION*REGCAT
      /MISSING LIST;
RUN;
```

I.4.A Q4FY2007\PROGRAMS\PURCHASEDREPORTCARDS\MPR_ADULTQ4FY2007\PRVCOMPQ.SAS - CALCULATE PREVENTIVE CARE COMPOSITE SCORES - RUN QUARTERLY.

```
*****************************************************************
*  Project:   DoD Reporting and Analysis 6077-410
*  Program:   PRVCOMPQ.SAS
*  Author:    Chris Rankin
*  Date:      12/22/2000
*  Modified:  4/19/2001 By Keith Rathbun: Restrict population to
*   xins_cov in(1,2,3,6).  Use POSTSTR instead of
*   adj_cell.
*  Modified:  10/25/01 By Daniele Beahm: Because no poststratification
*   was done for q3 2000, changed POSTSTR back to ADJ_CELL
*   04/09/02 modified macros the first three macros to create
*   temporary datasets (instead of writing permanent datasets)
*   07/15/02 By Mike Scott: Changed HCS021 to HCS022 for Q2 2002.
*   01/12/03 By Mike Scott: Changed ADJ_CELL to COM_SAMP.
*   03/21/03 By Mike Scott: Changed HCS024 to HCS031 for Q2 2002.
*   04/01/03 By Mike Scott: Replaced HP_FLU with HP_CHOL.
*   04/30/03 By Mike Scott: Changed COM_SAMP to ADJ_CELL.  Changed
*   CMPNUM1 from 4 to 5 and CMPNUM2 from 4 to 3.
*   06/13/03 By Eric Schone.  Changed composite mean & std err calculations
*   to use weights from 2000 input data.
*   07/23/03 By Mike Scott: Removed ..\PROGRAMS\ from INCLUDE.
*   10/21/03 By Mike Scott: Updated for Q3 2003.
*   01/07/04 By Mike Scott: Updated for Q4 2003.
*   02/02/04 By Mike Scott: Set PRVVAR6, PRVVAR7, and PRVVAR8 in DATA NORMDATA
*   to H04023, H04020, and H04031.
*   03/24/04 By Mike Scott: Updated for Q1 2004.
*   04/09/04 By Keith Rathbun: Added Service Affiliation variables to
*   accomodate the consumer watch.
*   06/22/04 By Regina Gramss: Updated for Q2 2004.
*   09/2004  By Regina Gramss: Updated for Q3 2004, to use XTNEXREG
*vs. XREGION
*   01/2005 By Regina Gramss: Updated to create "Last conus_q" for
* Q4 2004, replace XTNEXREG with XSERVREG
*   04/2005 By Regina Gramss: Updated for Q1 2005 (update 2004 field names)
*   07/2005 By Regina Gramss: updated for Q2 2005
*   10/2005 By Regina Gramss: Updated for Q3 2005
*   12/2005 By Regina Gramss: Updated for Q4 2005
*   03/24/2006 By Keith Rathbun: Updated for Q2 FY 2006.  Changed reference
*   to ADJ_CELL in 2006 data to be STRATUM.
*   07/2006 By Justin Oh: updated for Q2 FY 2006
*   08/22/2006 By Justin Oh
* Changed XSERVREG for Overseas
* Changed IF XINS_COV IN (3,4,5) THEN GROUP4 = 1 to
*         IF XINS_COV IN (3)     THEN GROUP4 = 1
*         Since only XINS_COV IN (1,2,3,6) is kept.
* Create XOCONUS for 2005 data.
* Added XREGION in the keep statement for NORMDATA.
*   10/04/2006 By Justin Oh Updated %LET INDATA and YRDATA.
*   11/15/2006 By Justin Oh Added FIELDAGE in 4 keep statements
*   12/22/2006 By Justin Oh Updated %LET INDATA and YRDATA HCS071_1.
*   04/05/2007 By Justin Oh Updated %LET INDATA and YRDATA HCS072_1.
*   04/05/2007 By Justin Oh Added conditions for RC types
*    ReportCards OR PurchasedReportCards.
*   05/10/2007 By Justin Oh, Added codes, variables for new reservists logic for
*    both Norm and Quarter datasets.
*   05/15/2007 By Justin Oh, Changed XINS_COV to NXNS_COV to assign
*    Groups 1,3, and 4 for new reservists logic.
*   07/30/2007 By Justin Oh, Added added DBENCAT conditions to assign
*    Groups All, 4, 5, and 6.
*   09/04/2007 By Justin Oh Updated %LET INDATA and YRDATA HCS074_1.
*
*  Purpose:   Calculate MPR Preventive Care Composites
*  Input:     HCSyyq_1.SD2
*  Output:    RFINAL.SD2
*   CFINAL.SD2
*   MFINAL.SD2
*   SFINAL.SD2
*
*  Include
```

```
*   Files:    LOADCAHPQ.INC
*   Notes:    Next program is Loadmprq.sas
*
*   ***CHECK PARAMETER ASSIGNMENTS***
*****************************************************************;

OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 MLOGIC MPRINT
        NOFMTERR COMPRESS=YES;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards      ***/
%LET RCTYPE = PurchasedReportCards;

LIBNAME IN      v612 "..\..\..\DATA\AFINAL";
LIBNAME INNORM  v612 "..\..\..\..\2005\DATA";
LIBNAME OUT     v612 ".";
LIBNAME LIBRARY      "..\..\..\DATA\AFINAL\FMTLIB";

%LET WGT=FWRWT;
%LET NORMWGT = CFWT;
%LET NORMDAT = HCS05A_1;

%LET DEBUG=Y;      /** Set to Y for Debug print of datasets **/
%LET INDATA=HCS074_1;

%LET YRDATA=HCS074_1;

/***** The following parameters are used in the Variance ****/
/***** calcuation macro for region and catchment area    ****/

%LET GRPNUM=8;      /** number of groups**/
%LET COMPNUM=7;      /** number of variables        **/  /* RSG - 04/2005 changed from 8 to 7
(eliminate cholesterol*/
%LET REGNUM=15;     /** number of regions          **/  /* RSG - 01/2005 CHANGED TO FIT THE 16
CATEGORIES OF XSERVREG */
     /* JSO 08/24/2006 (16 TO 15) Changed Overseas Regions*/
%LET CATCHNUM=9999; /** number of catchment areas **/

%LET CMPNUM1=4;     /** number of variables in first composite   **/    /*RSG 04/2005 Changed
CMPNUM1 from 5 to 4*/
%LET CMPNUM2=3;     /** number of variables in second composite **/    /*MJS 04/30/03 Changed
CMPNUM2 from 4 to 3*/

%LET COMPCNT=2;    /** number of composites**/

**** set up benchmarks for preventive services ;
**** note -- these are the hp 2000 goals       ;

%LET GOALVAR1= .90;    /** HP Goal for prenatal care        **/
%LET GOALVAR2= .70;    /** HP Goal for Mammography**/
%LET GOALVAR3= .90;    /** HP Goal for Papsmear   **/
%LET GOALVAR4= .95;    /** HP Goal for Blood Pressure check **/
%LET GOALVAR5= .90;    /** access goals **/ /*04/2005 - RSG: DELETED CHOLESTEROLE GOAL*/
%LET GOALVAR6= .90;
%LET GOALVAR7= .98;

%INCLUDE "..\..\LOADWEB\LOADCAHQ.INC";   ***MJS 07/23/03 Removed ..\PROGRAMS\;

*************************************************************;
* Beneficiary group note
*    Eight groups   Definitions
* ___________________________________________________________;
* 1. Prime enrolleesXINS_COV IN (1,2,6) AND H07007>=2
* 2. Enrollees w/mil PCM      XENR_PCM IN (1,2,6) AND H07007>=2
* 3. Enrollees w/civ PCM      XENR_PCM IN (3,7)   AND H07007>=2
* 4. Nonenrollees   XINS_COV IN (3) /*JSO 08/24/2006, Deleted 4,5*/
* 5. Active duty    XBNFGRP = 1
* 6. Active duty dependents   XBNFGRP = 2
* 7. Retirees       XBNFGRP IN (3,4)
* 8. All beneficiaries        ALL
*************************************************************;


/**** note -- output all data to a single dataset for macro */
```

```
/**** call*/
/**** MACROS are no longer called for catchment areas       */

/* 08/24/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
LIBNAME LIBRARY '..\..\..\..\2005\Data\fmtlib';

DATA NORMDATA(KEEP=XTNEXREG XSERVREG &WGT PRVVAR1-PRVVAR&COMPNUM. NUMV1-NUMV&COMPNUM.
        DENV1-DENV&COMPNUM XSERVAFF FIELDAGE);
        /* 11/15/2006 JSO Added FIELDAGE in the keep statement */

  set INNORM.&NORMDAT(KEEP=MPRID XINS_COV HP_BP HP_MAMOG HP_PAP HP_PRNTL XTNEXREG
       XENR_PCM XBNFGRP ENBGSMPL &NORMWGT ADJ_CELL DBENCAT
       H05022 H05019 H05030 H05007 H05006 SERVAFF XREGION FIELDAGE);
  /* 08/24/2006 JSO Added XREGION in the keep statement to get XOCONUS */
  /* 11/15/2006 JSO Added FIELDAGE in the keep statement */
  /* 05/10/2007 JSO Added H05006, DBENCAT in the keep statement */

***************************************************************************
* For quarterly reports, catchment level reporting is not done
* so the value of cellp is set to 1.
* For annual reporting purposes, cellp will need to be assigned
* to geocell
***************************************************************************;

/*RSG 02/2005 Added codes to define XTNEXREG & XSERVAFF*/

  IF SERVAFF = 'A' THEN XSERVAFF = 1;        *Army;
  ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;   *Air Force;
  ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;   *Navy;
  ELSE XSERVAFF = 4;     *Other/unknown;

  IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

  IF XTNEXREG = . THEN DELETE;

  IF XINS_COV NOT IN(1,2,3,6,9) THEN DELETE;  /*JSO 07/30/2007, Added 9*/

  NXNS_COV = XINS_COV;    /*JSO 04/26/2007 added for reservists logic*/
      /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
  IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
  IF DBENCAT IN('GRD','IGR') AND H05006 = 3 THEN DO;
     NXNS_COV = 3;
     XENR_PCM = .;
  END;

  PRVVAR1=HP_PRNTL;        /** prenatal care  **/
  PRVVAR2=HP_MAMOG;        /** mammography    **/
  PRVVAR3=HP_PAP;/** papsmear       **/
  PRVVAR4=HP_BP; /** blood pressure **/
  PRVVAR5=H05022;/** access var 1   **/
  PRVVAR6=H05019;/** access var 2   **/
  PRVVAR7=H05030;/** access var 3   **/

/**** set up numerator and denominator for proportions ****/

  ARRAY PRVVAR(*) PRVVAR1-PRVVAR&COMPNUM;
  ARRAY  NUMER(*) NUMV1-NUMV&COMPNUM;
  ARRAY  DENOM(*) DENV1-DENV&COMPNUM;

  DO I = 1 TO &COMPNUM;
     IF I LE  &CMPNUM1 THEN DO;
        IF PRVVAR(I) = 1 THEN NUMER(I) = 1;
        ELSE NUMER(I)=0;
        IF PRVVAR(I) IN (1, 2) THEN DENOM(I)=1;
     END;
     ELSE IF I GT &CMPNUM1 THEN DO;
        IF PRVVAR(I) IN (1, 2) THEN NUMER(I)=1;
        ELSE NUMER(I)=0;
        IF PRVVAR(I) > 0 THEN DENOM(I)=1;
     END;
  END;
  DROP I;
  DENV4=1;
```

```
 /* 08/22/2006, JSO Create XOCONUS for 2005 data */
    IF      XREGION=13 THEN XOCONUS=1;
    ELSE IF XREGION=14 THEN XOCONUS=2;
    ELSE IF XREGION=15 THEN XOCONUS=3;

 /*RSG 02/2005 Added codes to define XSERVREG CACSMPL*/

    IF XTNEXREG = 1 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 1;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
      ELSE XSERVREG = 4;
    END;

    IF XTNEXREG = 2 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 5;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
      ELSE XSERVREG = 8;
    END;

    IF XTNEXREG = 3 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 9;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
      ELSE XSERVREG = 12;
    END;

    IF XTNEXREG = 4 THEN DO; /*JSO 08/22/2006, Changed Overseas Regions*/
       IF      XOCONUS = 1 THEN XSERVREG = 13;
       ELSE IF XOCONUS = 2 THEN XSERVREG = 14;
       ELSE IF XOCONUS = 3 THEN XSERVREG = 15;
    END;

   RENAME &NORMWGT = &WGT;
run;

/* 08/22/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
LIBNAME LIBRARY  "..\..\..\Data\Afinal\fmtlib";

DATA &YRDATA(KEEP=BGROUP MHS CONUS XSERVAFF CACSMPL &WGT TMP_CELL
        PRVVAR1-PRVVAR&COMPNUM. NUMV1-NUMV&COMPNUM.
        DENV1-DENV&COMPNUM XTNEXREG XSERVREG FIELDAGE);
        /* 11/15/2006 JSO Added FIELDAGE in the keep statement */

  SET IN.&INDATA(KEEP=XINS_COV HP_BP XTNEXREG HP_MAMOG HP_PAP HP_PRNTL    /*RSG 04/2005 DELETE
HP_CHOL*/
  XREGION SERVAFF XENR_PCM XBNFGRP ENBGSMPL &WGT CACSMPL
  STRATUM H07022 H07019 H07030 H07007 H07006 D_HEALTH FIELDAGE DBENCAT);
  /* 11/15/2006 JSO Added FIELDAGE in the keep statement */
  /* 05/10/2007 JSO Added H07006, DBENCAT in the keep statement */

*************************************************************************
* For quarterly reports, catchment level reporting is not done
* so the value of cellp is set to 1.
* For annual reporting purposes, cellp will need to be assigned
* to geocell
*************************************************************************;
  IF SERVAFF = 'A' THEN XSERVAFF = 1;        *Army;
  ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;   *Air Force;
  ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;   *Navy;
  ELSE XSERVAFF = 4;     *Other/unknown;

  CELLP = 1;
  LENGTH TMP_CELL 8;
  TMP_CELL = STRATUM;   /* Make STRATUM a numeric variable */

  IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

  IF XTNEXREG = . THEN DELETE;

  IF XINS_COV NOT IN(1,2,3,6,9) THEN DELETE;  /*JSO 07/30/2007, Added 9*/
```

```
  NXNS_COV = XINS_COV;   /*JSO 05/14/2007 added for reservists logic*/
     /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
  IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
  IF DBENCAT IN('GRD','IGR') AND H07006 = 3 THEN DO;
     NXNS_COV = 3;
     XENR_PCM = .;
  END;

  PRVVAR1=HP_PRNTL;        /** prenatal care  **/
  PRVVAR2=HP_MAMOG;        /** mammography    **/
  PRVVAR3=HP_PAP;/** papsmear       **/
  PRVVAR4=HP_BP; /** blood pressure **/
  /*RSG 04/2005 - delete cholesterol, renumber PRVVAR below*/
  PRVVAR5=H07022;/** access var 1   **/
  PRVVAR6=H07019;/** access var 2   **/
  PRVVAR7=H07030;/** access var 3   **/

/**** set up numerator and denominator for proportions ****/

  ARRAY PRVVAR(*) PRVVAR1-PRVVAR&COMPNUM;
  ARRAY  NUMER(*) NUMV1-NUMV&COMPNUM;
  ARRAY  DENOM(*) DENV1-DENV&COMPNUM;

  DO I = 1 TO &COMPNUM;
     IF I LE  &CMPNUM1 THEN DO;
        IF PRVVAR(I) = 1 THEN NUMER(I) = 1;
        ELSE NUMER(I)=0;
        IF PRVVAR(I) IN (1, 2) THEN DENOM(I)=1;
     END;
     ELSE IF I GT &CMPNUM1 THEN DO;
        IF PRVVAR(I) IN (1, 2) THEN NUMER(I)=1;
        ELSE NUMER(I)=0;
        IF PRVVAR(I) > 0 THEN DENOM(I)=1;
     END;
  END;
  DROP I;
  DENV4=1;

  MHS= 1;   /* set up dummy for MHS-- include all observations */

 /* 08/22/2006, JSO Create XOCONUS for 2005 data */
  IF      XREGION=13 THEN XOCONUS=1;
  ELSE IF XREGION=14 THEN XOCONUS=2;
  ELSE IF XREGION=15 THEN XOCONUS=3;

  IF XTNEXREG = 1 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 1;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
      ELSE XSERVREG = 4;
  END;

  IF XTNEXREG = 2 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 5;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
      ELSE XSERVREG = 8;
  END;

  IF XTNEXREG = 3 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 9;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
      ELSE XSERVREG = 12;
  END;

  IF XTNEXREG = 4 THEN DO; /*JSO 08/22/2006, Changed Overseas Regions*/
     IF      XOCONUS = 1 THEN XSERVREG = 13;
     ELSE IF XOCONUS = 2 THEN XSERVREG = 14;
     ELSE IF XOCONUS = 3 THEN XSERVREG = 15;
  END;
```

```
*************************************************************************
* Assign indicator of CONUS based on XTNEXREG.  CONUS stands for
* Contential United States it but includes both Alaska and Hawaii.
*************************************************************************;
  IF XTNEXREG IN (1,2,3) THEN CONUS=1;  /*RSG 01/2005 OVERALL CONUS*/

  ELSE IF XTNEXREG = 4 THEN CONUS=2;

* Prime enrollees     *;

  IF (NXNS_COV IN (1,2,6) AND H07007>=2) THEN DO;
     BGROUP=1;
     OUTPUT;
  END;

* Enrollees with military PCMs *; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
     (XENR_PCM IN (1,2,6) AND H07007>=2) THEN DO;
     BGROUP=2;
     OUTPUT;
  END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
     (XENR_PCM IN (1,2) AND H07007>=2) THEN DO;
     BGROUP=2;
     OUTPUT;
  END;

* Enrollees with civilian PCMs *; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
     (XENR_PCM IN (3,7) AND H07007>=2) THEN DO;
     BGROUP=3;
     OUTPUT;
  END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
     ((XENR_PCM IN (3) AND H07007>=2) OR NXNS_COV IN (3,9)) THEN DO;  /*JSO 07/30/2007, Added
9*/
     BGROUP=3;
     OUTPUT;
  END;

* Nonenrollees *;

  IF NXNS_COV IN (3,9) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
     BGROUP=4;        /*JSO 07/30/2007, Added 9*/
     OUTPUT;
  END;

* Active duty      *;

  IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
     BGROUP=5;        /*JSO 07/30/2007, added DBENCAT conditions*/
     OUTPUT;
  END;

* Active duty dependents  *;

  IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN DO;
     BGROUP=6;        /*JSO 07/30/2007, added DBENCAT conditions*/
     OUTPUT;
  END;

* Retirees  *;

  IF XBNFGRP IN (3,4) THEN DO;
     BGROUP=7;
     OUTPUT;
  END;

* All beneficiaries *;

  BGROUP=8;
  OUTPUT;
RUN;
```

```
DATA HCSDB;
SET &YRDATA;
RUN;

*****************************************************
*** First, calculate standard errors and create     ***
*** a file for each analytical unit       ***
*****************************************************;

PROC SORT DATA=HCSDB; BY TMP_CELL;
RUN;

*****************************************************
***** Sudaan macro to calculate standard errors   *****
***** there are three output datasets created     *****
***** (XTNEXREG, XSERVREG, MHS, XSERVAFF)  *****
***** Note:  7/10/2000 use CONUS for MHS*****
***** Note:  there are 8 variables and 8 groups   *****
*****************************************************;

%MACRO A_SUDAAN(TABLEVAR);

*** set the number of levels in the proc descript ***;
*** for region or catchment   ***;

 %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
     %LET ENDNUM=4;
     %LET PREF=S;         /** dataset prefix for service affiliation data    **/
 %END;
 %IF %UPCASE(&TABLEVAR)=XSERVREG %THEN %DO;
     %LET ENDNUM=&REGNUM;
     %LET PREF=R;         /** dataset prefix for region data    **/
 %END;
 %ELSE  %IF  %UPCASE(&TABLEVAR)=CONUS  %THEN  %LET  PREF=C;              /**  dataset  prefix  for
catchement area data **/

 %ELSE %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
     %LET ENDNUM=4;      /** RSG 01/2005 Change level of conus to 4 **/
     %LET PREF=M;
 %END;

 %DO I=1 %TO &GRPNUM;     /** 8 groups    **/

     %DO J=1 %TO &COMPNUM;   /** 7 variables **/

         DATA INDATA&I.&J(KEEP=&WGT MHS CONUS XSERVAFF XTNEXREG XSERVREG CACSMPL
 XSERVAFF NUMV&J DENV&J TMP_CELL);
 SET HCSDB;
 WHERE XSERVREG > 0 AND BGROUP=&I AND DENV&J > 0;
 %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
     IF XSERVAFF > 4 OR XSERVAFF = . THEN DELETE;  /*RSG 01/2005 Delete Conus greater than 4
which are not conus */
 %END;
             %IF %UPCASE(&TABLEVAR)=CONUS %THEN %DO;
                 IF CONUS NE 1 THEN DELETE;
             %END;
             %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
                 IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
             %END;
         RUN;

*** Calculate values for regions, catchment areas ****;

         %IF %UPCASE(&TABLEVAR) NE CONUS %THEN %DO;

   PROC DESCRIPT DATA=INDATA&I.&J DESIGN=STRWR NOPRINT;
       WEIGHT &WGT;
       SETENV DECWIDTH=4;
       NEST TMP_CELL / MISSUNIT;
       VAR NUMV&J;
       TABLES &TABLEVAR;
```

```
      SUBGROUP &TABLEVAR;
      LEVELS &ENDNUM;
      OUTPUT SEMEAN/ TABLECELL=DEFAULT
      FILENAME=&PREF.GRP&I.V&J;
  RUN;

         %END;
         %ELSE %IF %UPCASE(&TABLEVAR)=CONUS %THEN %DO;

**** No tables, levels, or subgroups needed ****;

  PROC DESCRIPT DATA=INDATA&I.&J DESIGN=STRWR NOPRINT;
     WEIGHT &WGT;
     SETENV DECWIDTH=4;
     NEST TMP_CELL / MISSUNIT;
     VAR NUMV&J;
     OUTPUT SEMEAN/ TABLECELL=DEFAULT
     FILENAME=&PREF.GRP&I.V&J;
  RUN;

         %END;

***** first, put all variables into one dataset for each group *****;

         DATA &PREF.GRP&I.V&J;
  SET &PREF.GRP&I.V&J;
  IF SEMEAN NE .;
  MHS=1;
  %IF %UPCASE(&TABLEVAR)=CONUS %THEN %DO;
      CONUS=1;
  %END;
         RUN;

         %IF &J=1 %THEN %DO;
  DATA &PREF.SEGRP&I;
     SET &PREF.GRP&I.V&J(KEEP=&TABLEVAR SEMEAN);
     GROUP=&I;
     IF SEMEAN NE .;
     RENAME SEMEAN = SERRV&J;
  RUN;
         %END;
         %ELSE %DO;
  DATA &PREF.SEGRP&I;
     MERGE &PREF.SEGRP&I &PREF.GRP&I.V&J(KEEP=&TABLEVAR SEMEAN);
     BY &TABLEVAR;
     GROUP=&I;
     RENAME SEMEAN = SERRV&J;
  RUN;
         %END;
     %END;

***** Put all data into one dataset  *****
***** Note:  changed output dataset  *****
***** to include group     *****;

     %IF &I=1 %THEN %DO;

        DATA &PREF.SERR;
 SET &PREF.SEGRP&I;
 KEEP GROUP &TABLEVAR SERRV1-SERRV&COMPNUM;
        RUN;
     %END;
     %ELSE %DO;

        DATA &PREF.SERR;
 SET &PREF.SERR
 &PREF.SEGRP&I;
        RUN;
     %END;

******** DEBUG PRINT   *******;

     %IF &DEBUG=Y %THEN %DO;
```

```
            %IF &I=&GRPNUM AND &PREF=R %THEN %DO;
        PROC PRINT DATA=&PREF.SERR;
           VAR &TABLEVAR GROUP SERRV1-SERRV&COMPNUM;
        RUN;
             %END;
          %END;

      %END;

     %MEND A_SUDAAN;

     %A_SUDAAN (CONUS);
     %A_SUDAAN (XSERVAFF);
     %A_SUDAAN (XSERVREG);
     %A_SUDAAN (XTNEXREG);

     *******************************************************
     *** Next, calculate correlation coefficients         ***
     *** and create a file for each analytical unit       ***
     *******************************************************;

     %MACRO GETCORR(BYVAR);

      %IF %UPCASE(&BYVAR)=XTNEXREG %THEN %LET PREF=S;
      %ELSE %IF %UPCASE(&BYVAR)=XSERVREG %THEN %LET PREF=R;
      %ELSE %IF %UPCASE(&BYVAR)=CONUS %THEN %LET PREF=C;
      %ELSE %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %LET PREF=M;

      PROC SORT DATA=HCSDB; BY &BYVAR;
      RUN;

      %DO I = 1 %TO &GRPNUM;

         PROC CORR NOPRINT DATA=HCSDB OUTP=&PREF.CORRC&I;
            %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %DO;
     WHERE BGROUP=&I AND 1 <= XSERVAFF <= 4;      /** RSG 0/2005 Change conus values to keep to be
between 1-4 **/
            %END;
           %IF %UPCASE(&BYVAR)=CONUS %THEN %DO;
              WHERE BGROUP=&I AND CONUS = 1;
           %END;
            %ELSE %DO;
     WHERE BGROUP=&I;
            %END;
            BY &BYVAR;
            VAR PRVVAR1-PRVVAR&COMPNUM;
            WITH PRVVAR1-PRVVAR&COMPNUM;
            WEIGHT &WGT;
         RUN;

         DATA &PREF.CORRC&I;
           SET &PREF.CORRC&I;
           WHERE _TYPE_="CORR";
           GROUP=&I;
           ARRAY OLD PRVVAR1-PRVVAR&COMPNUM;
           ARRAY NEW CORV1-CORV&COMPNUM;
           DO J = 1 TO &COMPNUM;
              NEW(J)=OLD(J);
           END;
           DROP J PRVVAR1-PRVVAR&COMPNUM;
         RUN;

         %IF &I=1 %THEN %DO;

            DATA &PREF.CORRC;
              SET &PREF.CORRC&I;
            RUN;

         %END;
         %ELSE %DO;

            DATA &PREF.CORRC;
              SET &PREF.CORRC
```

```
         &PREF.CORRC&I;
       RUN;

    %END;
    %IF &DEBUG=Y %THEN %DO;
        %IF &I=&COMPNUM AND &PREF=R %THEN %DO;
 PROC PRINT DATA=&PREF.CORRC;
    WHERE GROUP=1;
 RUN;
        %END;
    %END;
 %END;

*** Flatten dataset(for each region, condense matrix to one row) ***;

 %DO K=1 %TO &COMPNUM;

    DATA &PREF.CORR&K;
      SET &PREF.CORRC;
      WHERE _NAME_ = "PRVVAR&K";
      ARRAY CORR   (&COMPNUM) CORV1-CORV&COMPNUM;
      ARRAY CORR&K (&COMPNUM) CORV&K.1-CORV&K.&COMPNUM;
      DO L=1 TO &COMPNUM;
         CORR&K(L)=CORR(L);
      END;
      KEEP GROUP &BYVAR CORV&K.1-CORV&K.&COMPNUM;
    RUN;
    %IF &K=1 %THEN %DO;
        DATA &PREF.CORR;
SET &PREF.CORR&K;
        RUN;
    %END;
    %ELSE %DO;
       DATA &PREF.CORR;
         MERGE &PREF.CORR(IN=IN_1) &PREF.CORR&K(IN=IN_2);
BY GROUP &BYVAR;
       RUN;
    %END;
    %IF &DEBUG=Y %THEN %DO;
       %IF &PREF=R %THEN %DO;
PROC PRINT DATA=&PREF.CORR;
   WHERE GROUP=1;
RUN;
       %END;
     %END;
 %END;

%MEND GETCORR;

