Contract No.: 282-98-0021
MPR Reference No.: 8860-500

2003 Health Care Survey of DoD Beneficiaries:

Child Technical Manual

Publication Date:
January 2004

Final

Submitted to:

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Chapter 1

Introduction

The 2003 Child 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 parents' opinions concerning their child's experience in the military health system (MHS). The Child HCSDB is closely modeled to the Consumer Assessment of Health Plans Survey (CAHPS) 2.0H survey instrument so that findings for children in the MHS can be compared to the results of CAHPS surveys of privately insured children in the private sector. The Child HCSDB is intended to answer the following questions:

- How *satisfied* are sponsors of children in the MHS with their child's health care and their health plan?
- Does *access* for children at military and civilian facilities meet TRICARE standards?
- What aspects of MHS care contribute most to beneficiary satisfaction with their child's health care experiences? With which aspects are beneficiaries least satisfied?
- What are the demographic characteristics of children in the MHS and their sponsors?
- How do children in the MHS compare with children in the private sector on issues related to satisfaction and access to care?

The HCSDB is a 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). The DoD Defense Manpower Data Center (DMDC) prepared the sampling frame, which consists of selected variables for each MHS beneficiary in the Defense Enrollment Eligibility Reporting System (DEERS) database in February 2003. 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). The frame 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.

Mathematica Policy Research, Inc. (MPR, Washington, D.C.) prepared the sample of 35,000 child beneficiaries (Clusen and Friedman, 2003). National Research Corporation (NRC) fielded the survey between June and August 2003. MPR analyzed the survey data, reported on the results, and prepared this document, the "2003 Health Care Survey of DoD Beneficiaries: Child Technical Manual" under task order 14, under Contract Number 282-98-0021.

This manual is designed as a reference tool to be used by analysts 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 report. The manual 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

This section represents an overview of the methodology used in the survey. From the sample, 10,741 parents or sponsors of MHS beneficiaries younger than 18 years of age completed and returned a 2003 Child HCSDB questionnaire between July 3, 2003 and August 31, 2003.

1. Sample Design

The 2003 child sample design is based on three sample stratifications—enrollment status, geographic area, and age group. Enrollment type is defined by enrollment in TRICARE Prime with a military primary care manager (PCM), enrollment in TRICARE Prime with a civilian PCM, and not enrolled in TRICARE Prime. The effect of this stratification is to allocate a greater proportion of the sample to those enrolled in Prime and a smaller proportion to those not enrolled in Prime.

Geographic area refers to the beneficiary's regional assignment. The beneficiary's regional assignment is determined by the MTF that bears the financial responsibility for the beneficiary's health care. Only beneficiaries in the continental United States were included in the sample. Regions are combined into three "super regions". Regions are organized to reflect the relative maturity of TRICARE Prime in each region. The areas are referred to as *new regions*, where Prime is most recently implemented (Regions 1, 2, and 5); *mature regions*, where Prime was first implemented (Regions 6, 9-12, and 16); and *other regions* (Regions 3, 4, and 7/8).

Beneficiaries were assigned to one of three age groups: younger than 6 years old, between 6 and 12, and between 13 and 17 years old. Sampling procedures ensured that only one child per household was surveyed.

2. 2003 Child HCSDB

The HCSDB is an annual health care survey that was first fielded in 1995 for active duty military personnel, retirees, and their adult family members. In 1996 and 1997, the survey was expanded to include topics related to health care of children. In those years, the survey consisted of two separate questionnaires: Form A for adults and Form C for children's topics. The 1998 HCSDB did not include a child survey. In 2000, fielding of the child survey was resumed. The child survey assesses parents' satisfaction with their child's access to health care, TRICARE Prime, communication and customer service related to pediatric care. Note that prior to 2002, the title of the survey referred to the survey reference period. For example, the survey fielded in 2000 described children's experiences beginning in 1999 and was known as the 1999 Child HCSDB. Beginning in 2002, the survey title refers to the year the survey was fielded.

The 1999, 2000, 2002, and 2003 Child HCSDB were closely modeled on CAHPS 2.0H survey instruments so that findings for children in the MHS could be compared with the results of CAHPS surveys of privately insured children in the civilian sector. Most of the survey questions are identical to the CAHPS questions. CAHPS is a survey program sponsored by the Agency for Health Care Research and Quality (AHRQ), U.S. Department of Health and Human Services, and the Picker Institute. The program is designed to monitor the satisfaction and access of civilian health care plan beneficiaries. A few of the questions are "CAHPS-like" but are modified slightly to better fit the MHS context; some questions are unique to issues related to TRICARE.

The Child HCSDB covers the following topics:

- **Health Plan.** This section collects data on TRICARE Prime enrollment and the use of supplemental insurance and/or other private insurance by the child in the past 12 months.
- **Your Child's Personal Doctor or Nurse.** In this section, respondents are asked about their relationship with their child's personal doctor or nurse. They are asked to rate their child's personal doctor or nurse on a scale of 0 to 10 where 0 is the worst and 10 is the best. There are additional questions on problems receiving care from a TRICARE primary care manager.
- **Getting Health Care from a Specialist.** This section collects information about the child's need for and access to care from specialists. Respondents rate the specialist that their child sees most frequently on a scale from 0 to 10 where 0 is the worst and 10 is the best.
- **Your Child's Health Care in the Last 12 Months.** This section collects information on where children of DoD beneficiaries received most of their care in the past 12 months. These are questions on both military and civilian care. This section also contains questions about general and specific care at the facility the child used the most. These questions cover topics such as availability of providers and their staff, convenience, and courtesy and respect shown by providers and their staff. These questions are similar in content and format to questions in CAHPS.
- **Specialized Services.** In this section, parents are asked about requests for special medical equipment and therapy for their children. There are additional questions on how much of a problem it was to obtain these services.
- **Your Child's Health Plan.** This section is designed to measure beneficiaries' satisfaction with their child's primary health plan. Respondents are asked to rate their child's health plan on a scale of 0 to 10, where 0 is the worst and 10 is the best. Additionally, respondents are asked questions on problems with claims processing for their child, finding and understanding written materials from their child's health plan, customer service, processing paperwork, and resolving complaints.
- **Prescription Medications.** This section collects information on obtaining prescription medication for beneficiaries' children.
- **About Your Child and You.** This section collects demographic information about the child, including age, gender, and race. Respondents also report their age, gender, education level, and relationship to the child.

3. Survey Response

The survey was fielded by mail. Out of the initial sample of 35,000, NRC sent out 31,674 surveys during Wave 1 on July 3, 2003. The final mailing took place on August 7, 2003. Of these questionnaires, a total of 10,741 were returned either by mail or internet, for a response rate of 30.8 percent.

4. Database Development

MPR edited the data, selected the records for inclusion in the final database, and constructed variables to be used in the reports. To ensure that the survey data was representative of the DEERS population, MPR developed weights to take account of the initial sampling and the sampled individuals who chose not to respond to the survey.

5. Report

This year's results are presented in electronic HTML format on TMA's website at http://www.TRICARE.USD.MIL. In the 2003 Child TRICARE Consumer Report, results are

presented by enrollment group, age, and region. Results from this year's survey are compared to the civilian population using data from the national CAHPS Benchmarking Database (NCBD). Programming specifications used to create the Consumer Report using the 2003 Child HCSDB data are included as Appendix E.

B. ORGANIZATION OF THIS MANUAL

Chapter 2 presents the procedures used in fielding the survey. Chapter 3 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, and weighting procedures. Chapter 4 describes how the database was analyzed. The description includes rules for developing response rates, 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
- Appendix B: Materials sent to the respondents during the fielding of the survey
- Appendix C: Data Processing Architecture
- Appendix D: Plan for Data Quality – Coding Scheme
- Appendix E: SAS Code for Child TRICARE Consumer Report
- Appendix F: Web Specifications for Child TRICARE Consumer Report
- Appendix G: SAS Code for Database Construction
- Appendix H: The SUDAAN code for calculating variance of estimates

Chapter 2

Survey of Children

This chapter presents information on the survey administration cycle for the 2003 Child Health Care Survey of DoD Beneficiaries (HCSDB), with specific details on the survey mailing cycle and the number of surveys received. Those who received the mailing were given the option of responding on the internet instead of by mail. This chapter describes the mailings and the surveys received by mail. Both mail and internet responses are included in the dataset, frequency tables and response rate calculations.

A. SURVEY OPERATIONS ACTIVITIES

The operational support for mailing the survey involved four mailings to beneficiaries between June 3, 2003 and August 7, 2003. Targeted mailings and remailings have been integrated into the mailing administration in order to increase response rates. The mailings are as follows: notification letter, first survey mailing, reminder/thank you post card, and second survey mailing. The notification letter was a short letter of explanation encouraging beneficiaries to participate. The first and second surveys were mailed with a cover letter of explanation. The reminder/thank you post card was mailed between the first and second surveys reminding beneficiaries to complete the survey and thanking those beneficiaries who had completed the survey. All mailing pieces were addressed to the parent or guardian of the beneficiary. Examples of these are available in Appendix B. All mailings have been completed. The field period closed on September 2, 2003.

B. ADDRESS UPDATE ACTIVITIES PRIOR TO AND DURING SURVEY ADMINISTRATION

The sample file was received from Mathematica Policy Research (MPR) on May 20, 2003. The file contained 35,000 records of DoD beneficiaries and 69 variables constructed from the Defense Enrollment Eligibility Reporting System (DEERS). The file was sent to an NCOA vendor for address updating on May 20, 2003. National Research Corporation (NRC) sent a copy of all sample records to an outside vendor to receive address hygiene services and to be interfaced with the National Change of Address (NCOA) database to obtain updated address information. The NCOA vendor returned the updated address file and this information, along with the sample file from MPR, were loaded into NRC's proprietary software system known as Qualysis. Qualysis is NRC's "quality process" software and business discipline that standardizes and automates the entire survey process from data quality checks to the scanning of returned surveys.

The Configuration Manager module in Qualysis contains the layout for all mail items (e.g., the survey, cover letters, thank you/reminder postcards), mail methodology, and cover letter personalization. For the notification letter mailing step, the address provided by the NCOA vendor was utilized when available. Records that were not updated by the NCOA vendor were mailed to one of the three DEERS addresses: residential address, sponsor address, and unit address. When possible, the residential address was given preference over the sponsor address and likewise the sponsor address was given preference over the unit address. When all records had

been assigned an address for the notification letter mailing step, Qualysis began generating the personalized letters. The notification letter was mailed on June 3, 2003.

The updating of addresses is a continuous process throughout the survey administration cycle. During survey administration, address updates are obtained from multiple sources:

- Self report by beneficiaries (via telephone, voice mail, or fax).
- Address correction information from the United States Postal Service (USPS).
- Out of date forwarding address information from the USPS.
- Mail items returned by the USPS as non-deliverable.

Updated address information was added to Qualyisis through the use of the DoD Beneficiary Update System (DoDBUS), an interface created by NRC developers to allow new address information to be entered into Qualysis and to track changes when using the DEERS supplied addresses.

Address information received directly from the beneficiary was considered the most accurate and was the first address used whenever possible. Beneficiaries were provided with toll free telephone and toll free fax phone numbers and voice mail option to use in order to update their addresses. Collect calls were also available if a beneficiary could not access the toll free telephone number. The telephone and fax numbers were printed on the notification letter, the reminder/thank you card, and the cover letter that accompanied the first survey.

The United States Postal Service also provided address update information in the form of Address Correction Services. This service is accessed by the use of the "Address Service Requested" indicia on the notification letter and the outer envelopes of the first and second surveys. Many post offices returned updated address information on diskettes, which are loaded, into Qualysis. Post offices that did not have access to this technology returned copies of the mail piece with the old and new addresses provided. This information was entered into Qualysis through the DoDBUS.

The DoDBUS also provided the interface to enter non-deliverable mail pieces and mark the address used for that mail step as invalid. If other addresses were available, the DoDBUS operator would choose the next available address for the next mail step. When all addresses had been exhausted, the record was marked as a "final non-deliverable" and no further mailings were attempted. Second surveys that were returned as non-deliverable were also marked as "final non-deliverables" as it was the final mail step in this methodology.

Based on data from the final returns data set, a total of 524 beneficiaries did not have sufficient addresses information and were not included in any of the mail steps. The remaining beneficiaries were mailed the notification letter. Prior to mailing the first survey, NRC removed any beneficiaries who were marked as "final non-deliverable" or any beneficiary who contacted NRC and refused to participate or was found to be ineligible. First surveys were mailed on July 3, 2003. The reminder/thank you card was mailed on July 17, 2003. The reminder card was sent to all beneficiaries who received the first survey, with the exception of those beneficiaries whose first survey was returned and their record marked as "final non-deliverable". Second surveys were mailed on August 7, 2003. Second surveys were mailed to all beneficiaries who did not return a first survey and whose records had not been marked as "final non-deliverable".

Table 2.1 summarizes address sources by each of the four beneficiary categories. This table shows the source of the last address used in sending a mailing piece to a beneficiary. Table 2.1 shows that DEERS-supplied addresses were used 83% of the time.

TABLE 2.1

FREQUENCY OF ADDRESS SOURCE BY BENEFICIARY CATEGORY
(N = 35,000)

	Active Duty	**Active Duty Dependents**	**Retirees and Family Members < 65**	**Retirees and Family Members > 65**	**Total**
No valid address (disqualified after NCOA)	1 0.00%	4 0.01%	16 0.05%	0 0.00%	21 0.06%
Bad Address (disqualified by postal cleaning software)	2 0.01%	397 1.13%	143 0.41%	0 0.00%	542 1.55%
Phone call/Voice mail	0 0.00%	36 0.10%	16 0.05%	0 0.00%	52 0.15%
ACR	0 0.00%	1,841 5.26%	327 0.93%	0 0.00%	2,168 6.19%
Fax	0 0.00%	7 0.02%	9 0.03%	0 0.00%	16 0.05%
NCOA	2 0.01%	2,132 6.09%	1,055 3.01%	0 0.00%	1,489 9.11%
DEERS Unit	12 0.03%	0 0.00%	0 0.00%	0 0.00%	12 0.03%
DEERS Residential	13 0.04%	19,262 55.03%	9,551 27.29%	0 0.00%	28,826 82.36%
DEERS Sponsor	0 0.00%	78 0.22%	92 0.26%	0 0.00%	170 0.49%
ODF	0 0.00%	0 0.00%	0 0.00%	0 0.00%	0 0.00%
Electronic ACR	0 0.00%	3 0.01%	1 0.00%	0 0.00%	4 0.01%
Total	30 0.09%	23,760 67.89%	11,210 32.03%	0 0.00%	35,000 100.00%

Table 2.2 summarizes the address sources for returned surveys included in the 2003 Child HCSDB data file. The data shows that 86% of the returned surveys were mailed to the residential beneficiary address supplied by DEERS.

TABLE 2.2

FREQUENCY OF ADDRESS SOURCES FOR RETURNED SURVEYS
(N = 9,898)

Address Type	Frequency (n)	Percent of Returns
DEERS Residential	8,532	86.2%
DEERS Sponsor	34	0.3%
DEERS Unit	0	0.0%
Phone/Voice Mail	27	0.3%
NCOA	906	9.2%
Fax	9	0.1%
ACR & ODF	390	3.9%
Electronic ACR	0	0.0%
Total	9,898	100.0%

Note: If beneficiaries returned more than one completed survey, both surveys were included in the numbers in Table 2.2.

C. LETTER PROCESSING PROCEDURES

A vital component to effective management and monitoring of the data collection process is the Survey Control System (SCS). The SCS ensures that data are accurate, integrated, and available during all phases of the survey administration. NRC's unique identifier known as a "lithocode" links all records in the SCS to the original sample file. The lithocode is a unique identification number assigned by Qualysis at the time that letters or surveys are generated. A new lithocode number is created for each mail step. These lithocodes are stored for each beneficiary in a table in the SCS. This allows NRC staff to determine whether a returned survey is a first or second survey and to identify instances where a beneficiary may return both the first and second survey. The lithocode also allows the surveys to be monitored without use of a beneficiary's social security number or other information that could identify the beneficiary. Lithocodes are used to identify the beneficiary when returned surveys are scanned, whenever beneficiaries are removed from future mailings due to refusal/ineligibility or no valid address, and when addresses are updated or changed in DoDBUS.

D. SURVEY ADMINISTRATION TIMELINE

The HCSDB mailing process was designed so that each beneficiary with a usable address could receive up to four documents: a notification letter, a first survey, a reminder/thank you card, and a second survey. If a beneficiary returned a first survey, a second survey was not sent. If a beneficiary identified themselves as refusing to participate or as ineligible, they were removed from future mail steps as well. Beneficiaries who were marked as "final non-deliverable" were also removed from future mail steps.

A total of 34,476 notification letters were mailed on June 3, 2003. Immediately following this mailing, NRC staff began entering address changes and updating records to indicate beneficiaries who identified themselves as refusing to participate or as ineligible to participate. There were 2,661

records marked as "final non-deliverable" and 141 records marked as refused/ineligible prior to mailing the first survey. The survey is a 12-page booklet accompanied by a cover letter of explanation and a postage paid return envelope. A total of 31,674 first surveys were mailed to beneficiaries on July 3, 2003.

The reminder/thank you card was sent to 28,425 beneficiaries on July 17, 2003. The number of reminder/thank you cards was reduced by 3,249 due to "final non-deliverables" received prior to mailing.

The second survey was mailed to 24,786 beneficiaries on August 7, 2003. This number was reduced by 521 records marked as "final non-deliverables", 58 records marked as refused/ineligible, and 3,060 records marked due to beneficiaries who returned the first survey.

Prior to the mailing of the first survey, 20 questionnaires were completed by NRC staff and scanned into the SCS. A data set file was created and copies of the questionnaires were sent to the analysis contractor to determine if the file was readable and scanned correctly.

Table 2.3 summarizes the HCSDB mailings. Data includes the date of each mail step, the quantity mailed in each step, and the number of records that were removed prior to the next mail step.

TABLE 2.3

MAILING TIMELINE

Mail Step	Action	Records Removed	Sample
	Total Sample Size		**35,000**
	Subtract no address	126	
	Subtract bad address	398	
	Total: beneficiaries not receiving a pre note		-524
Notification Letter	Mailed on 06/3/03		**34,476**
	Subtract PND	2,661	
	Subtract ineligible/refused	141	
	Total		-2,802
First Survey	Mailed on 07/3/03		**31,674**
	Subtract PND	3,249	
	Total		-3,249
Reminder/Thank You Post Card	Mailed on 07/17/03		**28,425**
	Subtract PND	521	
	Subtract ineligible/refused	58	
	Subtract 1st Surveys received	3,060	
	Total		-3,639
Second Survey	Mailed on 08/7/03		**24,786**

E. PROCESSING AND CLASSIFICATION OF INCOMING SURVEYS

Returned surveys were visually checked for any written comments prior to scanning. Refusal or ineligibility comments were entered into Qualysis using the DoDBUS. Any other comments were referred to the Account Director to be forwarded to the DoD Task Manager.

Each morning, NRC staff open non-deliverables and update address changes or "final non-deliverable" status for each record. Surveys are scanned using software called FAQSS. The Scanner Interface module of Qualysis receives the information from FAQSS and identifies the beneficiary and their responses to the survey questions.