%GETCORR(CONUS);
%GETCORR(XSERVAFF);
%GETCORR(XSERVREG);
%GETCORR(XTNEXREG);

*******************************************************
***  Macro to derive composites for each         *******
***  beneficiary group, level*******
***  output one dataset for each group *******
*******************************************************;

%MACRO GETPROP(BYVAR);

 %LET START = %EVAL(&CMPNUM1+1);

 %IF %UPCASE(&BYVAR)=XSERVREG %THEN %LET PREF=R;
 %ELSE %IF %UPCASE(&BYVAR)=CONUS %THEN %LET PREF=C;
 %ELSE %IF %UPCASE(&BYVAR)=XSERVAFF %THEN %LET PREF=M;
 %ELSE %IF %UPCASE(&BYVAR)=XTNEXREG %THEN %LET PREF=S;


 PROC MEANS NWAY NOPRINT DATA=HCSDB;
    CLASS BGROUP &BYVAR;
    VAR NUMV1-NUMV&COMPNUM
```

```
            DENV1-DENV&COMPNUM;
         WEIGHT &WGT;
         OUTPUT OUT= &PREF.CMPSUM(DROP = _TYPE_)
         SUM =  ;
      RUN;
      PROC MEANS NWAY NOPRINT DATA=normdata;
      *   CLASS &BYVAR;
         VAR
            DENV1-DENV&COMPNUM;
         WEIGHT &wgt.;
         OUTPUT OUT= &PREF.norms(DROP = _TYPE_)
         SUM =  nrmv1-nrmv&compnum;
      RUN;

      PROC MEANS NWAY NOPRINT DATA=HCSDB;
         CLASS BGROUP &BYVAR;
         VAR DENV1-DENV&COMPNUM;
         OUTPUT OUT=&PREF.DGFR(DROP=_TYPE_ _FREQ_)
         SUM= NOBSV1-NOBSV&COMPNUM;
      RUN;

     data &pref.cmpsum;

     if _n_=1 then set &pref.norms;
     set &pref.cmpsum;
     proc sort data=&pref.cmpsum; by bgroup &byvar;
      DATA &PREF.CMPSUM;
         MERGE &PREF.CMPSUM(RENAME=(_FREQ_=N_OBS))
     &PREF.DGFR;
         BY BGROUP &BYVAR;
         %IF &PREF=M %THEN %DO;  /** added 7/10/2000 **/
            WHERE 1 <= XSERVAFF <= 4;          /** RSG 01/2005 Change conus values to keep to be
between 1-4 **/
         %END;
         %ELSE %IF &PREF=C %THEN %DO;
            WHERE CONUS = 1;
         %END;

        **** set up group variable  **;

         RENAME BGROUP=GROUP;;

        **** set up proportions, and composites **;

        ARRAY PROPORT PROPV1-PROPV&COMPNUM;
        ARRAY NUMER   NUMV1-NUMV&COMPNUM;
        ARRAY DENOM   DENV1-DENV&COMPNUM;
        array norm    nrmv1-nrmv&compnum;

        DO J=1 TO DIM(PROPORT);
           PROPORT(J) = NUMER(J)/DENOM(J);
        END;
        DROP J;

       **** composites **;


     ** added goalvars to datastep, 5/30/2000       ;
     ** taken out of temporary array for variance calculations;
     ** and used, kept as variables       ;

       GOALVAR1=&GOALVAR1;
       GOALVAR2=&GOALVAR2;
       GOALVAR3=&GOALVAR3;
       GOALVAR4=&GOALVAR4;
       GOALVAR5=&GOALVAR5;
       GOALVAR6=&GOALVAR6;
       GOALVAR7=&GOALVAR7;
     /*RSG 04/2005 - delete goal8 since chol eliminated*/

     ** the weight for preventive service is defined as the         ;
     ** proportion of the denominator for that service to the       ;  ;
     ** composite denominator         ;
```

```
** healthy people 2000 goals -- used as benchmarks   ;

  ARRAY   SVCWGT(&COMPNUM) WGTV1-WGTV&COMPNUM;
  ARRAY    BMARK(&COMPNUM) GOALVAR1-GOALVAR&COMPNUM;
  ARRAY WGTBMARK(&COMPNUM) WTDV1-WTDV&COMPNUM;
  array comp(&compnum) cmpv1-cmpv&compnum;
cpden1=sum(of nrmv1-nrmv&cmpnum1);
cpden2=sum(of nrmv&start-nrmv&compnum);
  DO K = 1 TO &COMPNUM;
      IF K < &START THEN SVCWGT(K)= norm(K)/CPDEN1;
      ELSE SVCWGT(K) = norm(K)/CPDEN2;
      WGTBMARK(K) = SVCWGT(K)*BMARK(K);
      comp(k)=svcwgt(k)*proport(k);
  END;
  DROP K;
  CPBMK1=SUM(OF WTDV1-WTDV&CMPNUM1);
  CPBMK2=SUM(OF WTDV&START-WTDV&COMPNUM);
  comp1=sum(of cmpv1-cmpv&cmpnum1);
comp2=sum(of cmpv&start-cmpv&compnum);
 DROP WGTV1-WGTV&COMPNUM WTDV1-WTDV&COMPNUM
       NUMV1-NUMV&COMPNUM;
 RUN;

 %IF &DEBUG=Y AND &PREF=R %THEN %DO;
     PROC PRINT DATA=&PREF.CMPSUM;  /* print out final dataset */
     RUN; /* for region to check     */
 %END;

%MEND GETPROP;

%GETPROP(CONUS);
%GETPROP(XSERVAFF);
%GETprop(XSERVREG);
%GETPROP(XTNEXREG);

*******************************************************
** since MHS benchmarks will be displayed ****
** set up adjustment factor to apply to   ****
** each analytical unit's composite benchmarks      ****
*******************************************************;


*******************************************************
***  Macro to merge 3 datasets for each*******
***  called by analytical unit         *******
***  output final dataset for*******
***  XSERVAFF, XSERVREG, XTNEXREG, MHS (CONUS)   *******
*******************************************************;

PROC FORMAT;  /*RSG 02/2005 - hardcoded in prog to have caps vs format in loadcahq.inc*/
   VALUE REGIONF
      0 = "CONUS MHS "
      1 = "NORTH"
      2 = "SOUTH"
      3 = "WEST"
      4 = "OVERSEAS"
   ;
%MACRO GETSIG(BYVAR);

 %LET START = %EVAL(&CMPNUM1+1);
 %LET NEXT  = %EVAL(&CMPNUM1+2);

 %IF &BYVAR=XSERVREG %THEN %LET PREF=R;
 %ELSE %IF &BYVAR=CONUS %THEN %LET PREF=C;
 %ELSE %IF &BYVAR=XSERVAFF %THEN %LET PREF=M;
 %ELSE %IF &BYVAR=XTNEXREG %THEN %LET PREF=S;


 DATA OUT.&PREF.FINAL(KEEP= MAJGRP REGION REGCAT GOALVAR1-GOALVAR&COMPNUM
      SIGV1-SIGV&COMPNUM SCORV1-SCORV&COMPNUM
      CPSIG1-CPSIG&COMPCNT CP1SE CP2SE
      CSCOR1-CSCOR&COMPCNT CPBMK1-CPBMK&COMPCNT
      SERRV1-SERRV&COMPNUM CP1SE CP2SE
```

```
     COMP1 COMP2 PROPV1-PROPV&COMPNUM
     DFSCR1-DFSCR&COMPNUM DF_CP1 DF_CP2
     NOBSV1-NOBSV&COMPNUM CPOBS1-CPOBS&COMPCNT
     DENV1-DENV&COMPNUM CPDEN1-CPDEN&COMPCNT);

   FORMAT MAJGRP $30. REGION $25. REGCAT $26.;
       MERGE &PREF.CMPSUM(IN=IN_PROP) &PREF.CORR
       &PREF.SERR;
       BY GROUP &BYVAR;
       IF IN_PROP;
%DO Z=1 %TO &COMPCNT;

 CSCOR&Z=COMP&Z.*100;

   %END;
 **  MAJGRP -- text field for group   **;
   IF      GROUP=1 THEN MAJGRP="Prime Enrollees  ";
   ELSE IF GROUP=2 THEN MAJGRP="Enrollees with Military PCM";
   ELSE IF GROUP=3 THEN MAJGRP="Enrollees with Civilian PCM";
   ELSE IF GROUP=4 THEN MAJGRP="Non-enrolled Beneficiaries ";
   ELSE IF GROUP=5 THEN MAJGRP="Active Duty      ";
   ELSE IF GROUP=6 THEN MAJGRP="Active Duty Dependents     ";
   ELSE IF GROUP=7 THEN MAJGRP="Retirees and Dependents    ";
   ELSE IF GROUP=8 THEN MAJGRP="All Beneficiaries";

 **** REGION AND REGCAT SETUP**;
   %IF &PREF=S %THEN %DO;
       REGCAT=PUT(XTNEXREG,REGIONF.);
       REGION=PUT(XTNEXREG,REGIONF.);
   %END;
   %else %IF &PREF=C %THEN %DO;
       REGION="CONUS MHS";
       REGCAT="CONUS MHS";
   %END;
   %ELSE %IF &PREF=R %THEN %DO;
       REGION=PUT(XSERVREG, SERVREGO.);
       REGCAT=PUT(XSERVREG, SERVREGO.);
   %END;
   %ELSE %IF &PREF=M %THEN %DO; /** RSG 1/2005 Add codes for service grouping **/
       REGION=PUT(XSERVAFF,XSERVAFF.);
       REGCAT=PUT(XSERVAFF,XSERVAFF.);
   %END;

  **** setup t statistics, degreees of freedom    **;
   ARRAY    TSTAT{&COMPNUM} T_V1-T_V&COMPNUM;
   ARRAY    BMARK{&COMPNUM} GOALVAR1-GOALVAR&COMPNUM;
   ARRAY  STNDERR{&COMPNUM} SERRV1-SERRV&COMPNUM;
   ARRAY  SERRSQR{&COMPNUM} SESQV1-SESQV&COMPNUM;
   ARRAY     DEGF{&COMPNUM} DFSCR1-DFSCR&COMPNUM;
   ARRAY    DENOM{&COMPNUM} DENV1-DENV&COMPNUM;
   ARRAY  PROPORT{&COMPNUM} PROPV1-PROPV&COMPNUM;
   ARRAY    SCORE{&COMPNUM} SCORV1-SCORV&COMPNUM;
   ARRAY   PVALUE{&COMPNUM} PVALV1-PVALV&COMPNUM;
   ARRAY      SIG{&COMPNUM} SIGV1-SIGV&COMPNUM;
   ARRAY     NOBS{&COMPNUM} NOBSV1-NOBSV&COMPNUM;
   array     norm{&compnum} nrmv1-nrmv&compnum;

  ** get the item variance, t-statistics, df, p-values **;
  ** and whether significant       **;
   DO I=1 TO &COMPNUM;
       SERRSQR{I}=STNDERR{I}**2;  /* Item variance */
       SCORE{I}=PROPORT{I}*100;   /* Score (prop. * 100) */
       IF STNDERR{I} > 0 THEN TSTAT{I}=(PROPORT{I}-BMARK{I})/STNDERR{I};
       ELSE TSTAT{I}=.;
       DEGF{I}=NOBS{I}-1;
       PVALUE{I}=(1-PROBT(ABS(TSTAT{I}),DEGF{I}))*2;
       IF PVALUE{I} GE .05 THEN SIG{I}=0;
       ELSE IF PVALUE{I} < .05 THEN DO;
 IF PROPORT{I} > BMARK{I} THEN SIG{I}=1;
 IF PROPORT{I} < BMARK{I} THEN SIG{I}=-1;
       END;
   END;
   DROP I;
```

```
   ** multiply each item pair std. errors and correlation coefficients **;
   ** preventive care composite**;
  ARRAY SEwC1{&CMPNUM1} SEwV1-SEwV&CMPNUM1;

    ARRAY SERRC1{&CMPNUM1} SERRV1-SERRV&CMPNUM1;
    %DO J = 1 %TO &CMPNUM1;
        ARRAY  SMEAN&J{&CMPNUM1} SEMV&J.1-SEMV&J.&CMPNUM1;
        ARRAY CORVAR&J{&CMPNUM1} CORV&J.1-CORV&J.&CMPNUM1;
        DO K=1 TO &CMPNUM1;
  SMEAN&J{K}=SERRV&J*SERRC1{K}*CORVAR&J{K}*norm{K}*nrmV&J;
        END;
        SEMV&J.&J=0;
         sewv&j= (nrmV&j**2)*SESQV&j;/** don't count in final standard error calculation **/
    %END;
    DROP K;
   ** multiply each item pair std. errors and correlation coefficients **;
   ** access to care composite **;

    ARRAY SERRC2{&CMPNUM2} SERRV&START-SERRV&COMPNUM;
    %DO L = &START %TO &COMPNUM;
        ARRAY  SMEAN&L{&CMPNUM2} SEMV&L.&START-SEMV&L.&COMPNUM;
        ARRAY CORVAR&L{&CMPNUM2} CORV&L.&START-CORV&L.&COMPNUM;
        DO M=1 TO &CMPNUM2;
  SMEAN&L{M}=SERRV&L*SERRC2{M}*CORVAR&L{M};
        END;
        SEMV&L.&L=0;  /** don't coun't in final standard error calculation **/
    %END;
    DROP M;
   ** calculate composite t-statistic, pvalue, and whether significant **;
   ** for composites **;
  %DO P=1 %TO &COMPCNT;
        %IF &P=1 %THEN %DO;
        ** composite standard error comprised of two parts **;
  CP&P.SE1=SUM(OF SEwV1-SEwV&CMPNUM1);
  CP&P.SE2=SUM(OF SEMV11-SEMV&CMPNUM1.&CMPNUM1.);
  cpobs&p=sum(of nobsv1-nobsv&cmpnum1);
        %END;
        %ELSE %DO;
  CP&P.SE1=SUM(OF SESQV&START-SESQV&COMPNUM);
  CP&P.SE2=SUM(OF SEMV&START.&START.-SEMV&COMPNUM.&COMPNUM.);
  cpobs&p=sum(of nobsv&start-nobsv&compnum);
        %END;
   ** add the two parts of the composite standard error  **;
   ** calculate the composite t statistics and p-values  **;
   ** determine whether differences are sigificant       **;

        CP&P.SE=SQRT(CP&P.SE2+CP&P.SE1)/CPden&P;
        IF CP&P.SE > 0 THEN CP_T&P.=(COMP&P.-CPBMK&P.)/CP&P.SE;
        ELSE CP_T&P.= .;
        DF_CP&P.=CPOBS&P. - 1;
        CP_P&P.=(1-PROBT(ABS(CP_T&P.),DF_CP&P.))*2;
        IF CP_P&P GE .05 THEN CPSIG&P=0;
        ELSE IF CP_P&P < .05 THEN DO;
  IF COMP&P. > CPBMK&P THEN CPSIG&P= 1;
  ELSE IF COMP&P. < CPBMK&P THEN CPSIG&P=-1;
        END;
    %END;

    OUTPUT OUT.&PREF.FINAL;
 RUN;

%MEND GETSIG;

%GETSIG(CONUS);
%GETSIG(XTNEXREG);
%GETSIG(XSERVREG);
%GETSIG(XSERVAFF);
```

I.4.B Q4FY2007\PROGRAMS\PURCHASEDREPORTCARDS\MPR_ADULTQ4FY2007\SMOKING_BMI.SAS - CALCULATES HEALTHY BEHAVIOR COMPOSITE SCORES - RUN QUARTERLY.

```
*************************************************************************
*
*  Project:   DoD Reporting and Analysis 6077-410
*  Program:   SMOKING_BMI.SAS
*  Purpose:   Calculate Smoking Rate and Smoking Cessation
*   for each region-service affiliation and
*   conus-service affiliation groups.
*
*  Date:      1/31/2005
*  Author:    Regina Gramss
*
*  Modified:  1) 04/2005 By Regina Gramss, Updated for Q1 2005.
*   2) 12/2005 By Regina Gramss, Updated for Q4 2005.
*   3) 01/2006 By Regina Gramss - Updated for 2005 annual data.  Normalize
*      with 2005 data and not 2000.  Standardize using age/sex and MPCSMPL
*      (military personnel category).  Update smoking cessation
*      calculation with new formula to correspond more to HEDIS.  Use new
*      weight (CFWT) and use STRATUM as TMP_CELL.
*   4) 03/24/2006 By Keith Rathbun, Updated for Q2 FY 2006.
*   5) 07/12/2006 By Justin Oh, Updated for Q3 FY 2006.
*   6) 08/24/2006 By Justin Oh, REGNUM changed from 16 to 24.
*      Changed XSERVREG for Overseas
*      Changed IF XINS_COV IN (3,4,5) THEN GROUP4 = 1 to
*    IF XINS_COV IN (3)     THEN GROUP4 = 1
*      Since only XINS_COV IN (1,2,3,6) is kept.
*      Create XOCONUS for 2005 data.
*      Added/Moved LIBRARY Libname to use both Quarter/Annual Formats.
*   7) 10/04/2006 By Justin Oh, Updated %LET DSN and CURRENT.
*   8) 12/22/2006 By Justin Oh, Updated %LET DSN HCS071_1 and CURRENT October, 2006.
*   9) 02/02/2007 By Justin Oh, Added "s" to Healthy Behaviors
*  10) 04/05/2007 By Justin Oh, Updated %LET DSN HCS072_1 and CURRENT January, 2007.
*  11) 04/05/2007 By Justin Oh, Added conditions for RC types
*       ReportCards OR PurchasedReportCards.
*  12) 05/10/2007 By Justin Oh, Added codes, variables for new reservists logic for
*       both Norm and Quarter datasets.
*  13) 05/15/2007 By Justin Oh, Changed XINS_COV to NXNS_COV to assign
*       Groups 1,3, and 4 for new reservists logic.
*  14) 07/30/2007 By Justin Oh, Added added DBENCAT conditions to assign
*       Groups All, 4, 5, and 6.
*  15) 09/04/2007 By Justin Oh, Updated %LET DSN HCS074_1 and CURRENT July, 2007.
*
*   Inputs:   1) HCS05A_1.SD2 - Annual 2005 Survey data
*   2) HCS074_1.SD2 - Q4 fy 2007 Survey data
*   3) AC2005DB.sas7bdat - 2005 CAHPS Benchmark Data
*
*   Output:   1) SMOKE.SD2
*
*
*************************************************************************;

OPTIONS COMPRESS=YES NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMTERR
        MPRINT MLOGIC;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards      ***/
%LET RCTYPE =  PurchasedReportCards;


LIBNAME BENCH  V612 "..\..\..\..\2005AdultChildNCBD\AC";
LIBNAME INDAT  v612 "..\..\..\Data\afinal";
LIBNAME INNORM v612 "..\..\..\..\2005\Data";
LIBNAME OUT    V612 ".";

%LET DSN=HCS074_1;
%LET DSN_NORM=HCS05A_1;       /*JSO 08/24/2006, Changed Regions, 16 to 15*/
%LET REGNUM = 15;   /*RSG 01/2005 Number of Regions (with serv affiliation)*/
%LET CONNUM = 4;    /*RSG 01/2005 Number of Conus level (with serv affiliation)*/
%LET CURRENT = July, 2007;
%LET WGT = FWRWT;
%LET NORMWGT = CFWT;
```

```
%LET CATCHNUM=9999; /*RSG 02/2005 number of catchment areas **/

DATA BENCHA01;
   SET BENCH.AC2005DB (RENAME=(BIRTHYY=YOB));
   if product in (7,9) then model=4;
   if product=3 then model=2;/*coded according to AC FORMATS.SAS*/
   if product=1 then model=1;
   if product=4 then model=6;
   if product=8 then model=5;
   if product=2 then model=3;
   product=planid;
if ^(model in (2,4));
if disp in ('M10','I10')  ;
if  ac52_05=1  &  (ac53_05  in  (1,2)  |(ac53_05=3  &  ac54_05=1))  &  ac55_05>=0  &  ac55_05<=4;
/*02/2006 RSG - REMOVED REQUIREMENT FOR ADDITIONAL VISIT (ACC22 FIELD)*/
cessbnch=0;
if ac55_05>0 then cessbnch=1;


proc summary nway; class product;
var cessbnch;
output out=tbench mean=;
proc print;
proc summary;
var cessbnch;
output out=tbench mean=;
proc print;
data _null_;
set tbench;
call symput('CNSLGOAL',cessbnch);
run;

%LET NSMKGOAL = 0.88;

%LET BMIGOAL  = 0.85;

%INCLUDE "..\..\LoadWeb\LOADCAHQ.INC";

PROC FORMAT;
VALUE AGEF
LOW - 34 = 1
 35 - 49 = 2
 50 - 64 = 3
 65 - HIGH = 4;

/* 08/22/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
LIBNAME LIBRARY '..\..\..\..\2005\Data\fmtlib';

DATA NORMDATA (KEEP=TMP_CELL AGE_GRP XTNEXREG XSERVREG XSERVAFF
SM_RATE SM_CESS SM_RTDN SM_CSDN  BMI_DN BMI
TOTCON GROUP XSEXA &WGT. age_n MPCSMPL NXNS_COV);
/* 05/10/2007 JSO Added NXNS_COV in the keep statement */
SET INNORM.&DSN_NORM.(DROP=&WGT.); /* 4/4/2006, KRR added drop so CFWT can renamed/used */
LENGTH AGE_N AGE_GRP TMP_CELL 8.;

IF      XREGION=13 THEN XOCONUS=1; /* 08/24/2006, JSO Create XOCONUS for 2005 data */
ELSE IF XREGION=14 THEN XOCONUS=2;
ELSE IF XREGION=15 THEN XOCONUS=3;

TMP_CELL=STRATUM;

AGE_N = FIELDAGE;

AGE_GRP = PUT(AGE_N, AGEF.);
IF AGE_GRP < 4;

IF SERVAFF = 'A' THEN XSERVAFF = 1;        *Army;
ELSE IF SERVAFF = 'F' THEN XSERVAFF = 2;   *Air Force;
ELSE IF SERVAFF = 'N' THEN XSERVAFF = 3;   *Navy;
ELSE XSERVAFF = 4;     *Other/unknown;

IF XTNEXREG = 1 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 1;
```

```
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
      ELSE XSERVREG = 4;
   END;

   IF XTNEXREG = 2 THEN DO;
      IF XSERVAFF = 1 THEN XSERVREG = 5;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
      ELSE XSERVREG = 8;
   END;

   IF XTNEXREG = 3 THEN DO;
      IF XSERVAFF = 1 THEN XSERVREG = 9;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
      ELSE XSERVREG = 12;
   END;

   IF XTNEXREG = 4 THEN DO; /*JSO 08/22/2006, Changed Overseas Regions*/
      IF      XOCONUS = 1 THEN XSERVREG = 13;
      ELSE IF XOCONUS = 2 THEN XSERVREG = 14;
      ELSE IF XOCONUS = 3 THEN XSERVREG = 15;
   END;

   IF HP_SMOKH IN (1,2) THEN DO;
      SM_RATE = 0;
      IF HP_SMOKH = 2 THEN SM_RATE=1;
      SM_RTDN=1;
   END;

   if hp_smokh=1 & H05055>0 then do;     /*RSG 02/2006 NEW SMOKING CESSATION FORMULA AS PER ERIC
SCHONE */
      if H05055>1 then sm_cess=1;
      else sm_cess=0;
      sm_csdn=1;
   end;

   IF xbmicat > 0  THEN DO;
       BMI = 0;
       BMI_DN=1;
      IF xbmicat <=3 THEN BMI=1;
   END;

   IF XTNEXREG IN (1,2,3) THEN TOTCON=1;

   ELSE IF XTNEXREG = 4 THEN TOTCON=2;

   IF MPCSMPL = 3 THEN MPCSMPL = 2;  /* RSG 02/2006 GROUP WARRANT OFFICER WITH OFFICER */

   RENAME &NORMWGT = &WGT;

   IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

   IF XTNEXREG = .    THEN DELETE;

   IF XINS_COV NOT IN(1,2,3,6,9) THEN DELETE;  /*JSO 07/30/2007, Added 9*/

   NXNS_COV = XINS_COV;    /*JSO 04/26/2007 added for reservists logic*/
       /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
   IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
   IF DBENCAT IN('GRD','IGR') AND H05006 = 3 THEN DO;
      NXNS_COV = 3;
      XENR_PCM = .;
   END;

   * prime enrollees;
   IF NXNS_COV IN (1,2,6) AND H05007>=2 THEN DO;
      GROUP=1;
      OUTPUT;
   END;

   * enrollees with military pcms; /*JSO 04/05/2007, added conditions for RC type*/
```

```
IF "&RCTYPE" = 'ReportCards' AND
   XENR_PCM IN (1,2,6) AND H05007>=2 THEN DO;
   GROUP=2;
   OUTPUT;
END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
   XENR_PCM IN (1,2) AND H05007>=2 THEN DO;
   GROUP=2;
   OUTPUT;
END;

* enrollees with civilian pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
   XENR_PCM = 3 AND H05007>=2 THEN DO;
   GROUP=3;
   OUTPUT;
END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
   ((XENR_PCM = 3 AND H05007>=2) OR NXNS_COV IN (3,9)) THEN DO; /*JSO 07/30/2007, Added 9*/
   GROUP=3;
   OUTPUT;
END;

* nonenrollees;
IF NXNS_COV IN (3,9) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
   GROUP=4;         /*JSO 07/30/2007, Added 9*/
   OUTPUT;
END;

* active duty;
IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
   GROUP=5;        /*JSO 07/30/2007, added DBENCAT conditions*/
   OUTPUT;
END;

* active duty dependents;
IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR')THEN DO;
   GROUP=6;        /*JSO 07/30/2007, added DBENCAT conditions*/
   OUTPUT;
END;

* retirees;
IF XBNFGRP IN (3,4) THEN DO;
   GROUP=7;
   OUTPUT;
END;

* all beneficiaries;
GROUP=8;
OUTPUT;

RUN;

/* 08/22/2006 JSO Moved from the top of program for using Quarter vs. Annual Formats */
LIBNAME LIBRARY '..\..\..\Data\afinal\fmtlib';

DATA SMOKE (KEEP=TMP_CELL AGE_GRP XTNEXREG XSERVREG XSERVAFF TOTCON GROUP
       SM_RATE SM_CESS SM_RTDN SM_CSDN XSEXA &WGT BMI_DN BMI
       MPCSMPL NXNS_COV);/* 05/10/2007 JSO Added NXNS_COV in the keep statement */
SET INDAT.&DSN.;
LENGTH AGE_N AGE_GRP TMP_CELL 8.;

TMP_CELL=STRATUM;

AGE_N = FIELDAGE;

AGE_GRP = PUT(AGE_N, AGEF.);

IF AGE_GRP < 4;
IF SERVAFF='A' THEN XSERVAFF=1;    *Army;
   ELSE IF SERVAFF='F' THEN XSERVAFF=2;      *Air Force;
   ELSE IF SERVAFF='N' THEN XSERVAFF=3;      *Navy;
   ELSE XSERVAFF=4;
```

```
IF XTNEXREG = 1 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 1;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
   ELSE XSERVREG = 4;
END;

IF XTNEXREG = 2 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 5;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
   ELSE XSERVREG = 8;
END;

IF XTNEXREG = 3 THEN DO;
   IF XSERVAFF = 1 THEN XSERVREG = 9;
   ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
   ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
   ELSE XSERVREG = 12;
END;

IF XTNEXREG = 4 THEN DO; /*JSO 08/24/2006, Changed Overseas Regions*/
   IF      XOCONUS = 1 THEN XSERVREG = 13;
   ELSE IF XOCONUS = 2 THEN XSERVREG = 14;
   ELSE IF XOCONUS = 3 THEN XSERVREG = 15;
END;

IF XTNEXREG IN (1,2,3) THEN TOTCON=1;

ELSE IF XTNEXREG=4 THEN TOTCON=2;

IF MPCSMPL = 3 THEN MPCSMPL = 2;  /* RSG 02/2006 GROUP WARRANT OFFICER WITH OFFICER */

IF FIELDAGE >= '065' THEN DELETE; /*JSO added 11/10/2006*/

IF XTNEXREG = . THEN DELETE;

IF XINS_COV NOT IN(1,2,3,6,9) THEN DELETE;  /*JSO 07/30/2007, Added 9*/

NXNS_COV = XINS_COV;    /*JSO 04/26/2007 added for reservists logic*/
    /*JSO 07/30/2007, added DBENCAT, NXNS_COV conditions*/
IF DBENCAT NOT IN('IGR','GRD','IDG','DGR') AND NXNS_COV = 9 THEN DELETE;
IF DBENCAT IN('GRD','IGR') AND H07006 = 3 THEN DO;
   NXNS_COV = 3;
   XENR_PCM = .;
END;

IF HP_SMOKH IN (1,2) THEN DO;
   SM_RATE = 0;
   IF HP_SMOKH = 2 THEN SM_RATE=1;
   SM_RTDN=1;
END;

if hp_smokh=1 & H07055>0 then do;     /*RSG 02/2006 NEW SMOKING CESSATION FORMULA AS PER ERIC
SCHONE */
   if H07055>1 then sm_cess=1;
   else sm_cess=0;
   sm_csdn=1;
end;

IF xbmicat > 0  THEN DO;
    BMI = 0;
    BMI_DN=1;
   IF xbmicat <=3 THEN BMI=1;
END;

* prime enrollees;
IF NXNS_COV IN (1,2,6) AND H07007>=2 THEN DO;
   GROUP=1;
   OUTPUT;
END;
```

```
* enrollees with military pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
   XENR_PCM IN (1,2,6) AND H07007>=2 THEN DO;
   GROUP=2;
   OUTPUT;
END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
   XENR_PCM IN (1,2) AND H07007>=2 THEN DO;
   GROUP=2;
   OUTPUT;
END;

* enrollees with civilian pcms; /*JSO 04/05/2007, added conditions for RC type*/
IF "&RCTYPE" = 'ReportCards' AND
   XENR_PCM = 3 AND H07007>=2 THEN DO;
   GROUP=3;
   OUTPUT;
END;
ELSE IF "&RCTYPE" = 'PurchasedReportCards' AND
   ((XENR_PCM = 3 AND H07007>=2) OR NXNS_COV IN (3,9)) THEN DO; /*JSO 07/30/2007, Added 9*/
   GROUP=3;
   OUTPUT;
END;

* nonenrollees;
IF NXNS_COV IN (3,9) THEN DO; /*JSO 08/24/2006, Deleted 4,5*/
   GROUP=4;         /*JSO 07/30/2007, Added 9*/
   OUTPUT;
END;

* active duty;
IF XBNFGRP = 1 OR DBENCAT IN('IGR','GRD') THEN DO;
   GROUP=5;        /*JSO 07/30/2007, added DBENCAT conditions*/
   OUTPUT;
END;

* active duty dependents;
IF XBNFGRP = 2 OR DBENCAT IN('IDG','DGR') THEN DO;
   GROUP=6;        /*JSO 07/30/2007, added DBENCAT conditions*/
   OUTPUT;
END;

* retirees;
IF XBNFGRP IN (3,4) THEN DO;
   GROUP=7;
   OUTPUT;
END;

* all beneficiaries;
GROUP=8;
OUTPUT;

RUN;

PROC SORT DATA=SMOKE;
BY TMP_CELL;
PROC SORT DATA=NORMDATA;
BY TMP_CELL;
RUN;

%MACRO A_SUDAAN(TABLEVAR,SMOKE,SMOKEVAR,DEN);

%IF %UPCASE(&TABLEVAR)=XSERVREG %THEN %DO;
    %LET ENDNUM=&REGNUM;
   %LET PREF=R;
%END;
%ELSE %IF %UPCASE(&TABLEVAR)=XSERVAFF %THEN %DO;
    %LET ENDNUM=&CONNUM;
   %LET PREF=M;
%END;
%ELSE %IF %UPCASE(&TABLEVAR)=XTNEXREG %THEN %DO;
    %LET ENDNUM=&CONNUM;
   %LET PREF=S;
```

```
%END;

%ELSE %IF %UPCASE(&TABLEVAR)=TOTCON %THEN %LET PREF=C;

%DO I = 1 %TO 8;

    DATA INDAT&I.(KEEP=&WGT XSERVAFF XSERVREG AGE_GRP XSEXA MPCSMPL
             &SMOKEVAR. &DEN. TMP_CELL XTNEXREG);
   SET SMOKE;
    WHERE XSERVREG > 0 AND GROUP=&I. AND &DEN. >= 0;
       %IF %UPCASE(&TABLEVAR) = XSERVAFF %THEN %DO;
 IF XSERVAFF > 4 OR XSERVAFF = . THEN DELETE;
       %END;
      %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
          IF TOTCON NE 1 THEN DELETE;
      %END;
      %IF %UPCASE(&TABLEVAR) = XTNEXREG %THEN %DO;
          IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
      %END;
    RUN;


       DATA NORMDAT&I.(KEEP=&WGT XSERVAFF XSERVREG AGE_GRP XSEXA &SMOKEVAR. &DEN.
        TMP_CELL XTNEXREG MPCSMPL);
           SET NORMDATA;
      WHERE XSERVREG > 0 AND GROUP=&I.;

      %IF %UPCASE(&TABLEVAR) = XSERVAFF %THEN %DO;
IF XSERVAFF > 4 OR XSERVAFF = . THEN DELETE;
      %END;
           %IF %UPCASE(&TABLEVAR) = XTNEXREG %THEN %DO;
     IF XTNEXREG NOTIN (1,2,3,4) THEN DELETE;
           %END;

  RUN;

          %IF %UPCASE(&SMOKE) NE CS AND %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
WEIGHT &WGT;
SETENV DECWIDTH=4;
NEST TMP_CELL / missunit;
VAR &SMOKEVAR;
TABLES AGE_GRP*XSEXA*MPCSMPL*&TABLEVAR.;
SUBGROUP AGE_GRP XSEXA MPCSMPL &TABLEVAR.;
LEVELS 8 2 2 &ENDNUM.;
OUTPUT  SEMEAN MEAN wsum nsum
        / TABLECELL=DEFAULT REPLACE
FILENAME=&PREF.GRP&I.&SMOKE.;
RUN;
          %END;
          %ELSE %IF %UPCASE(&SMOKE) NE CS AND %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
WEIGHT &WGT;
SETENV DECWIDTH=4;
NEST TMP_CELL / missunit;
VAR &SMOKEVAR;
TABLES AGE_GRP*XSEXA*MPCSMPL;
SUBGROUP AGE_GRP XSEXA MPCSMPL;
LEVELS 3 2 2;
OUTPUT  SEMEAN MEAN wsum nsum
        / TABLECELL=DEFAULT REPLACE
FILENAME=&PREF.GRP&I.&SMOKE.;
RUN;
          %END;

   %IF %UPCASE(&SMOKE) NE CS %THEN %DO;

             DATA &PREF.SER_&I.&SMOKE.;
             SET &PREF.GRP&I.&SMOKE.;
             GROUP=&I.;
             IF SEMEAN NE .;
             %IF %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
                 KEEP &TABLEVAR. GROUP AGE_GRP XSEXA MPCSMPL SEMEAN MEAN wsum nsum;
```

```
            %END;
            %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
                TOTCON=1;
                KEEP TOTCON GROUP AGE_GRP XSEXA MPCSMPL SEMEAN MEAN wsum nsum;
            %END;
        RUN;

        /* CREATE WEIGHTS FROM 2005 DATA*/
        proc summary data=normdat&i. nway;
    var &WGT;
    where &den>0;
    class age_grp xsexa MPCSMPL;
    output out=norm_&i. sum=normwt;

    proc sort data=&pref.ser_&i.&smoke.;
    by age_grp xsexa mpcsmpl;

    data &pref.ser_&i.&smoke.;
    merge &pref.ser_&i.&smoke.(in=gin) norm_&i.;
    by age_grp xsexa mpcsmpl;
    if gin;
    wsum=wsum/normwt;
    nsum=nsum/normwt;
    sesq=normwt*semean**2;
    run;

    proc summary data=&pref.ser_&i.&smoke. nway;
    var mean semean sesq wsum nsum;
    class &tablevar.;
    weight normwt;
    output out=&pref.sert&i.&smoke. mean(mean sesq)= sum(wsum nsum)= sumwgt(semean)=;
    run;

        data &pref.sert&i.&smoke;
            set &pref.sert&i.&smoke;
            group=&i.;
       semean=sqrt(sesq/semean);
            drop _type_ _freq_;
        run;

        %IF &I. = 1 %THEN %DO;

            DATA &PREF._&SMOKE.;
            SET &PREF.SERT&I.&SMOKE.;
            RUN;
        %END;
        %ELSE %DO;

            DATA &PREF._&SMOKE.;
SET &PREF._&SMOKE. &PREF.SERT&I.&SMOKE.;
            RUN;

            PROC SORT DATA=&PREF._&SMOKE.;
            BY GROUP;
            RUN;

        %END;

    %END;
        %IF %UPCASE(&SMOKE) = CS AND %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
WEIGHT &WGT;
SETENV DECWIDTH=4;
NEST TMP_CELL / missunit;
VAR &SMOKEVAR;
TABLES AGE_GRP*XSEXA*&TABLEVAR.;
SUBGROUP AGE_GRP XSEXA &TABLEVAR.;
LEVELS 3 2 &ENDNUM.;
OUTPUT  SEMEAN MEAN wsum nsum
        / TABLECELL=DEFAULT REPLACE
FILENAME=&PREF.GRP&I.&SMOKE.;
RUN;
        %END;
```

```
          %ELSE %IF %UPCASE(&SMOKE) = CS AND %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
PROC DESCRIPT DATA=INDAT&I. DESIGN=STRWR NOPRINT;
WEIGHT &WGT;
SETENV DECWIDTH=4;
NEST TMP_CELL / missunit;
VAR &SMOKEVAR;
TABLES AGE_GRP*XSEXA;
SUBGROUP AGE_GRP XSEXA;
LEVELS 3 2 ;
OUTPUT  SEMEAN MEAN wsum nsum
        / TABLECELL=DEFAULT REPLACE
FILENAME=&PREF.GRP&I.&SMOKE.;
RUN;
          %END;

   %IF %UPCASE(&SMOKE) = CS %THEN %DO;

             DATA &PREF.SER_&I.&SMOKE.;
             SET &PREF.GRP&I.&SMOKE.;
             GROUP=&I.;
             IF SEMEAN NE .;
             %IF %UPCASE(&TABLEVAR) NE TOTCON %THEN %DO;
                 KEEP &TABLEVAR. GROUP AGE_GRP XSEXA SEMEAN MEAN wsum nsum;
             %END;
             %IF %UPCASE(&TABLEVAR) = TOTCON %THEN %DO;
                 TOTCON=1;
                 KEEP TOTCON GROUP AGE_GRP XSEXA SEMEAN MEAN wsum nsum;
             %END;
          RUN;

          /* CREATE WEIGHTS FROM 2005 DATA*/
          proc summary data=normdat&i. nway;
      var &WGT;
      where &den>0;
      class age_grp xsexa;
      output out=norm_&i. sum=normwt;

      proc sort data=&pref.ser_&i.&smoke.;
      by age_grp xsexa;

      data &pref.ser_&i.&smoke.;
      merge &pref.ser_&i.&smoke.(in=gin) norm_&i.;
      by age_grp xsexa;
      if gin;
      wsum=wsum/normwt;
      nsum=nsum/normwt;
      sesq=normwt*semean**2;
      run;

      proc summary data=&pref.ser_&i.&smoke. nway;
      var mean semean sesq wsum nsum;
      class &tablevar.;
      weight normwt;
      output out=&pref.sert&i.&smoke. mean(mean sesq)= sum(wsum nsum)= sumwgt(semean)=;
      run;

          data &pref.sert&i.&smoke;
             set &pref.sert&i.&smoke;
             group=&i.;
         semean=sqrt(sesq/semean);
             drop _type_ _freq_;
          run;





        %IF &I. = 1 %THEN %DO;

        DATA &PREF._CESS;
        SET &PREF.SERT&I.&SMOKE.;
```

```
        RUN;
        %END;
        %ELSE %DO;

        DATA &PREF._CESS;
     SET &PREF._CESS &PREF.SERT&I.&SMOKE.;
   RUN;

        PROC SORT DATA=&PREF._CESS;
        BY GROUP;
        RUN;

        %END;

     %END;
%END;

%MEND;

%A_SUDAAN(XSERVAFF,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(XSERVAFF,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(XSERVAFF,BM,BMI,BMI_DN);
%A_SUDAAN(XSERVREG,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(XSERVREG,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(XSERVREG,BM,BMI,BMI_DN);
%A_SUDAAN(XTNEXREG,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(XTNEXREG,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(XTNEXREG,BM,BMI,BMI_DN);
%A_SUDAAN(TOTCON,RT,SM_RATE,SM_RTDN);
%A_SUDAAN(TOTCON,CS,SM_CESS,SM_CSDN);
%A_SUDAAN(TOTCON,BM,BMI,BMI_DN);

%MACRO ADDIT(PREF, TYPE);

DATA &PREF._&TYPE;
SET &PREF._&TYPE;
LENGTH BENEFIT $34. BENTYPE $50.;

BENEFIT="Healthy Behaviors";
    %IF &TYPE=RT %THEN %DO;
        BENTYPE="Non-Smoking Rate";
    %END;
    %IF &TYPE=CESS %THEN %DO;
        BENTYPE="Counselled To Quit";
    %END;
    %IF &TYPE = BM %THEN %DO;
        BENTYPE = "Percent Not Obese";
    %END;
RUN;

%MEND;

%ADDIT(C,RT);
%ADDIT(C,CESS);
%ADDIT(C,BM);
%ADDIT(M,RT);
%ADDIT(M,CESS);
%ADDIT(M,BM);
%ADDIT(R,RT);
%ADDIT(R,CESS);
%ADDIT(R,BM);
%ADDIT(S,RT);
%ADDIT(S,CESS);
%ADDIT(S,BM);


%MACRO MAKEDATA(PREF, TABLEVAR);
  DATA &PREF._SMOKE;
   SET &PREF._RT
       &PREF._CESS
       &PREF._BM
;
```

```
   LENGTH MAJGRP $30. REGION REGCAT $25.;

    IF      GROUP=1 THEN MAJGRP="Prime Enrollees  ";
    ELSE IF GROUP=2 THEN MAJGRP="Enrollees with Military PCM";
    ELSE IF GROUP=3 THEN MAJGRP="Enrollees with Civilian PCM";
    ELSE IF GROUP=4 THEN MAJGRP="Non-enrolled Beneficiaries ";
    ELSE IF GROUP=5 THEN MAJGRP="Active Duty      ";
    ELSE IF GROUP=6 THEN MAJGRP="Active Duty Dependents     ";
    ELSE IF GROUP=7 THEN MAJGRP="Retirees and Dependents    ";
    ELSE IF GROUP=8 THEN MAJGRP="All Beneficiaries";

   %IF &TABLEVAR = XSERVAFF %THEN %DO;
       IF XSERVAFF = 1 THEN REGION = 'ARMY';
       IF XSERVAFF = 2 THEN REGION = 'AIR FORCE';
       IF XSERVAFF = 3 THEN REGION = 'NAVY';
       IF XSERVAFF = 4 THEN REGION = 'OTHER';
   %END;

   %IF &TABLEVAR = XSERVREG %THEN %DO;
           REGION = PUT(XSERVREG,SERVREGO.); /*JSO 08/24/2006, Create new format for Overseas*/
   %END;

   %IF &TABLEVAR = XTNEXREG %THEN %DO;
        IF XTNEXREG=1 THEN REGION="NORTH";
       ELSE IF XTNEXREG=2 THEN REGION="SOUTH";
       ELSE IF XTNEXREG=3 THEN REGION="WEST";
       ELSE IF XTNEXREG=4 THEN REGION="OVERSEAS";
   %END;

   %IF &TABLEVAR = TOTCON %THEN %DO;
        REGION = "CONUS MHS";
   %END;


        REGCAT=REGION;
        DROP GROUP &TABLEVAR;

   IF &TABLEVAR NE 0;

   RUN;


%MEND MAKEDATA;

%MAKEDATA(M,XSERVAFF);
%MAKEDATA(C,TOTCON);
%MAKEDATA(R,XSERVREG);
%MAKEDATA(S,XTNEXREG);


DATA SMOKE;
SET M_SMOKE R_SMOKE S_SMOKE C_SMOKE;
SESQ = SEMEAN**2;
RENAME MEAN=SCORE wsum=n_wgt nsum=n_obs;
RUN;

/* CALCULATE COMPOSITE SCORE - AVERAGE RATE AND CESSATION*/

PROC SORT DATA=SMOKE;
BY MAJGRP REGION REGCAT;
RUN;

PROC SUMMARY DATA=SMOKE SUM;
BY MAJGRP REGION REGCAT;
VAR SCORE SESQ N_WGT N_OBS;
OUTPUT SUM= OUT=PRECOMP;
RUN;

DATA COMP(RENAME=(S_MEAN=SCORE S_SE=SEMEAN));
SET PRECOMP;
IF _FREQ_ = 3 THEN DO;
   S_MEAN=SCORE/3;
   S_SE=SQRT(SESQ)/3;
```

```
   N_OBS=round(N_OBS/3);
END;
ELSE DO;
   S_MEAN=.;
   S_SE=.;
END;
BENTYPE="Composite";
BENEFIT="Healthy Behaviors";
DROP _TYPE_ _FREQ_ SCORE SESQ;
RUN;

PROC SORT DATA=SMOKE;
BY MAJGRP BENTYPE;
RUN;

DATA BENCH;
SET SMOKE;
BY MAJGRP BENTYPE;
IF LAST.BENTYPE AND BENTYPE="Counselled To Quit" THEN DO;
   SCORE=&CNSLGOAL;
   SEMEAN=.;
   REGION="Benchmark";
   REGCAT="Benchmark";
   DROP N_WGT N_OBS;
   OUTPUT;
END;
ELSE IF LAST.BENTYPE AND BENTYPE="Non-Smoking Rate" THEN DO;
   SCORE=&NSMKGOAL;
   SEMEAN=.;
   REGION="Benchmark";
   REGCAT="Benchmark";
   DROP N_WGT N_OBS;
   OUTPUT;
END;
ELSE IF LAST.BENTYPE AND BENTYPE="Percent Not Obese" THEN DO;
   SCORE=&BMIGOAL;
   SEMEAN=.;
   REGION="Benchmark";
   REGCAT="Benchmark";
   DROP N_WGT N_OBS;
   OUTPUT;
   SCORE=(SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3;
   SEMEAN=.;
   REGION="Benchmark";
   REGCAT="Benchmark";
   BENTYPE="Composite";
   DROP N_WGT;
   OUTPUT;
END;
RUN;

PROC SORT DATA=SMOKE;
BY REGION BENTYPE;
RUN;

DATA BENCH2;
SET SMOKE;
BY REGION BENTYPE;
IF LAST.BENTYPE AND BENTYPE="Counselled To Quit" THEN DO;
   SCORE=&CNSLGOAL;
   SEMEAN=.;
   MAJGRP="Benchmark";
   DROP N_WGT N_OBS;
   OUTPUT;
END;
IF LAST.BENTYPE AND BENTYPE="Non-Smoking Rate" THEN DO;
   SCORE=&NSMKGOAL;
   SEMEAN=.;
   MAJGRP="Benchmark";
   DROP N_WGT;
   OUTPUT;
END;
IF LAST.BENTYPE AND BENTYPE="Percent Not Obese" THEN DO;
```

```
   SCORE=&BMIGOAL;
   SEMEAN=.;
   MAJGRP="Benchmark";
   DROP N_WGT;
   OUTPUT;
   SCORE=(SUM(&CNSLGOAL, &NSMKGOAL, &BMIGOAL))/3;
   SEMEAN=.;
   MAJGRP="Benchmark";
   BENTYPE="Composite";
   DROP N_WGT N_OBS;
   OUTPUT;
END;
RUN;

DATA SIG1;
SET SMOKE COMP;
IF BENTYPE='Non-Smoking Rate' THEN DO;
   IF SEMEAN > 0 THEN TSTAT=(SCORE-&NSMKGOAL)/SEMEAN;
   ELSE TSTAT=.;
   IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
   ELSE PVAL=.;

   IF PVAL GE 0.05 THEN SIG=0;
   ELSE IF PVAL < 0.05 THEN DO;
      IF SCORE > &NSMKGOAL THEN SIG = 1;
     ELSE IF SCORE < &NSMKGOAL THEN SIG = -1;
   END;
END;
IF BENTYPE='Counselled To Quit' THEN DO;
   IF SEMEAN > 0 THEN TSTAT=(SCORE-&CNSLGOAL)/SEMEAN;
   ELSE TSTAT=.;
   IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
   ELSE PVAL=.;
   IF PVAL GE 0.05 THEN SIG=0;
   ELSE IF PVAL < 0.05 THEN DO;
      IF SCORE > &CNSLGOAL THEN SIG = 1;
     ELSE IF SCORE < &CNSLGOAL THEN SIG = -1;
   END;
END;
IF BENTYPE='Percent Not Obese' THEN DO;
   IF SEMEAN > 0 THEN TSTAT=(SCORE-&BMIGOAL)/SEMEAN;
   ELSE TSTAT=.;
   IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
   ELSE PVAL=.;
   IF PVAL GE 0.05 THEN SIG=0;
   ELSE IF PVAL < 0.05 THEN DO;
      IF SCORE > &BMIGOAL THEN SIG = 1;
     ELSE IF SCORE < &BMIGOAL THEN SIG = -1;
   END;
END;
IF BENTYPE='Composite' THEN DO;
   IF SEMEAN > 0 THEN TSTAT=(SCORE-((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3))/SEMEAN;
   ELSE TSTAT=.;
   IF N_OBS > 1 THEN PVAL=(1-PROBT(ABS(TSTAT),(N_OBS-1)))*2;
   ELSE PVAL=.;
   IF PVAL GE 0.05 THEN SIG=0;
   ELSE IF PVAL < 0.05 THEN DO;
      IF SCORE > ((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3) THEN SIG = 1;
     ELSE IF SCORE <((SUM(&NSMKGOAL, &CNSLGOAL, &BMIGOAL))/3) THEN SIG = -1;
   END;
END;

DROP TSTAT PVAL;
RUN;

DATA SMOKE_ALL;
SET SIG1 BENCH BENCH2;
TIMEPD="&CURRENT.";
RUN;

PROC SORT DATA=SMOKE_ALL OUT=OUT.SMOKE;
BY MAJGRP REGION REGCAT BENTYPE;
RUN;
```

I.4.C Q4FY2007\PROGRAMS\PURCHASEDREPORTCARDS\MPR_ADULTQ4FY2007\LOADMPRQ.SAS - CONVERT THE MPR SCORES DATABASE INTO THE WEB LAYOUT - RUN QUARTERLY.

```
***************************************************************************
*
*  Project:   DoD Reporting and Analysis 6077-410
*  Program:   LOADMPRQ.SAS
*  Purpose:   Calculate MPR Preventive Care Composites
*  Date:      4/07/2000
*  Author:    Chris Rankin
*
*  Modified:  1) 05-08-2001 By Keith Rathbun, Added SEMEAN to LOADMPRQ.SD2
*      to accommodate the Short Reports.  Condensed some code.
*   2) 07-15-2002 By Mike Scott, Changed PERIOD to = "April, 2001
*      to March, 2002".
*   3) 03-21-2003 By Mike Scott, Changed PERIOD to = "January, 2001
*      to December, 2002".
*   4) 04-30-2003 By Mike Scott, Changed CMPNUM1 from 4 to 5, and
*      changed the upper limits of both DO loops from 5 to 6 because
*      of the addition of Cholesterol Testing.
*   5) 06-23-2003 By Mike Scott, Changed setting BENTYPE from &PERIOD
*      to Composite.  Added TIMEPD variable.
*   6) 06-26-2003 By Mike Scott, Updated for Q2 2003.
*   7) 10-21-2003 By Mike Scott, Updated for Q3 2003.
*   8) 01-07-2004 By Mike Scott, Updated for Q4 2003.
*   9) 03-24-2004 By Mike Scott, Updated for Q1 2004.
*  10) 06-22-2004 By Regina Gramss, Updated for Q2 2004.
*  11) 09/2004    By Regina Gramss, Updated for Q3 2004.
*  12) 01/2005    By Regina Gramss, Replaced XTNEXREG with XSERVREG
*      to produce "last conus_q" for Q4 2005
*  13) 12/2005    By Regina Gramss, Updated for Q4 2005.
*  14) 03/24/2006 By Keith Rathbun, Updated for Q2 FY 2006.
*      %LET PERIOD = January, 2006 was the only change.
*  15) 07/12/2006 By Justin Oh, Updated for Q3 FY 2006.
*  16) 08/24/2006 By Justin Oh, change DO REG = 1 TO 15 from 1 TO 16.
*  17) 10/04/2006 By Justin Oh, Updated %LET PERIOD.
*  18) 12/20/2006 By Justin Oh, Updated %LET PERIOD October, 2006.
*  19) 04/05/2007 By Justin Oh, Updated %LET PERIOD January, 2007.
*  20) 06/22/2007 By Keith Rathbun, Updated %LET PERIOD April, 2007.
*  21) 09/04/2007 By Justin Oh, Updated %LET PERIOD July, 2007.
*
*   Input:    1) RFINAL.SD2
*   2) CFINAL.SD2
*   3) MFINAL.SD2
*   4) SFINAL.SD2
*   5) SMOKE.SD2
*
*   Output:   loadmprq.sd2
*
*   Note:     ***CHECK COMPNUM AND CMPNUM1 ASSIGNMENTS AND UPPER LIMIT OF DO LOOPS***
*
***************************************************************************;

OPTIONS COMPRESS=YES NOCENTER LS=124 PS=74 SOURCE SOURCE2;

LIBNAME INLIB V612 ".";
LIBNAME OUT   V612 ".";
LIBNAME LIBRARY    "..\..\..\Data\Afinal\fmtlib";

%LET CMPNUM1=4; /*** number of questions in first composite ***/ /*RSG 04/2005 Changed 5 to 4*/

%LET PERIOD = July, 2007;
%INCLUDE "..\..\LOADWEB\LOADCAHQ.INC";

*************************************************************;
*** Note -- take out access to care questions and composite ***;
*************************************************************;

data mfinal(keep=cpbmk1 compress=no);
  set inlib.mfinal(keep=majgrp cpbmk1) INLIB.CFINAL (KEEP=MAJGRP CPBMK1);
  where majgrp="All Beneficiaries";    /*RSG 02/2005 Include CONUS MHS data*/
run;
```

```
     data mfinal;
       if _n_=1 then set mfinal;
       set inlib.mfinal(drop=cpbmk1) INLIB.CFINAL(DROP=CPBMK1) ;
     run;

     proc sort data=mfinal;        /*RSG 01/2005 - Added code to select only 1 record per majgrp */
     by majgrp;/*using xservreg, there are now 4 conus areas which caused duplicate benchmark calcs
*/
     data mfinal;
     set mfinal;
     by majgrp;
     if first.majgrp;
     run;

     *************************;
     ***** Benchmarks       **;
     *************************;

     DATA BENCHMKS(KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SIG);
          FORMAT   MAJGRP  $30. REGION  $25. REGCAT $26.    /** RSG 01/2005 Increase region format
to accommodate service affiliation **/
         BENEFIT $34. BENTYPE $50. TIMEPD $35.;   ***MJS 06/23/03 Added TIMEPD;
       SET MFINAL;