Surveys must be imported from the Qualysis directory into the FAQSS System by running a "create text definitions files" from the scanner interface application. During the import process, the surveys are run through three passes. In the first pass, the lithocode is read. Any unread lithocodes are manually entered. The system then creates a lithocode list. From the complete lithocode list, Qualysis exports the text definition files to match the lithocodes. Lastly, FAQSS separates the files into batches and moves them into the processing queue.

The next step in scanning is batch processing. This template is used by the processor to find response areas and to read the responses as valid or spurious. If the system is not 99 percent certain of a response, it is sent to a data editing workstation.

Any questionable marks as detected by the processor are brought up at the data editing station for review by an editor. The editor decides if the mark is a valid response and enters the appropriate system instructions. If the editor is unable to determine the response, a "non-response" instruction is entered. From scanner interface, a transfer results application is applied which moves the scanning files into the Qualysis database and logs the transaction. A final check is then performed to ensure that all surveys have been entered in the Qualysis database.

Throughout the administration of HCSDB, all records are marked with a final disposition code known as FLAG_FIN. Some records (such as no valid addresses) can be marked prior to the first mail step. Other records cannot be marked until all mail steps have been completed. The FLAG_FIN variables and their descriptions are

FLAG	COMMENT
FLAG_FIN=1	Returned survey – survey was completed and returned.
FLAG_FIN=2	Returned ineligible – survey was returned with at least one question marked and information that the beneficiary was ineligible. The information indicating ineligibility may have come by phone, fax, or the survey itself.
FLAG_FIN=3	Returned blank – temporarily ill or incapacitated. Survey was returned blank along with information that the beneficiary was temporarily ill or incapacitated. These sample members were eligible.
FLAG_FIN=4	Returned blank – deceased. Survey was returned blank along with information that the beneficiary was deceased. These sample members were ineligible.
FLAG_FIN=5	Returned blank – incarcerated or permanently incapacitated. Survey was returned blank along with information that the beneficiary was incarcerated or permanently hospitalized. These sample members were ineligible.

FLAG	COMMENT
FLAG_FIN=6	Returned blank – left military or divorced after 01/31/03, retired. Survey was returned blank along with information that the beneficiary left the military after 01/31/03, divorced after 01/31/03, or retired. These sample members were eligible.
FLAG_FIN=7	Returned blank – not eligible on 01/31/03. Survey was returned blank along with information that the beneficiary was not eligible for Military Health System Plan on 01/31/03. These sample members were ineligible.
FLAG_FIN=8	Returned blank – other eligible. Survey was returned blank along with a reason given by the sample member. These sample members were eligible.
FLAG_FIN=9	Returned blank – no reason. Survey was returned blank without an explanation. These sample members were eligible.
FLAG_FIN=10	No return – temporarily ill or incapacitated. Survey was not returned and beneficiary was temporarily ill or incapacitated. These sample members were eligible.
FLAG_FIN=11	No return – active refuser. Survey was not returned and beneficiary refused to take part in the survey. These sample members were eligible.
FLAG_FIN=12	No return – deceased. Survey was not returned and beneficiary deceased. These sample members were ineligible.
FLAG_FIN=13	No return – incarcerated or permanently incapacitated. Survey was not returned, beneficiary was incarcerated or permanently hospitalized. These sample members were ineligible.
FLAG_FIN=14	No return – left military or divorced after 01/31/03, retired. Survey was not returned, beneficiary left service after 01/31/03, divorced after 01/31/03, or retired. These sample members were eligible.
FLAG_FIN=15	No return – not eligible on 01/31/03. Survey was not returned, beneficiary was not eligible for Military Health System Plan on 01/31/03. These sample members were ineligible.
FLAG_FIN=16	No return – other eligible. Survey was not returned, beneficiary gave other reason for not completing the survey. These sample members were eligible.
FLAG_FIN=17	No return – no reason. Survey was not returned, beneficiary gave no reason.
FLAG_FIN=18	PND – no address remaining. All addresses were attempted, mailing was returned PND.
FLAG_FIN=19	PND – address remaining at the close of field. At the close of field, the last address used was found invalid, next available was not attempted.
FLAG_FIN=20	Original Non-Locatable – no address at start of mailing. Substantially incomplete or blank address field before the survey was administered, no mailings attempted.

FLAG	COMMENT
FLAG_FIN=21	Beneficiary provides written documentation declining to participate but doesn't specify a reason.
FLAG_FIN=22	Beneficiary indicates they are hospitalized but without providing any way to determine whether incapacity is temporary or permanent. Therefore, eligibility determination can not be made.
FLAG_FIN=23	Returned blank – deployed. Survey was returned blank along with information that the beneficiary was deployed.
FLAG_FIN=24	No return – deployed. Survey was not returned, beneficiary was deployed.

Table 2.4 documents the final disposition of the survey sample by each beneficiary group. The ENBGSMPL variable was used to create the beneficiary groups. The ENBGSMPL variable has values 1-10. The value of 1 is = Active Duty; values of 2, 3, & 4 = Active Duty Dependents, values of 5, 6, & 7 = Retired and Family Members < 65; and values of 8, 9, & 10 = Retired and Family Members > 65.

*Please note that the active duty beneficiaries are 17 years of age and appear to be active duty or in the guard/reserves.

TABLE 2.4

FREQUENCY (N) AND PERCENT DISTRIBUTION OF FINAL DISPOSITION OF SURVEY SAMPLE BY BENEFICIARY

Final Survey Disposition	Active Duty	Active Duty Dependents	Retirees and Family Members < 65	Retirees and Family Members > 65	Total
Returned non blank survey	1	5,139	3,488	0	8,628
	0.00%	14.68%	9.97%	0.00%	24.65%
Returned - ineligible	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.00%
Blank - temp ill or incapacitated	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.00%
Blank - deceased	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.00%
Blank - incarcerated or perm incapacitated	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.00%
Blank - left military or divorced after 01/31/03	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.00%
Blank - not eligible for MHS on 01/31/03	0	1	0	0	1
	0.00%	0.00%	0.00%	0.00%	0.00%
Blank - other eligible	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.00%
Blank - no reason	0	24	13	0	37
	0.00%	0.07%	0.04%	0.00%	0.11%
No return - temp ill or incapacitated	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.00%
No return - active refuser	0	13	10	0	23
	0.00%	0.04%	0.03%	0.00%	0.07%
No return - deceased	0	3	3	0	6
	0.00%	0.01%	0.01%	0.00%	0.02%
No return - incarcerated or perm incapacitated	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.00%
No return - left military or divorced after 01/31/03	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.00%
No return - not eligible on 01/31/03	0	20	25	0	45
	0.00%	0.06%	0.07%	0.00%	0.13%
No return - other eligible	0	6	3	0	9
	0.00%	0.02%	0.01%	0.00%	0.03%
No return - no reason given	9	14,556	6,087	0	20,652
	0.03%	41.59%	17.39%	0.00%	59.01%
PND - no address remaining	15	3,380	1,344	0	4,739
	0.04%	9.66%	3.84%	0.00%	13.54%
PND - address remaining	2	210	75	0	287
	0.01%	0.60%	0.21%	0.00%	0.82%
Original Non-Locatable - no address at start	3	404	162	0	569
	0.01%	1.15%	0.46%	0.00%	1.63%
Beneficiary writes and refuses participation	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.00%
Hospitalized - unknown if temp or perm incapacitated	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.00%
Blank - deployed	0	0	0	0	0
	0.00%	0.00%	0.00%	0.00%	0.00%
No return - deployed	0	4	0	0	4
	0.00%	0.01%	0.00%	0.00%	0.01%
Total	30	23,760	11,210	0	35,000
	0.09%	67.89%	32.03%	0.00%	100.00%

Note: This table does not include duplicate surveys.

The data in Table 2.5 displays the number of first and second surveys returned.

TABLE 2.5

RETURNED SURVEYS BY SURVEY TYPE

Survey Indicator	First Survey	Second Survey	Total
Returned non-blank survey	5,398 54.54%	4,415 44.60%	9,813 99.14%
Returned non-blank duplicate survey	0 0.00%	85 0.86%	85 0.86%
Total	5,398 54.54%	4,500 45.46%	9,898 100.00%

Note: This table includes duplicate surveys.

Chapter
3

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 2003 Child HCSDB consists of variables from various sources. When NRC delivered the file to MPR after fielding the sample, the following types of variables were present:

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

MPR added 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 updated and cleaned the questionnaire responses using the Coding Scheme tables found in Appendix D. This year the final file does not include both the original and recoded responses, but only the cleaned 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 3.1 lists all variables in the database by source and briefly describes each variable. For specific information on variable location within the database, refer to the "2003 Health Care Survey of DoD Beneficiaries: Child Codebook and User's Guide."

1. Data Sources

a. DEERS

The sampling frame was provided 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 NRC are cleaned and recoded as necessary to ensure that responses are consistent throughout the questionnaire. The Coding Scheme tables found in Appendix D are the basis for insuring data quality.

d. Survey Fielding Variables

In the process of fielding the survey, NRC 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 D) 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 child report cards. 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 3.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 3.E.

TABLE 3.1

VARIABLES IN THE 2003 CHILD HCSDB DATA FILE

	SAMPLING VARIABLES
MPCSMPL	- MPCSMPL - Military Personnel Category
MPRID	- Unique MPR Identifier
SEXSMPL	- SEXSMPL - Sex
SVCSMPL	- SVCSMPL - Branch of Service
AGESMPL	- AGESMPL - Age
BGCSMPL	- BGCSMPL - Beneficiary Group
REGSMPL	- REGSMPL - Region
ENBGSMPL	- Enrollment by beneficiary category
STRATUM	- Sampling STRATUM
E1	- Eligibility indicator for period = 1
E2	- Eligibility indicator for period = 2
E3	- Eligibility indicator for period = 3
	DEERS VARIABLES
MRTLSTAT	- Marital Status
SUPREG	- SUPREG - Super Region
DAGEQY	- Age (As of 28 February 2002)
FIELDAGE	- Age (As of 1 July 2002)
PCM	- Primary Manager Code (CIV or MIL)
RACEETHN	- Race/Ethnic Code
DBENCAT	- Beneficiary Category
LEGDDSCD	- DDS Code
MBRRELCD	- Member Relationship Code
PNLCATCD	- Personnel Category Code (Duty Status)
DMEDELG	- Medical Privlege Code
DSPONSVC	- Derived Sponsor Branch of Service
MEDTYPE	- Medicare Type
PATCAT	- Aggregated Beneficiary Category
ENRID	- Enrollment DMISID
DCATCH	- Catchment Area
ULOCDMIS	- Unit DMISID
DHSRGN	- Health Service Region
	POST STRATIFICATION
ENLSMPL	- ENLSMPL - Enrollment Sampling Group
FNSTATUS	- Final Status
KEYCOUNT	- # of Key Questions Answered
POSTSTR	- Post Stratification Cell
	QUESTIONNAIRE RESPONSES
C03001	- Are you adult responsible for child
C03002	- Which hlth plan did you use most
C03003	- Last 12 mnths:# months in a row child enrolled in health plan
C03004A	- Child covered by TRICARE Prime
C03004B	- Child covered by TRICARE Extra/Standard
C03004C	- Child covered by Civilian HMO
C03004D	- Child covered by Other Civilian Insurance
C03004E	- Child covered by Medicaid
C03004F	- Child covered by Uniform Services Family Health Plan(USFHP)
C03004G	- Child covered by Federal Employee Health Benefit Program(FEHBP)
C03004H	- Not sure who Child is covered by
C03004I	- Child did not use health plan last 12 months
C03005	- Child get new personal Dr/Nurse since joining health plan
C03006	- How much problem to get personal Dr/Nurse
C03007	- Does child have personal Dr/Nurse

C03008 - Last 12 mnths:Times child visited personal Dr/Nurse in office/clinic .....
C03009 - Talk about feeling/growing/behaving.....
C03010 - Child has medical/behavioral/other condition lasting >3mnths.....
C03011 - Dr understands med/behvrl/othr cndtn's effect on child's daily life .....
C03012 - Dr understands med/behvrl/othr cndtn's effect on family's daily life .....
C03013 - Rating of child's personal Dr/Nurse.....
C03014 - Does child have primary care manager .....
C03015 - Know name of child's Primary care mgr.....
C03016 - In last 12 mos how much prblm to see PCM .....
C03017 - Is primary care mgr military or civilian.....
C03018 - Did you think child needed to see spclst.....
C03019 - How much problem to get referral to specialist that child needed to see .....
C03020 - In last 12 mos did child see specialist.....
C03021 - Rating of specialist seen most often .....
C03022 - Specialist same as personal Dr.....
C03023 - Call during reg. Hrs to get help/advice.....
C03024 - Called during reg Hrs did you get hlp.....
C03025 - Make appt for regular/routine hlthcre .....
C03026 - How oftn child got apptmnt for regular/routine care as soon as wanted.....
C03027 - Days child waited between making apptmnt and seeing provider.....
C03028 - Last 12 mnths:Child need appointment for well-patient care.....
C03029 - Get appt for well-patient care as soon as you wanted.....
C03030 - Days child waited between making apptmnt and seeing well-patnt care provider.....
C03031 - Have illness/injury need care right away.....
C03032 - Get needed care as soon as wanted .....
C03033 - Wait btwn trying to & seeing provider.....
C03034 - Times to ER.....
C03035 - Times to Dr office/Clinic (excluding ER) .....
C03036 - Problem to get necessary care .....
C03037 - Problem wait for approval .....
C03038 - How oftn wait >15 mins.....
C03039 - How oftn staff treat w/courtesy &respect .....
C03040 - How oftn were staff helpful.....
C03041 - How oftn did staff listen carefully.....
C03042 - How oftn did staff explain things to you .....
C03043 - How oftn staff respect what had to say.....
C03044 - Child able to talk to Dr.....
C03045 - Dr explain in way for child to undrstnd .....
C03046 - How oftn spend enough time w/child .....
C03047 - Have questions about child's health or health care? .....
C03048 - How oftn child's Dr made it easy to discuss concerns.....
C03049 - How oftn you got specific info needed from child's Dr .....
C03050 - How oftn you had your questions answered by child's Dr .....
C03051 - Were any decisions made about your child's health care.....
C03052 - How oftn child's Dr offer you choices about child's health care.....
C03053 - How oftn child's Dr discuss good and bad of diffrnt choices.....
C03054 - How oftn child's Dr ask you to tell them what choice you prefer.....
C03055 - How oftn child's Dr involved you when decisions were made.....
C03056 - Rating of child's healthcare .....
C03057 - Type of facility child used most often .....
C03058 - Child enrolled in any kind of school or daycare .....
C03059 - Needed child's Dr to contact school about child's health.....
C03060 - Got help needed from child's Dr in contacting child's school.....
C03061 - Got special medical devices for child: eg walker, oxygen equipmnt.....
C03062 - Problem getting special medical equipment for child.....
C03063 - Someone from health plan/Dr's office helped get special med equipment....

C03064	- Got special therapy for child: eg physcl, occuptnl, spch therapy
C03065	- Problem getting special therapy for child
C03066	- Someone from health plan/Dr's office helped get special therapy for child
C03067	- Got treatmnt/cnselling for child's emotnl/develpmnt/behavrl prblm
C03068	- Problem getting treatment or counseling for child
C03069	- Someone from health plan/Dr's office helped get treatmnt/counselling
C03070	- Child got care from more than one kind of health care provider
C03071	- Someone from hlth plan/Dr's offc helped coordnt chld's care frm dif srvcs
C03072	- Send in any claims
C03073	- Handle claim in reasonable time
C03074	- Handle claim correctly
C03075	- Plan make clear how much to pay
C03076	- Look for info/written material
C03077	- Find/understand info in written material
C03078	- Call customer service to get info
C03079	- Problem get help when call customer svc
C03080	- Called/written plan with complaint
C03081	- How long to resolve complaint
C03082	- Complaint/problem settled to satisfction
C03083	- Experience with paperwork
C03084	- Problem with paperwork
C03085	- Rating of exprience with child hlth plan
C03086	- Child get prescripton or you refilled childs prescription
C03087	- Problem getting child's prescription medicine
C03088	- Someone from health plan/Dr's office helped get child's prescription
C03089	- Rate child's overall health
C03090	- Child use medicine prescribed by Dr
C03091	- Medicine b/c medical,behavioral,other
C03092	- Medicine b/c cndtn expected last>=12 mos
C03093	- Child needs/uses more medical,mntl,eductnl services than is usual
C03094	- Use services b/c of medical/behavioral/othr health condition
C03095	- Svcs b/c condition expected last>=12 mos
C03096	- Limited/prevented in ability
C03097	- Limited b/c medical, behavioral, other
C03098	- Limited b/c condition expected last>=1yr
C03099	- Get special therapy
C03100	- Therapy b/c medical, behavioral, other
C03101	- Therapy b/c condition expected last>=1yr
C03102	- Problem for which gets trtmnt/counseling
C03103	- Trtmnt/counseling b/c conditn last>=1yr
C03104	- Is child male or female
C03105	- Is child Hispanic/Latino
C03106A	- Child race: White
C03106B	- Child race: Black
C03106C	- Child race: Asian
C03106D	- Child race: Native Hawaiian/Pacific Islander
C03106E	- Child race: Am. Indian/Alaskan
C03106F	- Child race: Other
C03107	- Your age now
C03108	- Are you male or female
C03109	- Highest grade/level you completed
C03110	- How are you related to the policy holder
C03111	- How related to child
	NRC SURVEY FIELDING VARIABLES
FLAG_FIN	- Final Disposition
DUPFLAG	- Multiple Response Indicator
N1A	- Coding Scheme Note 1A

N2	- Coding Scheme Note 2
N2A	- Coding Scheme Note 2A
N2B	- Coding Scheme Note 2B
N3	- Coding Scheme Note 3
N4A	- Coding Scheme Note 4A
N4B	- Coding Scheme Note 4B
N5	- Coding Scheme Note 5
N6	- Coding Scheme Note 6
N7	- Coding Scheme Note 7
N8	- Coding scheme Note 8
N10	- Coding Scheme Note 10
N10A	- Coding Scheme Note 10A
N9	- Coding scheme Note 9
N10B	- Coding Scheme Note 10B
N10C	- Coding Scheme Note 10C
N10D	- Coding Scheme Note 10D
N10E	- Coding Scheme Note 10E
N10F	- Coding Scheme Note 10F
N10G	- Coding Scheme Note 10G
N11	- Coding Scheme Note 11
N12	- Coding Scheme Note 12
N13	- Coding Scheme Note 13
N14A	- Coding Scheme Note 14A
N15	- Coding Scheme Note 15
N15A	- Coding Scheme Note 15A
N16A	- Coding Scheme Note 16A
N17A	- Coding Scheme Note 17A
N18A	- Coding Scheme Note 18A
MISS_1	- Count of: Violates Skip Pattern
MISS_4	- Count of: Incomplete grid error
N19A	- Coding Scheme Note 19A
N20	- Coding Scheme Note 20
MISS_5	- Count of: Don't know or not sure
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
CONUS	- CONUS - CONUS/OCONUS Indicator
XENR_PCM	- Enrollment by PCM type
XENRLLMT	- Enrollment in TRICARE Prime
XINS_COV	- Insurance Coverage
KCIVWAT1	- Wait <4 wks for well patient visit-Civ
KMILOFFC	- Office wait of more than 15 minutes-Mil
KMILWAT1	- Wait <4 wks for well patient visit-Mil
XBNFGRP	- Constructed Beneficiary Group
KBGPRB1	- Big problem getting referrals to spclst
KBGPRB2	- Big problem getting necessary care
KCIVOFFC	- Office wait of more than 15 minutes-Civ
KMILOP	- Outpatient visits to Military facility
	WEIGHTS
BWT	- BWT - Basic Sampling Weight
KCIVINS	- Beneficiary covered by civilian insurance
KCIVOP	- Outpatient visits to Civilian facility
ADJWT	- ADJWT - Adjusted Weight
POP	- DEERS population by CELLNAME for weights

WRWT - Final Weight .....
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 .....
WRWT10 - Replicated/JackKnife Weight 10 .....
WRWT11 - Replicated/JackKnife Weight 11 .....
WRWT9 - Replicated/JackKnife Weight 9 .....
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 .....
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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 .....
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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 .....