       ARRAY BENCHMK{*} GOALVAR1-GOALVAR&CMPNUM1 CPBMK1;
       DO I = 1 TO 5;   ***RSG 04/2005 Changed 6 to 5;
          SCORE   = BENCHMK{I}*100;
          SIG     = .;
          REGION  = "Benchmark";
          REGCAT  = "Benchmark";
          BENEFIT = "Preventive Care";
          IF      I = 1 THEN BENTYPE = "Prenatal Care";
          ELSE IF I = 2 THEN BENTYPE = "Mammography";
          ELSE IF I = 3 THEN BENTYPE = "Pap Smear";
          ELSE IF I = 4 THEN BENTYPE = "Hypertension";
          /*RSG 04/2005 DELETED CHOLESTEROL*/
          ELSE IF I = 5 THEN BENTYPE = "Composite";   ***MJS 06/23/03 Changed &PERIOD to Composite;
          TIMEPD = "&PERIOD";   ***MJS 06/23/03 Added line;
          OUTPUT;
       END;
       DROP I;
     RUN;

     DATA BENCHMKS;
       SET BENCHMKS;
       OUTPUT;
       IF MAJGRP = "All Beneficiaries" THEN DO;
          DO REG = 1 TO 15; DROP REG; /*JSO 08/24/2006, Changed Regions, 16 to 15*/
      MAJGRP = "Benchmark";
      REGION = PUT(REG,SERVREGO.);
      REGCAT = PUT(REG,SERVREGO.);
      OUTPUT;
          END;
          DO SERV = 1 TO 4; DROP SERV;
              MAJGRP = "Benchmark";
              REGION = PUT(SERV,XSERVAFF.);
              REGCAT = PUT(SERV,XSERVAFF.);
              OUTPUT;
          END;

         MAJGRP = "Benchmark";
         REGION = 'CONUS MHS';
         REGCAT = 'CONUS MHS';
         OUTPUT;
         MAJGRP = "Benchmark";
         REGION = 'NORTH';
         REGCAT = 'NORTH';
         OUTPUT;
         MAJGRP = "Benchmark";
         REGION = 'SOUTH';
         REGCAT = 'SOUTH';
         OUTPUT;
```

```
        MAJGRP = "Benchmark";
        REGION = 'WEST';
        REGCAT = 'WEST';
        OUTPUT;
        MAJGRP = "Benchmark";
        REGION = 'OVERSEAS';
        REGCAT = 'OVERSEAS';
        OUTPUT;
      END;
    RUN;

    PROC FREQ DATA=BENCHMKS;
       TABLES MAJGRP/MISSING LIST;
    RUN;

    *************************;
    *****  Scores**;
    *************************;

    DATA SCORES(KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SEMEAN SIG N_OBS N_WGT);
         FORMAT MAJGRP  $30. REGION  $25. REGCAT $26.    /** RSG 01/2005 Increase region format to
accommodate service affiliation **/
      BENEFIT $34. BENTYPE $50. TIMEPD $35.;   ***MJS 06/23/03 Added TIMEPD;
      SET INLIB.MFINAL INLIB.CFINAL
          INLIB.RFINAL INLIB.SFINAL;


      ARRAY SEMEANS{*} SERRV1-SERRV&CMPNUM1.  CP1SE ;
      ARRAY  SCORES{*} SCORV1-SCORV&CMPNUM1.  CSCOR1;
      ARRAY  SIGNIF{*} SIGV1-SIGV&CMPNUM1.    CPSIG1;
      ARRAY   NOBS {*} NOBSV1-NOBSV&CMPNUM1.  CPOBS1;
      ARRAY   NWGT {*} DENV1-DENV&CMPNUM1     CPDEN1;

      DO I = 1 TO 5;   ***RSG 04/2005 Changed 6 to 5;
         SCORE   = SCORES{I};
         SEMEAN  = SEMEANS{I};
         SIG     = SIGNIF{I};
         N_OBS   = NOBS{I};
         N_WGT   = NWGT{I};
         BENEFIT = "Preventive Care";
         IF      I = 1 THEN BENTYPE = "Prenatal Care";
         ELSE IF I = 2 THEN BENTYPE = "Mammography";
         ELSE IF I = 3 THEN BENTYPE = "Pap Smear";
         ELSE IF I = 4 THEN BENTYPE = "Hypertension";
         /*RSG 04/2005 DELETED CHOLESTEROL*/
         ELSE IF I = 5 THEN BENTYPE = "Composite";   ***MJS 06/23/03 Changed &PERIOD to Composite;
         TIMEPD = "&PERIOD";   ***MJS 06/23/03 Added line;
         OUTPUT;
      END;
    RUN;

    DATA LOADMPRQ (KEEP=MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD SCORE SEMEAN SIG
       N_OBS N_WGT);
    SET BENCHMKS SCORES INLIB.SMOKE;
    RUN;

    PROC SORT DATA=LOADMPRQ OUT=OUT.LOADMPRQ;
    BY MAJGRP REGION;
    RUN;
```

I.5.A Q4FY2007\PROGRAMS\PURCHASEDLOADWEB\FAKEQ.SAS - GENERATE THE WEB LAYOUT/TEMPLATE FILE - RUN QUARTERLY.

```
************************************************************************
* PROJECT:  DOD Quarterly Survey, Consumer Reports (6077-410)
* PROGRAM:  FAKEQ.SAS
* PURPOSE:  Generate Fake Data for Report Cards
* AUTHOR:   Mark A. Brinkley
*
* MODIFIED: 1) July 2000 By Eric Schone to utilize CACRPT and CATREP
*    include files.
* 2) February 2001 By Keith Rathbun - More updates for
*    Quarterly report card format.  Made FAKE datastep into
*    a macro to handle multiple quarters.  Added QTR and
*    PERIOD parameters.
* 3) July 2001 By Mark Brinkley - Updated for
*    Quarterly 2 reports
* 4) April 2002 By Keith Rathbun - Updated DSN and %LET
*    statements for 2002 reports and added TREND records.
*    Removed Flu Shot.
* 5) July 2002 By Mike Scott - Updated DSN and %LET statements
*    for Q2 2002 reports.
* 6) March 2003 By Mike Scott - Updated for 2003 survey.
* 7) June 2003 By Mike Scott - Added TIMEPD variable to be set to the period
*    or 'Trend'.  Changed from setting BENTYPE to the period or 'Trend' to
*    setting to 'Composite'.  Updated for Q2 2003.
* 8) July 2003 BY Mike Scott - Above for K=7 through 10 in loop DO K=0 TO 11.
*    Added LOADCAHQ.INC.
* 9) October 2003 By Mike Scott - Updated for Q3 2003.
*10) January 2004 By Mike Scott - Updated for Q4 2003.
*11) March 2004 By Mike Scott - Updated for Q1 2004.
*12) June 2004 By Regina Gramss - Updated for Q2 2004.
*13) September 2004 By Regina Gramss - Updated for Q3 2004, to use XTNEXREG vs XREGION
*14) January 2005 By Regina Gramss - Prepare "Last Conus_q" for Q4 2005
*    replace XTNEXREG with XSERVREG
*15) April 2005 By Regina Gramss - Update for Q1 2005, delete cholesterol
*    bentype and include Healthy Behaviors composite and BMI bentype.
*16) July 2005 By Regina Gramss - Update for Q2 2005.
*17) October 2005 By Regina Gramss - Updated for Q3 2005
*18) December 2005 By Regina Gramss - Updated for Q4 2005
*19) March 2006 By Keith Rathbun - Updated for Q2 FY 2006
*20) July 2006 By Justin Oh - Updated for Q3 FY 2006
*21) 08/22/2006 By Justin Oh - Changed XSERVREG for Overseas
*22) 10/03/2006 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*    Changed input data HCS063_1 to HCS064_1 for Q4FY2006 reports.
*23) 02/02/2006 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*    Changed input data HCS064_1 to HCS071_1 for Q4FY2006 reports.
*24) 04/05/2007 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*    Changed input data HCS071_1 to HCS072_1 for Q4FY2006 reports.
*25) 06/22/2007 By Keith Rathbun - Changed %LET PERIOD1 - PERIOD4
*    Changed input data HCS072_1 to HCS073_1 for Q3FY2007 reports.
*26) 09/05/2007 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*    Changed input data HCS073_1 to HCS074_1 for Q4FY2007 reports.
*
* INCLUDES: 1) CACRPT.INC - Report Card Catchment Definitions
* 2) CATREP.INC - Report Card Catchment Format Defns
*
************************************************************************;
%LET NUMQTR = 5;   ***MJS 06/18/03 Changed 4 to 5;

%LET PERIOD1 = October, 2006;
%LET PERIOD2 = January, 2007;
%LET PERIOD3 = April, 2007;
%LET PERIOD4 = July, 2007;

%LET PERIOD5 = Trend;   ***MJS 06/18/03 Added line;

%INCLUDE "LOADCAHQ.INC";   ***MJS 07/07/03 Added;

LIBNAME OUT V612 ".";
LIBNAME IN  V612 "..\..\Data\AFinal";
LIBNAME LIBRARY  "..\..\Data\AFinal\fmtlib";
```

```
OPTIONS COMPRESS=YES NOFMTERR;

*************************************************************************
* CREATE TEMPORARY DATASET FOR RECODING CACSMPL TO BE COLLAPSED FOR
* REPORT CARD PURPOSES
* FOR QUARTERLY REPORTS CATCHMENT LEVEL REPORTING IS NOT DONE
* AND THEREFORE THE VALUE OF CELLP IS SET TO 1
* FOR ANNUAL REPORTING PURPOSES
* CELLP WILL NEED TO BE ASSIGNED TO GEOCELL (KEEP GEOCELL ON INPUT)
*************************************************************************;

DATA TEMP;
  SET IN.HCS074_1;
   CELLP=1;
   ********************************************************************
   * CODE FOR XSERVREG FROM XTNEXREG
   ********************************************************************;
    IF SERVAFF='A' THEN XSERVAFF=1;    *Army;
       ELSE IF SERVAFF='F' THEN XSERVAFF=2;      *Air Force;
       ELSE IF SERVAFF='N' THEN XSERVAFF=3;      *Navy;
       ELSE XSERVAFF=4;


    IF XTNEXREG = 1 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 1;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 2;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 3;
      ELSE XSERVREG = 4;
   END;

    IF XTNEXREG = 2 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 5;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 6;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 7;
      ELSE XSERVREG = 8;
   END;

    IF XTNEXREG = 3 THEN DO;
       IF XSERVAFF = 1 THEN XSERVREG = 9;
      ELSE IF XSERVAFF = 2 THEN XSERVREG = 10;
      ELSE IF XSERVAFF = 3 THEN XSERVREG = 11;
      ELSE XSERVREG = 12;
   END;


    IF XTNEXREG = . THEN DELETE;

RUN;

proc freq;
table xservreg*cacsmpl/ noprint out=temp;
run;

data temp2;
length cafmt $26;
set temp end=last;
by xservreg;
  caf=0;
where cacsmpl ne 9999;
  if first.xservreg then do; /* took out condition for xregion= 8 since useing xservreg now */
    cafmt=put(xservreg,servregf.);
    output;
  end;
  cafmt=put(cacsmpl,catrep.);
  caf=1;
  if count>60 & cafmt ne 'INV' then output;
  if last then do;
    xservreg=0;
    caf=0;
    cafmt='Benchmark';
   output;
/** RSG 01/2005 Add in codes for service affiliation categories **/
```

```
   caf=1;

   xservreg=13;
   cafmt='Overseas Europe';
   output;
  xservreg=14;
   cafmt='Overseas Pacific';
   output;
  xservreg=15;
   cafmt='Overseas Latin America';
   output;
xservreg=16;
  cafmt = 'ARMY';
   output;
   xservreg=17;
   cafmt = 'AIR FORCE';
   output;
   xservreg=18;
   cafmt = 'NAVY';
   output;
   xservreg=19;
   cafmt = 'OTHER';
   output;
   xservreg=20;
   cafmt = 'NORTH';
   output;
   xservreg=21;
   cafmt = 'SOUTH';
   output;
   xservreg=22;
   cafmt = 'WEST';
   output;
   xservreg=23;
   cafmt = 'OVERSEAS';
   output;
   xservreg=24;
   cafmt = 'CONUS MHS';
   output;
   xservreg=25;
   cafmt = 'Europe Army';
   output;
   xservreg=26;
   cafmt = 'Europe Air Force';
   output;
   xservreg=27;
   cafmt = 'Europe Navy';
   output;
   xservreg=28;
   cafmt = 'Europe Other';
   output;
   xservreg=29;
   cafmt = 'Pacific Army';
   output;
   xservreg=30;
   cafmt = 'Pacific Air Force';
   output;
   xservreg=31;
   cafmt = 'Pacific Navy';
   output;
   xservreg=32;
   cafmt = 'Pacific Other';
   output;
   xservreg=33;
   cafmt = 'Latin America Army';
   output;
   xservreg=34;
   cafmt = 'Latin America Force';
   output;
   xservreg=35;
   cafmt = 'Latin America Navy';
```

```
   output;
   xservreg=36;
   cafmt = 'Latin America Other';
   output;
  end;
run;

/*RSG 04/2005 order region groups the way it should appear in reports*/
data temp3 (rename=(temp_r=xservreg));
   set temp2;
if      xservreg=0  then temp_r=1;
else if xservreg=24 then temp_r=2;
else if xservreg=16 then temp_r=3;
else if xservreg=18 then temp_r=4;
else if xservreg=17 then temp_r=5;
else if xservreg=19 then temp_r=6;
else if xservreg=20 then temp_r=7;
else if xservreg=1  then temp_r=8;
else if xservreg=3  then temp_r=9;
else if xservreg=2  then temp_r=10;
else if xservreg=4  then temp_r=11;
else if xservreg=21 then temp_r=12;
else if xservreg=5  then temp_r=13;
else if xservreg=7  then temp_r=14;
else if xservreg=6  then temp_r=15;
else if xservreg=8  then temp_r=16;
else if xservreg=22 then temp_r=17;
else if xservreg=9  then temp_r=18;
else if xservreg=11 then temp_r=19;
else if xservreg=10 then temp_r=20;
else if xservreg=12 then temp_r=21;
else if xservreg=23 then temp_r=22;
else if xservreg=13 then temp_r=23;
else if xservreg=14 then temp_r=24;
else if xservreg=25 then temp_r=25;
else if xservreg=26 then temp_r=26;
else if xservreg=27 then temp_r=27;
else if xservreg=28 then temp_r=28;
else if xservreg=29 then temp_r=29;
else if xservreg=30 then temp_r=30;
else if xservreg=31 then temp_r=31;
else if xservreg=32 then temp_r=32;
else if xservreg=33 then temp_r=33;
else if xservreg=34 then temp_r=34;
else if xservreg=35 then temp_r=35;
else if xservreg=36 then temp_r=36;
drop xservreg;
run;

proc sort;
by xservreg caf cafmt;
run;

data temp4;
set temp3 end=last;

start=_n_;
label=cafmt;
type='N';
fmtname='ROWMAT';
if last then call symput('x',_n_);

run;

proc format cntlin=temp4;

proc print data=temp4;
run;

%MACRO FAKE;
DATA FAKE;

  KEEP MAJGRP REGION REGCAT BENEFIT BENTYPE TIMEPD I K;   ***MJS 06/18/03 Added TIMEPD;
```

```
      LENGTH MAJGRP  $ 30
             REGION  $ 25    /*RSG 01/2005 lengthen format to fit service affiliation*/
             REGCAT  $ 26
             BENTYPE $ 50
             TIMEPD  $ 35;   ***MJS 06/18/03 Added TIMEPD;



      DO I=1 TO 8;   ** 8 Major groups **;

         MAJGRP=PUT(I,MAJOR.);

         DO J=1 TO &x;        ** Region/catchment **;

         REGCAT=PUT(J,ROWMAT.);
         RETAIN REGION;

         **RSG 01/2005 Change code to fit XSERVREG values**;
         IF SUBSTR(REGCAT,1,8) IN ('Benchmar','Overseas','OVERSEAS') OR
           SUBSTR(REGCAT,1,5)       IN       ('Pacif','Europ','Latin','CONUS','North','South','West
','NORTH','SOUTH','WEST') OR
      REGCAT IN ('ARMY','AIR FORCE','NAVY','OTHER') THEN REGION=REGCAT;


            DO K=1 TO 12;      ** 12 Benefits **;  /*** 12-13 MAB ***/

    BENEFIT=PUT(K,BEN.);

    IF K=1 THEN DO;
        DO L=1 TO 5;         ***MJS 06/18/03 Added L loop and BENTYPE PUT;
            BENTYPE=PUT(L,GETNCARE.);   ***that replaced BENTYPE hard assignment;
            %DO Q = 1 %TO &NUMQTR;    ***MJS 06/18/03 Moved loop inside L loop and changed BENTYPE
to TIMEPD;
      TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
            %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
        END;
    END;
    ELSE IF K=2 THEN DO;
        DO L=1 TO 5;         ***MJS 06/18/03 Added L loop and BENTYPE PUT;
            BENTYPE=PUT(L,GETCAREQ.);   ***that replaced BENTYPE hard assignment;
            %DO Q = 1 %TO &NUMQTR;    ***MJS 06/18/03 Moved loop inside L loop and changed BENTYPE
to TIMEPD;
      TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
            %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
        END;
    END;
    ELSE IF K=3 THEN DO;
        DO L=1 TO 3;         ***MJS 06/18/03 Added L loop and BENTYPE PUT;
            BENTYPE=PUT(L,CRTSHELP.);   ***that replaced BENTYPE hard assignment;
            %DO Q = 1 %TO &NUMQTR;    ***MJS 06/18/03 Moved loop inside L loop and changed BENTYPE
to TIMEPD;
      TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
            %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
        END;
    END;
    ELSE IF K=4 THEN DO;
        DO L=1 TO 5;         ***MJS 06/18/03 Added L loop and BENTYPE PUT;
            BENTYPE=PUT(L,HOWWELL.);   ***that replaced BENTYPE hard assignment;
            %DO Q = 1 %TO &NUMQTR;    ***MJS 06/18/03 Moved loop inside L loop and changed BENTYPE
to TIMEPD;
      TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
            %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
        END;
    END;
    ELSE IF K=5 THEN DO;
        DO L=1 TO 4;         ***MJS 06/18/03 Added L loop and BENTYPE PUT;
            BENTYPE=PUT(L,CUSTSERV.);   ***that replaced BENTYPE hard assignment;
            %DO Q = 1 %TO &NUMQTR;    ***MJS 06/18/03 Moved loop inside L loop and changed BENTYPE
to TIMEPD;
      TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
            %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
        END;
```

```
     END;
     ELSE IF K=6 THEN DO;
         DO L=1 TO 3;         ***MJS 06/18/03 Added L loop and BENTYPE PUT;
             BENTYPE=PUT(L,CLMSPROC.);   ***that replaced BENTYPE hard assignment;
             %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed BENTYPE
to TIMEPD;
       TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
             %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
         END;
     END;
     ELSE IF K=7 THEN DO;
         %DO Q = 1 %TO &NUMQTR;
             BENTYPE = "Composite";   ***MJS 07/07/03 Added;
             TIMEPD  =  "&&PERIOD&Q";  OUTPUT;  /***  02-01-2001  KRR  ***/     ***MJS  07/07/03  Changed
BENTYPE to TIMEPD;
         %END;    ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after this line;
     END;
     ELSE IF K=8 THEN DO;
         %DO Q = 1 %TO &NUMQTR;
             BENTYPE = "Composite";   ***MJS 07/07/03 Added;
             TIMEPD  =  "&&PERIOD&Q";  OUTPUT;  /***  02-01-2001  KRR  ***/     ***MJS  07/07/03  Changed
BENTYPE to TIMEPD;
         %END;    ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after this line;
     END;
     ELSE IF K=9 THEN DO;
         %DO Q = 1 %TO &NUMQTR;
             BENTYPE = "Composite";   ***MJS 07/07/03 Added;
             TIMEPD  =  "&&PERIOD&Q";  OUTPUT;  /***  02-01-2001  KRR  ***/     ***MJS  07/07/03  Changed
BENTYPE to TIMEPD;
         %END;    ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after this line;
     END;
     ELSE IF K=10 THEN DO;
         %DO Q = 1 %TO &NUMQTR;
             BENTYPE = "Composite";   ***MJS 07/07/03 Added;
             TIMEPD  =  "&&PERIOD&Q";  OUTPUT;  /***  02-01-2001  KRR  ***/     ***MJS  07/07/03  Changed
BENTYPE to TIMEPD;
         %END;    ***MJS 07/07/03 Deleted BENTYPE="Trend" OUTPUT after this line;
     END;
     ELSE IF K=11 THEN DO;
         DO L=1 TO 5;         ***MJS 06/18/03 Added L loop and BENTYPE PUT;
             BENTYPE=PUT(L,PREVCARE.);   ***that replaced BENTYPE hard assignment;
             %DO Q = 1 %TO &NUMQTR;   ***MJS 06/18/03 Moved loop inside L loop and changed BENTYPE
to TIMEPD;
       TIMEPD = "&&PERIOD&Q"; OUTPUT; /*** 02-01-2001 KRR ***/
             %END;   ***MJS 06/18/03 Deleted BENTYPE="Trend" and OUTPUT;
         END;
          END;
     ELSE IF K=12 THEN DO;  ***RSG 02/2005 Added for smoking scores.;
         DO M=1 TO 4;
             BENTYPE=PUT(M,SMOKEF.);
             %DO Q = 1 %TO &NUMQTR;
       TIMEPD = "&&PERIOD&Q"; OUTPUT;
             %END;
         END;
     END;
             END;
          END;
       END;
     RUN;
     %MEND FAKE;
     %FAKE;


     /*** 12-13 MAB ***/
     /*** Since quarterly files won't have catchment level data then delete ***/
     DATA FAKE;
       SET FAKE;
       IF REGION=REGCAT;
     RUN;

     /*** 12-13 MAB ***/
     /*** Need to create single benchmarks for ALL major groups ***/
     DATA EXTRA;
```

```
  SET FAKE;
  IF MAJGRP="Prime Enrollees" AND REGION=REGCAT AND REGION^="Benchmark";
  MAJGRP="Benchmark";
RUN;
/*** Combine extra data with fake ***/
DATA FAKE;
  SET EXTRA FAKE;
RUN;

/*** Need to clean up data ***/
DATA OUT.FAKEQ;
  SET FAKE;

  /*** Need to set oddball records to missing ***/
  IF REGION="Benchmark" THEN SIG=.;
  if region=''|compress(regcat)='.' then delete;

  /*** Don't populate catchment areas for 4 major groups ***/
  *IF I IN(3,4,6,7) AND REGION^=REGCAT THEN DELETE;         /*** 12-13 MAB ***/

  DROP I K;

RUN;


PROC FREQ;
  TABLES MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG;   ***MJS 07/21/03 Added TIMEPD;
RUN;


ENDSAS;
```

I.5.B Q4FY2007\PROGRAMS\PURCHASEDLOADWEB\MERGFINQ.SAS - MERGE THE FINAL CAHPS AND MPR SCORES DATABASES INTO THE WEB LAYOUT - RUN QUARTERLY.

```
***************************************************************************
*
* PROGRAM:  MERGFINQ.SAS
* TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
* PURPOSE:  Merge the final CAHPS and MPR Scores Databases
* into the WEB layout preserving the order of the FAKEQ.SD2.
*
* WRITTEN:  11/09/2000 BY KEITH RATHBUN, Adapted from MERGFINL.SAS.
*
* INPUTS:   1) MPR and CAHPS Individual and Composite data sets with adjusted
*    scores, and benchmark data for quarterly DoD HCS.
*    - LOADMPRQ.SD2 - MPR Scores Database
*    - LOADCAHQ.SD2 - CAHPS Scores Database
*    - BENCHA04.SD2 - CAHPS Benchmark Database
*    - FAKEQ.SD2    - WEB Layout in Column order
*
* OUTPUT:   1) MERGFINQ.SD2 - Combined Scores Database in WEB layout
*
* INCLUDES: 1) LOADCAHQ.INC - Format definitions for CAHPS Individual
*    and composite data sets
*
* MODIFIED: 1) 07/15/2002 by Mike Scott: Updated libnames for Q2 2002.
* 2) 03/21/2003 by Mike Scott: Updated for 2003 survey.
* 3) 07/09/2003 by Mike Scott: Updated for Q2 2003.  Added TIMEPD to KEYs.
* 4) 07/23/2003 by Mike Scott: Added TIMEPD to FREQs and PRINT.
* 5) 10/21/2003 by Mike Scott: Updated for Q3 2003.
* 6) 01/07/2004 by Mike Scott: Updated for Q4 2003.
* 7) 03/24/2004 by Mike Scott: Updated for Q1 2004.
* 8) 06/22/2004 by Regina Gramss: Updated for Q2 2004.
* 9) 09/2004    by Regina Gramss: Updated for Q3 2004, Use XTNEXREG vs XREGION
*10) 01/2005    by Regina Gramss: Changed XTNEXREG to XSERVREG to compile
*    "Last conus_q" for Q4 2005
*11) 04/2005    by Regina Gramss: Updated for Q1 2005
*12) 07/2005    by Regina Gramss: updated for Q2 2005
*13) 10/2005    by Regina Gramss: Updated for Q3 2005
*14) 12/2005    by Regina Gramss: Updated for Q4 2005
*15) 07/2006    by Justin Oh: Updated for Q3 FY 2006
*16) 08/22/2006 by Justin Oh: Change DO REG = 1 TO 15 from 1 TO 16
*17) 10/03/2006 by Justin Oh - Changed libname in2 and in3 for Q4FY2006.
*18) 12/20/2006 by Justin Oh - Changed libname in2 and in3 for Q1FY2007.
*19) 04/05/2007 by Justin Oh - Changed libname in2 and in3 for Q2FY2007.
*20) 04/05/2007 by Justin Oh - Added %LET RCTYPE to select RC types
*    ReportCards OR PurchasedReportCards.
*21) 04/05/2007 by Justin Oh - Added %LET BCHTYPE to select BCH types
*    Benchmark OR PurchasedBenchmark.
*22) 09/05/2007 by Justin Oh - Changed libname in2 and in3 for Q4FY2007.
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*  - STEP1Q.SAS      - Recode questions and generate CAHPS group files
*  - STEP2Q.SAS      - Calculate CAHPS individual adjusted scores for groups 1-7
*  - COMPOSIT.SAS    - Calculate composite adjusted scores for group 1-8
*  - PRVCOMPQ.SAS    - Calculate MPR individual and composite scores
*  - BENCHA01-04.SAS - Convert Benchmark Scores into WEB layout
*  - LOADCAHQ.SAS    - Convert Quarterly CAHPS Scores Database into WEB layout
*  - LOADMPRQ.SAS    - Convert Quarterly MPR Scores Database into WEB layout
*
* 2) The output file (MERGFINQ.SD2) will be run through the
*    MAKEHTMQ.SAS program to generate the WEB pages.
*
***************************************************************************
* Assign data libraries and options
***************************************************************************;

/*** SELECT PROGRAM - ReportCards OR PurchasedReportCards      ***/
%LET RCTYPE = PurchasedReportCards;
/*** SELECT PROGRAM - Benchmark OR PurchasedBenchmark***/
%LET BCHTYPE = PurchasedBenchmark;
```

```
LIBNAME IN1 v612 ".";
LIBNAME IN2 v612 "CAHPS_ADULTQ4FY2007\Data";
LIBNAME IN3 v612 "..\&RCTYPE\MPR_AdultQ4FY2007";
LIBNAME IN4 v612 "..\&BCHTYPE\Data";
LIBNAME OUT v612 ".";
LIBNAME LIBRARY   "..\..\DATA\AFINAL\FMTLIB";

OPTIONS PS=79 LS=232 COMPRESS=YES NOCENTER;   ***MJS 07/23/03 Changed LS from 132;

%INCLUDE "LOADCAHQ.INC";

*************************************************************************
* Construct ORDERing variable from WEB layout
*************************************************************************;
DATA ORDER;
   SET IN1.FAKEQ;
   ORDER = _N_;
   LENGTH KEY $200;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/09/03 Added TIMEPD;
   KEEP KEY ORDER;
RUN;

PROC SORT DATA=ORDER; BY KEY; RUN;