2. Variable Naming Conventions

To preserve continuity with survey data from previous years, MPR followed the same variable naming conventions used for the 1999, 2000, and 2002 Child survey data. Variable naming conventions for the 2003 Child HCSDB are shown in Table 3.2. The public use files for the child survey will contain only recoded variables.

TABLE 3.2

NAMING CONVENTIONS FOR 2003 CHILD HCSDB VARIABLES
(VARIABLES REPRESENTING SURVEY QUESTIONS)

1st Character: Survey Type	2nd – 3rd Characters: Survey Year	4th – 6th Characters: Question #	Additional Characters: Additional Information
C= Health Beneficiaries (17 and Younger, child questionnaire)	03	001 to 111	A to I are used to label responses associated with a multiple response question

(CONSTRUCTED VARIABLES)

1st Characters: Variable Group	Additional Characters: Additional Information
N=Coding scheme notes	Number referring to Note, e.g., N2
X=Constructed independent variable	Descriptive text, e.g., XENRLLMT
K=Constructed dependent variables	Descriptive text, e.g., KMILOP (total number of outpatient visits to military facility)

3. Missing Value Conventions

The 2003 conventions for missing variables are the same as the 2003 Adult HCSDB conventions. All missing value conventions used in the 2003 HCSDB are shown in Table 3.3

TABLE 3.3

CODING OF MISSING DATA AND "NOT APPLICABLE" RESPONSES

ASCII or Raw Source Data	Edited and Cleaned SAS Data	Description
Numeric	Numeric	
-9	.	No response
-8	.A	Multiple response error
-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. 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
- Checks for multiple responses to any question that should have one response
- 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

NRC 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 NRC Editing and Coding

- In preparing the database for MPR, NRC used variable names and response values provided by MPR in the annotated questionnaire (see Appendix A). NRC 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 '.'. Also, as part of the scanning procedure, NRC entered the SAS missing value of '.A' for any question with multiple responses where a single response was required.

3. Duplicate or Multiple Surveys

At this stage, NRC 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 3.C.

4. Removal of Sensitive or Confidential Information

The file that MPR received from NRC contained sensitive information such as social security number (SSN). Any confidential information was removed from the file. Each beneficiary had already been given a generic ID (MPRID) substitute during sample selection, 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 for both versions of the child questionnaire is found in the 2003 Child Coding Scheme. It contains detailed instructions for all editing procedures used to correct data inconsistencies and errors. The Coding Scheme tables are found in Appendix D. 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 program implementing the Coding Scheme is found in Appendix G-2.

a. 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 will be 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. 2003 Child Coding Scheme (see Appendix D) 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.

b. Missing Values

NRC initially encoded any question with missing responses 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 multiple responses, incomplete grids, and questions that should not have been answered is shown in Table 3.3.

Occasionally, missing questionnaire responses can be inferred by examining other responses. For example, if a respondent fails to answer Question 25 regarding appointments made by sponsors for their child for regular or routine care, but answers Questions 26 about how often their child got an appointment for regular or routine care as soon as they wanted, we can reason that they did make an appointment in the past 12 months. Using this technique, we successfully recoded some missing questionnaire responses to legitimate responses.

c. Multiple Response Errors

If a respondent gives more than one answer to a question that should have only one answer, the response to that question was coded with a SAS missing value of '.A'.

Using an approach similar to that used for missing values, we examined other questionnaire responses in an attempt to infer what the respondent intended for those questions with multiple marks. For example, if there are multiple responses to Question 23 "In the last 12 months, did you call a doctor's office or clinic during regular office hours to get help or advice for your child?" and the response to Question 24 indicates that the respondent usually got help or advice they needed for their child, we assume that the response to Question 23 should have been yes.

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 D) 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 weighting adjustments and constructed variables.

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 NRC for each sampled beneficiary. This information is contained in the FLAG_FIN variable and is described in Table 3.4.

TABLE 3.4

FLAG_FIN VARIABLE

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 1/31/03, or retired	Eligible
7	Returned blank	Information sent that beneficiary was not eligible on 1/31/03	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
14	No return	Left military or divorced after 1/31/03, or retired. Information came in by phone	Eligible
15	No return	Not eligible on 1/31/03. Information came in by phone	Ineligible
16	No return	Other eligible. Information came in by phone	Eligible
17	No return	No reason	---
18	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	Survey was returned blank along with information that the beneficiary was deployed.	Eligible
24	No return- deployed	Survey was not returned, beneficiary was deployed	Eligible

Using the above variables in Table 3.4, 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 on June 1, 2003, that is, not deceased, not incarcerated, and not permanently hospitalized (FLAG_FIN = 3, 6, 8, 10, 11, 14, 16, 21)
- **Group 3:** Ineligible Beneficiaries who were ineligible because of death, institutionalization, divorce, or no longer being in the MHS as of June 1, 2003 (FLAG_FIN = 2, 4, 5, 7, 12, 13, 15)
- **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, 26 key questions were adapted from the complete questionnaire rule for the CAHPS 2.0. The key questions are: 2, 3, 7, 14, 18, 23, 25, 28, 31, 34, 35, 57, 72, 76, 78, 80, 83, 85, 89, 104, 105, 107, 108, 109, 111. If fourteen or more of these key items are completed, then the questionnaire can be counted as complete.

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
- 30 for Group 3
- 41 for G4-1
- 42 for G4-2

There were 226 duplicate questionnaires in the data set NRC 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 = 3, i.e., ineligible), then we regarded the questionnaire as being ineligible.

Only beneficiaries with FNSTATUS = 11 were retained. All other records were dropped.

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 3.1 there is a list of all constructed variables for 2003. 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 G.

1. Demographic Variables

a. Super region (SUPREG)

This variable groups the CONUS regions into 3 super regions: new, mature and other regions. Regions are grouped to reflect relative maturity of TRICARE Prime in each region.

New region contains regions 1, 2, and 5. Mature region consists of regions 6, 9, 10, 11, 12, and 16. Other region is comprised of the remainder of the CONUS regions.

```
*************************************************************************
* Assign SUPREG
*************************************************************************;
IF REGSMPL IN (1,2,5) THEN SUPREG = 1;
ELSE IF REGSMPL IN (6,9,10,11,12,16) THEN SUPREG = 2;
ELSE IF REGSMPL IN (3,4,7,8) THEN SUPREG=3;
```

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 the enrollment type (ENBGSMPL), based on DEERS data, indicates that they were enrolled at the time of data collection. The two categories for TRICARE Prime enrollment are as follows:

1 = Enrollees
2 = Not enrolled in TRICARE Prime

. = Unknown

```
/* XENRLLMT--ENROLLMENT STATUS */
IF ENBGSMPL IN (1,2,3,5,6) THEN XENRLLMT = 1; /*   Enrolled  */
ELSE IF ENBGSMPL IN (4,7) THEN XENRLLMT = 2;  /*   Not Enrolled */
```

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

This variable determines if a child has a civilian or a military primary care manager (PCM).

1 = Enrolled with a military PCM

2 = Enrolled with a civilian PCM
3 = Not enrolled

```
/* XENR_PCM--ENROLLMENT BY PCM TYPE */
IF ENBGSMPL IN (1,3,6) THEN XENR_PCM=1; /* 1=Enrolled  - mil PCM */
ELSE IF ENBGSMPL IN (2,5) THEN XENR_PCM=2;      /* 2=Enrolled  - civ PCM */
ELSE IF ENBGSMPL IN (4,7) THEN XENR_PCM=3;      /* 3=Not Enrolled       */
```

c. Most–Used Health Plan (XINS_COV)

The respondent's most–used health plan comes directly from Question 2. The three categories for this variable are as follows:

1 = TRICARE Prime
2 = TRICARE Standard/Extra (CHAMPUS)
3 = Other civilian health insurance or civilian HMO
. = Unknown

```
/* XINS_COV--INSURANCE COVERAGE */
 IF C03002 = 1 THEN XINS_COV = 1;                    /* Prime */
 ELSE IF C03002 = 3 THEN XINS_COV = 2;               /* Standard/Extra */
 ELSE IF C03002 IN (5,6,7,8,9) THEN XINS_COV = 3;    /* Other Insurance */
```

d. Types of Coverage (KCIVINS)

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

- Is the respondent covered by Civilian insurance (KCIVINS)

This variable has the following values:

1 = Yes

2 = No

.= Unknown

```
/* KCIVINS--IS BENEFICIARY COVERED BY CIVILIAN INSURANCE */
IF (C03004C=1 OR C03004D=1 OR C03004G=1) THEN KCIVINS=1;  /* YES  */
 ELSE KCIVINS=2;
```

e. Beneficiary group (XBNFGRP)

This variable is equal to the sampling variable BGCSMPL and has the following values:

1 = Active duty

2 = Family of active duty

3 = Family of retirees or survivors

.= Unknown

```
/* XBNFGRP-Beneficiary Group that excludes those 65 and over-
Active Duty and Family Members of Active Duty */
XBNFGRP=BGCSMPL;
```

3. Access to Care (KMILWAT1, KCIVWAT1, KMILOFFC, KCIVOFFC, KBGPRB1, KBGPRB2)

Many of the survey questions on access relate directly to a TRICARE performance standard. The questions in the Section "Your Child's Healthcare in the Last 12 Months" of the questionnaire refer to all healthcare received in the last 12 months. For these questions, we constructed binary variables, separately for respondents who used military and civilian facilities the most, indicating whether the TRICARE standard was met. Table 3.5 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 information

TABLE 3.5

TRICARE STANDARDS FOR ACCESS

Access Measure	TRICARE Standard	Variable Name	Relevant Question
Wait for a Well Visit	Less than 4 weeks	KMILWATI, KCIVWATI	30
Waiting Room Wait	Within 15 minutes	KMILOFFC, KCIVOFFC	38

```
/* KMILWAT1--WAIT LESS THAN 4 WEEKS FOR WELL PATIENT VISIT AT MILFACILITIES
  KCIVWAT1--WAIT LESS THAN 4 WEEKS FOR WELL PATIENT VISIT AT CIV FACILITIES*/
  IF C03057  = 1 THEN DO;                    /* Military */
  IF C03030  IN (1, 2, 3) THEN KMILWAT1 = 1;       /* Yes */
  ELSE IF C03030 = 4 THEN KMILWAT1 = 2;            /* No  */
END;
 ELSE IF C03057  = 2 THEN DO;                   /* Civilian */
     IF C03030  IN (1, 2, 3) THEN KCIVWAT1 = 1;     /* Yes */
     ELSE IF C03030 = 4 THEN KCIVWAT1 = 2;          /* No  */
  END;

 /* KMILOFFC--OFFICE WAIT OF 15 MINUTES OR MORE AT MILITARY FACILITES
    KCIVOFFC--OFFICE WAIT OF 15 MINUTES OR MORE AT CIVILIAN FACILITES */
    IF C03057  = 1 THEN DO;                       /* Military */
        IF C03038  IN (3,4) THEN KMILOFFC = 1;            /* Yes */
        ELSE IF C03038  IN (1,2) THEN KMILOFFC = 2;       /* No  */
       END;
        ELSE IF C03057  = 2 THEN DO;                  /* Civilian */
        IF C03038  IN (3,4) THEN KCIVOFFC = 1;        /* Yes */
        ELSE IF C03038  IN (1,2) THEN KCIVOFFC = 2;     /* No */
                  END;
```

Question 19 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 C03019  =1 THEN KBGPRB1 =1; /* YES */
  ELSE IF C03019  IN (2,3) THEN KBGPRB1 =2; /* NO  */
```

Similarly, variable KBGPRB2 was constructed. Question 36 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 C03036  =1 THEN KBGPRB2 =1;  /* YES */
   ELSE IF C03036 IN (2,3) THEN KBGPRB2 =2; /* NO  */
```

4. Utilization

a. Outpatient Utilization (KMILOP, KCIVOP)

Question 35 contains the total number of outpatient visits. This is renamed to KMILOP or KCIVOP depending on the answer to Question 57. The new variables have the following values:

1 = no visits
2 = 1 visit
3 = 2 visits
4 = 3 visits
5 = 4 visits
6 = 5 to 9 visits
7 = 10 or more visits

```
/* KMILOP--OUTPATIENT VISITS TO MILITARY FACILITY
KCIVOP--OUTPATIENT VISITS TO CIVILIAN FACILITY */
IF C03057  = 1 THEN KMILOP=C03035;
ELSE IF (C03057=. AND C03035=.) THEN KMILOP=.;
ELSE KMILOP = 1 ;
IF C03057  = 2 THEN KCIVOP=C03035;
ELSE IF (C03057=. AND C03035=.) THEN KCIVOP=.;
  ELSE KCIVOP = 1 ;
```

E. WEIGHTING PROCEDURES

Estimates based on the 2003 HCSDB must account for the survey's complex sample design and for the potential biasing effects due to nonresponse. As a part of sample selection, MPR constructed sampling weights (BWT) that reflect the differential selection probabilities used to sample beneficiaries across strata. Nonresponse can also lead to distortions of the respondent sample with respect to the total population of DoD health care beneficiaries. Adjustments were made to these sampling weights, BWT, to compensate for such distortions, using a weighting class method. These adjusted weights were also adjusted through the poststratification procedure to form the analysis weights, which we included in the final deliverable database. We also generated replicate weights for the final database so that users have the option of obtaining variance

estimates with a replication method as well as the Taylor series method. This section presents these weighting procedures for the 2003 Child HCSDB.

1. Constructing the Sampling Weight

The sampling weight was constructed on the basis of the sample design. In the 2003 Child HCSDB, stratified sampling was used to select the samples that would receive the questionnaire. Sampling for the Child survey was independently executed within strata defined by combinations of the three domains: enrollment status groups; age 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 2003 child sample design, see the *2003 Health Care Survey of DoD Beneficiaries: HCSDB Child Sample Report*. Our first step in weighting was to construct sampling weights that reflect these unequal sampling rates. These sampling weights can be viewed as the number of population elements that each sampled beneficiary represents. The sampling weight was defined as the inverse of the beneficiary's selection probability or:

(1) $$W_s(h,i) = \frac{N(h)}{n(h)}$$

where:

$W_s(h,i)$ is the sampling weight for the i-th sampled beneficiary within the h-th stratum,
$N(h)$ is the total number of beneficiaries in the h-th stratum, and
$n(h)$ is the number of sampled beneficiaries from stratum h.

The sum of the sampling weights over selections from the h-th stratum equals the total population size of the h-th stratum 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). To reduce this bias, we developed procedures to deal with the problems caused by nonresponse. Two types of nonresponse were associated with the 2003 Child HCSDB:

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

With high item response rates observed in previous Adult HCSDB surveys, statistical imputation was not used to compensate for item nonresponse in the 2003 Child HCSDB. To account for total nonresponse, we implemented a weighting class adjustment followed by a poststratification adjustment.

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 class.

The 2003 Child HCSDB weighting classes were defined on the basis of the stratification variables: TRICARE Prime enrollment status, age group, and geographic area. To avoid excessive variance inflation, we required that each weighting class have at least 20 eligible respondents and that the adjustment factor not exceed 4.

Nonresponse adjustment factors for the 2003 Child 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 — completed 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 = 30)

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

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 and defined as:

(2) $$A_{wc1}(c,d) = \frac{\sum_{i \in S(c)} W_s(c,i)}{\sum_{i \in S(c)} I_1(i) W_s(c,i) + \sum_{i \in S(c)} I_2(i) W_s(c,i) + \sum_{i \in S(c)} I_3 W_s(c,i)}$$ 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 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 *i*-th 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:

(3) $W_{wc1}(c,d,i) = A_{wc1}(c,d)\, W_s(c,i)$

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 the loss of completed questionnaires from beneficiaries known to be eligible. For this adjustment, the weighting class *c* from the previous step 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:

$$(4) \qquad A_{wc2}(c,1) = \frac{\sum_{i \in S(c)} I_1(i) W_{wc1}(c,i) + \sum_{i \in S(c)} I_2(i) W_{wc1}(c,i)}{\sum_{i \in S(c)} I_1(i) W_{wc1}(c,i)}$$

By definition, all d=3 ineligible beneficiaries "respond," so the d=3 adjustment factor is 1, or $A_{wc2}(c,3)=1$. 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:

$$(5) \qquad W_{wc2}(c,d,i) = A_{wc2}(c,d)\, W_{wc1}(c,d,i)$$

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) remained unchanged, or $W_{wc2}(c,3,i)=W_{wc1}(c,3,i)$.

3. Poststratification

To minimize selecting more than one child per household, we assigned all children from a household to the same sampling stratum. Therefore, we needed to compensate for the resulting discrepancy in population totals by using poststratification for the 2003 HCSDB. Poststratification adjustments forced the adjusted weight totals to the DEERS population totals for the specified population groups that formed the *poststrata*. We used DEERS data as of February 28th, 2003 as poststratification values for certain variables. Like stratum variables, poststratum variables are also a combination of three key domain variables: enrollment group, age group, and geographic area (super regions). Construction of age and super region groups is the same as in sampling strata variables except for the reference date.

After creating the cross-classification of the three poststrata variables, enrollment group, age group, and super regions, an additional usual poststratification adjustment was implemented. To illustrate the use of poststratification, let g index poststrata, where g = 1, 2, ..., G. The poststratification adjustment factor for the g-th poststrata was defined as:

$$(6) \qquad A_{ps}(g) = \frac{N(g)}{\sum_{h,i \in S(g)} W_{wc2}(h,i)}$$

where:

$N(g)$ is the total number of beneficiaries in the DEERS frame associated with the g-th post-stratum, and

$S(g)$ is the set of sample records that are found in the g-th poststratum.

The poststratified adjusted weight for the i-th sample record from the h-th design stratum and the g-th poststratum was then calculated as:

$$(7) \qquad W_{ps}(g,h,i) = A_{ps}(g)\, W_{wc2}(h,i)$$

When summed over members of poststratum g, the poststratified weights now total $N(g)$. This poststratified weight is the final analysis weight used for all reporting and analysis.

4. Calculation of Jackknife Replicates

We constructed the 60 jackknife replicates as follows. First, the entire file of sampled beneficiaries was sorted according to stratification variables. Next, 60 mutually exclusive and exhaustive systematic sub-samples of the full sample was identified in the sorted file.[5] A jackknife replicate was then obtained by dropping one subsample from the full sample. By dropping each subsample in turn, the same number of different jackknife replicates as subsamples was defined. The entire weighting process as applied to the full sample was then applied separately to each of the jackknife replicates to produce a set of replicate weights for each record. A series of jackknife replicate weights (WRWT01-WRWT60) was then attached to each beneficiary record in the final database. Given jackknife replicate weights, WesVarPC® (Brick et al. 1996) can be used to construct jackknife replication variance estimates.

[5]With 60 replicates, further statistical analyses such as confidence intervals and hypothesis tests can be based on approximate normal distribution. Inferences with finite replicate number *k* are based on the student *t* distribution with *k*-1 degrees of freedom. Thus, with 60 replicates, normal approximation can be used in constructing confidence intervals or hypothesis testing.

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Chapter
4

Analysis

This chapter explains how the Child HCSDB variables were processed during the analysis phase of the project. It covers the procedure for calculating response rates, the method for estimating the variance of the statistics, significance tests, demographic adjustment, development of the dependent and independent variables for the analysis, and report production.

This year's results are being presented in an electronic format.

A. RESPONSE RATES

In this section, we present the procedures for response rate calculation along with a brief analysis of response rates for domains of interest. Response rates for the 2003 Child HCSDB were calculated in the same way as they were calculated for the 2003 Adult HCSDB. The procedure is based on the guidelines established by the Council of American Survey Research Organizations (CASRO 1982) in 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 2003 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 3.C, all sampled beneficiaries were completely classified into these four main (six detailed) groups: Group 1 (G1-1 and G1-2), Group 2, Group 3, and Group 4 (G4-1 and G4-2):

- 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: ineligible
- 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[1] ($\hat{N}_i$ for Group i, where i =1,2,3,4) for the four main response categories.

[1]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.

These weighted and unweighted counts were also calculated for the subgroups G1-1, G1-2, G4-1, and G4-2, where we denote the unweighted counts by $n_{1,1}$, $n_{1,2}$, $n_{4,1}$, and $n_{4,2}$, and the weighted counts by $\hat{N}_{1,1}, \hat{N}_{1,2}, \hat{N}_{4,1}, \text{and } \hat{N}_{4,2}$. 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)

$$l = \left(\frac{n_1 + n_2}{n_1 + n_2 + n_3} \right) n_{4,1} \qquad \text{and} \qquad l_w = \left(\frac{\hat{N}_1 + \hat{N}_2}{\hat{N}_1 + \hat{N}_2 + \hat{N}_3} \right) \hat{N}_{4,1}$$

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)

$$LR = \frac{n_1 + n_2 + l}{n_1 + n_2 + n_4 \left(\frac{n_1 + n_2}{n_1 + n_2 + n_3} \right)} \quad \text{and} \quad LR_w = \frac{\hat{N}_1 + \hat{N}_2 + l}{\hat{N}_1 + \hat{N}_2 + \hat{N}_4 \left(\frac{\hat{N}_1 + \hat{N}_2}{\hat{N}_1 + \hat{N}_2 + \hat{N}_3} \right)}.$$

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 can be obtained by multiplying the location rate in Equation (2) by the completion rate in Equation (3).

(4)

$$FRR = LRxCR \; and \; FRR_w = LR_w xCR_w$$

In the definitions in Equations (1) through (4), the subscript "*w*" indicates that all calculations involve weighted counts. The method that we 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 are often interested in getting unweighted measures. All tables include unweighted and weighted values under columns headed "Unweighted" and "Weighted", respectively. In the following, we focus on discussing unweighted response rates for

domains of interest. Table 4.1 includes response rates for the 2003 Child HCSDB as a whole, by enrollment status by age groups, and by super regions.

- Overall: The overall unweighted response rate for the 2003 Child HCSDB was about 31 percent (which is found in Table 4.1 in the row of "Overall" under the column of "RR" in "Unweighted").
- Enrollment status: Sponsors of nonenrollees had an unweighted response rate of 28 percent, which is less than the rate for children enrolled in Prime (33 percent).
- Age group: Unweighted response rates according to age groups are: Sponsors of children younger than 6 years old - 29 percent; between 6 and 12 years old - 30 percent; between 13 and 17 years old - 33 percent
- Geographic area: Unweighted response rates according to region are: New regions – 33 percent; mature regions – 29 percent; and other regions – 31 percent.

TABLE 4.1

UNWEIGHTED AND WEIGHTED RESPONSE RATES OVERALL, BY ENROLLMENT GROUP, BY AGE GROUP, AND SUPER REGION

		RR (unweighted) (%)	**RR_W (weighted)** (%)
Overall		30.8	31.6
Enrollment Group	Enrolled	33.4	33.2
	Not enrolled	27.9	28.2
Age Group	Younger than 6 years old	29.3	30.1
	Between 6 and 12 years old	30.4	31.3
	Between 13 and 17 years old	32.8	33.4
Super Region	New Regions (regions 1, 2, 5)	32.7	33.0
	Mature regions (regions 6, 9-12 and 16)	29.2	30.4
	Other regions (regions 3, 4, 7, 8)	30.5	31.0

B. VARIANCE ESTIMATION

To calculate the standard errors (the squared roots of variances) of estimates for the 2003 HCSDB analyses, we used SUDAAN™ (Shah et al. 1996) and the Taylor series linearization method. For analysts who prefer a replication method, 60 replicate weights for jackknife replication are provided in the public use file. Here we describe variance estimation methods for the Taylor series linearization method and the jackknife replication method.

1. Taylor Series Linearization

MPR uses Taylor series linearization to produce standard errors for the estimates from the 2003 HCSDB for adults and children. For most sample designs, including the 2003 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 the 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 sampling design and includes variables recording stratum and the analysis weight for each record. MPR uses SAS to make camera-ready tables for numerical results from SUDAAN. There is no restriction to the number of strata in SUDAAN, so stratification effects can be incorporated in calculating standard errors.

Some of the reported estimates are composite scale scores that are linear functions of individual estimates. The sampling variance for these scale estimates can be directly obtained from the usual design-based variance estimation formula by incorporating the covariance terms among individual items within the scale.

(5)

$$\text{Let } \bar{y} = \frac{\sum_{h=1}^{L}\sum_{i=1}^{n_h} W_{hi} Y_{hi}}{\sum_{h}\sum_{i} W_{hi}}$$

denote an estimator of a composite scale where individual composite measure for beneficiary (*h*, *i*) consists of *r* items is thus denoted as:

(6)

$$Y_{hi} = \sum_{j=1}^{r} X_{hi,j} / r \quad .$$

Then, a customary variance estimator of $\bar{y}$ is the sum of the item variances and covariances among item estimates:

(7)

$$v(\bar{y}) = \frac{1}{r^2}\left\{\sum_{j=1}^{r} v_j + \sum_{j \neq j'} \mathrm{cov}(\bar{x}_j, \bar{x}_{j'})\right\} \quad ,$$

where v_j is a variance estimator of $\bar{x}_j$.

All of the variance components can be obtained from the usual survey specific software such as SUDAAN and WesVarPC, which are described above.

2. Jackknife Replication

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.

a. Calculation of Jackknife Replicates

A series of jackknife replicate weights are calculated and attached to each beneficiary record in the database. In jackknife replication, a prescribed number of replicates are generated by deleting selected cases from the full sample. Given jackknife replicate weights, WesVarPC® (Brick et al. 1996) can be used to produce variance estimates. WesVarPC allows jackknife variance estimation for two primary sampling units per stratum up to 100 strata, or up to 256 replicates without stratification. The 2003 HCSDB for children involves 27 strata. To use WesVarPC, we must modify the actual design to create appropriate replicates. The two options for doing this are to (1) form fewer than 256 replicates by ignoring stratification or (2) form replicates by assigning each unit to one of two pseudo primary sampling units (PSUs) within each of the 27 strata. For either option, the entire weighting process as described in the previous sections must be applied for each jackknife replicate.

To be consistent with the adult survey, we use option 1 to construct the jackknife replicates as follows. First, the entire file of sampled beneficiaries is sorted in sample selection order in which stratification variables are only used in the sorting process. Next, 60 mutually exclusive and exhaustive systematic subsamples[1] 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, the series of jackknife replicate weights (WRWT01 – WRWT60) is attached to the final data in order to construct jackknife replication variance estimates.

b. Software for Jackknife Replication

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 is a popular software package that calculates standard errors based on replication methods. It produces standard errors for functions

[1]With 60 replicates, further statistical analyses such as confidence intervals and hypothesis tests can be based on an approximate normal distribution. Inferences with finite replicate numbers *k* are based on the student *t* distribution with *k*-1 degrees of freedom. Thus, with 60 replicates, normal approximation can be used in constructing confidence intervals or hypothesis testing.

of survey estimates such as differences and ratios as well as simple estimates such as mean, proportion, 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 the child TRICARE Consumer Report statistical testing is done to show whether values in the report cards are statistically different from external benchmarks.

The null hypothesis for this significance test is that a mean value is essentially equal to the benchmark, and the alternative is that a mean value is different from the benchmark. That is, we are testing:

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

For instance, μ_1 might represent the characteristic of interest for mature regions while μ_2 might represent the benchmark.

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 $\alpha = 0.05$, 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 $\sigma^2_{\overline{y_1}-\overline{y_2}}$:

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

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. With an external benchmark, the covariance can be assumed to be zero.

D. DEMOGRAPHIC ADJUSTMENTS

All scores in the report card are adjusted for children's and parent's characteristics affecting their scores.

The purpose of risk-adjustment is to make comparisons of outcomes, either internally or to external benchmarks, that control for characteristics of the respondent beyond the health care provider's

control. Based on previous work with CAHPS, it appears that ratings are affected by characteristics of children and their parents. Besides controlling for these factors, the methodology used:

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

A different model for each beneficiary group, *l,* is used for this adjustment:

$$Y_{jkl} = \beta_{1l} A_{1l} + \beta_{2l} A_{2l} + ... + \beta_{7l} A_{7l} + \beta_{8l} P_l + \varepsilon_{jkl} ,$$

where *Y* is a dependent variable, β_{ql}'s are parameters to be estimated, A_{ql}'s are parents' age dummy variables (A_{ql} = 1 if the parent 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, A_6 = age 65-74, A_7 = age 75 and over) and P_l is the child's health status. The subscripts *j* and *k* refer to the region and beneficiary, respectively.

Given 3 super regions, the specification we use is:

$$\varepsilon_{jkl} = \delta_{0l} + \delta_l R_l + \delta_{2l} R_{2l} + w_{jkl} ,$$

where R_j 's are regional dummy variables (R_{jl} = 1 if the beneficiary is in super region *j* and beneficiary group *l*, and 0 otherwise).

The adjusted mean of the dependent variable *Y* for region *j* can be obtained as:

$$\overline{y_j} = \hat{\delta}_0 + \hat{\delta}_j + \hat{\beta}_1 \hat{A}_1 + \hat{\beta}_2 \hat{A}_2 + ... + \hat{\beta}_7 \hat{A}_7 + \hat{\beta}_8 \hat{P} ,$$

where $\hat{\beta}_q$'s are estimated model parameters, $\hat{A}_q$'s are weighted proportions of age group *q* among the MHS parent population, and $\hat{P}$ is the weighted MHS mean health status. For beneficiary group *l*, the adjusted regional value is:

$$\overline{y_{jl}} = \hat{\delta}_{0l} + \hat{\delta}_{jl} + \hat{\beta}_{1l} \hat{A}_{1l} + \hat{\beta}_{2l} \hat{A}_{2l} + ... + \hat{\beta}_{7l} \hat{A}_{7l} + \hat{\beta}_{8l} \hat{P}_l ,$$

where $\hat{A}_q$'s are weighted proportions of age group *q* for parents of beneficiary group *l* in the MHS.

E. REPORTS

This section discusses the main purpose of the Child Consumer Reports. For further statistical and web specifications for the Child Consumer Reports, please refer to Appendices E and F.

1. 2003 Child TRICARE Consumer Report

a. Purpose

The purpose of the report is to provide Lead Agents and MTF commanders with a comprehensive description of TRICARE beneficiaries' satisfaction with their child's care relative to civilian benchmarks. The report provides an easy-to-understand snapshot of various aspects of the quality of care in the MHS. Users can easily "drill down" to follow the performance of providers among different enrollment and beneficiary groups.

b. Consumer Report Production

1) Programming Specifications

Data for the report are arranged in a SAS dataset and consist of summary records indexed by region, age group, and enrollment group. Benchmark records with no geographic reference are also included in the file. A summary record contains: mean composite scores, p-values for tests of difference from the relevant benchmark, a categorical variable describing the existence and direction of significant differences. Other records contain mean scores for individual elements of the composite. Benchmark records contain national mean values for a comparable population. Programs used to produce the report cards are in Appendix E.

2) Web Specifications

The SAS dataset serves as the basis for the electronic report. For the 2003 HCSDB, a single file contains all super regions and CONUS values. Current values are compared with values from past years. Specifications for the web design of the child consumer reports are in Appendix F.

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APPENDIX A

ANNOTATED QUESTIONNAIRE

RCS: DD-HA(A) 1942
Expires: 09/12/03

Health Care Survey of DoD Beneficiaries

Child Questionnaire

31379604

July 2003

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SURVEY INSTRUCTIONS

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

◯ Yes **Go to Question 1**
◯ 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 (Health Affairs)
c/o Survey Processing Center
PO Box 82660
Lincoln, NE 68501-9462

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 572, Public Law 102-484, E.O. 9397.

Purpose: This survey helps health policy makers gauge beneficiary satisfaction with the current military healthcare 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 STARTS HERE----------

Please answer the questions for the child whose name appears on the envelope. Please do not answer for any other children.

1. Are you an adult responsible for the child listed on the envelope?

C03001

1 ◯ Yes **Go to Question 2**
2 ◯ No **Please give this questionnaire to a person responsible for that child.**

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

C03002

1 ◯ TRICARE Prime
3 ◯ TRICARE Extra/Standard (CHAMPUS)
5 ◯ Federal Employees Health Benefit Program (FEHBP)
6 ◯ Medicaid
7 ◯ A civilian HMO (such as Kaiser)
8 ◯ Other civilian health insurance (such as Blue Cross)
9 ◯ Uniform Services Family Health Plan (USFHP)
-5 ◯ Not sure
-6 ◯ My child did not use any health plan in the last 12 months.

For the remainder of this questionnaire, the term health plan refers to the plan you marked in Question 2.

3. In the last 12 months, how many months in a row was your child enrolled in this health plan?

C03003

2 ◯ Less than 2 months
3 ◯ 2-6 months
4 ◯ 7-12 months
-6 ◯ Not enrolled in a health plan in the last 12 months.

4. **By which of the following healthcare plans is your child currently covered? MARK ALL THAT APPLY.**

C03004A - C03004I

A ◯ TRICARE Prime
B ◯ TRICARE Extra/Standard (CHAMPUS)
C ◯ A civilian HMO (such as Kaiser)
D ◯ Other civilian insurance (such as Blue Cross)
E ◯ Medicaid
F ◯ Uniform Services Family Health Plan (USFHP)
G ◯ Federal Employees Health Benefit Program (FEHBP)
I ◯ My child did not use any health plan in the last 12 months
H ◯ Not sure

-----YOUR CHILD'S PERSONAL DOCTOR OR NURSE-----

The next questions ask you about your child's health care. Do not include care your child got when he or she stayed overnight in a hospital. Do not include the times your child went for dental care visits.

5. **A personal doctor or nurse is the health provider who knows your child best. This can be a general doctor, a specialist doctor, a nurse practitioner, or a physician assistant.**

When your child joined this health plan or at any time since then, did he or she get a new personal doctor or nurse?

C03005 | See Note 1A

1 ◯ Yes 2 ◯ No **Go to Question 7**

6. **With the choices your child's health plan gave you, how much of a problem, if any, was it to get a personal doctor or nurse for your child you are happy with?**

C03006 | See Note 1A

1 ◯ A big problem
2 ◯ A small problem
3 ◯ Not a problem

7. **Do you have one person you think of as your child's personal doctor or nurse? If your child has more than one personal doctor or nurse, choose the person your child sees most often.**

C03007 | See Note 2

1 ◯ Yes 2 ◯ No **Go to Question 14**

8. **In the last 12 months, not counting the times your child went to the emergency room, how many times did your child go to his or her personal doctor or nurse's office or clinic?**

C03008 | See Note 2 and 2A

1 ◯ None **Go to Question 10**
2 ◯ 1
3 ◯ 2
4 ◯ 3
5 ◯ 4
6 ◯ 5 to 9
7 ◯ 10 or more

9. **In the last 12 months, did your child's personal doctor or nurse talk with you about how your child is feeling, growing, or behaving?**

1 ◯ Yes 2 ◯ No C03009 | See Note 2 and 2A

10. **Does your child have any medical, behavioral or other health conditions that have lasted for more than 3 months?**

C03010 | See Note 2 and 2B

1 ◯ Yes 2 ◯ No **Go to Question 13**

11. **Does your child's personal doctor or nurse understand how these medical, behavioral or other health conditions affect your child's day-to-day life?**

1 ◯ Yes 2 ◯ No C03011 | See Note 2 and 2B

12. **Does your child's personal doctor or nurse understand how your child's medical, behavioral or other health conditions affect your family's day-to-day life?**

1 ◯ Yes 2 ◯ No C03012 | See Note 2 and 2B

13. **We want to know your rating of your child's personal doctor or nurse. If your child has more than one personal doctor or nurse, choose the person your child sees most often.**

Use 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. How would you rate your child's personal doctor or nurse now?

C03013

See Note 2

0 ○ 0 Worst personal doctor or nurse possible
1 ○ 1
2 ○ 2
3 ○ 3
4 ○ 4
5 ○ 5
6 ○ 6
7 ○ 7
8 ○ 8
9 ○ 9
10 ○ 10 Best personal doctor or nurse possible
-6 ○ My child doesn't have a personal doctor or nurse.

14. **For members of TRICARE Prime, the primary point of contact regarding your child's health is called a primary care manager or PCM. This may be the same person as your child's personal doctor or nurse. Does your child have a TRICARE primary care manager?**

C03014

See Note 3

1 ○ Yes **Go to Question 15**
2 ○ No **Go to Question 18**
-5 ○ I don't know **Go to Question 18**
-6 ○ My child is not enrolled in TRICARE Prime. **Go to Question 18**

15. **Do you know the name of your child's TRICARE Prime primary care manager?**

C03015

See Note 3

1 ○ Yes
2 ○ No
-6 ○ My child doesn't have a TRICARE primary care manager. **Go to Question 18**

16. **In the last 12 months, how much of a problem was it for your child to see his or her TRICARE primary care manager?**

C03016

See Note 3

1 ○ A big problem
2 ○ A small problem
3 ○ Not a problem
-6 ○ My child doesn't have a TRICARE primary care manager. **Go to Question 18**

17. **Is your child's TRICARE Prime primary care manager (PCM) based in a military or civilian facility?**

1 ○ A primary care manager based at a military facility
2 ○ A primary care manager based at a civilian facility
-5 ○ Not sure
-6 ○ Not a member of TRICARE Prime

C03017

See Note 3

-------GETTING HEALTHCARE FROM A SPECIALIST-------

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

18. **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 your child needed to see a specialist?

C03018

See Note 4A

1 ○ Yes 2 ○ No **Go to Question 20**

19. **In the last 12 months, how much of a problem, if any, was it to get a referral to a specialist that your child needed to see?**

C03019

See Note 4A

1 ○ A big problem
2 ○ A small problem
3 ○ Not a problem
-6 ○ My child did not see a specialist in the last 12 months.

20. **In the last 12 months, did your child see a specialist?**

C03020

See Note 4B

1 ○ Yes 2 ○ No **Go to Question 22**

21. **We want to know your rating of the specialist your child saw most often in the last 12 months, including a personal doctor if he or she was a specialist. Use any number from 0 to 10 where 0 is the worst specialist possible and 10 is the best specialist possible. How would you rate your child's specialist?**

C03021

See Note 4B

0 ○ 0 Worst specialist possible
1 ○ 1
2 ○ 2
3 ○ 3
4 ○ 4
5 ○ 5
6 ○ 6
7 ○ 7
8 ○ 8
9 ○ 9
10 ○ 10 Best specialist possible
-6 ○ My child didn't see a specialist in the last 12 months.