*************************************************************************
* Merge the Scores Databases
*************************************************************************;
DATA MERGFINQ;
   SET IN2.LOADCAHQ(IN=INCAHPQ)
       IN3.LOADMPRQ(IN=INMPRQ )
       IN4.BENCHA04(IN=INBENQ );
   SVCAHPQ = INCAHPQ;
   SVMPRQ  = INMPRQ;
   SVBENQ  = INBENQ;
   LENGTH KEY $200;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/09/03 Added TIMEPD;
   KEYLEN=LENGTH(KEY);
   KEYTEST=LENGTH(BENEFIT)+LENGTH(BENTYPE)+LENGTH(MAJGRP)+LENGTH(REGION)+LENGTH(TIMEPD);
   OUTPUT;
   IF INBENQ THEN DO;
      IF MAJGRP = "All Beneficiaries" THEN DO;
         DO REG = 1 TO 24; DROP REG;  /*JSO 08/24/2006, Changed Regions, 16 to 24*/
     MAJGRP = "Benchmark";
     REGION = PUT(REG,SERVREGF.);
     REGCAT = PUT(REG,SERVREGF.);
     KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
 UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
 UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/09/03 Added TIMEPD;
     OUTPUT;
         END;
         DO SERV = 1 TO 4; DROP SERV;        ****RSG 02/2005 Add in serv affiliation;
     MAJGRP = "Benchmark";
     REGION = PUT(SERV,XSERVAFF.);
     REGCAT = PUT(SERV,XSERVAFF.);
     KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
 UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
 UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
     OUTPUT;
         END;

    MAJGRP = "Benchmark";
    REGION = 'NORTH';
    REGCAT = 'NORTH';
         KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
     UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
     UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
         OUTPUT;
```

```
    MAJGRP = "Benchmark";
    REGION = 'Overseas Europe';
    REGCAT = 'Overseas Europe';
         KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
     UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
     UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
         OUTPUT;

    MAJGRP = "Benchmark";
    REGION = 'Overseas Pacific';
    REGCAT = 'Overseas Pacific';
         KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
     UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
     UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
         OUTPUT;

    MAJGRP = "Benchmark";
    REGION = 'Overseas Latin America';
    REGCAT = 'Overseas Latin America';
         KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
     UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
     UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
         OUTPUT;

    MAJGRP = "Benchmark";
    REGION = 'SOUTH';
    REGCAT = 'SOUTH';
    KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
     UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
     UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
         OUTPUT;

         MAJGRP = "Benchmark";
         REGION = 'WEST';
         REGCAT = 'WEST';
    KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
     UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
     UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
         OUTPUT;

         MAJGRP = "Benchmark";
         REGION = 'OVERSEAS';
         REGCAT = 'OVERSEAS';
    KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
     UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
     UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
         OUTPUT;

         MAJGRP = "Benchmark";
         REGION = 'CONUS MHS';
         REGCAT = 'CONUS MHS';
    KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
     UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
     UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));
         OUTPUT;

      END;
   END;
   IF SCORE = . THEN DELETE;

RUN;

PROC SORT DATA=MERGFINQ; BY KEY; RUN;

*************************************************************************
* Append ORDERing variable to the merged Scores database file
*************************************************************************;
DATA MERGFINQ MISSING;
   MERGE MERGFINQ(IN=IN1) ORDER(IN=IN2);
   BY KEY;

   LENGTH FLAG $30;
   IF IN1 AND IN2 THEN FLAG = "IN SCORES DB AND LAYOUT";
```

```
      ELSE IF    IN1 THEN FLAG = "IN SCORES DB ONLY";
      ELSE IF    IN2 THEN FLAG = "IN LAYOUT ONLY";

      LENGTH SOURCE $30;
      IF SVCAHPQ = 1 THEN SOURCE = "CAHPS     ";
      IF SVMPRQ  = 1 THEN SOURCE = "MPR       ";
      IF SVBENQ  = 1 THEN SOURCE = "BENCHMARK ";

      IF IN1 AND NOT IN2 THEN OUTPUT MISSING; *Missing from layout;
      IF IN1 THEN OUTPUT MERGFINQ;
   RUN;

   ***************************************************************************
   * Reorder file according to WEB layout
   ***************************************************************************;
   PROC SORT DATA=MERGFINQ OUT=OUT.MERGFINQ; BY ORDER; RUN;

   DATA FAKEQ;
      SET IN1.FAKEQ;
      ORDER = _N_;
   RUN;

   DATA LAYONLY;
      MERGE FAKEQ(IN=IN1) OUT.MERGFINQ(IN=IN2 KEEP=ORDER);
      BY ORDER;
      IF IN1 AND NOT IN2;
   RUN;

   TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6244-410)";    /*MJS 03/24/04 Updated
project number*/
   TITLE2 "Program Name: MERGFINQ.SAS By Keith Rathbun";
   TITLE3 "Program Inputs: MPR and CAHPS Combined Scores data sets and WEB Layout";
   TITLE4  "Program  Outputs:  MERGFINQ.SD2  -  Merged  Final  Scores  Database  for  input  to
MAKEHTML.SAS";

   TITLE5 "MERGFINQ.SD2 Data source counts";
   PROC FREQ DATA=OUT.MERGFINQ;
   TABLES SOURCE FLAG SVCAHPQ SVMPRQ SVBENQ
            SVCAHPQ*SVMPRQ*SVBENQ
         /MISSING LIST;
   RUN;

   TITLE5 "MERGFINQ.SD2 Data attribute counts";
   PROC FREQ DATA=OUT.MERGFINQ;
   TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT TIMEPD   /*MJS 07/23/03 Added TIMEPD*/
          REGION*REGCAT
         /MISSING LIST;
   RUN;

   TITLE5 "LAYONLY.SD2 Data attribute counts";
   PROC FREQ DATA=LAYONLY;
   TABLES BENEFIT BENTYPE MAJGRP REGION REGCAT TIMEPD   /*MJS 07/23/03 Added TIMEPD*/
          REGION*REGCAT
         /MISSING LIST;
   RUN;

   TITLE5 "No matching record found in LAYOUT file (FAKEQ.SD2)";
   PROC PRINT DATA=MISSING;
   VAR MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD;   ***MJS 07/23/03 Added TIMEPD;
   RUN;
```

I.6 Q4FY2007\PROGRAMS\PURCHASEDLOADWEB\CONUS_Q.SAS - GENERATE CAHPS CONUS SCORES AND PERFORM SIGNIFICANCE TESTS - RUN QUARTERLY.

```
*****************************************************************************
*
*  PROGRAM:  CONUS_Q.SAS
*  TASK:     Quarterly DOD HEALTH CARE SURVEY ANALYSIS (6077-410)
*  PURPOSE:  Generate CAHPS CONUS scores and perform significance tests.
*
*  WRITTEN:  11/13/2000 BY KEITH RATHBUN, Adapted from CONUS_A.SAS.
*  Merged SIGNIF_A.SAS funtionality.
*
*  MODIFIED: 1) 04/10/2002 BY KEITH RATHBUN, Update for 2002 survey:
*     changed code to process 4 rolling quarters.
*  2) 04/30/2002 By Eric Schone, to calculate & test trend.
*  3) 07/17/2002 BY MIKE SCOTT, Updated %LET statements for
*     Q2 2002.
*  4) 03/21/2003 BY MIKE SCOTT, Updated for 2003 survey.
*  5) 07/08/2003 BY MIKE SCOTT, Updated for Q2 2003.  Changed BENTYPE="&PERIOD4"
*     to BENTYPE="Composite".  Added TIMEPD to KEY and FREQ.
*  6) 07/23/2003 BY MIKE SCOTT, Added TIMEPD constraint to DATA LASTQTR.
*  7) 10/21/2003 BY MIKE SCOTT, Updated for Q3 2003.
*  8) 01/07/2004 BY MIKE SCOTT, Updated for Q4 2003.
*  9) 01/28/2004 BY MIKE SCOTT, Updated LSTCONUS to point to Q3_2003t.
* 10) 03/23/2004 BY MIKE SCOTT, Updated for Q1 2004.
* 11) 06/22/2004 BY REGINA GRAMSS, Updated for Q2 2004, Added conditions
*     to avoid error messages in data sigtest2 step (ensure degree of freedom
*     is not zero for the probt function) and data trend steps (ensure division
*     by zero is not taking place).
* 12) 09/2004 BY REGINA GRAMSS, Updated for Q3, 2004.  Added in codes
*     for trend calculations (per Eric Schone). Revised to use XTNEXREG.
* 13) 01/2005 BY REGINA GRAMSS, Changed codes for XTNEXREG to XSERVREG
*     to incorporate service affiliation into regions.  Change
*     adjustments made to trend calculation to what was previous.
* 14) 06/2005 BY REGINA GRAMSS, Included relevant codes from TOTAL_Q.SAS
*     to consolidate both programs into one.  TOTAL_Q.SAS will no longer
*     be used. Also put in codes to set trend score to missing if any of the
*     previous scores are missing.
* 15) 10/2005 BY REGINA GRAMSS, Updated for Q3 2005
* 16) 12/2005 BY REGINA GRAMSS, Updated for Q4 2005
* 17) 07/2006 BY Justin Oh, Updated for Q3 FY 2006
* 18) 10/03/2006 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*     Changed %LET LSTCONUS.
* 19) 12/20/2006 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*     Changed %LET LSTCONUS.
* 20) 02/02/2007 By Justin Oh - Added "s" to Healthy Behaviors.
* 21) 02/16/2007 By Justin Oh - Added if statement to change BENEFIT
*     "Heathly Behavior" to Healthy "Behaviors" for the Last CONUS_Q.SD2 data
* 22) 04/05/2007 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*     Changed %LET LSTCONUS.
* 23) 04/05/2007 by Justin Oh - Added %LET BCHTYPE to select BCH types
*     Benchmark OR PurchasedBenchmark.
* 24) 04/05/2007 by Justin Oh - Added changes to select RC types
*     ReportCards OR PurchasedReportCards.
* 25) 10/03/2007 by Justin Oh - Removed code that removed Civilian PCM.
*     IF "&RCTYPE" = 'ReportCards' AND
*     MAJGRP="Enrollees with Civilian PCM" THEN DELETE;
* 26) 10/03/2007 by Justin Oh - Removed %LET BCHTYPE to select BCH types
*     Benchmark OR PurchasedBenchmark.
* 27) 09/05/2007 By Justin Oh - Changed %LET PERIOD1 - PERIOD4
*     Changed %LET LSTCONUS.
*
*   INPUTS:  1) MERGFINQ.SD2 - Scores Database in WEB Layout
*  2) FAKEQ.SD2 - Scores Database WEB Layout
*  3) CONUS_Q.SD2 - Previous Quarters Combined CAHPS/MPR Scores Database in WEB layout
*
*   OUTPUT:  1) TOTAL_Q.SD2 - Combined CAHPS/MPR Scores Database in WEB layout
*  2) LT30Q.SD2 - Records with <= 30 observations
*  3) CONUS_Q.SD2 - Current Quarters Combined CAHPS/MPR Scores Database in WEB layout
*
*
*    NOTES:
```

```
*
* 1) The following steps need to be run prior to this program:
*    - STEP1Q.SAS   - Recode questions and generate group files
*    - STEP2Q.SAS   - Calculate individual adjusted scores for group 1-7
*    - COMPOSIT.SAS - Calculate composite adjusted scores for group 1-8
*    - LOADCAHPQ.SAS - Combine all questionnaire (CAHPS) scores together
*    - PRVCOMPQ_NOCHOL.SAS - Calculate preventative measure scores for group1-8
*    - SMOKING_BMI.SAS     - Calculate healthy behaviors scores for group1-8
*    - LOADMPRQ_NEW.SAS    - Combined preventative and healthy behaviors scores
*    - MERGFINQ.SAS - Merge the final CAHPS and MPR Scores Databases
*
***************************************************************************
* Assign data libraries and options
***************************************************************************;

LIBNAME IN1 V612 ".";
LIBNAME OUT V612 ".";


OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER MPRINT MLOGIC;

***************************************************************************;
* Define GLOBAL parameters for last CONUSQ.SD2, rolling quarters, and
* input dataset name.
*
* IMPORTANT: Update these GLOBALS each quarter prior to rerunning program.
***************************************************************************;
%LET LSTCONUS = total_q_p3\Loadweb;


%LET PERIOD1 = October, 2006;
%LET PERIOD2 = January, 2007;
%LET PERIOD3 = April, 2007;
%LET PERIOD4 = July, 2007;

%LET DSN     = MERGFINQ;

***************************************************************************;
* Set up empty template file for data merge purposes and set first time flag
***************************************************************************;
DATA INIT;
   SET IN1.&DSN;
   DELETE;
RUN;
%LET FLAG = 0;
***************************************************************************
*
* Process Macro Input Parameters:
*
* 1) BENTYPE = Benefit Type
* 2) MAJGRP = Major Group
* 3) TYPE = INDIVIDUAL or COMPOSITE
* 4) BENEFIT = COMPOSITE Benefit Type
*
***************************************************************************;
%MACRO PROCESS(BENTYPE=,MAJGRP=,TYPE=,BENEFIT=);
DATA TEMP;
   SET IN1.&DSN END=FINISHED;
   %IF "&TYPE" = "INDIVIDUAL" %THEN %DO;
       WHERE BENTYPE = "&BENTYPE" AND "&MAJGRP" = MAJGRP AND REGION = REGCAT AND
   SUBSTR(REGION,1,5) NOT IN("Bench","CONUS") AND
   SUBSTR(REGCAT,1,5) NOT IN("Bench","CONUS") AND
   REGION NOT IN ("ARMY","AIR FORCE","NAVY","OTHER");
   %END;
   %ELSE %IF "&TYPE" = "COMPOSITE" %THEN %DO;
       WHERE BENTYPE = &BENTYPE AND "&MAJGRP" = MAJGRP AND REGION = REGCAT AND
   BENEFIT = "&BENEFIT" AND
   SUBSTR(REGION,1,5) NOT IN("Bench","CONUS") AND
   SUBSTR(REGCAT,1,5) NOT IN("Bench","CONUS") AND
   REGION NOT IN ("ARMY","AIR FORCE","NAVY","OTHER");
   %END;
   %ELSE %DO;
       PUT "ERROR - Invalid Type = &TYPE";
```

```
   %END;

   IF SUBSTR(REGION,1,5) IN ('North','South') THEN DO;
      IF      SUBSTR(REGION,1,5)='North' THEN REGCON=1;
      ELSE IF SUBSTR(REGION,1,5)='South' THEN REGCON=2;
      TOTCON=1;
      IF      SUBSTR(REGION,7,4)='Army'       THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,7,9)='Air Force'  THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,7,4)='Navy'       THEN SERVICE=3;
      ELSE SERVICE=4;
   END;
   ELSE IF SUBSTR(REGION,1,4)='West' THEN DO;
      REGCON=3;
      TOTCON=1;
      IF      SUBSTR(REGION,6,4)='Army'       THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,6,9)='Air Force'  THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,6,4)='Navy'       THEN SERVICE=3;
      ELSE SERVICE=4;
   END;
   ELSE IF SUBSTR(REGION,1,6)='Europe' THEN DO;
      REGCON=4;
      TOTCON=2;
      IF      SUBSTR(REGION,8,4)='Army'       THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,8,9)='Air Force'  THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,8,4)='Navy'       THEN SERVICE=3;
      ELSE SERVICE=4;
   END;
      ELSE IF SUBSTR(REGION,1,7)='Pacific' THEN DO;
      REGCON=5;
      TOTCON=2;
      IF      SUBSTR(REGION,9,4)='Army'       THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,9,9)='Air Force'  THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,9,4)='Navy'       THEN SERVICE=3;
      ELSE SERVICE=4;
   END;
   ELSE IF SUBSTR(REGION,1,13)='Latin America' THEN DO;
      REGCON=6;
      TOTCON=2;
      IF      SUBSTR(REGION,15,4)='Army'      THEN SERVICE=1;
      ELSE IF SUBSTR(REGION,15,9)='Air Force' THEN SERVICE=2;
      ELSE IF SUBSTR(REGION,15,4)='Navy'      THEN SERVICE=3;
      ELSE SERVICE=4;
   END;


RUN;

************************************************************************;
* RSG 01/2005 Calc. total Service Affiliation Scores       *;
************************************************************************;
PROC SORT DATA=TEMP;
BY SERVICE;

DATA TEMP2;
   SET TEMP;
   BY SERVICE;
      length key $200;
   IF FIRST.SERVICE THEN DO;
      SUMSCOR1 = 0;    RETAIN SUMSCOR1;
      SUMWGT1 = 0;     RETAIN SUMWGT1;
      SUMSE2 = 0;      RETAIN SUMSE2;
      SUMWGT2 = 0;     RETAIN SUMWGT2;
      N_OBS1 = 0;      RETAIN N_OBS1;
   END;

   IF SCORE  NE . AND N_WGT NE . THEN SUMSCOR1 = SUMSCOR1 + (SCORE*N_WGT);
   IF N_WGT  NE . THEN SUMWGT1  = SUMWGT1  + N_WGT;
   IF SEMEAN NE . AND N_WGT NE . THEN SUMSE2 = SUMSE2 + (SEMEAN*N_WGT)**2;
   IF N_OBS  NE . THEN N_OBS1 + N_OBS;


KEEP MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG SCORE SEMEAN N_OBS N_WGT
     FLAG SOURCE SUMSCOR1 SUMWGT1 SUMSE2 KEY;   ***MJS 07/08/03 Added TIMEPD;
```

```
   IF LAST.SERVICE THEN DO;

      IF SUMWGT1 NOTIN (.,0) THEN DO;
         SCORE   = SUMSCOR1/SUMWGT1;
         SEMEAN  = SQRT(SUMSE2)/SUMWGT1;
      END;
      ELSE DO;
         SCORE   = .;
         SEMEAN  = .;
      END;

      N_OBS   = N_OBS1;
      N_WGT   = SUMWGT1;
      SOURCE  = "CONUS";
      FLAG    = "CONUS";
      IF SERVICE=1 THEN REGION = "ARMY";
      IF SERVICE=2 THEN REGION = "AIR FORCE";
      IF SERVICE=3 THEN REGION = "NAVY";
      IF SERVICE=4 THEN REGION = "OTHER";
      REGCAT  = REGION;
      KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
  UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
  UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
      OUTPUT;
   END;
RUN;
*********************************************************************;
* RSG 01/2005 Calc. Total Region scores   *;
*********************************************************************;
PROC SORT DATA=TEMP;
BY REGCON;
DATA TEMP3;
   SET TEMP;
   BY REGCON;
      length key $200;
   IF FIRST.REGCON THEN DO;
      SUMSCOR1 = 0;    RETAIN SUMSCOR1;
      SUMWGT1 = 0;     RETAIN SUMWGT1;
      SUMSE2 = 0;      RETAIN SUMSE2;
      SUMWGT2 = 0;     RETAIN SUMWGT2;
      N_OBS1 = 0;      RETAIN N_OBS1;
   END;

   IF SCORE  NE . AND N_WGT NE . THEN SUMSCOR1 = SUMSCOR1 + (SCORE*N_WGT);
   IF N_WGT  NE . THEN SUMWGT1  = SUMWGT1  + N_WGT;
   IF SEMEAN NE . AND N_WGT NE . THEN SUMSE2 = SUMSE2 + (SEMEAN*N_WGT)**2;
   IF N_OBS  NE . THEN N_OBS1 + N_OBS;

KEEP MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG SCORE SEMEAN N_OBS N_WGT
     FLAG SOURCE SUMSCOR1 SUMWGT1 SUMSE2 KEY;   ***MJS 07/08/03 Added TIMEPD;

   IF LAST.REGCON THEN DO;

      IF SUMWGT1 NOTIN (.,0) THEN DO;
         SCORE = SUMSCOR1/SUMWGT1;
         SEMEAN  = SQRT(SUMSE2)/SUMWGT1;
      END;
      ELSE DO;
         SCORE   = .;
         SEMEAN  = .;
      END;
      N_OBS   = N_OBS1;
      N_WGT   = SUMWGT1;
      SOURCE  = "REGION";
      FLAG    = "REGION";
      IF REGCON=1 THEN REGION = "NORTH";
      IF REGCON=2 THEN REGION = "SOUTH";
      IF REGCON=3 THEN REGION = "WEST";
      IF REGCON=4 THEN REGION = "Overseas Europe";
      IF REGCON=5 THEN REGION = "Overseas Pacific";
      IF REGCON=6 THEN REGION = "Overseas Latin America";
```

```
      REGCAT  = REGION;
      KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
  UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
  UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
      OUTPUT;
   END;
RUN;

*********************************************************************;
* RSG 01/2005 Calc. Total CONUS Scores    *;
*********************************************************************;
PROC SORT DATA=TEMP;
BY TOTCON;
DATA TEMP4;
   SET TEMP END=FINISHED;
   BY TOTCON;
      length key $200;
   IF FIRST.TOTCON THEN DO;
      SUMSCOR1 = 0;    RETAIN SUMSCOR1;
      SUMWGT1 = 0;     RETAIN SUMWGT1;
      SUMSE2 = 0;      RETAIN SUMSE2;
      SUMWGT2 = 0;     RETAIN SUMWGT2;
      N_OBS1 = 0;      RETAIN N_OBS1;
   END;


      IF SCORE  NE . AND N_WGT NE . THEN SUMSCOR1 = SUMSCOR1 + (SCORE*N_WGT);
      IF N_WGT  NE . THEN SUMWGT1  = SUMWGT1  + N_WGT;
      IF SEMEAN NE . AND N_WGT NE . THEN SUMSE2 = SUMSE2 + (SEMEAN*N_WGT)**2;
      IF N_OBS  NE . THEN N_OBS1 + N_OBS;

   IF LAST.TOTCON THEN DO;




      IF SUMWGT1 NOTIN (.,0) THEN DO;
        SCORE   = SUMSCOR1/SUMWGT1;
        SEMEAN  = SQRT(SUMSE2)/SUMWGT1;
     END;
     ELSE DO;
       SCORE   = .;
       SEMEAN  = .;
     END;
      N_OBS   = N_OBS1;
      N_WGT   = SUMWGT1;
      SOURCE  = "CONUS";
      FLAG    = "CONUS";
   IF TOTCON=1 THEN REGION = "CONUS MHS";
   IF TOTCON=2 THEN REGION = "OVERSEAS";
      REGCAT  = REGION;
      KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
  UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
  UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
      OUTPUT;
END;
KEEP MAJGRP REGION REGCAT BENTYPE BENEFIT TIMEPD SIG SCORE SEMEAN N_OBS N_WGT
     FLAG SOURCE SUMSCOR1 SUMWGT1 SUMSE2 KEY;   ***MJS 07/08/03 Added TIMEPD;

RUN;

%IF &FLAG = 0 %THEN %DO;
   DATA FINAL;
      SET INIT TEMP2 TEMP3 TEMP4;
   RUN;
%END;
%ELSE %DO;
   DATA FINAL;
      SET FINAL TEMP2 TEMP3 TEMP4;
   RUN;
%END;
%LET FLAG = 1;
```

```
%MEND;

*************************************************************************
* Create CONUS for Active Duty - Individual
*************************************************************************;
%PROCESS(BENTYPE=Advice over Telephone     ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled Correctly  ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous and Respectful  ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Delays  in  Care  while  Awaiting  Approval               ,MAJGRP=Active  Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains so You can Understand      ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful         ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully         ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem    Finding/Understanding    Written    Material,MAJGRP=Active    Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem  Getting  Help  from  Customer  Service         ,MAJGRP=Active  Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork    ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Necessary Care     ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems  Getting  Personal  Doctor/Nurse                ,MAJGRP=Active  Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems  Getting  Referral  to  Specialist              ,MAJGRP=Active  Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect   ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You      ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care      ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait  More  than  15  Minutes  Past  Appointment         ,MAJGRP=Active  Duty,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit    ,MAJGRP=Active Duty, TYPE=INDIVIDUAL);


*************************************************************************
* Create CONUS for Active Duty Dependents - Individual
*************************************************************************;
%PROCESS(BENTYPE=Advice over Telephone     ,MAJGRP=Active Duty Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims Handled Correctly  ,MAJGRP=Active Duty Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims  Handled  in  a  Reasonable  Time  ,MAJGRP=Active  Duty  Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Courteous and Respectful  ,MAJGRP=Active Duty Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Delays in Care while Awaiting Approval        ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Explains  so  You  can  Understand           ,MAJGRP=Active  Duty  Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Helpful         ,MAJGRP=Active Duty Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Listens Carefully         ,MAJGRP=Active Duty Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service    ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problem with Paperwork    ,MAJGRP=Active Duty Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems  Getting  Necessary  Care          ,MAJGRP=Active  Duty  Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse        ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist       ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Shows Respect   ,MAJGRP=Active Duty Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Spends Time with You      ,MAJGRP=Active Duty Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Urgent Care      ,MAJGRP=Active Duty Dependents, TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment     ,MAJGRP=Active Duty Dependents,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Wait for Routine Visit    ,MAJGRP=Active Duty Dependents, TYPE=INDIVIDUAL);

*************************************************************************
* Create CONUS for Enrollees with Civilian PCM - Individual
*************************************************************************;
%PROCESS(BENTYPE=Advice   over   Telephone             ,MAJGRP=Enrollees   with   Civilian   PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims   Handled   Correctly      ,MAJGRP=Enrollees   with   Civilian   PCM,
TYPE=INDIVIDUAL);
%PROCESS(BENTYPE=Claims  Handled  in  a  Reasonable  Time  ,MAJGRP=Enrollees  with  Civilian  PCM,
TYPE=INDIVIDUAL);
```

```
     %PROCESS(BENTYPE=Courteous   and   Respectful      ,MAJGRP=Enrollees   with   Civilian   PCM,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Delays in Care while Awaiting Approval        ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Explains  so  You  can  Understand         ,MAJGRP=Enrollees  with  Civilian  PCM,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Helpful         ,MAJGRP=Enrollees with Civilian PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Listens  Carefully                    ,MAJGRP=Enrollees  with  Civilian  PCM,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem  Finding/Understanding  Written  Material,MAJGRP=Enrollees  with  Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Getting Help from Customer Service    ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem   with   Paperwork           ,MAJGRP=Enrollees   with   Civilian   PCM,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems  Getting  Necessary  Care        ,MAJGRP=Enrollees  with  Civilian  PCM,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse         ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Referral to Specialist        ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Shows Respect   ,MAJGRP=Enrollees with Civilian PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Spends  Time  with  You              ,MAJGRP=Enrollees  with  Civilian  PCM,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait  for  Urgent  Care              ,MAJGRP=Enrollees  with  Civilian  PCM,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment     ,MAJGRP=Enrollees with Civilian
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait  for  Routine  Visit          ,MAJGRP=Enrollees  with  Civilian  PCM,
TYPE=INDIVIDUAL);

     ****************************************************************************
     * Create CONUS for Enrollees with Military PCM - Individual
     ****************************************************************************;
     %PROCESS(BENTYPE=Advice  over  Telephone             ,MAJGRP=Enrollees  with  Military  PCM,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims   Handled   Correctly      ,MAJGRP=Enrollees   with   Military   PCM,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Claims  Handled  in  a  Reasonable  Time  ,MAJGRP=Enrollees  with  Military  PCM,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Courteous   and   Respectful      ,MAJGRP=Enrollees   with   Military   PCM,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Delays in Care while Awaiting Approval        ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Explains  so  You  can  Understand         ,MAJGRP=Enrollees  with  Military  PCM,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Helpful         ,MAJGRP=Enrollees with Military PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Listens  Carefully                    ,MAJGRP=Enrollees  with  Military  PCM,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem  Finding/Understanding  Written  Material,MAJGRP=Enrollees  with  Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem Getting Help from Customer Service    ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problem   with   Paperwork           ,MAJGRP=Enrollees   with   Military   PCM,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems  Getting  Necessary  Care        ,MAJGRP=Enrollees  with  Military  PCM,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse         ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Problems Getting Referral to Specialist        ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Shows Respect   ,MAJGRP=Enrollees with Military PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Spends  Time  with  You              ,MAJGRP=Enrollees  with  Military  PCM,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait  for  Urgent  Care              ,MAJGRP=Enrollees  with  Military  PCM,
TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait More than 15 Minutes Past Appointment     ,MAJGRP=Enrollees with Military
PCM, TYPE=INDIVIDUAL);
     %PROCESS(BENTYPE=Wait  for  Routine  Visit          ,MAJGRP=Enrollees  with  Military  PCM,
TYPE=INDIVIDUAL);