22. **In the last 12 months, was the specialist your child saw most often the same doctor as your child's personal doctor?**

C03022

1 ○ Yes
2 ○ No
-6 ○ My child doesn't have a personal doctor or didn't see a specialist in the last 12 months.

YOUR CHILD'S HEALTH CARE IN THE LAST 12 MONTHS

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

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

1 ○ Yes 2 ○ No **Go to Question 25**

C03023

See Note 5

24. **In the last 12 months, when you called during regular office hours, how often did you get the help or advice you needed for your child?**

C03024

See Note 5

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always
-6 ○ I didn't call for help or advice for my child during regular office hours in the last 12 months.

25. **A health provider could be a general doctor, a specialist doctor, a nurse practitioner, a physician assistant, a nurse, or anyone else your child would see for health care.**

In the last 12 months, did you make any appointments for your child with a doctor or other health provider for regular or routine health care?

C03025

See Note 6

1 ○ Yes 2 ○ No **Go to Question 28**

26. **In the last 12 months, how often did your child get an appointment for regular or routine health care as soon as you wanted?**

C03026

See Note 6

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always
-6 ○ My child didn't need an appointment for regular or routine health care in the last 12 months.

27. **In the last 12 months, how many days did your child usually have to wait between making an appointment for regular or routine health care and actually seeing a provider?**

C03027

See Note 6

1 ○ Same day
2 ○ 1 day
3 ○ 2-3 days
4 ○ 4-7 days
5 ○ 8-14 days
6 ○ 15-30 days
7 ○ 31 days or longer
-6 ○ My child didn't need an appointment for regular or routine care in the last 12 months.

28. **In the last 12 months, did your child need an appointment for well-patient care, such as a physical exam or check-up?**

1 ○ Yes 2 ○ No **Go to Question 31**

C03028

See Note 8

29. **In the last 12 months, when your child needed an appointment for well-patient care, how often did your child get an appointment as soon as you wanted?**

C03029
See Note 8

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always
-6 ○ My child didn't need an appointment for well-patient care in the last 12 months.

30. **In the last 12 months, when your child needed an appointment for well-patient care, how long did your child have to wait between trying to get care and actually seeing a provider?**

C03030
See Note 8

1 ○ Within 7 days
2 ○ 8-14 days
3 ○ 15-28 days
4 ○ More than 28 days
-6 ○ My child didn't need an appointment for well-patient care in the last 12 months.

31. **In the last 12 months, did your child have an illness or injury that needed care right away from a doctor's office, clinic, or emergency room?**

C03031
See Note 7

1 ○ Yes 2 ○ No **Go to Question 34**

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

C03032
See Note 7

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always
-6 ○ My child didn't need care right away for an illness or injury in the last 12 months.

33. **In the last 12 months, how long did your child usually have to wait between trying to get care and actually seeing a provider for an illness or injury?**

C03033
See Note 7

1 ○ Same day
2 ○ 1 day
3 ○ 2 days
4 ○ 3 days
5 ○ 4-7 days
6 ○ 8-14 days
7 ○ 15 days or longer
-6 ○ My child didn't need to get care right away for an illness or injury in the last 12 months.

34. **In the last 12 months, how many times did your child go to an emergency room?**

C03034

1 ○ None
2 ○ 1
3 ○ 2
4 ○ 3
5 ○ 4
6 ○ 5 to 9
7 ○ 10 or more

35. **In the last 12 months (not counting times your child went to an emergency room), how many times did your child go to a doctor's office or clinic?**

C03035
See Note 9

1 ○ None **Go to Question 57**
2 ○ 1
3 ○ 2
4 ○ 3
5 ○ 4
6 ○ 5-9
7 ○ 10 or more

36. **In the last 12 months, how much of a problem, if any, was it to get care for your child that you or a doctor believed necessary?**

C03036
See Note 9

1 ○ A big problem
2 ○ A small problem
3 ○ Not a problem
-6 ○ My child had no visits in the last 12 months.

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

C03037
See Note 9

1 ○ A big problem
2 ○ A small problem
3 ○ Not a problem
-6 ○ My child had no visits in the last 12 months.

38. **In the last 12 months, how often did your child wait in the doctor's office or clinic more than 15 minutes past the appointment time to see the person your child went to see?**

C03038
See Note 9

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always
-5 ○ Don't Know
-6 ○ My child had no visits in the last 12 months.

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

C03039

See Note 9

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always
-6 ○ My child had no visits in the last 12 months

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

C03040

See Note 9

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always
-6 ○ My child had no visits in the last 12 months

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

C03041

See Note 9

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always
-6 ○ My child had no visits in the last 12 months

42. **In the last 12 months, how often did your child's doctor or other health providers explain things in a way you could understand?**

C03042

See Note 9

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always
-6 ○ My child had no visits in the last 12 months

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

C03043

See Note 9

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always
-6 ○ My child had no visits in the last 12 months

44. **Is your child able to talk with doctors about his or her health care?**

C03044

See Note 9 and 10

1 ○ Yes 2 ○ No **Go to Question 46**

45. **In the last 12 months, how often did doctors or other health providers explain things in a way your child could understand?**

C03045

See Note 9 and 10

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always
-5 ○ Don't Know
-6 ○ My child had no visits in the last 12 months or my child is

46. **In the last 12 months, how often did doctors or other health providers spend enough time with your child?**

C03046

See Note 9

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always
-5 ○ Don't Know
-6 ○ My child had no visits in the last 12 months or my child is not old enough to talk with doctors

47. **In the last 12 months, did you have any questions or concerns about your child's health or health care?**

C03047

See Note 9 and 10A

1 ○ Yes 2 ○ No **Go to Question 50**

48. **In the last 12 months, how often did your child's doctors or other health providers make it easy for you to discuss your questions or concerns?**

C03048

See Note 9 and 10A

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always

49. **In the last 12 months, how often did you get the specific information you needed from your child's doctors or other health providers?**

C03049

See Note 9 and 10A

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always

50. **In the last 12 months, how <u>often</u> did you have <u>your questions</u> answered by your child's doctors or other health providers?**

C03050

See Note 9

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always

We want to know how you, your child's doctors and other health providers make decisions about your child's health care.

51. **In the last 12 months, were <u>any decisions</u> made about your child's health care?**

C03051 | See Note 9 and 10B

1 ○ Yes 2 ○ No **Go to Question 56**

52. **When <u>decisions</u> were made in the last 12 months, how <u>often</u> did your child's doctors or other health providers <u>offer you choices</u> about your child's health care?**

C03052

See Note 9 and 10B

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always

53. **When <u>decisions</u> were made in the last 12 months, how <u>often</u> did your child's doctors or other health providers <u>discuss</u> with you the good and bad things about each of the different choices for your child's health care?**

C03053

See Note 9 and 10B

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always

54. **When <u>decisions</u> were made in the last 12 months, how <u>often</u> did your child's doctors or other health providers <u>ask you</u> to tell them what choices <u>you prefer</u>?**

C03054

See Note 9 and 10B

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always

55. **When <u>decisions</u> were made in the last 12 months, how <u>often</u> did your child's doctors or other health providers <u>involve you</u> as much as you wanted?**

C03055

See Note 9 and 10B

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always

56. **We want to know your rating of all your child's health care in the last 12 months from <u>all doctors and other health providers</u>.**

Use <u>any number from 0 to 10</u> where 0 is the worst health care possible and 10 is the best health care possible. How would you rate your child's health care?

C03056

See Note 9

0 ○ 0 Worst health care possible
1 ○ 1
2 ○ 2
3 ○ 3
4 ○ 4
5 ○ 5
6 ○ 6
7 ○ 7
8 ○ 8
9 ○ 9
10 ○ 10 Best health care possible
-6 ○ My child had no visits last 12 months.

57. **In the last 12 months, what type of facility did your child go to most often for health care? Select the facility your child used most often.**

Please mark only one answer

C03057

1 ○ A military facility - This includes: Military clinic, Military hospital, PRIMUS clinic, NAVCARE clinic
2 ○ A civilian facility - This includes: Civilian doctor's office, Civilian clinic, Hospital, Civilian TRICARE contractor
3 ○ Uniformed Services Family Plan Facility (USFHP)
-6 ○ My child went to none of the listed types of facility in the last 12 months.

58. **Is your child now enrolled in any kind of school or daycare?**

C03058 | See Note 10C

1 ○ Yes 2 ○ No **Go to Question 61**

59. In the last 12 months, did you need your child's doctors or other health providers to contact a school or daycare center about your child's health or health care?

C03059
See Note 10C

1 ○ Yes 2 ○ No **Go to Question 61**

60. In the last 12 months, did you get the help you needed from your child's doctors or other health providers in contacting your child's school or daycare?

1 ○ Yes 2 ○ No

C03060
See Note 10C

----------SPECIALIZED SERVICES----------

61. In the last 12 months, did you get or try to get any special medical equipment or devices for your child, such as a walker, wheelchair, nebulizer, feeding tubes, or oxygen equipment?

C03061 See Note 10D

1 ○ Yes 2 ○ No **Go to Question 64**

62. In the last 12 months, how much of a problem, if any, was it to get special medical equipment for your child?

C03062 See Note 10D

1 ○ A big problem
2 ○ A small problem
3 ○ Not a problem **Go to Question 64**

63. Did anyone from your child's health plan, doctor's office or clinic help you with this problem?

1 ○ Yes 2 ○ No

C03063 See Note 10D

64. In the last 12 months, did you get or try to get special therapy for your child, such as physical, occupational, or speech therapy?

C03064 See Note 10E

1 ○ Yes 2 ○ No **Go to Question 67**

65. In the last 12 months, how much of a problem, if any, was it to get special therapy for your child?

C03065
See Note 10E

1 ○ A big problem
2 ○ A small problem
3 ○ Not a problem **Go to Question 67**

66. Did anyone from your child's health plan, doctor's office or clinic help you with this problem?

1 ○ Yes 2 ○ No

C03066
See Note 10E

67. In the last 12 months, did you get or try to get treatment or counseling for your child for an emotional, developmental or behavioral problem?

C03067
See Note 10F

1 ○ Yes 2 ○ No **Go to Question 70**

68. In the last 12 months, how much of a problem, if any, was it to get this treatment or counseling for your child?

C03068
See Note 10F

1 ○ A big problem
2 ○ A small problem
3 ○ Not a problem **Go to Question 70**

69. Did anyone from your child's health plan, doctor's office or clinic help you with this problem?

1 ○ Yes 2 ○ No

C03069 See Note 10F

70. In the last 12 months, did your child get care from more than one kind of health care provider or use more than one kind of health care service?

C02070
See Note 10G

1 ○ Yes 2 ○ No **Go to Question 72**

71. In the last 12 months, did anyone from your child's health plan, doctor's office or clinic help coordinate your child's care among these different providers or services?

C03071
See Note 10G

1 ○ Yes 2 ○ No

----------YOUR CHILD'S HEALTH PLAN----------

The next questions ask about your experience with your child's health plan. Your child's health plan is the one he or she used most in the last 12 months.

72. 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 your child. In the last 12 months, did you or anyone send in any claims for your child to your child's health plan?

C03072
See Note 11

1 ○ Yes
2 ○ No **Go to Question 76**
-5 ○ Don't know **Go to Question 76**

73. **In the last 12 months, how often did your child's health plan handle your child's claims in a reasonable time?**

C03073
See Note 11

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always
-5 ○ Don't know.
-6 ○ No claims were sent to my child's health plan in the last 12 months.

74. **In the last 12 months, how often did your child's health plan handle your child's claims correctly?**

C03074
See Note 11

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always
-5 ○ Don't know.
-6 ○ No claims were sent to my child's health plan in the last 12 months.

75. **In the last 12 months, before your child went for care, how often did your child's health plan make it clear how much you would have to pay?**

C03075
See Note 11

1 ○ Never
2 ○ Sometimes
3 ○ Usually
4 ○ Always
-5 ○ Don't know.
-6 ○ No claims were sent to my child's health plan in the last 12 months.

76. **In the last 12 months, did you look for any information in written materials from your child's health plan?**

C03076
See Note 12

1 ○ Yes 2 ○ No **Go to Question 78**

77. **In the last 12 months, how much of a problem, if any, was it to find or understand information in the written materials?**

C03077
See Note 12

1 ○ A big problem
2 ○ A small problem
3 ○ Not a problem
-6 ○ I didn't look for information from my child's health plan in the last 12 months.

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

C03078
See Note 13

1 ○ Yes 2 ○ No **Go to Question 80**

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

C03079
See Note 13

1 ○ A big problem
2 ○ A small problem
3 ○ Not a problem
-6 ○ I didn't call my child's health plan's customer service in the last 12 months.

80. **In the last 12 months, have you called or written your child's health plan with a complaint or problem?**

C03080
See Note 14A

1 ○ Yes 2 ○ No **Go to Question 83**

81. **How long did it take for your child's health plan to resolve your complaint?**

C03081
See Note 14A

1 ○ Same day
2 ○ 2-7 days
3 ○ 8-14 days
4 ○ 15-21 days
5 ○ More than 21 days
6 ○ I am still waiting for it to be settled. **Go to Question 83**
-6 ○ I haven't called or written with a complaint in the last 12 months. **Go to Question 83**

82. **Was your complaint or problem settled to your satisfaction?**

C03082
See Note 14A

1 ○ Yes 2 ○ No

83. **Paperwork means things like getting your child's ID card, having your child's record changed, processing forms, or other paperwork related to getting care for your child. In the last 12 months, did you have any experiences with paperwork for your child's health plan?**

C03083
See Note 15

1 ○ Yes 2 ○ No **Go to Question 85**

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

C03084
See Note 15

1 ○ A big problem
2 ○ A small problem
3 ○ Not a problem
-6 ○ I didn't have any experience with paperwork for my child's health plan in the last 12 months.

85. **We want to know your rating of all your experience with your child's health plan.**

Use any number from 0 to 10 where 0 is the worst health plan possible, and 10 is the best health plan possible. How would you rate your child's health plan now?

0 ◯ 0 Worst health plan possible
1 ◯ 1
2 ◯ 2
3 ◯ 3
4 ◯ 4
5 ◯ 5
6 ◯ 6
7 ◯ 7
8 ◯ 8
9 ◯ 9
10 ◯ 10 Best health plan possible

C03085

----------PRESCRIPTION MEDICATIONS----------

86. **In the last 12 months, did your child get a prescription for medicine or did you refill a prescription for your child?**

1 ◯ Yes 2 ◯ No **Go to Question 89**

C03086
See Note 15A

87. **In the last 12 months, how much of a problem, if any, was it to get your child's prescription medicine?**

1 ◯ A big problem
2 ◯ A small problem
3 ◯ Not a problem **Go to Question 89**

C03087
See Note 15A

88. **Did anyone from your child's health plan, doctor's office or clinic help you with this problem?**

1 ◯ Yes 2 ◯ No

C03088
See Note 15A

----------ABOUT YOUR CHILD AND YOU----------

Information in this section will be used to study how different kinds of people view our health care system. This information will not be used to identify you personally.

89. **In general, how would you rate your child's overall health now?**

5 ◯ Excellent
4 ◯ Very Good
3 ◯ Good
2 ◯ Fair
1 ◯ Poor

C03089

90. **Does your child currently need or use medicine prescribed by a doctor (other than vitamins)?**

1 ◯ Yes 2 ◯ No **Go to Question 93**

C03090
See Note 16A

91. **Is this because of any medical, behavioral, or other health condition?**

1 ◯ Yes 2 ◯ No **Go to Question 93**

C03091
See Note 16A

92. **Is this a condition that has lasted or is expected to last for at least 12 months?**

1 ◯ Yes 2 ◯ No

C03092
See Note 16A

93. **Does your child need or use more medical care, mental health, or educational services than is usual for most children of the same age?**

1 ◯ Yes 2 ◯ No **Go to Question 96**

C03093
See Note 17A

94. **Is this because of any medical, behavioral, or other health condition?**

1 ◯ Yes 2 ◯ No **Go to Question 96**

C03094
See Note 17A

95. **Is this a condition that has lasted or is expected to last for at least 12 months?**

1 ◯ Yes 2 ◯ No

C03095
See Note 17A

96. **Is your child limited or prevented in any way in his or her ability to do the things most children of the same age can do?**

1 ◯ Yes 2 ◯ No **Go to Question 99**

C03096
See Note 18A

97. **Is this because of any medical, behavioral, or other health condition?**

C03097

1 ◯ Yes 2 ◯ No **Go to Question 99**

See Note 18A

98. **Is this a condition that has lasted or is expected to last for <u>at least 12 months</u>?**

C03098 See Note 18A

1 ◯ Yes 2 ◯ No

99. **Does your child need or get <u>special therapy</u>, such as physical, occupational, or speech therapy?**

C03099

1 ◯ Yes 2 ◯ No **Go to Question 102**

See Note 19A

100. **Is this because of any medical, behavioral, or other health condition?**

C03100

1 ◯ Yes 2 ◯ No **Go to Question 102**

See Note 19A

101. **Is this a condition that has lasted or is expected to last for <u>at least 12 months</u>?**

C03101

1 ◯ Yes 2 ◯ No

See Note 19A

102. **Does your child have any kind of emotional, developmental, or behavioral problem for which he or she needs or gets <u>treatment or counseling</u>?**

C03102

1 ◯ Yes 2 ◯ No **Go to Question 104**

See Note 20

103. **Has this problem lasted or is it expected to last for <u>at least 12 months</u>?**

C03103 See Note 20

1 ◯ Yes 2 ◯ No

104. **Is your child male or female?**

1 ◯ Male 2 ◯ Female C03104

105. **Is your child of Hispanic or Latino origin or descent?**

1 ◯ Yes, Hispanic or Latino
2 ◯ No, not Hispanic or Latino

C03105

106. **What is your child's race? PLEASE MARK ONE OR MORE.**

A ◯ White
B ◯ Black or African-American
C ◯ Asian
D ◯ Native Hawaiian or other Pacific Islander
E ◯ American Indian or Alaska Native
F ◯ Other

C03106A - C03106F

107. **What is <u>your</u> age now?**

1 ◯ Under 18
2 ◯ 18 to 24
3 ◯ 25 to 34
4 ◯ 35 to 44
5 ◯ 45 to 54
6 ◯ 55 to 64
7 ◯ 65 to 74
8 ◯ 75 or older

C03107

108. **Are you male or female?**

1 ◯ Male 2 ◯ Female C03108

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

C03109

1 ◯ 8th grade or less
2 ◯ Some high school, but did not graduate
3 ◯ High school graduate or GED
4 ◯ Some college or 2-year degree
5 ◯ 4-year college graduate
6 ◯ More than 4-year college degree

110. **How are you related to the policyholder?**

1 ◯ I am the policyholder
2 ◯ Spouse or partner of policyholder
3 ◯ Child of policyholder
4 ◯ Other family member
5 ◯ Friend
6 ◯ Someone else

C03110

111. **How are you related to the child?**

1 ◯ Mother or father
2 ◯ Grandparent
3 ◯ Aunt or uncle
4 ◯ Older sibling
5 ◯ Other relative
6 ◯ Legal guardian

C03111

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

Return your survey in the postage-paid envelope. If envelope is missing, send to: NRC/Survey Processing Center, PO BOX 82660, Lincoln, NE 68501-9465

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APPENDIX B

CHILD SURVEY FIELDING MATERIALS

Sample Notification Letter

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
HEALTH AFFAIRS

TRICARE
MANAGEMENT
ACTIVITY

June 3, 2003

#BWNHNMP
** 0075973-A12345 **
TO THE PARENT OR GUARDIAN OF
JONATHON WILKENSONS I
1245 Q ST STE 400
LINCOLN, NE 68508-1430

Dear Parent/Guardian:

We need your help! The Department of Defense (DoD) is requesting your cooperation in completing a survey of **all** children of DoD health care beneficiaries aimed at understanding and improving their health care experiences. In a few weeks, you will receive the ***Health Care Survey of DoD Beneficiaries for Children*** in the mail. The survey includes questions about the health care services your child received in the last 12 months. Your views are important to us and your opinions count. By completing the survey, you will provide important information that will help us improve the health care services for children within the entire DoD health care community. Please take advantage of this opportunity to share your child's experiences by participating in the survey.

Taking part in this survey is voluntary. Your child is among only a few beneficiaries who were randomly selected to participate. As an eligible military beneficiary, your child's benefits under TRICARE include both civilian care and care your child receives within our military facilities. **Even if your child does not recive health care services from a military facility, please still complete the survey.** All the information from the survey is private.

If your address above is incorrect, please telephone the Survey Operations Center at 1-800-866-1821 (within the U.S.) or call collect at 1-402-475-5003 (outside the U.S.) between the hours of 9:00 AM and 7:00 PM EST to give your correct address. You also can send this letter via facsimile with your correct address to 1-800-733-5751. All calls to these numbers are toll free.

Thank you for your service to our country, and thank you in advance for your help!

Sincerely,

Richard D. Guerin, Ph.D.
Director
Health Program Analysis and Evaluation

Sample First Survey Cover Letter

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
HEALTH AFFAIRS

TRICARE
MANAGEMENT
ACTIVITY

July 3, 2003

#BWNHNMP
** 0122629-A12345 **
TO THE PARENT OR GUARDIAN OF
JONATHON WILKENSONS I
1245 Q ST STE 400
LINCOLN, NE 68508-1430

Dear Parent/Guardian:

We need your help! The Department of Defense (DoD) is requesting your cooperation in completing a survey of all children of DoD health care beneficiaries aimed at understanding and improving their health care experiences. By completing the ***Health Care Survey of DoD Beneficiaries for Children***, you will provide key information that will help us improve the health care services for the children of the entire DoD health care community. Please take advantage of this opportunity to share your child's experiences by participating in the survey.

Enclosed is a survey that asks your opinions about the health care services your child received in the past 12 months. You may also complete the questionnaire on-line by connecting to **http://iquest.telesage.com/dod-ben-child**. Your personal password is **123ABC.** Your views are important to us and your opinions count. As an eligible military beneficiary, your child's benefits under TRICARE include both civilian care and care your child receives within our military facilities. **Even if your child did not receive their health care from a military facility, please still complete the survey.**

Taking part in this survey is voluntary. Your child is among only a few military beneficiaries who were randomly selected to participate. All you and your child's contact information and what you have to say are private.

We hope you will take this chance to tell us about your child's health care experience. Please return the completed survey in the enclosed postage-paid envelope within the next 7 days. If your address above is incorrect, please telephone the Survey Operations Center at 1-800-866-1821 (within the U.S.) or call collect at 1-402-475-5003 (outside the U.S.) between the hours of 9:00 AM and 7:00 PM EST to give your correct address. You also can send this letter via facsimile with your correct address to 1-800-733-5751. All calls to these numbers are toll free.

Thank you for your service to our country. Your child's experience as a military beneficiary needs to be heard. Thank you for your help.

Richard D. Guerin, Ph.D.
Director
Health Program Analysis and Evaluation

Sample Reminder/Thank You Postcard

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
HEALTH AFFAIRS
SURVEY PROCESSING CENTER
c/o NATIONAL RESEARCH CORPORATION
PO BOX 82660
LINCOLN, NE 68501

PRESORTED
1ST CLASS
U.S. POSTAGE
PAID
LINCOLN, NE
PERMIT #1116

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE $300

#BWNHNMP
** 0215941-A12345 **
TO THE PARENT OR GUARDIAN OF
JONATHON WILKENSONS I
1245 Q ST STE 400
LINCOLN, NE 68508-1430

WE NEED YOUR HELP!

HELLO!

Recently, we mailed you the *Health Care Survey of DoD Beneficiaries for Children*, a DoD-sponsored survey of all military beneficiaries. Since we have not heard from you, we would like to remind you to take advantage of this opportunity to share your opinions about your child's health care experiences by completing the survey.

Taking part in this survey is voluntary. You are among only a few military beneficiaries randomly selected to participate. As an eligible military beneficiary, your child's benefits under TRICARE include both civilian care and care your child receives within our military facilities. Even if your child did not receive their health care from a military facility, please still complete the survey. All your contact information and what you have to say is private.

If you did not receive the survey or if you need another copy, please call 1-800-866-1821 (within the U.S.) or call collect at 1-402-475-5003 (outside the U.S.). All calls to this number are free.

THANK YOU!

Richard D. Guerin, Ph.D.
Director, Health Program Analysis and Evaluation
Office of the Assistant Secretary of Defense (Health Affairs)
TRICARE Management Activity

Sample Second Survey Cover Letter

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE
HEALTH AFFAIRS

TRICARE
MANAGEMENT
ACTIVITY

August 7, 2003

#BWNHNMP
** 0169285-A12345 **
TO THE PARENT OR GUARDIAN OF
JONATHON WILKENSONS I
1245 Q ST STE 400
LINCOLN, NE 68508-1430

Dear Parent/Guardian:

We need your help! The Department of Defense (DoD) is requesting your cooperation in completing a survey of children of DoD health care beneficiaries aimed at understanding and improving your child's health care experiences. Since we have not heard from you, we would like to follow up with you about the letter and survey we recently sent you. We hope that you will take advantage of this opportunity to share your child's experience by participating in the survey. By completing the enclosed ***Health Care Survey of DoD Beneficiaries for Children***, you will provide important information that will help us improve the health care services for children of the entire DoD health care community.

Enclosed is a survey that asks your opinions about the health care services your child received in the past 12 months. You may also complete the questionnaire on-line by connecting to **http://iquest.telesage.com/dod-ben-child**. Your personal password is **123ABC**. As an eligible DoD health care beneficiary, your child's benefits under the TRICARE include both civilian care and the care your child receives within out military facilities. **Even if your child did not receive health care services from a military facility, please still complete the survey.** Your views are important to us and your opinions count.

Taking part in this survey is voluntary. Your child is among only a few DoD health care beneficiaries who were randomly selected to participate. All your contact information and what you have to say is private.

If the address above is incorrect, please telephone the Survey Operations Center at 1-800-866-1821 (within the U.S.) or call collect at 1-402-475-5003 (outside the U.S.) between the hours of 9:00 AM and 7:00 PM EST to give your correct address. You also can send this letter via facsimile with your correct address to 1-800-733-5751. All calls to these numbers are toll free.

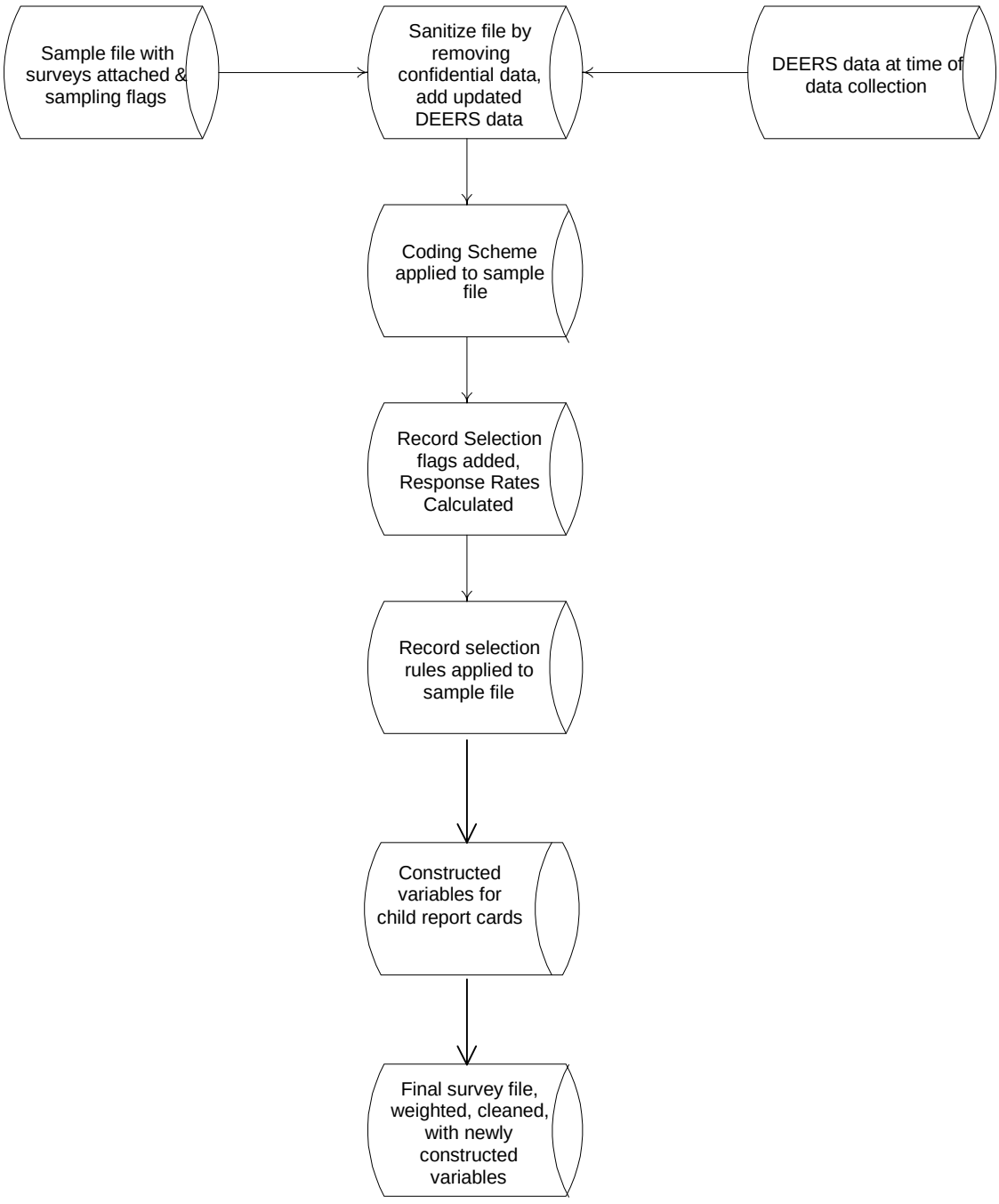
Thank you for your service to our country. Your experiences as a military beneficiary needs to be heard. Please take the time to respond.

Richard D. Guerin, Ph.D.
Director
Health Program Analysis and Evaluation

APPENDIX C

DATA PROCESSING ARCHITECTURE

DATA PROCESSING ARCHITECTURE



APPENDIX D

SAS PROC CONTENTS—ALPHABETICAL CHILD 2003

The CONTENTS Procedure

Data Set Name:	IN.HCS03C_1	Observations:	10741
Member Type:	DATA	Variables:	279
Engine:	V612	Indexes:	0
Created:	11:25 Wednesday, December 31, 2003	Observation Length:	1450
Last Modified:	11:25 Wednesday, December 31, 2003	Deleted Observations:	0
Protection:		Compressed:	YES
Data Set Type:		Reuse Space:	NO
Label:		Point to Observations:	NO
		Sorted:	NO

-----Engine/Host Dependent Information-----

Data Set Page Size:	16384
Number of Data Set Pages:	898
Number of Data Set Repairs:	0
File Name:	\\Dod2\files\DOD\Q3_2003\DATA\CFINAL\hcs03c_1.sd2
Release Created:	6.08.00
Host Created:	WIN

-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Format	Informat	Label
217	ADJWT	Num	8	946			Adjusted Weight
5	AGESMPL	Num	8	23	AGESMPL.		AGESMPL - Age
6	BGCSMPL	Num	8	31	XBGC_S.		BGCSMPL - Beneficiary Group
214	BWT	Num	8	927			BWT - Basic Sampling Weight
35	C03001	Num	4	129	CYN2_.	11.	Are you adult responsible for child
36	C03002	Num	4	133	CPLAN1_.	11.	Which hlth plan did you use most
37	C03003	Num	4	137	CENROLL.	11.	Past 12 mos,# mos in a row cvrd w/Pln
47	C03005	Num	4	177	CYN2_.	11.	Did child get new personal Dr/Nurse
48	C03006	Num	4	181	CPROB8_.	11.	How much prblem to get personal Dr/Nurse
49	C03007	Num	4	185	CYN2_.	11.	Does child have personal Dr/Nurse
50	C03008	Num	4	189	CTIMES.	11.	Num times child went Dr/Nurses last 12mo
51	C03009	Num	4	193	CYN2_.	11.	Talk about feeling/growing/behaving
52	C03010	Num	4	197	CYN2_.	11.	Chld has medical/behavr/oth health cndtn
53	C03011	Num	4	201	CYN2_.	11.	Dr undrstnds med/beh/oth affct chld life
54	C03012	Num	4	205	CYN2_.	11.	Dr undrstnds med/beh/oth affct fmly life
55	C03013	Num	4	209	CRATE1_.	11.	Rating of childs personal Dr/Nurse
56	C03014	Num	4	213	CYN3_.	11.	Does child have primary care manager
57	C03015	Num	4	217	CYN6_.	11.	Know name of childs Primary care mgr
58	C03016	Num	4	221	CPROB2_.	11.	In last 12 mos how much prblm to see PCM
59	C03017	Num	4	225	CWORK.	11.	Is primary care mgr military or civilian
60	C03018	Num	4	229	CYN2_.	11.	Did you think child needed to see spclst
61	C03019	Num	4	233	CPROB3_.	11.	How much prblm to get referral to spclst
62	C03020	Num	4	237	CYN2_.	11.	In last 12 mos did child see specialist
63	C03021	Num	4	241	CRATE2_.	11.	Rating of specialist seen most often
64	C03022	Num	4	245	CYN4_.	11.	Specialist same as personal Dr
65	C03023	Num	4	249	CYN2_.	11.	Call during reg. Hrs to get help/advice
66	C03024	Num	4	253	COFTN2_.	11.	Called during reg Hrs did you get hlp
67	C03025	Num	4	257	CYN2_.	11.	Make appt for regular/routine hlthcre
68	C03026	Num	4	261	COFTN3_.	11.	How oftn get appt for care soon as wnted
69	C03027	Num	4	265	CDAYS1_.	11.	Wait btwn mking appt and seeing provider
70	C03028	Num	4	269	CYN2_.	11.	Appointment for well-patient care
71	C03029	Num	4	273	COFTN5_.	11.	Get appt for well-patient care
72	C03030	Num	4	277	CLONG.	11.	Wait to see provider for well-patnt care
73	C03031	Num	4	281	CYN2_.	11.	Have illness/injury need care right away
74	C03032	Num	4	285	COFTN4_.	11.	Get needed care as soon as wanted
75	C03033	Num	4	289	CDAYS3_.	11.	Wait btwn trying to & seeing provider
76	C03034	Num	4	293	CTIMES.	11.	Times to ER
77	C03035	Num	4	297	CDOCCLIN.	11.	Times to Dr office/Clinic (excluding ER)
78	C03036	Num	4	301	CPROB4_.	11.	Problem to get necessary care
79	C03037	Num	4	305	CPROB4_.	11.	Problem wait for approval
80	C03038	Num	4	309	COFTN6_.	11.	How oftn wait >15 mins
81	C03039	Num	4	313	COFTN6_.	11.	How oftn staff treat w/courtesy &respect
82	C03040	Num	4	317	COFTN6_.	11.	How oftn were staff helpful
83	C03041	Num	4	321	COFTN6_.	11.	How oftn did staff listen carefully
84	C03042	Num	4	325	COFTN6_.	11.	How oftn did staff explain things to you

The CONTENTS Procedure

-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Format	Informat	Label
85	C03043	Num	4	329	COFTN6_.	11.	How oftn staff respect what had to say
86	C03044	Num	4	333	CYN2_.	11.	Child able to talk to Dr
87	C03045	Num	4	337	COFTN7_.	11.	Dr explain in way for child to undrstnd
88	C03046	Num	4	341	COFTN7_.	11.	How oftn spend enough time w/child
89	C03047	Num	4	345	CYN2_.	11.	Questions/concerns about chlds hlth/care
90	C03048	Num	4	349	COFTN9_.	11.	How oftn Dr make it easy discuss cncrns
91	C03049	Num	4	353	COFTN9_.	11.	How oftn get specific info from Dr
92	C03050	Num	4	357	COFTN9_.	11.	How oftn your questions answered by Dr
93	C03051	Num	4	361	CYN2_.	11.	Last 12 mos, chlds hlthcr decsns made
94	C03052	Num	4	365	COFTN9_.	11.	How oftn Dr offer choices chlds hlthcr
95	C03053	Num	4	369	COFTN9_.	11.	How oftn Dr dscss gd/bad chld hlthcr cho
96	C03054	Num	4	373	COFTN9_.	11.	How oftn Dr ask for choice preference
97	C03055	Num	4	377	COFTN9_.	11.	How oftn Dr involve you as much as wntd
98	C03056	Num	4	381	CRATE3_.	11.	Rating of childs healthcare
99	C03057	Num	4	385	CTYPE.	11.	Type of facility child used most often
100	C03058	Num	4	389	CYN2_.	11.	Child enrolled in school/daycare
101	C03059	Num	4	393	CYN2_.	11.	Need Dr to contact school/daycare
102	C03060	Num	4	397	CYN2_.	11.	Get help from Dr to contact schl/dycr
103	C03061	Num	4	401	CYN2_.	11.	Get spcial med equipmnt for child
104	C03062	Num	4	405	CPROB8_.	11.	Problem get spcial med equip/devices
105	C03063	Num	4	409	CYN2_.	11.	Help get spcial med equip/dev
106	C03064	Num	4	413	CYN2_.	11.	Try special therapy for child
107	C03065	Num	4	417	CPROB8_.	11.	Problem get special therapy
108	C03066	Num	4	421	CYN2_.	11.	Help get spcial therapy
109	C03067	Num	4	425	CYN2_.	11.	Get treatmnt emotnl/dvlop/behav prob
110	C03068	Num	4	429	CPROB8_.	11.	Problem get treatmnt emotnl/devel/behav
111	C03069	Num	4	433	CYN2_.	11.	Help get treatmnt emotnl/devel/behav pro
112	C03070	Num	4	437	CYN2_.	11.	Use more thn one kind prvder/hlth srvice
113	C03071	Num	4	441	CYN2_.	11.	Anyone help coordinate childs care
114	C03072	Num	4	445	CYN1_.	11.	Send in any claims
115	C03073	Num	4	449	COFTN8_.	11.	Handle claim in reasonable time
116	C03074	Num	4	453	COFTN8_.	11.	Handle claim correctly
117	C03075	Num	4	457	COFTN8_.	11.	Plan make clear how much to pay
118	C03076	Num	4	461	CYN2_.	11.	Look for info/written material
119	C03077	Num	4	465	CPROB5_.	11.	Find/understand info in written material
120	C03078	Num	4	469	CYN2_.	11.	Call customer service to get info
121	C03079	Num	4	473	CPROB6_.	11.	Problem get help when call customer svc
122	C03080	Num	4	477	CYN2_.	11.	Called/written plan with complaint
123	C03081	Num	4	481	CSOLVE2_.	11.	How long to resolve complaint
124	C03082	Num	4	485	CYN2_.	11.	Complaint/problem settled to satisfction
125	C03083	Num	4	489	CYN2_.	11.	Experience with paperwork
126	C03084	Num	4	493	CPROB7_.	11.	Problem with paperwork
127	C03085	Num	4	497	CRATE4_.	11.	Rating of exprience with child hlth plan
128	C03086	Num	4	501	CYN2_.	11.	Get prescription/refill
129	C03087	Num	4	505	CPROB8_.	11.	Problem prescription/refill
130	C03088	Num	4	509	CYN2_.	11.	Help get prescription/refill
131	C03089	Num	4	513	CHEALTH.	11.	Rate child overall health
132	C03090	Num	4	517	CYN2_.	11.	Child use medicine prescribed by Dr
133	C03091	Num	4	521	CYN2_.	11.	Medicine b/c medical,behavioral,other
134	C03092	Num	4	525	CYN2_.	11.	Medicine b/c cndtn expected last>=12 mos
135	C03093	Num	4	529	CYN2_.	11.	Mre medical,mntl,education svcs thn usua
136	C03094	Num	4	533	CYN2_.	11.	Use svcs b/c medical, behavioral, oth
137	C03095	Num	4	537	CYN2_.	11.	Svcs b/c condition expected last>=12 mos
138	C03096	Num	4	541	CYN2_.	11.	Limited/prevented in ability
139	C03097	Num	4	545	CYN2_.	11.	Limited b/c medical, behavioral, other
140	C03098	Num	4	549	CYN2_.	11.	Limited b/c condition expected last>=1yr
141	C03099	Num	4	553	CYN2_.	11.	Get special therapy
142	C03100	Num	4	557	CYN2_.	11.	Therapy b/c medical, behavioral, other
143	C03101	Num	4	561	CYN2_.	11.	Therapy b/c condition expected last>=1yr
144	C03102	Num	4	565	CYN2_.	11.	Problem for which gets trtmnt/counseling
145	C03103	Num	4	569	CYN2_.	11.	Trtmnt/counseling b/c conditn last>=1yr
146	C03104	Num	4	573	CSEX.	11.	Is child male or female
147	C03105	Num	4	577	CHISP.	11.	Is child Hispanic/Latino
154	C03107	Num	4	605	CAGE2_.	11.	Your age now
155	C03108	Num	4	609	CSEX.	11.	Are you male or female
156	C03109	Num	4	613	CRELEDU.	11.	Highest grade/level you completed