     ****************************************************************************
     * Create CONUS for Non-enrolled Beneficiaries - Individual
```

```
    ****************************************************************************;
    %PROCESS(BENTYPE=Advice   over   Telephone                ,MAJGRP=Non-enrolled   Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Claims    Handled    Correctly         ,MAJGRP=Non-enrolled    Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Claims  Handled  in  a  Reasonable  Time  ,MAJGRP=Non-enrolled  Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Courteous    and    Respectful         ,MAJGRP=Non-enrolled    Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Delays  in  Care  while  Awaiting  Approval               ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Explains  so  You  can  Understand          ,MAJGRP=Non-enrolled  Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Helpful         ,MAJGRP=Non-enrolled Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Listens   Carefully                       ,MAJGRP=Non-enrolled   Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problem     Finding/Understanding     Written     Material,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problem  Getting  Help  from  Customer  Service         ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problem   with   Paperwork              ,MAJGRP=Non-enrolled   Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems  Getting  Necessary  Care         ,MAJGRP=Non-enrolled  Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems  Getting  Personal  Doctor/Nurse                 ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems  Getting  Referral  to  Specialist               ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Shows Respect   ,MAJGRP=Non-enrolled Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Spends   Time   with   You                ,MAJGRP=Non-enrolled   Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait   for   Urgent   Care                ,MAJGRP=Non-enrolled   Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait  More  than  15  Minutes  Past  Appointment          ,MAJGRP=Non-enrolled
Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait   for   Routine   Visit            ,MAJGRP=Non-enrolled   Beneficiaries,
TYPE=INDIVIDUAL);

    ****************************************************************************
    * Create CONUS for Prime Enrollees - Individual
    ****************************************************************************;
    %PROCESS(BENTYPE=Advice over Telephone     ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Claims Handled Correctly  ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Claims Handled in a Reasonable Time ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Courteous and Respectful  ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Delays  in  Care  while  Awaiting  Approval            ,MAJGRP=Prime  Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Explains so You can Understand      ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Helpful         ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Listens Carefully         ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problem   Finding/Understanding   Written   Material,MAJGRP=Prime   Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problem  Getting  Help  from  Customer  Service       ,MAJGRP=Prime  Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problem with Paperwork    ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems Getting Necessary Care     ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems  Getting  Personal  Doctor/Nurse             ,MAJGRP=Prime  Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems  Getting  Referral  to  Specialist           ,MAJGRP=Prime  Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Shows Respect   ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Spends Time with You      ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait for Urgent Care      ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait  More  than  15  Minutes  Past  Appointment        ,MAJGRP=Prime  Enrollees,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait for Routine Visit    ,MAJGRP=Prime Enrollees, TYPE=INDIVIDUAL);

    ****************************************************************************
    * Create CONUS for Retirees and Dependents - Individual
    ****************************************************************************;
    %PROCESS(BENTYPE=Advice over Telephone     ,MAJGRP=Retirees and Dependents, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Claims Handled Correctly  ,MAJGRP=Retirees and Dependents, TYPE=INDIVIDUAL);
```

```
    %PROCESS(BENTYPE=Claims  Handled  in  a  Reasonable  Time  ,MAJGRP=Retirees  and  Dependents,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Courteous and Respectful  ,MAJGRP=Retirees and Dependents, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Delays in Care while Awaiting Approval        ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Explains  so  You  can  Understand           ,MAJGRP=Retirees  and  Dependents,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Helpful         ,MAJGRP=Retirees and Dependents, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Listens Carefully         ,MAJGRP=Retirees and Dependents, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problem Finding/Understanding Written Material,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problem Getting Help from Customer Service    ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problem with Paperwork    ,MAJGRP=Retirees and Dependents, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems  Getting  Necessary  Care          ,MAJGRP=Retirees  and  Dependents,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse        ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems Getting Referral to Specialist       ,MAJGRP=Retirees and Dependents,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Shows Respect   ,MAJGRP=Retirees and Dependents, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Spends Time with You      ,MAJGRP=Retirees and Dependents, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait for Urgent Care      ,MAJGRP=Retirees and Dependents, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait  More  than  15  Minutes  Past  Appointment          ,MAJGRP=Retirees  and
Dependents, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait for Routine Visit    ,MAJGRP=Retirees and Dependents, TYPE=INDIVIDUAL);

    ***************************************************************************
    * Create CONUS for All Beneficiaries - Individual
    ***************************************************************************;
    %PROCESS(BENTYPE=Advice over Telephone     ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Claims Handled Correctly  ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Claims   Handled   in   a   Reasonable   Time   ,MAJGRP=All   Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Courteous and Respectful  ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Delays  in  Care  while  Awaiting  Approval           ,MAJGRP=All  Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Explains   so   You   can   Understand               ,MAJGRP=All   Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Helpful         ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Listens Carefully         ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problem   Finding/Understanding   Written   Material,MAJGRP=All   Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problem  Getting  Help  from  Customer  Service      ,MAJGRP=All  Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problem with Paperwork    ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems   Getting   Necessary   Care              ,MAJGRP=All   Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems  Getting  Personal  Doctor/Nurse            ,MAJGRP=All  Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Problems  Getting  Referral  to  Specialist           ,MAJGRP=All  Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Shows Respect   ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Spends Time with You      ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait for Urgent Care      ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait  More  than  15  Minutes  Past  Appointment       ,MAJGRP=All  Beneficiaries,
TYPE=INDIVIDUAL);
    %PROCESS(BENTYPE=Wait for Routine Visit    ,MAJGRP=All Beneficiaries, TYPE=INDIVIDUAL);

    ***************************************************************************
    * Process Quarterly CONUS Composites
    ***************************************************************************
    ***************************************************************************
    * Create CONUS for Claims Processing - Quarterly
    ***************************************************************************;
    %PROCESS(BENTYPE="Composite",  MAJGRP=Active  Duty             ,  TYPE=COMPOSITE,BENEFIT=Claims
Processing);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
    %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents     , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
    %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Claims
Processing);
    %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Claims
Processing);
```

```
    %PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
    %PROCESS(BENTYPE="Composite",   MAJGRP=Prime   Enrollees      ,   TYPE=COMPOSITE,BENEFIT=Claims
Processing);
    %PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Claims
Processing);
    %PROCESS(BENTYPE="Composite",    MAJGRP=All    Beneficiaries,    TYPE=COMPOSITE,BENEFIT=Claims
Processing);

    ***************************************************************************
    * Create CONUS for Courteous and Helpful Office Staff - Quarterly
    ***************************************************************************;
    %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty        , TYPE=COMPOSITE,BENEFIT=Courteous and
Helpful Office Staff);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
    %PROCESS(BENTYPE="Composite",     MAJGRP=Active     Duty     Dependents                        ,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);
    %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Civilian         PCM,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);
    %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Military         PCM,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);
    %PROCESS(BENTYPE="Composite",           MAJGRP=Non-enrolled           Beneficiaries           ,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);
    %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees   , TYPE=COMPOSITE,BENEFIT=Courteous and
Helpful Office Staff);
    %PROCESS(BENTYPE="Composite",     MAJGRP=Retirees     and     Dependents                      ,
TYPE=COMPOSITE,BENEFIT=Courteous and Helpful Office Staff);
    %PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries, TYPE=COMPOSITE,BENEFIT=Courteous and
Helpful Office Staff);

    ***************************************************************************
    * Create CONUS for Customer Service - Quarterly
    ***************************************************************************;
    %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty           , TYPE=COMPOSITE,BENEFIT=Customer
Service);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
    %PROCESS(BENTYPE="Composite",     MAJGRP=Active     Duty     Dependents                        ,
TYPE=COMPOSITE,BENEFIT=Customer Service);
    %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Civilian         PCM,
TYPE=COMPOSITE,BENEFIT=Customer Service);
    %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Military         PCM,
TYPE=COMPOSITE,BENEFIT=Customer Service);
    %PROCESS(BENTYPE="Composite",           MAJGRP=Non-enrolled           Beneficiaries           ,
TYPE=COMPOSITE,BENEFIT=Customer Service);
    %PROCESS(BENTYPE="Composite",   MAJGRP=Prime   Enrollees     ,   TYPE=COMPOSITE,BENEFIT=Customer
Service);
    %PROCESS(BENTYPE="Composite",     MAJGRP=Retirees     and     Dependents                      ,
TYPE=COMPOSITE,BENEFIT=Customer Service);
    %PROCESS(BENTYPE="Composite",    MAJGRP=All    Beneficiaries,    TYPE=COMPOSITE,BENEFIT=Customer
Service);

    ***************************************************************************
    * Create CONUS for Getting Care Quickly - Quarterly
    ***************************************************************************;
    %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty         , TYPE=COMPOSITE,BENEFIT=Getting Care
Quickly);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
    %PROCESS(BENTYPE="Composite",     MAJGRP=Active     Duty     Dependents                        ,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);
    %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Civilian         PCM,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);
    %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Military         PCM,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);
    %PROCESS(BENTYPE="Composite",           MAJGRP=Non-enrolled           Beneficiaries           ,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);
    %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees   , TYPE=COMPOSITE,BENEFIT=Getting Care
Quickly);
    %PROCESS(BENTYPE="Composite",     MAJGRP=Retirees     and     Dependents                      ,
TYPE=COMPOSITE,BENEFIT=Getting Care Quickly);
    %PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries, TYPE=COMPOSITE,BENEFIT=Getting Care
Quickly);

    ***************************************************************************
    * Create CONUS for Getting Needed Care - Quarterly
    ***************************************************************************;
```

```
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty        , TYPE=COMPOSITE,BENEFIT=Getting Needed
Care);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite",     MAJGRP=Active     Duty     Dependents                        ,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Civilian         PCM,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Military         PCM,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);
     %PROCESS(BENTYPE="Composite",           MAJGRP=Non-enrolled           Beneficiaries           ,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees   , TYPE=COMPOSITE,BENEFIT=Getting Needed
Care);
     %PROCESS(BENTYPE="Composite",     MAJGRP=Retirees     and     Dependents                        ,
TYPE=COMPOSITE,BENEFIT=Getting Needed Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries, TYPE=COMPOSITE,BENEFIT=Getting Needed
Care);

     ****************************************************************************
     * Create CONUS for Health Care - Quarterly
     ****************************************************************************;
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty        , TYPE=COMPOSITE,BENEFIT=Health Care);
***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents     , TYPE=COMPOSITE,BENEFIT=Health
Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Health
Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Health
Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Health
Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees  , TYPE=COMPOSITE,BENEFIT=Health Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Health
Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries, TYPE=COMPOSITE,BENEFIT=Health Care);

     ****************************************************************************
     * Create CONUS for Health Plan - Quarterly
     ****************************************************************************;
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty        , TYPE=COMPOSITE,BENEFIT=Health Plan);
***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents     , TYPE=COMPOSITE,BENEFIT=Health
Plan);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=Health
Plan);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=Health
Plan);
     %PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=Health
Plan);
     %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees  , TYPE=COMPOSITE,BENEFIT=Health Plan);
     %PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents    , TYPE=COMPOSITE,BENEFIT=Health
Plan);
     %PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries, TYPE=COMPOSITE,BENEFIT=Health Plan);

     ****************************************************************************
     * Create CONUS for How Well Doctors Communicate - Quarterly
     ****************************************************************************;
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty      , TYPE=COMPOSITE,BENEFIT=How Well Doctors
Communicate);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty Dependents       , TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Civilian PCM, TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=Enrollees with Military PCM, TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=Non-enrolled Beneficiaries , TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees  , TYPE=COMPOSITE,BENEFIT=How Well Doctors
Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=Retirees and Dependents      , TYPE=COMPOSITE,BENEFIT=How
Well Doctors Communicate);
     %PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries, TYPE=COMPOSITE,BENEFIT=How Well Doctors
Communicate);
```

```
     ************************************************************************
     * Create CONUS for Primary Care Manager - Quarterly
     ************************************************************************;
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty         , TYPE=COMPOSITE,BENEFIT=Primary Care
Manager);   ***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite",     MAJGRP=Active     Duty     Dependents                        ,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Civilian         PCM,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Military         PCM,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);
     %PROCESS(BENTYPE="Composite",           MAJGRP=Non-enrolled           Beneficiaries           ,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);
     %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees   , TYPE=COMPOSITE,BENEFIT=Primary Care
Manager);
     %PROCESS(BENTYPE="Composite",     MAJGRP=Retirees     and     Dependents                      ,
TYPE=COMPOSITE,BENEFIT=Primary Care Manager);
     %PROCESS(BENTYPE="Composite",  MAJGRP=All  Beneficiaries,  TYPE=COMPOSITE,BENEFIT=Primary  Care
Manager);

     ************************************************************************
     * Create CONUS for Specialty Care - Quarterly
     ************************************************************************;
     %PROCESS(BENTYPE="Composite", MAJGRP=Active Duty      , TYPE=COMPOSITE,BENEFIT=Specialty Care);
***MJS 07/08/03 Changed BENTYPE="&PERIOD4" to BENTYPE="Composite";
     %PROCESS(BENTYPE="Composite",     MAJGRP=Active     Duty     Dependents                        ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Civilian         PCM,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite",         MAJGRP=Enrollees         with         Military         PCM,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite",           MAJGRP=Non-enrolled           Beneficiaries           ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=Prime Enrollees  , TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite",     MAJGRP=Retirees     and     Dependents                      ,
TYPE=COMPOSITE,BENEFIT=Specialty Care);
     %PROCESS(BENTYPE="Composite", MAJGRP=All Beneficiaries, TYPE=COMPOSITE,BENEFIT=Specialty Care);

     ************************************************************************
     * Extract ORDER and KEY from the WEB Layout file.  TEMPQ will be used
     * as place holders for missing records.  FAKEQ will be used for adding
     * new records.
     ************************************************************************;
     DATA FAKEQ;
        SET IN1.FAKEQ;
          length key $200;
        SIG = .;
        SCORE = .;
        ORDER = _N_;
        KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
              UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
              UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;

     RUN;
     PROC SORT DATA=FAKEQ OUT=TEMPQ;       BY KEY; RUN;
     PROC SORT DATA=FAKEQ(KEEP=ORDER KEY); BY KEY; RUN;

     ************************************************************************
     * Append BENCHMARK records to CAHPS records and perform significance tests
     ************************************************************************;
     DATA BENCHMRK(KEEP=MAJGRP BENEFIT BENTYPE SEMEAN SCORE);
        SET IN1.&DSN;
        WHERE SUBSTR(REGION,1,5) = "Bench" AND SVMPRQ = 0;
     RUN;
     Data abnchmrk(keep=benefit bentype ascore);
     set benchmrk;
     where upcase(majgrp)='ALL BENEFICIARIES';
     rename score=ascore;
     run;
     proc sort; by benefit bentype;
     proc sort data=benchmrk; by benefit bentype;
     data benchmrk;
     merge benchmrk abnchmrk; by benefit bentype;run;
```

```
     PROC SORT DATA=BENCHMRK; BY MAJGRP BENEFIT BENTYPE; RUN;

     PROC SORT DATA=FINAL; BY KEY; RUN;

     DATA CONUS_Q;
        MERGE FINAL(IN=IN1) FAKEQ(IN=IN2);
        BY KEY;
        IF IN1;
     RUN;
     PROC SORT DATA=CONUS_Q; BY MAJGRP BENEFIT BENTYPE; RUN;

     ************************************************************************
     * Perform significance tests for CONUS scores
     ************************************************************************;
     DATA SIGTEST1;
        MERGE CONUS_Q(IN=SIN) BENCHMRK(RENAME=(SCORE=BSCORE SEMEAN=BSEMEAN));
        BY MAJGRP BENEFIT BENTYPE;
        length key $200;
        TEMP = (SCORE-BSCORE)/SQRT(BSEMEAN**2+SEMEAN**2);
        IF N_OBS > 1 THEN TEST = 2*(1-PROBT(ABS(TEMP),N_OBS-1)); /** RSG 06/22/2004 - PUT CONDITION
TO AVOID DF=0 WHICH CAUSES ERROR FOR PROBT FUNCTION **/
        ELSE TEST = .; /** RSG 06/22/2004 - ADDED FOR CASES WITH N_OBS = 1 OR LESS SINCE PROBT CAN'T
BE PERFORMED AND WOULD RESULT IN TEST = MISSING ANYWAY **/
        SIG = 0;
        IF TEST < 0.05 AND TEST NE . THEN SIG = 1; /** RSG 06/22/2004 - ADDED CONDITION "TEST NE ."
IN CASE MISSING IS CONSIDERED LESS THAN 0.05 **/
        IF SCORE < BSCORE THEN SIG = -SIG;


        KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
              UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
              UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
        SOURCE = "CONUS_Q";
        FLAG   = "CONUS_Q";
        IF SIN;
        score=score+ascore-bscore;
     RUN;
     PROC SORT DATA=SIGTEST1; BY KEY; RUN;

     ************************************************************************
     * Extract CAHPS scores to perform significance tests
     ************************************************************************;
     DATA CAHPS MPR bench;
        SET IN1.&DSN;
        ***********************************************************************
        * Significance tests have already been performed for MPR scores,
        * so remove from file.
        ************************************************************************;
        IF SVMPRQ = 1 THEN OUTPUT MPR;
        IF SVMPRQ = 0 THEN do;
         if majgrp ne 'Benchmark' then OUTPUT CAHPS;
         else output bench; end;
     RUN;


     PROC SORT DATA=CAHPS;
        BY MAJGRP BENEFIT BENTYPE;
     RUN;

     ************************************************************************
     * Perform significance tests for CAHPS scores
     ************************************************************************;
     DATA SIGTEST2;
        MERGE CAHPS(IN=SIN) BENCHMRK(RENAME=(SCORE=BSCORE SEMEAN=BSEMEAN));
        BY MAJGRP BENEFIT BENTYPE;
        TEMP = (SCORE-BSCORE)/SQRT(BSEMEAN**2+SEMEAN**2);
        IF N_OBS > 1 THEN TEST = 2*(1-PROBT(ABS(TEMP),N_OBS-1));  /** RSG 06/22/2004 PUT N_OBS > 1
CONDITION TO AVOID ERRORS BECAUSE PROBT CAN NOT HANDLE DF=0 **/
        ELSE TEST = .;
        SIG = 0;
        IF N_OBS >= 30 AND TEST < 0.05 THEN SIG = 1;
        IF SCORE < BSCORE THEN SIG = -SIG;
        IF SIN;
```

```
   score=score+ascore-bscore;
   RUN;
proc sort data=bench; by majgrp benefit bentype;
data sigtest2;
set sigtest2 bench; by majgrp benefit bentype;
PROC SORT DATA=SIGTEST2; BY KEY; RUN;

*************************************************************************
* When NOT 1st quarter: Get records from previous quarters
*************************************************************************;
%MACRO LASTQTR;
   *********************************************************************
   * Input composite records from previous quarters.
   *********************************************************************;
   LIBNAME IN2 "&LSTCONUS";
   DATA LASTQTR (drop=key2); /*RSG 10/2005 - KEY2 WAS CREATED AT END OF PROG TO HELP
 SET TREND TO MISSING FOR SCORES MISSING IN ANY QUARTERS
 THIS SHOULD BE DROPPED AND RESET AT THE END OF PROG*/
      SET IN2.CONUS_Q (DROP=KEY);

/*** Change BENEFIT "Heathly Behavior" to Healthy "Behaviors" JSO 02/16/2007 ***/
      IF BENEFIT = 'Healthy Behavior' THEN BENEFIT = 'Healthy Behaviors';

      IF timepd IN ("&PERIOD1","&PERIOD2","&PERIOD3") AND
        (REGION = REGCAT) AND
         BENEFIT IN ("Getting Needed Care",
 "Getting Care Quickly",
 "How Well Doctors Communicate",
 "Courteous and Helpful Office Staff",
 "Customer Service",
 "Claims Processing",
 "Health Care",
 "Health Plan",
 "Primary Care Manager",
 "Specialty Care",
 "Preventive Care",
 "Healthy Behaviors") & TIMEPD NE "Trend";



    KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
  UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
  UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));

   RUN;
%MEND LASTQTR;
%LASTQTR;

PROC SORT DATA=LASTQTR(DROP=ORDER); BY KEY; RUN;

DATA LASTQTR;
   MERGE TEMPQ(IN=IN1) LASTQTR(IN=IN2);
   BY KEY;
   IF IN1 AND IN2;
RUN;

PROC SORT DATA=MPR; BY KEY; RUN;

*************************************************************************
* Combine previously created records with the new file
*************************************************************************;
DATA COMBINE OUT.LT30Q;
   SET SIGTEST1 SIGTEST2 LASTQTR MPR;
   BY KEY;
   if timepd="&period1" then period=1;   ***MJS 07/08/03 Changed from bentype="&period1";
   if timepd="&period2" then period=2;   ***MJS 07/08/03 Changed from bentype="&period2";
   if timepd="&period3" then period=3;   ***MJS 07/08/03 Changed from bentype="&period3";
   if timepd="&period4" then period=4;   ***MJS 07/08/03 Changed from bentype="&period4";
   *********************************************************************
   * Remove N_OBS < 30 OR N_WGT < 200
   *********************************************************************;
   IF (N_OBS < 30 OR N_WGT < 200) AND (MAJGRP NE "Benchmark") AND
      (REGION NE "Benchmark")
```

```
      THEN OUTPUT OUT.LT30Q;
   ELSE OUTPUT COMBINE;
RUN;

data trend;
set combine;
where period ne . ;
if period<4|benefit="Preventive Care" then score=score/100;

proc sort data=trend;
by majgrp region regcat benefit bentype period;
run;

data avg(keep=majgrp region regcat benefit t_obs a_period a_score twgt bentype) ;
set trend;   by majgrp region regcat benefit bentype period;
if majgrp="Benchmark"|region="Benchmark" then n_wgt=1;
if first.majgrp|first.region|first.regcat|first.benefit|first.bentype then do;
t_obs=0;
t_score=0;
twgt=0;
t_period=0;
end;
t_obs+n_obs;
t_Score+n_wgt*score;
twgt+n_wgt;
t_period+period*n_wgt;
 if last.majgrp|last.region|last.regcat|last.benefit|last.bentype then do;
    if twgt notin (.,0) then do;
       a_score=t_score/twgt;
       a_period=t_period/twgt;
    end;
    else do;
       a_score=.;
       a_period=.;
    end;
    output;
 end;
RUN;

data trend2(drop=score) btrend(keep=majgrp benefit bentype trend serr);
merge trend avg;  by majgrp region regcat benefit bentype;
if majgrp="Benchmark"|region="Benchmark" then n_wgt=1;
if first.majgrp|first.region|first.regcat|first.benefit|first.bentype then do;
t_score=0;
t_se=0;
t_period=0;
end;
t_se+((n_wgt**2)*(semean**2));
t_score+n_wgt*(score-a_score)*(period-a_period);
t_period+n_wgt*(period-a_period)**2;
if last.majgrp|last.region|last.regcat|last.benefit|last.bentype then do;
if t_period ne 0 then do;   /* RSG 06/22/2004 Added to avoid division by zero*/
   trend=t_score/t_period;
   serr=sqrt(t_se/(t_period*twgt));
end;
else do;
   trend=.;
   serr=.;
end;
if region="Benchmark"|majgrp="Benchmark" then output btrend;
output trend2;
end;
proc sort data=trend2; by majgrp benefit bentype;RUN;
proc sort data=btrend; by majgrp benefit bentype;
data trend3(rename=(trend=score));
merge trend2 btrend(rename=(trend=btrend serr=bserr));
by majgrp benefit bentype;
   length key $200;
if ^(region="Benchmark"|majgrp="Benchmark") then do;
ttrend=trend-btrend;
serr=sqrt((serr**2)+(bserr**2));
sig=0;
```

```
    if serr > 0 and t_obs notin (.,0) then test= 2*(1-probt(abs(ttrend/serr),t_obs));   /* RSG
06/22/2004 Added to avoid division by zero*/
    else test = .;
    if test<.05 & test ne . then sig=1;
    if sig=1 & ttrend<0 then sig=-1;
    end;
    timepd="Trend";
       KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
             UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
             UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/08/03 Added TIMEPD;
    run;

    proc sort data=trend3(drop=t_obs twgt a_score a_period t_score t_se t_period serr
     bserr btrend ttrend order); by key;
     data trend4 ;
     merge trend3(in=din) fakeq(in=cin); by key;
     if din;
     RUN;


    data combine2;
    set combine trend4;RUN;

    proc sort; by key;
    data combine3 dupe;
    set combine2; by key;
    if ^(first.key & last.key) then output dupe;
    output combine3;
    proc print data=dupe;run;

    /* RSG 06/2005 - set trend to missing for component/composite
       scores with missing scores in any of the quarter*/
    data misses (keep=key2) all;
    set combine3;
    length key2 $200.;
    KEY2 = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
      UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
      UPCASE(TRIM(REGION));
    if score = . then output misses;
    output all;
    run;
    proc sort data=misses;
    by key2;
    proc sort data=all;
    by key2;
    run;

    data combine4;
    merge all (in=a) misses (in=b);
    by key2;
    if a and b then do;
      if timepd = "Trend" then score = .;
    end;
    run;

    ***************************************************************************
    * Create place holders for missing records
    ***************************************************************************;
    DATA FAKEONLY;
       MERGE COMBINE4(IN=IN1) TEMPQ(IN=IN2);
       BY KEY;
       SOURCE = "FAKE ONLY";
       FLAG   = "FAKE ONLY";
       IF IN2 AND NOT IN1;

    RUN;

    ***************************************************************************
    * Combine all of the missing records with the existing records to generate
    * the complete WEB layout file.
    ***************************************************************************;
    DATA CONUS_Q;
       SET FAKEONLY COMBINE4;
```

```
   BY KEY;
   ************************************************************************
   * Convert CAHPS Composites and Individual to 1-100 scale
   ************************************************************************;
   IF timepd="Trend" OR (timepd="&PERIOD4" & benefit ne "Preventive Care")
      then
        SCORE = SCORE*100;
RUN;

PROC SORT DATA=CONUS_Q; BY ORDER; RUN;

DATA FAKEQ;
   SET IN1.FAKEQ;
   SIG = .;
   SCORE = .;
   ORDER = _N_;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(REGCAT))  ||
         UPCASE(TRIM(REGION))  || UPCASE(TRIM(TIMEPD));   ***MJS 07/31/03 Added TIMEPD;

RUN;
PROC SORT DATA=FAKEQ OUT=TEMPQ;       BY KEY; RUN;
PROC SORT DATA=FAKEQ(KEEP=ORDER KEY); BY KEY; RUN;

PROC SORT DATA=CONUS_Q out=OUT.CONUS_Q;
BY KEY;
RUN;

DATA FAKEONLY;
   MERGE OUT.CONUS_Q(IN=IN1) TEMPQ(IN=IN2);
   BY KEY;
   SOURCE = "FAKE ONLY";
   FLAG   = "FAKE ONLY";
   IF IN2 AND NOT IN1;
RUN;

DATA TOTAL_Q;
   SET FAKEONLY OUT.CONUS_Q;
   BY KEY;
   IF MAJGRP="All Beneficiaries" then MAJGRP="All Users";
   IF MAJGRP="Non-enrolled Beneficiaries" then MAJGRP="Standard/Extra Users";
   IF BENEFIT="Primary Care Manager" THEN BENEFIT="Personal Doctor";   /*MJS 02/05/2003*/
   /* 11/14/2005 RSG - ADDED IN THESE CODE TO CAPITALIZE ALL WORDS IN TITLE */
   IF BENTYPE = "Problems Getting Referral to Specialist       "
      THEN BENTYPE = "Problems Getting Referral To Specialist  ";
   IF BENTYPE = "Delays in Care while Awaiting Approval        "
      THEN BENTYPE = "Delays In Care While Awaiting Approval   ";
   IF BENTYPE = "Advice over Telephone    "
      THEN BENTYPE = "Advice Over Telephone";
   IF BENTYPE = "Wait for Routine Visit    "
      THEN BENTYPE = "Wait For Routine Visit         ";
   IF BENTYPE = "Wait for Urgent Care      "
      THEN BENTYPE = "Wait For Urgent Care ";
   IF BENTYPE = "Wait More than 15 Minutes Past Appointment    "
      THEN BENTYPE = "Wait More Than 15 Minutes Past Appointment";
   IF BENTYPE = "Explains so You can Understand      "
      THEN BENTYPE = "Explains So You Can Understand ";
   IF BENTYPE = "Spends Time with You      "
      THEN BENTYPE = "Spends Time With You ";
   IF BENTYPE = "Courteous and Respectful  "
      THEN BENTYPE = "Courteous And Respectful       ";
   IF BENTYPE = "Problem Getting Help from Customer Service    "
      THEN BENTYPE = "Problem Getting Help From Customer Service";
   IF BENTYPE = "Problem with Paperwork    "
      THEN BENTYPE = "Problem With Paperwork         ";
   IF BENTYPE = "Claims Handled in a Reasonable Time "
      THEN BENTYPE = "Claims Handled In A Reasonable Time      ";
   IF substr(region,1,5) in ('Latin','Europ','Pacif')|Region='Overseas Latin America'
    then delete;

RUN;

PROC SORT DATA=TOTAL_Q OUT=OUT.TOTAL_Q; BY ORDER; RUN;
```

```
    TITLE1 "Quarterly DOD Health Survey Scores/Report Cards (6244-410)";    /*MJS 03/23/04 Updated
project number*/
    TITLE2 "Program Name: CONUS_Q.SAS By Keith Rathbun";
    TITLE3 "Program Inputs: MERGFINQ.SD2 - Scores Database in WEB Layout";
    TITLE4 "Program Outputs: TOTAL_Q.SD2 - CONUS Scores Database in WEB layout";

    PROC FREQ;
    TABLES SIG FLAG SOURCE BENEFIT BENTYPE MAJGRP REGION REGCAT TIMEPD    /*MJS 07/08/03 Added
TIMEPD*/
           REGION*REGCAT
          /MISSING LIST;
    RUN;
```

APPENDIX J

SAS CODE FOR 2007 TRICARE PURCHASED CARE CONSUMER WATCH - QUARTERS I-IV AND COMBINED ANNUAL

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J.1.A Q4FY2007\PROGRAMS\PURCHASEDCONSUMERWATCH\CONSUMERWATCH-CONUS.SAS - RUN CONUS TRICARE CONSUMER WATCH REPORTS - RUN QUARTERLY.