The CONTENTS Procedure

-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Format	Informat	Label
157	C03110	Num	4	617	CRELPOL.	11.	How related to policyholder
158	C03111	Num	4	621	CRELATEB.	11.	How related to child
38	C03004A	Num	4	141	CMARK.	11.	Child covered by TRICARE Prime
39	C03004B	Num	4	145	CMARK.	11.	Child covered by TRICARE Extra/Standard
40	C03004C	Num	4	149	CMARK.	11.	Child covered by Civilian HMO
41	C03004D	Num	4	153	CMARK.	11.	Child covered by Other Civilian Ins.
42	C03004E	Num	4	157	CMARK.	11.	Child covered by Medicaid
43	C03004F	Num	4	161	CMARK.	11.	Child covered by USFP
44	C03004G	Num	4	165	CMARK.	11.	Child covered by Federal Employee Health
45	C03004H	Num	4	169	CMARK.		Not Sure Child used health pln last 12mo
46	C03004I	Num	4	173	CMARK.		Child did not use health pln last 12mos
148	C03106A	Num	4	581	CMARK.	11.	Child race:White
149	C03106B	Num	4	585	CMARK.	11.	Child race:Black
150	C03106C	Num	4	589	CMARK.	11.	Child race:Asian
151	C03106D	Num	4	593	CMARK.	11.	Child race:Native Hawaiian/Pacific Islnd
152	C03106E	Num	4	597	CMARK.	11.	Child race:Am. Indian/Alaskan
153	C03106F	Num	4	601	CMARK.	11.	Child race:Other
200	CONUS	Num	3	820	CONUSMHS.		CONUS - CONUS/OCONUS Indicator
16	DAGEQY	Char	3	62			Age (As of 28 February 2003)
22	DBENCAT	Char	3	75	$BENCAT.		Beneficiary Category
28	DCATCH	Char	4	92			Catchment Area
30	DHSRGN	Char	2	100	$DHSRGN.		Health Service Region
23	DMEDELG	Char	1	78	$MEDELG.		Medical Privlege Code
24	DSPONSVC	Char	1	79	$SPONSVC.		Derived Sponsor Branch of Service
160	DUPFLAG	Char	3	629			Multiple Response Indicator
11	E1	Char	1	57			Eligibility indicator for period = 1
12	E2	Char	1	58			Eligibility indicator for period = 2
13	E3	Char	1	59			Eligibility indicator for period = 3
8	ENBGSMPL	Char	2	44	$ENBGS.		Enrollment by beneficiary category
31	ENLSMPL	Num	8	102	ENLSMP.		ENLSMPL - Enrollment Sampling Group
27	ENRID	Char	4	88			Enrollment DMISID
17	FIELDAGE	Char	3	65			Age as of July 1st 2003
159	FLAG_FIN	Char	4	625	$FINAL.	$8.	Final Disposition
32	FNSTATUS	Num	8	110	FNSTATS.		Final Status
209	KBGPRB1	Num	8	887	HAYNN.		Big problem getting referrals to spclst
210	KBGPRB2	Num	8	895	HAYNN.		Big problem getting necessary care
213	KCIVINS	Num	8	919	HAYNN2_.		Beneficiary covered by civilian insuranc
208	KCIVOFFC	Num	8	879	HAYNN.		Office wait of >15 min-Civ
212	KCIVOP	Num	8	911	CTIMES.		Outpatient visits to Civilian facility
206	KCIVWAT1	Num	8	863	HAYNN.		Wait <=4 wks for well patient visit-Civ
33	KEYCOUNT	Num	8	118			# of Key Questions Answered
207	KMILOFFC	Num	8	871	HAYNN.		Office wait of >15 min-Mil
211	KMILOP	Num	8	903	CTIMES.		Outpatient visits to Military facility
205	KMILWAT1	Num	8	855	HAYNN.		Wait <=4 wks for well patient visit-Mil
19	LEGDDSCD	Char	2	71	$DDSFMT.		DDS Code
21	MBRRELCD	Char	1	74	$MBRREL.		Member Relationship Code
25	MEDTYPE	Char	1	80	$MEDTYP.		Medicare Type
192	MISS_1	Num	8	756	HAMISS.		Count of: Violates Skip Pattern
193	MISS_4	Num	8	764	HAMISS.		Count of: Incomplete grid error
194	MISS_5	Num	8	772	HAMISS.		Count of: Dont know or not sure
195	MISS_6	Num	8	780	HAMISS.		Count of: Not applicable - valid skip
196	MISS_7	Num	8	788	HAMISS.		Count of: Out-of-range error
197	MISS_8	Num	8	796	HAMISS.		Count of: Multiple response error
198	MISS_9	Num	8	804	HAMISS.		Count of: No response - invalid skip
199	MISS_TOT	Num	8	812	HAMISS.		Total number of missing responses
2	MPCSMPL	Num	5	8	MPCSMPL.		MPCSMPL - Military Personnel Category
1	MPRID	Char	8	0	$42.	$42.	Unique MPR Identifier
14	MRTLSTAT	Char	1	60	$MSTATUS.		Marital Status
162	N2	Num	4	636			Coding Scheme Note 2
165	N3	Num	4	648			Coding Scheme Note 3
168	N5	Num	4	660			Coding Scheme Note 5
169	N6	Num	4	664			Coding Scheme Note 6
170	N7	Num	4	668			Coding Scheme Note 7
171	N8	Num	4	672			Coding scheme Note 8
172	N9	Num	4	676			Coding scheme Note 9
173	N10	Num	4	680			Coding Scheme Note 10

The CONTENTS Procedure

-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Format	Informat	Label
181	N11	Num	4	712			Coding Scheme Note 11
182	N12	Num	4	716			Coding Scheme Note 12
183	N13	Num	4	720			Coding Scheme Note 13
185	N15	Num	4	728			Coding Scheme Note 15
191	N20	Num	4	752			Coding Scheme Note 20
174	N10A	Num	4	684			Coding Scheme Note 10A
175	N10B	Num	4	688			Coding Scheme Note 10B
176	N10C	Num	4	692			Coding Scheme Note 10C
177	N10D	Num	4	696			Coding Scheme Note 10D
178	N10E	Num	4	700			Coding Scheme Note 10E
179	N10F	Num	4	704			Coding Scheme Note 10F
180	N10G	Num	4	708			Coding Scheme Note 10G
184	N14A	Num	4	724			Coding Scheme Note 14A
186	N15A	Num	4	732			Coding Scheme Note 15A
187	N16A	Num	4	736			Coding Scheme Note 16A
188	N17A	Num	4	740			Coding Scheme Note 17A
189	N18A	Num	4	744			Coding Scheme Note 18A
190	N19A	Num	4	748			Coding Scheme Note 19A
161	N1A	Num	4	632			Coding Scheme Note 1A
163	N2A	Num	4	640			Coding Scheme Note 2A
164	N2B	Num	4	644			Coding Scheme Note 2B
166	N4A	Num	4	652			Coding Scheme Note 4A
167	N4B	Num	4	656			Coding Scheme Note 4B
216	ONTIME	Char	3	943	$3.	$3.	On time indicator
26	PATCAT	Char	7	81	$AGGBCAT.		Aggregated Beneficiary Category
18	PCM	Char	3	68	$PCM.		Primary Manager Code (CIV or MIL)
20	PNLCATCD	Char	1	73	$PNLCAT.		Personnel Category Code (Duty Status)
218	POP	Num	8	954			DEERS population by CELLNAME for weights
34	POSTSTR	Char	3	126			Post Stratification Cell
15	RACEETHN	Char	1	61	$RACECD.		Race/Ethnic Code
7	REGSMPL	Num	5	39	CREGSMPL.		REGSMPL - Region
4	SEXSMPL	Num	5	18	HASEX.		SEXSMPL - Sex
9	STRATUM	Char	3	46			Sampling STRATUM
10	SUPREG	Num	8	49	SUPERREG.		SUPREG - Super Region
3	SVCSMPL	Num	5	13	SVCSMPL.		SVCSMPL - Branch of Service
29	ULOCDMIS	Char	4	96			Unit DMISID
215	WEB	Num	8	935	WEB.	8.	Web/mail-out survey indicator
219	WRWT	Num	8	962			Final Weight
220	WRWT1	Num	8	970			Replicated/JackKnife Weight 1
221	WRWT2	Num	8	978			Replicated/JackKnife Weight 2
222	WRWT3	Num	8	986			Replicated/JackKnife Weight 3
223	WRWT4	Num	8	994			Replicated/JackKnife Weight 4
224	WRWT5	Num	8	1002			Replicated/JackKnife Weight 5
225	WRWT6	Num	8	1010			Replicated/JackKnife Weight 6
226	WRWT7	Num	8	1018			Replicated/JackKnife Weight 7
227	WRWT8	Num	8	1026			Replicated/JackKnife Weight 8
228	WRWT9	Num	8	1034			Replicated/JackKnife Weight 9
229	WRWT10	Num	8	1042			Replicated/JackKnife Weight 10
230	WRWT11	Num	8	1050			Replicated/JackKnife Weight 11
231	WRWT12	Num	8	1058			Replicated/JackKnife Weight 12
232	WRWT13	Num	8	1066			Replicated/JackKnife Weight 13
233	WRWT14	Num	8	1074			Replicated/JackKnife Weight 14
234	WRWT15	Num	8	1082			Replicated/JackKnife Weight 15
235	WRWT16	Num	8	1090			Replicated/JackKnife Weight 16
236	WRWT17	Num	8	1098			Replicated/JackKnife Weight 17
237	WRWT18	Num	8	1106			Replicated/JackKnife Weight 18
238	WRWT19	Num	8	1114			Replicated/JackKnife Weight 19
239	WRWT20	Num	8	1122			Replicated/JackKnife Weight 20
240	WRWT21	Num	8	1130			Replicated/JackKnife Weight 21
241	WRWT22	Num	8	1138			Replicated/JackKnife Weight 22
242	WRWT23	Num	8	1146			Replicated/JackKnife Weight 23
243	WRWT24	Num	8	1154			Replicated/JackKnife Weight 24
244	WRWT25	Num	8	1162			Replicated/JackKnife Weight 25
245	WRWT26	Num	8	1170			Replicated/JackKnife Weight 26
246	WRWT27	Num	8	1178			Replicated/JackKnife Weight 27
247	WRWT28	Num	8	1186			Replicated/JackKnife Weight 28

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-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Format	Informat	Label
248	WRWT29	Num	8	1194			Replicated/JackKnife Weight 29
249	WRWT30	Num	8	1202			Replicated/JackKnife Weight 30
250	WRWT31	Num	8	1210			Replicated/JackKnife Weight 31
251	WRWT32	Num	8	1218			Replicated/JackKnife Weight 32
252	WRWT33	Num	8	1226			Replicated/JackKnife Weight 33
253	WRWT34	Num	8	1234			Replicated/JackKnife Weight 34
254	WRWT35	Num	8	1242			Replicated/JackKnife Weight 35
255	WRWT36	Num	8	1250			Replicated/JackKnife Weight 36
256	WRWT37	Num	8	1258			Replicated/JackKnife Weight 37
257	WRWT38	Num	8	1266			Replicated/JackKnife Weight 38
258	WRWT39	Num	8	1274			Replicated/JackKnife Weight 39
259	WRWT40	Num	8	1282			Replicated/JackKnife Weight 40
260	WRWT41	Num	8	1290			Replicated/JackKnife Weight 41
261	WRWT42	Num	8	1298			Replicated/JackKnife Weight 42
262	WRWT43	Num	8	1306			Replicated/JackKnife Weight 43
263	WRWT44	Num	8	1314			Replicated/JackKnife Weight 44
264	WRWT45	Num	8	1322			Replicated/JackKnife Weight 45
265	WRWT46	Num	8	1330			Replicated/JackKnife Weight 46
266	WRWT47	Num	8	1338			Replicated/JackKnife Weight 47
267	WRWT48	Num	8	1346			Replicated/JackKnife Weight 48
268	WRWT49	Num	8	1354			Replicated/JackKnife Weight 49
269	WRWT50	Num	8	1362			Replicated/JackKnife Weight 50
270	WRWT51	Num	8	1370			Replicated/JackKnife Weight 51
271	WRWT52	Num	8	1378			Replicated/JackKnife Weight 52
272	WRWT53	Num	8	1386			Replicated/JackKnife Weight 53
273	WRWT54	Num	8	1394			Replicated/JackKnife Weight 54
274	WRWT55	Num	8	1402			Replicated/JackKnife Weight 55
275	WRWT56	Num	8	1410			Replicated/JackKnife Weight 56
276	WRWT57	Num	8	1418			Replicated/JackKnife Weight 57
277	WRWT58	Num	8	1426			Replicated/JackKnife Weight 58
278	WRWT59	Num	8	1434			Replicated/JackKnife Weight 59
279	WRWT60	Num	8	1442			Replicated/JackKnife Weight 60
204	XBNFGRP	Num	8	847	XBGC_S.		Constructed Beneficiary Group
201	XENRLLMT	Num	8	823	ENROLL.		Enrollment in TRICARE Prime
202	XENR_PCM	Num	8	831	PCM.		Enrollment by PCM type
203	XINS_COV	Num	8	839	INSURE.		Insurance Coverage

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APPENDIX E

SAS PROC CONTENTS—POSITIONAL CHILD 2003

The CONTENTS Procedure

Data Set Name:	IN.HCS03C_1	Observations:	10741
Member Type:	DATA	Variables:	279
Engine:	V612	Indexes:	0
Created:	11:25 Wednesday, December 31, 2003	Observation Length:	1450
Last Modified:	11:25 Wednesday, December 31, 2003	Deleted Observations:	0
Protection:		Compressed:	YES
Data Set Type:		Reuse Space:	NO
Label:		Point to Observations:	NO
		Sorted:	NO

-----Engine/Host Dependent Information-----

Data Set Page Size:	16384
Number of Data Set Pages:	898
Number of Data Set Repairs:	0
File Name:	\\Dod2\files\DOD\Q3_2003\DATA\CFINAL\hcs03c_1.sd2
Release Created:	6.08.00
Host Created:	WIN

-----Variables Ordered by Position-----

#	Variable	Type	Len	Pos	Format	Informat	Label
1	MPRID	Char	8	0	$42.	$42.	Unique MPR Identifier
2	MPCSMPL	Num	5	8	MPCSMPL.		MPCSMPL - Military Personnel Category
3	SVCSMPL	Num	5	13	SVCSMPL.		SVCSMPL - Branch of Service
4	SEXSMPL	Num	5	18	HASEX.		SEXSMPL - Sex
5	AGESMPL	Num	8	23	AGESMPL.		AGESMPL - Age
6	BGCSMPL	Num	8	31	XBGC_S.		BGCSMPL - Beneficiary Group
7	REGSMPL	Num	5	39	CREGSMPL.		REGSMPL - Region
8	ENBGSMPL	Char	2	44	$ENBGS.		Enrollment by beneficiary category
9	STRATUM	Char	3	46			Sampling STRATUM
10	SUPREG	Num	8	49	SUPERREG.		SUPREG - Super Region
11	E1	Char	1	57			Eligibility indicator for period = 1
12	E2	Char	1	58			Eligibility indicator for period = 2
13	E3	Char	1	59			Eligibility indicator for period = 3
14	MRTLSTAT	Char	1	60	$MSTATUS.		Marital Status
15	RACEETHN	Char	1	61	$RACECD.		Race/Ethnic Code
16	DAGEQY	Char	3	62			Age (As of 28 February 2003)
17	FIELDAGE	Char	3	65			Age as of July 1st 2003
18	PCM	Char	3	68	$PCM.		Primary Manager Code (CIV or MIL)
19	LEGDDSCD	Char	2	71	$DDSFMT.		DDS Code
20	PNLCATCD	Char	1	73	$PNLCAT.		Personnel Category Code (Duty Status)
21	MBRRELCD	Char	1	74	$MBRREL.		Member Relationship Code
22	DBENCAT	Char	3	75	$BENCAT.		Beneficiary Category
23	DMEDELG	Char	1	78	$MEDELG.		Medical Privlege Code
24	DSPONSVC	Char	1	79	$SPONSVC.		Derived Sponsor Branch of Service
25	MEDTYPE	Char	1	80	$MEDTYP.		Medicare Type
26	PATCAT	Char	7	81	$AGGBCAT.		Aggregated Beneficiary Category
27	ENRID	Char	4	88			Enrollment DMISID
28	DCATCH	Char	4	92			Catchment Area
29	ULOCDMIS	Char	4	96			Unit DMISID
30	DHSRGN	Char	2	100	$DHSRGN.		Health Service Region
31	ENLSMPL	Num	8	102	ENLSMP.		ENLSMPL - Enrollment Sampling Group
32	FNSTATUS	Num	8	110	FNSTATS.		Final Status
33	KEYCOUNT	Num	8	118			# of Key Questions Answered
34	POSTSTR	Char	3	126			Post Stratification Cell
35	C03001	Num	4	129	CYN2_.	11.	Are you adult responsible for child
36	C03002	Num	4	133	CPLAN1_.	11.	Which hlth plan did you use most
37	C03003	Num	4	137	CENROLL.	11.	Past 12 mos,# mos in a row cvrd w/Pln
38	C03004A	Num	4	141	CMARK.	11.	Child covered by TRICARE Prime
39	C03004B	Num	4	145	CMARK.	11.	Child covered by TRICARE Extra/Standard
40	C03004C	Num	4	149	CMARK.	11.	Child covered by Civilian HMO
41	C03004D	Num	4	153	CMARK.	11.	Child covered by Other Civilian Ins.
42	C03004E	Num	4	157	CMARK.	11.	Child covered by Medicaid
43	C03004F	Num	4	161	CMARK.	11.	Child covered by USFP
44	C03004G	Num	4	165	CMARK.	11.	Child covered by Federal Employee Health
45	C03004H	Num	4	169	CMARK.		Not Sure Child used health pln last 12mo