```
*******************************************************************************
* PROJECT: 6077-420
* PROGRAM: CONSUMERWATCH-CONUS.SAS
* PURPOSE: CALL CONSUMERWATCH MACRO PROGRAM
*TO PRODUCE EXCEL TABLE FOR CONUS DATA.
*
* WRITTEN: 02/10/2005 BY LUCY LU FOR Q4 2004.
*
* UPDATE:  4/26/2005 FOR Q1 2005.
* UPDATE:  8/4/2005 FOR Q2 2005.
* UPDATE:  12/15/2005 FOR Q4 2005.
* UPDATE:  04/04/2006 FOR Q2 FISCAL YEAR 2006, LUCY Lu. STARTING THIS QUARTER,
*THE PERIOD IS CHANGED TO FISCAL YEAR.
* UPDATE:  09/01/2006 Lucy Lu FOR FY 3 2006.
* UPDATE:  10/05/2006 Lucy Lu FOR FY 4 2006.
* MODIFIED 7/30/2007 BY LUCY LU
*UNIFY THE PERDIOD MACRO VARIABLES WITH BENEFICIARY REPORT CARDS PROGRAMS
*CURRNT  ===> PERIOD4
*CURRNTQ ===> PERIOD4Q
*PREV1   ===> PERIOD3
*PREV1Q  ===> PERIOD3Q
*PREV2   ===> PERIOD2
*PREV2Q  ===> PERION2Q
*PREV3   ===> PERIOD1
*PREV3Q  ===> PERIOND1Q
* MODIFIED 8/29/2007 BY LUCY LU TO RUN CONSUMERWATCH-MACRO-COMB.INC
*STARTING Q4 2007 CONSUMERWATCH_R(REGION) AND CONSUMERWATCH_CONUS RUN A SINGLE
*MACRO TO PRODUCE CHARTS FOR BOTH PRIME ENROLLEES AND CIVILIAN PCM POPULATION
*
* INPUT  : DATA FROM CONSUMER REPORTS: ..\..\PROGRAMS\&DAT.LOADWEB\TOTAL_Q.SD2
*
* OUTPUT : INTO EXCEL SPREADSHEET
*
* PROGRAM TO CALL: CONSUMERWATCH-MACRO-COMB.INC
*******************************************************************************;


/****************************/
/* UPDATE REGIONAL LIBNAMES */
/****************************/

/* LIBNAME IS EMBEDDED IN MACRO PROGRAM */


/*******************************************/
/* TIME PERIOD MACROS: UPDATE EACH QUARTER */
/*******************************************/

*starting 2006, the period is changed to fiscal year, LLU 4/5/06;

%LET PERIOD4    = 'July, 2007';      *CURRENT QUARTER;
%LET PERIOD4Q   = Q4;

%LET PERIOD3    = 'April, 2007';
%LET PERIOD3Q   = Q3;

%LET PERIOD2    = 'January, 2007';
%LET PERIOD2Q   = Q2;

%LET PERIOD1    = 'October, 2006';
%LET PERIOD1Q   = Q1;



*%LET POP= Prime Enrollees;


TITLE "6244-420 DOD CONSUMER WATCH &PERIOD4Q FY 2007";

%INCLUDE "CONSUMERWATCH-MACRO-COMB.INC";
```

```
%RUNCW(AREA=CONUS MHS,
       FOLDER=CONUSMHS,
       CURRENT=CURNTR.TOTAL_Q);
```

J.1.B Q4FY2007\PROGRAMS\PURCHASEDCONSUMERWATCH\CONSUMERWATCH-R.SAS - RUN REGIONAL TRICARE CONSUMER WATCH REPORTS - RUN QUARTERLY.

```
*******************************************************************************
* PROJECT: 6077-420
* PROGRAM: CONSUMERWATCH-R.SAS
* PURPOSE: CALL CONSUMERWATCH MACRO PROGRAM
*TO PRODUCE EXCEL TABLE FOR REGIONS.
*
* WRITTEN: 02/10/2005 BY LUCY LU FOR Q4 2004 DATA.
*
* UPDATE:  4/26/2005 FOR Q1 2005.
* UPDATE:  8/4/2005 FOR Q2 2005.
* UPDATE:  12/15/05 FOR Q4 2005.
* UPDATE:  04/04/2006 FOR Q2 FISCAL YEAR 2006, LUCY Lu. STARTING THIS QUARTER,
*THE PERIOD IS CHANGED TO FISCAL YEAR.
* UPDATE:  08/31/2006 FOR Q3 FISCAL YEAR 2006, LUCY Lu. REGIONAL CHANGE TO
*OVERSEAS EUROPE AND OVERSEAS PACIFIC.
* MODIFIED 7/30/2007 BY LUCY LU
*UNIFY THE PERDIOD MACRO VARIABLES WITH BENEFICIARY REPORT CARDS PROGRAMS
*CURRNT  ===> PERIOD4
*CURRNTQ ===> PERIOD4Q
*PREV1   ===> PERIOD3
*PREV1Q  ===> PERIOD3Q
*PREV2   ===> PERIOD2
*PREV2Q  ===> PERION2Q
*PREV3   ===> PERIOD1
*PREV3Q  ===> PERIOND1Q
* MODIFIED 8/29/2007 BY LUCY LU TO RUN CONSUMERWATCH-MACRO-COMB.INC
*STARTING Q4 2007 CONSUMERWATCH_R(REGION) AND CONSUMERWATCH_CONUS RUN A SINGLE
*MACRO TO PRODUCE CHARTS FOR BOTH ENROLLEES WITH MILITARY PCM AND CIVILIAN PCM.
*
*
* INPUT  : DATA FROM CONSUMER REPORTS: ..\..\PROGRAMS\&DAT.LOADWEB\TOTAL_Q.SD2
*
* OUTPUT : INTO EXCEL SPREADSHEET
*
* PROGRAM TO CALL: CONSUMERWATCH-MACRO-COMB.INC
*******************************************************************************;


/****************************/
/* UPDATE REGIONAL LIBNAMES */
/****************************/

/* LIBNAME IS EMBEDDED IN MACRO PROGRAM */


/*****************************************/
/* TIME PERIOD MACROS: UPDATE EACH QUARTER */
/*****************************************/

*starting 2006, the period is changed to fiscal year, LLU 4/5/06;

%LET PERIOD4    = 'July, 2007';      *CURRENT QUARTER;
%LET PERIOD4Q   = Q4;

%LET PERIOD3    = 'April, 2007';
%LET PERIOD3Q   = Q3;

%LET PERIOD2    = 'January, 2007';
%LET PERIOD2Q   = Q2;

%LET PERIOD1    = 'October, 2006';
%LET PERIOD1Q   = Q1;




TITLE "6244-420 DOD CONSUMER WATCH &PERIOD4Q FY 2007";
```

```
%INCLUDE "CONSUMERWATCH-MACRO-COMB.INC"/SOURCE2;


%RUNCW(AREA=NORTH,
       FOLDER=North,
       CURRENT=CURNTR.TOTAL_Q);
%RUNCW(AREA=SOUTH,
       FOLDER=South,
       CURRENT=CURNTR.TOTAL_Q);
%RUNCW(AREA=WEST,
       FOLDER=West,
       CURRENT=CURNTR.TOTAL_Q);
```

J.2 Q4FY2007\PROGRAMS\PURCHASEDCONSUMERWATCH\CONSUMERWATCH-MACRO-COMB.INC - PRODUCE NUMBERS FOR QUARTERLY CONSUMER WATCH REPORTS.

```
*******************************************************************************
* PROJECT: 6077-420
* PROGRAM: CONSUMERWATCH-MACRO-COMB.INC
* PURPOSE: To produce numbers that go into data sheet in Excel to produce graphs
*for regional consumer watch
* AUTHOR : MIKI SATAKE
* DATE   : 4/24/01
* UPDATED: 7/16/01 FOR QUARTER 2 BY NATALIE JUSTH
* UPDATED: 10/16/01 FOR QUARTER 3 BY NATALIE JUSTH
* UPDATED: 1/11/02 FOR QUARTER 4 BY NATALIE JUSTH
* UPDATED AND RENAMED: 4/9/02 FOR QUARTER 1 2002 BY NATALIE JUSTH
* UPDATED: 7/5/02 FOR QUARTER 2 2002 BY NATALIE JUSTH
* UPDATED: 7/15/02 FOR QUARTER 3 2002 BY NATALIE JUSTH
* UPDATED: 11/12/02 FOR QUARTER 4 2002 BY NATALIE JUSTH
* UPDATED: 4/3/03 FOR QUARTER 1 2003 BY NATALIE JUSTH
* UPDATED: 5/19/03 FOR QUARTER 2 2003 BY NATALIE JUSTH
* UPDATED: 8/28/03 FOR QUARTER 3 2003 BY NATALIE JUSTH
* UPDATED: 11/14/03 FOR QUARTER 4 2003 BY NATALIE JUSTH
* UPDATED: 05/18/2004 FOR QUARTER 1 2004 BY KEITH RATHBUN
* UPDATED: 06/30/2004 FOR QUARTER 2 2004 BY LUCY LU
* UPDATED: 06/30/2004 FOR QUARTER 3 2004 BY LUCY LU. CHANGING XREGION TO XTNEXREG.
* UPDATED: 10/07/2004 BY LUCY LU. ADD THE CODE TO COMPARE CONSUMER WATCH
*WITH REPORT CARDS IN SCORES AND SIGNIFICANCE.*
* MODIFIED 2/10/05 BY LUCY LU:
*1). CREATE UNIVERSAL MACRO PROGRAM BASED ON PROGRAM CONSUMERWATCH-R.SAS
*    TO ELIMINATE REDUNDANCY AND INCREASE THE EFFECTIVENESS OF PROGRAMMING.
*2). ADD ADDITIONAL PREVENTION MEASURE "SMOKING CESSATION"
*    INTO PREVENTIVE CARE TABLE.
* MODIFIED 06/2/2005 BY LUCY LU FOR Q1 2005:
*1). REMOVE CHOLESTEROL MEASUREMENT AND ADD BMI MEASUREMENT
*2). COMMENT OUT DISENROLL CODE--NO DISENROLL DATA IN Q1 2005
*3). ADD SPECIALIST RATING.
* MODIFIED 11/16/2006 BY LUCY LU FOR FY Q4 2006
* ADD PURCHASE CARE VERSION-- CHANGE PRIME ENROLLEE TO
* Enrollees with Civilian PCM.
* MODIFIED 6/4/2007 BY LUCY LU. UNIFY THE MACRO PROGRAMS FOR CONSUMER WATCH.
*!! NEED TO DEFIND MACRO VARIABLE &POP IN SAS PROGRAMS:
*DIRECT CARE CONSUMDER WATCH:  &POP=='Prime Enrollees'
*PURCHASE CARE CONSUMDER WATCH:  &POP=='Enrollees with Civilian PCM'
* MODIFIED 8/30/2007 BY LUCY LU
*1). COMBINE CONSUMERWATCH-MACRO.INC and CONSUMERWATCH-MACRO_PURCHASE.INC
*    PRODUCE CHARTS CONTAINING BOTH DIRECT CARE AND PURCAHSE CARE DATA
*2). CREATE DUMMY ID FOR MERGE. SAS 9 doesn't allow merge without by variable
* MODIFIED 9/4/2007 BY LUCY LU. START Q4 2007,
*DIRECT CARE CONSUMER WATCH &POP='Enrollees with Military PCM'
*
* INPUT  : DATA FROM CONSUMER REPORTS: ..\..\PROGRAMS\&DAT.LOADWEB\TOTAL_Q.SD2
*
* OUTPUT : INTO EXCEL SPREADSHEET
*******************************************************************************;


OPTIONS PS=60 LS=120 ERRORS=2 NOCENTER NOFMTERR NOXWAIT SPOOL MPRINT obs=1000;


%MACRO RUNCW (AREA=,         /* Region/Service/conus    */
    FOLDER=,       /* Folder containing excel template  */
    CURRENT=,      /* Libname and dataset for the current quarter */
    );

x "COPY TEMPLATE-COMB.XLS &FOLDER.\&FOLDER..XLS";
DATA _NULL_;
   X=SLEEP(3);
RUN;

X "START &FOLDER.\&FOLDER..XLS";
DATA _NULL_;
   X=SLEEP(3);
RUN;
```

```
%MACRO RUNPOP(MAJPOP=, POP=,DAT=);

TITLE2 "&AREA.";
LIBNAME CURNTR "..\&DAT.Loadweb";

/* This macro pulls data from the specified dataset to be used in the Consumer Watch */
%MACRO GETDATA (MAJGRP=,    /* Prime enrollee or civilian PCM  */
      REGION=,    /* Value of variable REGION  */
      REGCAT=,    /* Value of variable REGCAT  */
      BENEFIT=,   /* Value of variable BENEFIT */
      TIMEPD=,    /* Value of variable TIMEPD  */
      OUTDATA=,   /* Name of output data set   */
      FIGURE=     /* Figure number in consumer watch reports */
      );

PROC FREQ NOPRINT DATA=CURNTR.TOTAL_Q;
   WHERE MAJGRP = &MAJPOP
     AND REGION IN &REGION
     AND REGCAT IN &REGCAT
     AND BENEFIT IN &BENEFIT
     AND BENTYPE = 'Composite'
     AND TIMEPD = &TIMEPD;
   TABLES  MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SCORE*N_OBS*N_WGT*SIG/OUT=&OUTDATA  (DROP=COUNT
PERCENT);
RUN;

%MEND GETDATA;

%MACRO NEWSCORE (FIGURE=);
/* This macro re-calculates SCORE based on the quarterly benchmark */
%DO QUARTER=1 %TO 4;

DATA FIG&FIGURE&QUARTER FIG&FIGURE.B&QUARTER(KEEP=SCORE N);
   SET FIG&FIGURE.P&QUARTER;
   N=1;     * DUMMY ID FOR NEXT MERGE STEP;
   IF REGION='Benchmark' THEN OUTPUT FIG&FIGURE.B&QUARTER;
      ELSE OUTPUT FIG&FIGURE&QUARTER;

RUN;

/*ADD CODE HERE TO PRESERVE ABOVE DATASET FOR LATER COMPARISON. LLU 10/7/04*/

DATA CFIG&FIGURE&QUARTER;
   SET FIG&FIGURE&QUARTER;

KEEP MAJGRP REGION BENEFIT BENTYPE TIMEPD SCORE SIG;
RUN;


DATA FIG&FIGURE.P&QUARTER(DROP=RSCORE);
   MERGE FIG&FIGURE.B&QUARTER(RENAME=(SCORE=RSCORE))
         FIG&FIGURE&QUARTER;
BY N;
   SCORE=SCORE-RSCORE;
RUN;
%END;
%MEND NEWSCORE;


%MACRO COMBDATA(FIGURE=);

DATA &POP.FIG&FIGURE(DROP=BSCORE);
   SET BENCH FIG&FIGURE.P1 FIG&FIGURE.P4 FIG&FIGURE.P3 FIG&FIGURE.P2;
   RETAIN BSCORE;
   IF REGION = 'Benchmark' THEN DO;
      ROW = 3;
      BSCORE=SCORE;
   END;
   ELSE IF TIMEPD = &PERIOD1 THEN DO;
      ROW = 4;
      SCORE=SCORE+BSCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE=.;
```

```
   END;
   ELSE IF TIMEPD = &PERIOD2 THEN DO;
      ROW = 5;
      SCORE=SCORE+BSCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE=.;
   END;
   ELSE IF TIMEPD = &PERIOD3 THEN DO;
      ROW = 6;
      SCORE=SCORE+BSCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE=.;
   END;
   ELSE IF TIMEPD = &PERIOD4 THEN DO;
      ROW=7;
      SCORE=SCORE+BSCORE;
   END;
   &POP.SCORE = SCORE / 100;
   &POP.SIG = SIG;
RUN;
PROC SORT;
   BY ROW;
RUN;

%MEND COMBDATA;

*******************************************************************************
* FIGURE 1: Health Care Rating
*******************************************************************************;
TITLE2 'Figure 1: Health Care Rating';

%GETDATA (MAJGRP=&MAJPOP,
REGION=('Benchmark'),
REGCAT=('Benchmark'),
BENEFIT=('Health Care'),
TIMEPD=&PERIOD4,
OUTDATA=BENCH);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Health Care'),
TIMEPD=&PERIOD4,
OUTDATA=FIG1P4);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Health Care'),
TIMEPD=&PERIOD3,
OUTDATA=FIG1P3);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Health Care'),
TIMEPD=&PERIOD2,
OUTDATA=FIG1P2);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Health Care'),
TIMEPD=&PERIOD1,
OUTDATA=FIG1P1);
%NEWSCORE(FIGURE=1);
%COMBDATA(FIGURE=1);



*******************************************************************************
* FIGURE 2: Health Plan Rating
*******************************************************************************;
TITLE2 'Figure 2: Health Plan Rating';

%GETDATA (MAJGRP=&MAJPOP,
REGION=('Benchmark'),
REGCAT=('Benchmark'),
BENEFIT=('Health Plan'),
TIMEPD=&PERIOD4,
```

```
OUTDATA=BENCH);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Health Plan'),
TIMEPD=&PERIOD4,
OUTDATA=FIG2P4);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Health Plan'),
TIMEPD=&PERIOD3,
OUTDATA=FIG2P3);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Health Plan'),
TIMEPD=&PERIOD2,
OUTDATA=FIG2P2);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Health Plan'),
TIMEPD=&PERIOD1,
OUTDATA=FIG2P1);
%NEWSCORE(FIGURE=2);
%COMBDATA(FIGURE=2);


*****************************************************************************
* FIGURE 3: Personal Provider Rating
*****************************************************************************;
TITLE2 'Figure 3: Personal Provider Rating';

%GETDATA (MAJGRP=&MAJPOP,
REGION=('Benchmark'),
REGCAT=('Benchmark'),
BENEFIT=('Personal Doctor'),
TIMEPD=&PERIOD4,
OUTDATA=BENCH);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Personal Doctor'),
TIMEPD=&PERIOD4,
OUTDATA=FIG3P4);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Personal Doctor'),
TIMEPD=&PERIOD3,
OUTDATA=FIG3P3);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Personal Doctor'),
TIMEPD=&PERIOD2,
OUTDATA=FIG3P2);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Personal Doctor'),
TIMEPD=&PERIOD1,
OUTDATA=FIG3P1);
%NEWSCORE(FIGURE=3);
%COMBDATA(FIGURE=3);


*****************************************************************************
* FIGURE 4: Specialist Rating--added for Q1 2005, LLu 6/2/05
*****************************************************************************;
TITLE2 'Figure 4: Specialist Rating';

%GETDATA (MAJGRP=&MAJPOP,
```

```
REGION=('Benchmark'),
REGCAT=('Benchmark'),
BENEFIT=('Specialty Care'),
TIMEPD=&PERIOD4,
OUTDATA=BENCH);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Specialty Care'),
TIMEPD=&PERIOD4,
OUTDATA=FIG4P4);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Specialty Care'),
TIMEPD=&PERIOD3,
OUTDATA=FIG4P3);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Specialty Care'),
TIMEPD=&PERIOD2,
OUTDATA=FIG4P2);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Specialty Care'),
TIMEPD=&PERIOD1,
OUTDATA=FIG4P1);
%NEWSCORE(FIGURE=4);
%COMBDATA(FIGURE=4);


*******************************************************************************
* FIGURE 5 & 6: Access Composites
*******************************************************************************;
TITLE2 'Figure 5 & 6: Access Composites';


%GETDATA (MAJGRP=&MAJPOP,
REGION=('Benchmark'),
REGCAT=('Benchmark'),
BENEFIT=('Getting Needed Care','Getting Care Quickly'),
TIMEPD=&PERIOD4,
OUTDATA=BENCH);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Getting Needed Care','Getting Care Quickly'),
TIMEPD=&PERIOD4,
OUTDATA=FIG5P4);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Getting Needed Care','Getting Care Quickly'),
TIMEPD=&PERIOD3,
OUTDATA=FIG5P3);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Getting Needed Care','Getting Care Quickly'),
TIMEPD=&PERIOD2,
OUTDATA=FIG5P2);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Getting Needed Care','Getting Care Quickly'),
TIMEPD=&PERIOD1,
OUTDATA=FIG5P1);

/*Use macro for figures 5-10 */

%MACRO COMPSCORE (FIGNUM=
       );
```

```
%DO QUARTER = 1 %TO 4;

DATA FIG&FIGNUM.P&QUARTER FIGB&QUARTER(KEEP=SCORE BENEFIT SIG);
   SET FIG&FIGNUM.P&QUARTER;
   IF REGION = 'Benchmark' THEN OUTPUT FIGB&QUARTER;
      ELSE OUTPUT FIG&FIGNUM.P&QUARTER;
RUN;
PROC SORT DATA=FIG&FIGNUM.P&QUARTER;
   BY BENEFIT;
RUN;
PROC SORT DATA=FIGB&QUARTER;
   BY BENEFIT;
RUN;


/*ADD CODE HERE TO PRESERVE THE SCORES IN CONUS_Q DATASET FOR LATER COMPARISON. LLU 10/7/04*/

DATA CFIG&FIGNUM.&QUARTER;
   SET FIG&FIGNUM.P&QUARTER;

KEEP MAJGRP REGION BENEFIT BENTYPE TIMEPD SCORE SIG;
RUN;


DATA FIG&FIGNUM.&QUARTER(DROP=RSCORE);
   MERGE FIGB&QUARTER(RENAME=(SCORE=RSCORE))
         FIG&FIGNUM.P&QUARTER;
   BY BENEFIT;
   SCORE=SCORE-RSCORE;
RUN;
%END;

%MEND COMPSCORE;

%COMPSCORE (FIGNUM=5);

DATA COL2(DROP=SCORE RENAME=(SCORE1=COL2))
     COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
     COL4(DROP=SCORE  RENAME=(SCORE1=COL4))            /*LLU 10/8/04, TO PRESERVE KEY VARS FOR
LATER COMPARISON*/
     COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
     COL6(KEEP=ROW SIG RENAME=(SIG=COL6))
     COL7(kEEP=ROW SIG RENAME=(SIG=COL7))
     ;
   SET BENCH FIG54 FIG53 FIG52 FIG51;
   BY BENEFIT;
   RETAIN BSCORE;
   IF REGION = 'Benchmark' THEN DO;
      BSCORE=SCORE;
      ROW = 18;
      SCORE1 = SCORE;
   END;
   ELSE IF TIMEPD = &PERIOD1 THEN DO;
      ROW = 18;
      SCORE=BSCORE+SCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
         ELSE SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = &PERIOD2 THEN DO;
      ROW = 19;
      SCORE=BSCORE+SCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
         ELSE SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = &PERIOD3 THEN DO;
      ROW = 20;
      SCORE=BSCORE+SCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
         ELSE SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = &PERIOD4 THEN DO;
      ROW = 21;
      SCORE=BSCORE+SCORE;
```

```
      SCORE1 = SCORE;
   END;

   IF (BENEFIT = 'Getting Needed Care' AND REGION NE 'Benchmark') THEN OUTPUT COL2 COL6;
   IF (BENEFIT = 'Getting Needed Care' AND REGION = 'Benchmark') THEN OUTPUT COL3;
   IF (BENEFIT = 'Getting Care Quickly' AND REGION NE 'Benchmark') THEN OUTPUT COL4 COL7;
   IF (BENEFIT = 'Getting Care Quickly' AND REGION = 'Benchmark') THEN OUTPUT COL5;

RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;


/*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 5. LLU 10/7/04*/

DATA FIG5A;
   MERGE COL2 COL6;
  BY ROW;
RUN;

DATA FIG5B;
   MERGE  COL4 COL7;
  BY ROW;
RUN;

DATA FIG5AB;
   SET FIG5A FIG5B;
  BY ROW;
RUN;



DATA &POP.FIG5;
   MERGE COL2 COL3 COL4(KEEP=ROW COL4) COL5 COL6 COL7;
   BY ROW;
RUN;
/*
DATA &POP.FIG6;
   MERGE COL4(KEEP=ROW COL4) COL5 COL7;
   BY ROW;
RUN;
*/


*******************************************************************************
* FIGURE 7 & 8: Office Composites
*******************************************************************************;
TITLE2 'Figure 7 & 8: Office Composites';

%GETDATA (MAJGRP=&MAJPOP,
REGION=('Benchmark'),
REGCAT=('Benchmark'),
BENEFIT=('Courteous and Helpful Office Staff','How Well Doctors Communicate'),
TIMEPD=&PERIOD4,
OUTDATA=BENCH);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Courteous and Helpful Office Staff','How Well Doctors Communicate'),
TIMEPD=&PERIOD4,
OUTDATA=FIG7P4);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Courteous and Helpful Office Staff','How Well Doctors Communicate'),
TIMEPD=&PERIOD3,
OUTDATA=FIG7P3);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
```

```
    REGCAT=("&AREA",'Benchmark'),
    BENEFIT=('Courteous and Helpful Office Staff','How Well Doctors Communicate'),
    TIMEPD=&PERIOD2,
    OUTDATA=FIG7P2);
    %GETDATA (MAJGRP=&MAJPOP,
    REGION=("&AREA",'Benchmark'),
    REGCAT=("&AREA",'Benchmark'),
    BENEFIT=('Courteous and Helpful Office Staff','How Well Doctors Communicate'),
    TIMEPD=&PERIOD1,
    OUTDATA=FIG7P1);

    %COMPSCORE (FIGNUM=7);

    DATA COL2(DROP=SCORE RENAME=(SCORE1=COL2))
         COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
         COL4(DROP=SCORE  RENAME=(SCORE1=COL4))            /*LLU 10/8/04, TO PRESERVE KEY VARS FOR
LATER COMPARISON*/
         COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
         COL6(KEEP=ROW SIG RENAME=(SIG=COL6))
         COL7(kEEP=ROW SIG RENAME=(SIG=COL7))
         ;
       SET BENCH FIG74 FIG73 FIG72 FIG71;
       BY BENEFIT;
       RETAIN BSCORE;
       IF REGION = 'Benchmark' THEN DO;
          BSCORE=SCORE;
          ROW = 18;
          SCORE1 = SCORE;
       END;
       ELSE IF TIMEPD = &PERIOD1 THEN DO;
          ROW = 18;
          SCORE=BSCORE+SCORE;
          IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
             ELSE SCORE1=SCORE;
       END;
       ELSE IF TIMEPD = &PERIOD2 THEN DO;
          ROW = 19;
          SCORE=BSCORE+SCORE;
          IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
             ELSE SCORE1=SCORE;
       END;
       ELSE IF TIMEPD = &PERIOD3 THEN DO;
          ROW = 20;
          SCORE=BSCORE+SCORE;
          IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
             ELSE SCORE1=SCORE;
       END;
       ELSE IF TIMEPD = &PERIOD4 THEN DO;
          ROW = 21;
          SCORE=BSCORE+SCORE;
          SCORE1 = SCORE;
       END;

       IF (BENEFIT = 'Courteous and Helpful Office Staff' AND REGION NE 'Benchmark') THEN OUTPUT
COL2 COL6;
       IF (BENEFIT = 'Courteous and Helpful Office Staff' AND REGION = 'Benchmark') THEN OUTPUT
COL3;
       IF (BENEFIT = 'How Well Doctors Communicate' AND REGION NE 'Benchmark') THEN OUTPUT COL4
COL7;
       IF (BENEFIT = 'How Well Doctors Communicate' AND REGION = 'Benchmark') THEN OUTPUT COL5;

    RUN;

    PROC SORT DATA=COL2; BY ROW; RUN;
    PROC SORT DATA=COL3; BY ROW; RUN;
    PROC SORT DATA=COL4; BY ROW; RUN;
    PROC SORT DATA=COL5; BY ROW; RUN;
    PROC SORT DATA=COL6; BY ROW; RUN;
    PROC SORT DATA=COL7; BY ROW; RUN;



    /*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 6. LLU 10/7/04*/
```

```
DATA FIG7A;
   MERGE COL2 COL6;
  BY ROW;
RUN;

DATA FIG7B;
   MERGE  COL4 COL7;
  BY ROW;
RUN;

DATA FIG7AB;
   SET FIG7A FIG7B;
  BY ROW;
RUN;


DATA &POP.FIG7;
   MERGE COL2 COL3 COL4(KEEP=ROW COL4) COL5 COL6 COL7;
   BY ROW;
RUN;

*******************************************************************************
* FIGURE 9 & 10: Claims/Service Composites
*******************************************************************************;
TITLE2 'Figure 9 & 10: Claims/Service Composites';
%GETDATA (MAJGRP=&MAJPOP,
REGION=('Benchmark'),
REGCAT=('Benchmark'),
BENEFIT=('Customer Service','Claims Processing'),
TIMEPD=&PERIOD4,
OUTDATA=BENCH);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Customer Service','Claims Processing'),
TIMEPD=&PERIOD4,
OUTDATA=FIG9P4);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Customer Service','Claims Processing'),
TIMEPD=&PERIOD3,
OUTDATA=FIG9P3);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Customer Service','Claims Processing'),
TIMEPD=&PERIOD2,
OUTDATA=FIG9P2);
%GETDATA (MAJGRP=&MAJPOP,
REGION=("&AREA",'Benchmark'),
REGCAT=("&AREA",'Benchmark'),
BENEFIT=('Customer Service','Claims Processing'),
TIMEPD=&PERIOD1,
OUTDATA=FIG9P1);

%COMPSCORE (FIGNUM=9);

DATA COL2(DROP=SCORE RENAME=(SCORE1=COL2))
     COL3(KEEP=ROW SCORE1 RENAME=(SCORE1=COL3))
     COL4(DROP=SCORE  RENAME=(SCORE1=COL4))            /*LLU 10/8/04, TO PRESERVE KEY VARS FOR
LATER COMPARISON*/
     COL5(KEEP=ROW SCORE1 RENAME=(SCORE1=COL5))
     COL6(KEEP=ROW SIG RENAME=(SIG=COL6))
     COL7(kEEP=ROW SIG RENAME=(SIG=COL7));
   SET BENCH FIG94 FIG93 FIG92 FIG91;
   BY BENEFIT;
   RETAIN BSCORE;
   IF REGION = 'Benchmark' THEN DO;
      BSCORE=SCORE;
      ROW = 18;
      SCORE1 = SCORE;
   END;
   ELSE IF TIMEPD = &PERIOD1 THEN DO;
```

```
      ROW = 18;
      SCORE=BSCORE+SCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
         ELSE SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = &PERIOD2 THEN DO;
      ROW = 19;
      SCORE=BSCORE+SCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
         ELSE SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = &PERIOD3 THEN DO;
      ROW = 20;
      SCORE=BSCORE+SCORE;
      IF (N_OBS<30 OR N_WGT<200) THEN SCORE1=.;
         ELSE SCORE1=SCORE;
   END;
   ELSE IF TIMEPD = &PERIOD4 THEN DO;
      ROW = 21;
      SCORE=BSCORE+SCORE;
      SCORE1 = SCORE;
   END;

   IF (BENEFIT = 'Customer Service' AND REGION NE 'Benchmark') THEN OUTPUT COL2 COL6;
   IF (BENEFIT = 'Customer Service' AND REGION = 'Benchmark') THEN OUTPUT COL3;
   IF (BENEFIT = 'Claims Processing' AND REGION NE 'Benchmark') THEN OUTPUT COL4 COL7;
   IF (BENEFIT = 'Claims Processing' AND REGION = 'Benchmark') THEN OUTPUT COL5;

RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;


/*ADD CODE HERE TO PRESERVE NEW SCORES FOR FIGURE 7. LLU 10/7/04*/

DATA FIG9A;
   MERGE COL2 COL6;
  BY ROW;
RUN;

DATA FIG9B;
   MERGE  COL4 COL7;
  BY ROW;
RUN;

DATA FIG9AB;
   SET FIG9A FIG9B;
  BY ROW;
RUN;


DATA &POP.FIG9;
   MERGE COL2 COL3 COL4(KEEP=ROW COL4) COL5 COL6 COL7;
   BY ROW;
RUN;



*******************************************************************************
* TABLE 1: Preventive Care
*******************************************************************************;
PROC FREQ NOPRINT DATA=CURNTR.TOTAL_Q;
   WHERE MAJGRP IN (&MAJPOP,'Benchmark')
     AND REGION = "&AREA"
     AND REGCAT = "&AREA"
     AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
     AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
 'Percent Not Obese', 'Non-Smoking Rate','Counselled To Quit')
     AND TIMEPD = &PERIOD4;
```

```
       TABLES     MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/     OUT=TAB1_P4(DROP=COUNT
PERCENT);
       TABLES MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*N_OBS/ OUT=TAB2_P4(DROP=COUNT PERCENT);
    RUN;
    PROC FREQ NOPRINT DATA=CURNTR.TOTAL_Q;
       WHERE MAJGRP = &MAJPOP
         AND REGION = "&AREA"
         AND REGCAT = "&AREA"
         AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
         AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
             'Percent Not Obese','Non-Smoking Rate','Counselled To Quit')
         AND TIMEPD = &PERIOD3;
       TABLES     MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/     OUT=TAB1_P3(DROP=COUNT
PERCENT);
    RUN;
    PROC FREQ NOPRINT DATA=CURNTR.TOTAL_Q;
       WHERE MAJGRP = &MAJPOP
         AND REGION = "&AREA"
         AND REGCAT = "&AREA"
         AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
         AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
     'Percent Not Obese','Non-Smoking Rate','Counselled To Quit')
         AND TIMEPD = &PERIOD2;
       TABLES     MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/     OUT=TAB1_P2(DROP=COUNT
PERCENT);
    RUN;
    PROC FREQ NOPRINT DATA=CURNTR.TOTAL_Q;
       WHERE MAJGRP = &MAJPOP
         AND REGION = "&AREA"
         AND REGCAT = "&AREA"
         AND BENEFIT IN ('Preventive Care','Healthy Behaviors')
         AND BENTYPE IN ('Mammography', 'Pap Smear', 'Hypertension', 'Prenatal Care',
     'Percent Not Obese','Non-Smoking Rate','Counselled To Quit')
         AND TIMEPD = &PERIOD1;
       TABLES     MAJGRP*REGION*BENEFIT*BENTYPE*TIMEPD*SEMEAN*SCORE*SIG/     OUT=TAB1_P1(DROP=COUNT
PERCENT);
    RUN;
    DATA TAB1P4;
       SET TAB1_P4;
       IF MAJGRP = 'Benchmark' THEN DO;
          ROW=42;
          IF BENTYPE='Mammography' THEN COL2=SCORE;
             ELSE IF BENTYPE='Pap Smear' THEN COL3=SCORE;
             ELSE IF BENTYPE='Hypertension' THEN COL4=SCORE;
             ELSE IF BENTYPE='Prenatal Care' THEN COL5=SCORE;
             ELSE IF BENTYPE='Percent Not Obese' THEN COL6=SCORE;
             ELSE IF BENTYPE = 'Non-Smoking Rate' THEN COL7=SCORE;
             ELSE IF BENTYPE ='Counselled To Quit' THEN COL8=SCORE;
       END;
          ELSE DO;
          ROW = 40;
          IF BENTYPE='Mammography' THEN DO;
             COL2=SCORE;
             COL9=SIG;
          END;
          ELSE IF BENTYPE='Pap Smear' THEN DO;
             COL3=SCORE;
             COL10=SIG;
          END;
          ELSE IF BENTYPE='Hypertension' THEN DO;
             COL4=SCORE;
             COL11=SIG;
          END;
          ELSE IF BENTYPE='Prenatal Care' THEN DO;
             COL5=SCORE;
             COL12=SIG;
          END;
          ELSE IF BENTYPE='Percent Not Obese' THEN DO;
             COL6=SCORE;
             COL13=SIG;
          END;
          ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
             COL7=SCORE;
             COL14=SIG;
```

```
      END;
      ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
         COL8=SCORE;
         COL15=SIG;
      END;
    END;
   PROC SORT;
   BY ROW;
RUN;
DATA TAB2P4;
   SET TAB2_P4;
   ROW=41;
   IF MAJGRP=&MAJPOP;
   IF BENTYPE='Mammography' THEN COL2=N_OBS;
      ELSE IF BENTYPE='Pap Smear' THEN COL3=N_OBS;
      ELSE IF BENTYPE='Hypertension' THEN COL4=N_OBS;
      ELSE IF BENTYPE='Prenatal Care' THEN COL5=N_OBS;
      ELSE IF BENTYPE='Percent Not Obese' THEN COL6=N_OBS;
      ELSE IF BENTYPE='Non-Smoking Rate' THEN COL7=N_OBS;
       ELSE IF BENTYPE='Counselled To Quit' THEN COL8=N_OBS;
   PROC SORT;
   BY ROW;
RUN;
DATA TAB1P3;
   SET TAB1_P3;
   ROW=39;
      IF BENTYPE='Mammography' THEN DO;
         COL2=SCORE;
         COL9=SIG;
      END;
      ELSE IF BENTYPE='Pap Smear' THEN DO;
         COL3=SCORE;
         COL10=SIG;
      END;
      ELSE IF BENTYPE='Hypertension' THEN DO;
         COL4=SCORE;
         COL11=SIG;
      END;
      ELSE IF BENTYPE='Prenatal Care' THEN DO;
         COL5=SCORE;
         COL12=SIG;
      END;
      ELSE IF BENTYPE='Percent Not Obese' THEN DO;
         COL6=SCORE;
         COL13=SIG;
      END;
      ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
         COL7=SCORE;
         COL14=SIG;
      END;
      ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
         COL8=SCORE;
         COL15=SIG;
      END;
   PROC SORT;
   BY ROW;
RUN;
DATA TAB1P2;
   SET TAB1_P2;
   ROW=38;
      IF BENTYPE='Mammography' THEN DO;
         COL2=SCORE;
         COL9=SIG;
      END;
      ELSE IF BENTYPE='Pap Smear' THEN DO;
         COL3=SCORE;
         COL10=SIG;
      END;
      ELSE IF BENTYPE='Hypertension' THEN DO;
         COL4=SCORE;
         COL11=SIG;
      END;
      ELSE IF BENTYPE='Prenatal Care' THEN DO;
         COL5=SCORE;
```

```
         COL12=SIG;
      END;
      ELSE IF BENTYPE='Percent Not Obese' THEN DO;
         COL6=SCORE;
         COL13=SIG;
      END;
  ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
         COL7=SCORE;
         COL14=SIG;
      END;
      ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
         COL8=SCORE;
         COL15=SIG;
      END;
   PROC SORT;
   BY ROW;

RUN;
DATA TAB1P1;
   SET TAB1_P1;
   ROW=37;
      IF BENTYPE='Mammography' THEN DO;
         COL2=SCORE;
         COL9=SIG;
      END;
      ELSE IF BENTYPE='Pap Smear' THEN DO;
         COL3=SCORE;
         COL10=SIG;
      END;
      ELSE IF BENTYPE='Hypertension' THEN DO;
         COL4=SCORE;
         COL11=SIG;
      END;
      ELSE IF BENTYPE='Prenatal Care' THEN DO;
         COL5=SCORE;
         COL12=SIG;
      END;
      ELSE IF BENTYPE='Percent Not Obese' THEN DO;
         COL6=SCORE;
         COL13=SIG;
      END;
    ELSE IF BENTYPE = 'Non-Smoking Rate'  THEN DO;
         COL7=SCORE;
         COL14=SIG;
      END;
      ELSE IF BENTYPE = 'Counselled To Quit' THEN DO;
         COL8=SCORE;
         COL15=SIG;
      END;
   PROC SORT;
   BY ROW;
RUN;

DATA TAB1;
   MERGE TAB1P1 TAB1P2 TAB1P3 TAB1P4 TAB2P4;
   BY ROW;
RUN;
DATA COL2(DROP=COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL3(DROP=COL2 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL4(DROP=COL2 COL3 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL5(DROP=COL2 COL3 COL4 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL6(DROP=COL2 COL3 COL4 COL5 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL7(DROP=COL2 COL3 COL4 COL5 COL6 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL8(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL9 COL10 COL11 COL12 COL13 COL14 COL15)
     COL9(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL10 COL11 COL12 COL13 COL14 COL15)
     COL10(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL11 COL12 COL13 COL14 COL15)
     COL11(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL12 COL13 COL14 COL15)
     COL12(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL13 COL14 COL15)
  COL13(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL14 COL15)
    COL14(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL15)
    COL15(DROP=COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14);

   SET TAB1;
```

```
   IF COL2 NE . THEN OUTPUT COL2;
   IF COL3 NE . THEN OUTPUT COL3;
   IF COL4 NE . THEN OUTPUT COL4;
   IF COL5 NE . THEN OUTPUT COL5;
   IF COL6 NE . THEN OUTPUT COL6;
   IF COL7 NE . THEN OUTPUT COL7;
   IF COL8 NE . THEN OUTPUT COL8;
   IF COL9 NE . THEN OUTPUT COL9;
   IF COL10 NE . THEN OUTPUT COL10;
   IF COL11 NE . THEN OUTPUT COL11;
   IF COL12 NE . THEN OUTPUT COL12;
   IF COL13 NE . THEN OUTPUT COL13;
   IF COL14 NE . THEN OUTPUT COL14;
   IF COL15 NE . THEN OUTPUT COL15;
RUN;

PROC SORT DATA=COL2; BY ROW; RUN;
PROC SORT DATA=COL3; BY ROW; RUN;
PROC SORT DATA=COL4; BY ROW; RUN;
PROC SORT DATA=COL5; BY ROW; RUN;
PROC SORT DATA=COL6; BY ROW; RUN;
PROC SORT DATA=COL7; BY ROW; RUN;
PROC SORT DATA=COL8; BY ROW; RUN;
PROC SORT DATA=COL9; BY ROW; RUN;
PROC SORT DATA=COL10; BY ROW; RUN;
PROC SORT DATA=COL11; BY ROW; RUN;
PROC SORT DATA=COL12; BY ROW; RUN;
PROC SORT DATA=COL13; BY ROW; RUN;
PROC SORT DATA=COL14; BY ROW; RUN;
PROC SORT DATA=COL15; BY ROW; RUN;

DATA &POP.TABLE1;
   MERGE COL2 COL3 COL4 COL5 COL6 COL7 COL8 COL9 COL10 COL11 COL12 COL13 COL14 COL15;
   BY ROW;
RUN;



*******************************************************************************
       COMPARE SCORES AND SIG B/T CONSUMER WATCH AND REPORT CARDS.
       SET 0.015 DIFFERENCE AS THRESHOLD.
       LUCY LU 10/07/2004
*******************************************************************************;

PROC SORT DATA=&POP.FIG1(DROP=SCORE);     *FROM CONSUMER WATCH. LLU 10/8/04;
BY BENEFIT TIMEPD REGION;

PROC SORT DATA=&POP.FIG2(DROP=SCORE);
BY BENEFIT TIMEPD REGION;

PROC SORT DATA=&POP.FIG3(DROP=SCORE);
BY BENEFIT TIMEPD REGION;

PROC SORT DATA=FIG5AB OUT=&POP.FIG5;
BY BENEFIT TIMEPD REGION;

PROC SORT DATA=FIG7AB OUT=&POP.FIG7;
BY BENEFIT TIMEPD REGION;

PROC SORT DATA=FIG9AB OUT=&POP.FIG9;
BY BENEFIT TIMEPD REGION;
RUN;



%MACRO COMPARE(I=, TITL=);

TITLE "DATA=&MAJPOP";

DATA CFIG&I;        *FROM CONUS. LLU 10/8/04;

  SET CFIG&I.1
```

```
      CFIG&I.2
      CFIG&I.3
      CFIG&I.4
      ;
RUN;


PROC SORT DATA=&POP.FIG&I;
BY BENEFIT TIMEPD REGION;
RUN;

PROC SORT DATA=CFIG&I;
BY BENEFIT TIMEPD REGION;
RUN;

DATA COMBFIG&I;
   MERGE CFIG&I(IN=F1) &POP.FIG&I(IN=F2);
BY BENEFIT TIMEPD REGION;


IF F1 AND F2;

FIG = &I;

IF FIG <=4 THEN DO;
   SCORE2=&POP.SCORE*100;
   SIG2=&POP.SIG;
END;

ELSE IF FIG >4 THEN DO;
   IF COL2 >= 0 THEN SCORE2=COL2;
   ELSE IF COL4 >0 THEN SCORE2=COL4;

   IF COL6 >= .Z THEN SIG2=COL6;
   ELSE IF COL7>=.Z THEN SIG2=COL7;
END;


   SCOREDIF=SCORE2-SCORE;
   SIGDIF=SIG2-SIG;


IF ABS(SCOREDIF)>.015 OR SIGDIF>0 THEN FLAG=1;
ELSE FLAG=0;

KEEP BENEFIT TIMEPD REGION SCORE SIG SCORE2 SIG2 SCOREDIF SIGDIF FLAG;

LABEL
FLAG="DIFF IN SCORES >0.015 OR/AND DIFF IN SIG >0"
SCORE="SCORES FROM CONUS"
SCORE2="SCORES FROM CONSUMER WATCH"
SIG="SIG FROM CONUS"
SIG2="SIG FROM CONSUMER WATCH"
;

TITLE2 "*********************************************************";
TITLE3 "CONSUMER WATCH, &AREA, DATA=&MAJPOP ";

PROC PRINT L NOOBS;
TITLE4 "Compare &TITL.";
RUN;

%MEND COMPARE;

%COMPARE(I=1, TITL=Health Care Rating);
%COMPARE(I=2, TITL=Health Plan Rating);
%COMPARE(I=3, TITL=Personal Provider Rating);
%COMPARE(I=4, TITL=Specialist Rating);

%COMPARE(I=5, TITL=Access composites);

%COMPARE(I=7, TITL=Office composites);
%COMPARE(I=9, TITL=Claims/Service composites);
```

```
*prepare to merge data;

DATA &POP.FIG5(RENAME=(COL2=&POP.SCORE COL6=&POP.SIG))
     &POP.FIG6(RENAME=(COL4=&POP.SCORE COL7=&POP.SIG));
   SET &POP.FIG5;
   IF BENEFIT='Getting Needed Care' THEN OUTPUT &POP.FIG5;
   ELSE IF BENEFIT = 'Getting Care Quickly' THEN OUTPUT &POP.FIG6;
RUN;

DATA &POP.FIG7(RENAME=(COL2=&POP.SCORE COL6=&POP.SIG))
     &POP.FIG8(RENAME=(COL4=&POP.SCORE COL7=&POP.SIG));
   SET &POP.FIG7;
   IF BENEFIT='Courteous and Helpful Office Staff' THEN OUTPUT &POP.FIG7;
   ELSE IF BENEFIT = 'How Well Doctors Communicate' THEN OUTPUT &POP.FIG8;
RUN;

DATA &POP.FIG9(RENAME=(COL2=&POP.SCORE COL6=&POP.SIG))
     &POP.FIG10(RENAME=(COL4=&POP.SCORE COL7=&POP.SIG));
   SET &POP.FIG9;
   IF BENEFIT='Customer Service' THEN OUTPUT &POP.FIG9;
   ELSE IF BENEFIT ='Claims Processing' THEN OUTPUT &POP.FIG10;
RUN;

%DO I= 1 %TO 10;
PROC SORT DATA=&POP.FIG&I;
BY ROW;
RUN;
%END;

%MEND RUNPOP;

%RUNPOP(MAJPOP='Enrollees with Military PCM', POP=DC,DAT=);
%RUNPOP(MAJPOP='Enrollees with Civilian PCM', POP=PC,DAT=PURCHASED);

%DO I=1 %TO 10;
DATA FIG&I;
   MERGE DCFIG&I PCFIG&I;
   BY ROW;
RUN;
%END;


DATA DCTABLE1;
  SET DCTABLE1;

  ROW=ROW-.5;      *CHANGE DIRECT CARES ROW NUMBER TO PREPARE NEXT STEP;
RUN;

DATA TABLE1;
   SET DCTABLE1 PCTABLE1;
   BY ROW;
RUN;



*****************************************************************************
* DDE LINK:  FIGURE 1-4: Health Care Rating
*****************************************************************************;

%MACRO RUNXLS1;

%DO I = 1 %TO 4;
FILENAME TBL DDE "EXCEL|RATINGS!R17C%EVAL(&I*6-4):R21C%EVAL(&I*6)";

DATA _NULL_;
   SET FIG&I;
   FILE TBL NOTAB LRECL=200;
   PUT DCSCORE '09'X PCSCORE '09'X DCSIG '09'X PCSIG;
RUN;
%END;
%MEND;
%RUNXLS1;
```

```
*****************************************************************************
* DDE LINK:  FIGURE 5-10: Composites
*****************************************************************************;

%MACRO RUNXLS2;
%DO I = 5 %TO 10;
FILENAME TBL DDE "EXCEL|Composites!R18C%EVAL((&I.-4)*5-3):R21C%EVAL((&I.-4)*5-1)";

DATA _NULL_;
   SET FIG&I;
   FILE TBL NOTAB LRECL=200;
   PUT DCSCORE '09'X PCSCORE '09'X BSCORE;
RUN;

FILENAME TBL DDE "EXCEL|Composites!R23C%EVAL((&I.-4)*5-3):R26C%EVAL((&I.-4)*5-1)";

DATA _NULL_;
   SET FIG&I;
   FILE TBL NOTAB LRECL=200;
   PUT DCSIG '09'X PCSIG;
RUN;

%END;
%MEND;
%RUNXLS2;

*****************************************************************************
* DDE LINK: TABLE 1: Preventive Care
*****************************************************************************;
FILENAME TBL DDE "EXCEL|TABLES!R3C11:R14C25";

DATA _NULL_;
   SET TABLE1;
   FILE TBL NOTAB LRECL=200;
   IF ROW <=41 THEN DO;
   PUT COL2 '09'X COL3 '09'X COL4 '09'X COL5 '09'X COL6 '09'X COL7 '09'X COL8 '09'X COL9 '09'X
COL10
       '09'X COL11 '09'X COL12 '09'X COL13 '09'X COL14 '09'X COL15;
   END;
   ELSE IF ROW=42 THEN DO;    *no benchmark for counselling;
   PUT COL2 '09'X COL3 '09'X COL4 '09'X COL5 '09'X COL6 '09'X COL7 '09'X '-' '09'X COL9 '09'X
COL10
       '09'X COL11 '09'X COL12 '09'X COL13 '09'X COL14 '09'X COL15;
   END;
RUN;

/*Run Excel macro signif,  May 9 2006, LLU*/

options noxsync;
*-- Specify XL filename ;

*%let excelf = &FOLDER..XLS ;

*-- Specify XL macro name ;
%let macron = sig2.signif2 ;


FILENAME CMDS DDE "EXCEL|SYSTEM";


DATA _NULL_;
  FILE CMDS;
  DDECommand = '[Run("' || "&macron" || '",0)]' ;
  put DDEcommand ;

RUN;


DATA _NULL_;
   FILE CMDS;
   PUT '[SAVE]';
   PUT '[CLOSE]';
RUN;
%MEND RUNCW;
```

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APPENDIX K

SAMPLE SUDAAN CODE FOR VARIANCE ESTIMATION – QUARTERS I-IV

```
*****************************************************************
*  program:   SUDTEST.SAS
*  purpose:   to demonstrate SAS callable SUDAAN procedures to get
*              SEs for survey estimates
*  input: j:\dod\2007\data\Afinal\hcs07A_1.sd2
*****************************************************************
*;
options ps=79 ls=132;
libname in 'j:\dod\2007\data\Afinal\hcs07A_1.sd2';
libname library  'j:\dod\2007\data\Afinal\fmtlib';


***SORT FILE BY STRATUM****;
data hcs2007;
set in.hcs07A_1;
***make xregion = 7 to xregion = 8 for tables  ***;
if xregion = 7 then xregion = 8;
run;

PROC SORT DATA=HCS2007(keep=xtnexreg h07014 h07015 h07049 xenrllmt
                                    cfwt stratum);
BY stratum;
RUN;


*************************************************************
if you want to estimate means
*************************************************************;
title 'Output file from SUDAAN for estimating means';
title2 'Overall ratings among all beneficiaries in the past 12 months';
title3 'who saw a specialist (H07014=1) for each region (XTNEXREG)';

PROC DESCRIPT DATA=HCS2007 DESIGN=STRWR NOPRINT;
 WEIGHT   CFWT;        ******  sampling/FINAL SURVEY WEIGHT     ********;
 NEST STRATUM / missunit;
 VAR  H07015;                 ******  VARIABLES TO BE ESTIMATED**;
 SUBPOPN H07014=1;               ******specify domains to be reported;
 TABLES XTNEXREG;
 SUBGROUP XTNEXREG;
 LEVELS 4;
 OUTPUT MEAN SEMEAN deffmean/ TABLECELL=DEFAULT FILENAME=mnsDAT;
 ***SEMEAN=standard error and deffmean=design effect**;
RUN;

proc print data=mnsdat;
run;

*************************************************************
if you want to estimate percentage
*************************************************************;
title 'Output file from SUDAAN for estimating percentages';
title2 'Those who last had a blood pressure reading less than 12 months;
title3 'ago, 1 to 2 years ago, and more than 2 years ago (H07049)';
title4 'by TRICARE enrollment (XENRLLMT) in region 3';
TITLE5 'PROC CROSSTAB';
PROC CROSSTAB DATA=HCS2007 DESIGN=STRWR NOPRINT;
 WEIGHT   CFWT;
 NEST STRATUM / missunit;
 SUBPOPN XTNEXREG=3;
 SUBGROUP H07049 XENRLLMT;
 LEVELS 3 5;
 TABLES H07049*XENRLLMT;              /*  DEP * INDEP */
 OUTPUT NSUM WSUM SEWGT COLPER SECOL
   / TABLECELL=DEFAULT FILENAME=OUTDAT;
RUN;

proc print data=outdat;
run;
```