The CONTENTS Procedure

-----Variables Ordered by Position-----

#	Variable	Type	Len	Pos	Format	Informat	Label
46	C03004I	Num	4	173	CMARK.		Child did not use health pln last 12mos
47	C03005	Num	4	177	CYN2_.	11.	Did child get new personal Dr/Nurse
48	C03006	Num	4	181	CPROB8_.	11.	How much prblem to get personal Dr/Nurse
49	C03007	Num	4	185	CYN2_.	11.	Does child have personal Dr/Nurse
50	C03008	Num	4	189	CTIMES.	11.	Num times child went Dr/Nurses last 12mo
51	C03009	Num	4	193	CYN2_.	11.	Talk about feeling/growing/behaving
52	C03010	Num	4	197	CYN2_.	11.	Chld has medical/behavr/oth health cndtn
53	C03011	Num	4	201	CYN2_.	11.	Dr undrstnds med/beh/oth affct chld life
54	C03012	Num	4	205	CYN2_.	11.	Dr undrstnds med/beh/oth affct fmly life
55	C03013	Num	4	209	CRATE1_.	11.	Rating of childs personal Dr/Nurse
56	C03014	Num	4	213	CYN3_.	11.	Does child have primary care manager
57	C03015	Num	4	217	CYN6_.	11.	Know name of childs Primary care mgr
58	C03016	Num	4	221	CPROB2_.	11.	In last 12 mos how much prblm to see PCM
59	C03017	Num	4	225	CWORK.	11.	Is primary care mgr military or civilian
60	C03018	Num	4	229	CYN2_.	11.	Did you think child needed to see spclst
61	C03019	Num	4	233	CPROB3_.	11.	How much prblm to get referral to spclst
62	C03020	Num	4	237	CYN2_.	11.	In last 12 mos did child see specialist
63	C03021	Num	4	241	CRATE2_.	11.	Rating of specialist seen most often
64	C03022	Num	4	245	CYN4_.	11.	Specialist same as personal Dr
65	C03023	Num	4	249	CYN2_.	11.	Call during reg. Hrs to get help/advice
66	C03024	Num	4	253	COFTN2_.	11.	Called during reg Hrs did you get hlp
67	C03025	Num	4	257	CYN2_.	11.	Make appt for regular/routine hlthcre
68	C03026	Num	4	261	COFTN3_.	11.	How oftn get appt for care soon as wnted
69	C03027	Num	4	265	CDAYS1_.	11.	Wait btwn mking appt and seeing provider
70	C03028	Num	4	269	CYN2_.	11.	Appointment for well-patient care
71	C03029	Num	4	273	COFTN5_.	11.	Get appt for well-patient care
72	C03030	Num	4	277	CLONG.	11.	Wait to see provider for well-patnt care
73	C03031	Num	4	281	CYN2_.	11.	Have illness/injury need care right away
74	C03032	Num	4	285	COFTN4_.	11.	Get needed care as soon as wanted
75	C03033	Num	4	289	CDAYS3_.	11.	Wait btwn trying to & seeing provider
76	C03034	Num	4	293	CTIMES.	11.	Times to ER
77	C03035	Num	4	297	CDOCCLIN.	11.	Times to Dr office/Clinic (excluding ER)
78	C03036	Num	4	301	CPROB4_.	11.	Problem to get necessary care
79	C03037	Num	4	305	CPROB4_.	11.	Problem wait for approval
80	C03038	Num	4	309	COFTN6_.	11.	How oftn wait >15 mins
81	C03039	Num	4	313	COFTN6_.	11.	How oftn staff treat w/courtesy &respect
82	C03040	Num	4	317	COFTN6_.	11.	How oftn were staff helpful
83	C03041	Num	4	321	COFTN6_.	11.	How oftn did staff listen carefully
84	C03042	Num	4	325	COFTN6_.	11.	How oftn did staff explain things to you
85	C03043	Num	4	329	COFTN6_.	11.	How oftn staff respect what had to say
86	C03044	Num	4	333	CYN2_.	11.	Child able to talk to Dr
87	C03045	Num	4	337	COFTN7_.	11.	Dr explain in way for child to undrstnd
88	C03046	Num	4	341	COFTN7_.	11.	How oftn spend enough time w/child
89	C03047	Num	4	345	CYN2_.	11.	Questions/concerns about chlds hlth/care
90	C03048	Num	4	349	COFTN9_.	11.	How oftn Dr make it easy discuss cncrns
91	C03049	Num	4	353	COFTN9_.	11.	How oftn get specific info from Dr
92	C03050	Num	4	357	COFTN9_.	11.	How oftn your questions answered by Dr
93	C03051	Num	4	361	CYN2_.	11.	Last 12 mos, chlds hlthcr decsns made
94	C03052	Num	4	365	COFTN9_.	11.	How oftn Dr offer choices chlds hlthcr
95	C03053	Num	4	369	COFTN9_.	11.	How oftn Dr dscss gd/bad chld hlthcr cho
96	C03054	Num	4	373	COFTN9_.	11.	How oftn Dr ask for choice preference
97	C03055	Num	4	377	COFTN9_.	11.	How oftn Dr involve you as much as wntd
98	C03056	Num	4	381	CRATE3_.	11.	Rating of childs healthcare
99	C03057	Num	4	385	CTYPE.	11.	Type of facility child used most often
100	C03058	Num	4	389	CYN2_.	11.	Child enrolled in school/daycare
101	C03059	Num	4	393	CYN2_.	11.	Need Dr to contact school/daycare
102	C03060	Num	4	397	CYN2_.	11.	Get help from Dr to contact schl/dycr
103	C03061	Num	4	401	CYN2_.	11.	Get spcial med equipmnt for child
104	C03062	Num	4	405	CPROB8_.	11.	Problem get spcial med equip/devices
105	C03063	Num	4	409	CYN2_.	11.	Help get spcial med equip/dev
106	C03064	Num	4	413	CYN2_.	11.	Try special therapy for child
107	C03065	Num	4	417	CPROB8_.	11.	Problem get special therapy
108	C03066	Num	4	421	CYN2_.	11.	Help get spcial therapy
109	C03067	Num	4	425	CYN2_.	11.	Get treatmnt emotnl/dvlop/behav prob
110	C03068	Num	4	429	CPROB8_.	11.	Problem get treatmnt emotnl/devel/behav
111	C03069	Num	4	433	CYN2_.	11.	Help get treatmnt emotnl/devel/behav pro

The CONTENTS Procedure

-----Variables Ordered by Position-----

#	Variable	Type	Len	Pos	Format	Informat	Label
112	C03070	Num	4	437	CYN2_.	11.	Use more thn one kind prvder/hlth srvice
113	C03071	Num	4	441	CYN2_.	11.	Anyone help coordinate childs care
114	C03072	Num	4	445	CYN1_.	11.	Send in any claims
115	C03073	Num	4	449	COFTN8_.	11.	Handle claim in reasonable time
116	C03074	Num	4	453	COFTN8_.	11.	Handle claim correctly
117	C03075	Num	4	457	COFTN8_.	11.	Plan make clear how much to pay
118	C03076	Num	4	461	CYN2_.	11.	Look for info/written material
119	C03077	Num	4	465	CPROB5_.	11.	Find/understand info in written material
120	C03078	Num	4	469	CYN2_.	11.	Call customer service to get info
121	C03079	Num	4	473	CPROB6_.	11.	Problem get help when call customer svc
122	C03080	Num	4	477	CYN2_.	11.	Called/written plan with complaint
123	C03081	Num	4	481	CSOLVE2_.	11.	How long to resolve complaint
124	C03082	Num	4	485	CYN2_.	11.	Complaint/problem settled to satisfction
125	C03083	Num	4	489	CYN2_.	11.	Experience with paperwork
126	C03084	Num	4	493	CPROB7_.	11.	Problem with paperwork
127	C03085	Num	4	497	CRATE4_.	11.	Rating of exprience with child hlth plan
128	C03086	Num	4	501	CYN2_.	11.	Get prescription/refill
129	C03087	Num	4	505	CPROB8_.	11.	Problem prescription/refill
130	C03088	Num	4	509	CYN2_.	11.	Help get prescription/refill
131	C03089	Num	4	513	CHEALTH.	11.	Rate child overall health
132	C03090	Num	4	517	CYN2_.	11.	Child use medicine prescribed by Dr
133	C03091	Num	4	521	CYN2_.	11.	Medicine b/c medical,behavioral,other
134	C03092	Num	4	525	CYN2_.	11.	Medicine b/c cndtn expected last>=12 mos
135	C03093	Num	4	529	CYN2_.	11.	Mre medical,mntl,education svcs thn usua
136	C03094	Num	4	533	CYN2_.	11.	Use svcs b/c medical, behavioral, oth
137	C03095	Num	4	537	CYN2_.	11.	Svcs b/c condition expected last>=12 mos
138	C03096	Num	4	541	CYN2_.	11.	Limited/prevented in ability
139	C03097	Num	4	545	CYN2_.	11.	Limited b/c medical, behavioral, other
140	C03098	Num	4	549	CYN2_.	11.	Limited b/c condition expected last>=1yr
141	C03099	Num	4	553	CYN2_.	11.	Get special therapy
142	C03100	Num	4	557	CYN2_.	11.	Therapy b/c medical, behavioral, other
143	C03101	Num	4	561	CYN2_.	11.	Therapy b/c condition expected last>=1yr
144	C03102	Num	4	565	CYN2_.	11.	Problem for which gets trtmnt/counseling
145	C03103	Num	4	569	CYN2_.	11.	Trtmnt/counseling b/c conditn last>=1yr
146	C03104	Num	4	573	CSEX.	11.	Is child male or female
147	C03105	Num	4	577	CHISP.	11.	Is child Hispanic/Latino
148	C03106A	Num	4	581	CMARK.	11.	Child race:White
149	C03106B	Num	4	585	CMARK.	11.	Child race:Black
150	C03106C	Num	4	589	CMARK.	11.	Child race:Asian
151	C03106D	Num	4	593	CMARK.	11.	Child race:Native Hawaiian/Pacific Islnd
152	C03106E	Num	4	597	CMARK.	11.	Child race:Am. Indian/Alaskan
153	C03106F	Num	4	601	CMARK.	11.	Child race:Other
154	C03107	Num	4	605	CAGE2_.	11.	Your age now
155	C03108	Num	4	609	CSEX.	11.	Are you male or female
156	C03109	Num	4	613	CRELEDU.	11.	Highest grade/level you completed
157	C03110	Num	4	617	CRELPOL.	11.	How related to policyholder
158	C03111	Num	4	621	CRELATEB.	11.	How related to child
159	FLAG_FIN	Char	4	625	$FINAL.	$8.	Final Disposition
160	DUPFLAG	Char	3	629			Multiple Response Indicator
161	N1A	Num	4	632			Coding Scheme Note 1A
162	N2	Num	4	636			Coding Scheme Note 2
163	N2A	Num	4	640			Coding Scheme Note 2A
164	N2B	Num	4	644			Coding Scheme Note 2B
165	N3	Num	4	648			Coding Scheme Note 3
166	N4A	Num	4	652			Coding Scheme Note 4A
167	N4B	Num	4	656			Coding Scheme Note 4B
168	N5	Num	4	660			Coding Scheme Note 5
169	N6	Num	4	664			Coding Scheme Note 6
170	N7	Num	4	668			Coding Scheme Note 7
171	N8	Num	4	672			Coding scheme Note 8
172	N9	Num	4	676			Coding scheme Note 9
173	N10	Num	4	680			Coding Scheme Note 10
174	N10A	Num	4	684			Coding Scheme Note 10A
175	N10B	Num	4	688			Coding Scheme Note 10B
176	N10C	Num	4	692			Coding Scheme Note 10C
177	N10D	Num	4	696			Coding Scheme Note 10D

The CONTENTS Procedure

-----Variables Ordered by Position-----

#	Variable	Type	Len	Pos	Format	Informat	Label
178	N10E	Num	4	700			Coding Scheme Note 10E
179	N10F	Num	4	704			Coding Scheme Note 10F
180	N10G	Num	4	708			Coding Scheme Note 10G
181	N11	Num	4	712			Coding Scheme Note 11
182	N12	Num	4	716			Coding Scheme Note 12
183	N13	Num	4	720			Coding Scheme Note 13
184	N14A	Num	4	724			Coding Scheme Note 14A
185	N15	Num	4	728			Coding Scheme Note 15
186	N15A	Num	4	732			Coding Scheme Note 15A
187	N16A	Num	4	736			Coding Scheme Note 16A
188	N17A	Num	4	740			Coding Scheme Note 17A
189	N18A	Num	4	744			Coding Scheme Note 18A
190	N19A	Num	4	748			Coding Scheme Note 19A
191	N20	Num	4	752			Coding Scheme Note 20
192	MISS_1	Num	8	756	HAMISS.		Count of: Violates Skip Pattern
193	MISS_4	Num	8	764	HAMISS.		Count of: Incomplete grid error
194	MISS_5	Num	8	772	HAMISS.		Count of: Dont know or not sure
195	MISS_6	Num	8	780	HAMISS.		Count of: Not applicable - valid skip
196	MISS_7	Num	8	788	HAMISS.		Count of: Out-of-range error
197	MISS_8	Num	8	796	HAMISS.		Count of: Multiple response error
198	MISS_9	Num	8	804	HAMISS.		Count of: No response - invalid skip
199	MISS_TOT	Num	8	812	HAMISS.		Total number of missing responses
200	CONUS	Num	3	820	CONUSMHS.		CONUS - CONUS/OCONUS Indicator
201	XENRLLMT	Num	8	823	ENROLL.		Enrollment in TRICARE Prime
202	XENR_PCM	Num	8	831	PCM.		Enrollment by PCM type
203	XINS_COV	Num	8	839	INSURE.		Insurance Coverage
204	XBNFGRP	Num	8	847	XBGC_S.		Constructed Beneficiary Group
205	KMILWAT1	Num	8	855	HAYNN.		Wait <=4 wks for well patient visit-Mil
206	KCIVWAT1	Num	8	863	HAYNN.		Wait <=4 wks for well patient visit-Civ
207	KMILOFFC	Num	8	871	HAYNN.		Office wait of >15 min-Mil
208	KCIVOFFC	Num	8	879	HAYNN.		Office wait of >15 min-Civ
209	KBGPRB1	Num	8	887	HAYNN.		Big problem getting referrals to spclst
210	KBGPRB2	Num	8	895	HAYNN.		Big problem getting necessary care
211	KMILOP	Num	8	903	CTIMES.		Outpatient visits to Military facility
212	KCIVOP	Num	8	911	CTIMES.		Outpatient visits to Civilian facility
213	KCIVINS	Num	8	919	HAYNN2_.		Beneficiary covered by civilian insuranc
214	BWT	Num	8	927			BWT - Basic Sampling Weight
215	WEB	Num	8	935	WEB.	8.	Web/mail-out survey indicator
216	ONTIME	Char	3	943	$3.	$3.	On time indicator
217	ADJWT	Num	8	946			Adjusted Weight
218	POP	Num	8	954			DEERS population by CELLNAME for weights
219	WRWT	Num	8	962			Final Weight
220	WRWT1	Num	8	970			Replicated/JackKnife Weight 1
221	WRWT2	Num	8	978			Replicated/JackKnife Weight 2
222	WRWT3	Num	8	986			Replicated/JackKnife Weight 3
223	WRWT4	Num	8	994			Replicated/JackKnife Weight 4
224	WRWT5	Num	8	1002			Replicated/JackKnife Weight 5
225	WRWT6	Num	8	1010			Replicated/JackKnife Weight 6
226	WRWT7	Num	8	1018			Replicated/JackKnife Weight 7
227	WRWT8	Num	8	1026			Replicated/JackKnife Weight 8
228	WRWT9	Num	8	1034			Replicated/JackKnife Weight 9
229	WRWT10	Num	8	1042			Replicated/JackKnife Weight 10
230	WRWT11	Num	8	1050			Replicated/JackKnife Weight 11
231	WRWT12	Num	8	1058			Replicated/JackKnife Weight 12
232	WRWT13	Num	8	1066			Replicated/JackKnife Weight 13
233	WRWT14	Num	8	1074			Replicated/JackKnife Weight 14
234	WRWT15	Num	8	1082			Replicated/JackKnife Weight 15
235	WRWT16	Num	8	1090			Replicated/JackKnife Weight 16
236	WRWT17	Num	8	1098			Replicated/JackKnife Weight 17
237	WRWT18	Num	8	1106			Replicated/JackKnife Weight 18
238	WRWT19	Num	8	1114			Replicated/JackKnife Weight 19
239	WRWT20	Num	8	1122			Replicated/JackKnife Weight 20
240	WRWT21	Num	8	1130			Replicated/JackKnife Weight 21
241	WRWT22	Num	8	1138			Replicated/JackKnife Weight 22
242	WRWT23	Num	8	1146			Replicated/JackKnife Weight 23
243	WRWT24	Num	8	1154			Replicated/JackKnife Weight 24

The CONTENTS Procedure

-----Variables Ordered by Position-----

#	Variable	Type	Len	Pos	Format	Informat	Label
244	WRWT25	Num	8	1162			Replicated/JackKnife Weight 25
245	WRWT26	Num	8	1170			Replicated/JackKnife Weight 26
246	WRWT27	Num	8	1178			Replicated/JackKnife Weight 27
247	WRWT28	Num	8	1186			Replicated/JackKnife Weight 28
248	WRWT29	Num	8	1194			Replicated/JackKnife Weight 29
249	WRWT30	Num	8	1202			Replicated/JackKnife Weight 30
250	WRWT31	Num	8	1210			Replicated/JackKnife Weight 31
251	WRWT32	Num	8	1218			Replicated/JackKnife Weight 32
252	WRWT33	Num	8	1226			Replicated/JackKnife Weight 33
253	WRWT34	Num	8	1234			Replicated/JackKnife Weight 34
254	WRWT35	Num	8	1242			Replicated/JackKnife Weight 35
255	WRWT36	Num	8	1250			Replicated/JackKnife Weight 36
256	WRWT37	Num	8	1258			Replicated/JackKnife Weight 37
257	WRWT38	Num	8	1266			Replicated/JackKnife Weight 38
258	WRWT39	Num	8	1274			Replicated/JackKnife Weight 39
259	WRWT40	Num	8	1282			Replicated/JackKnife Weight 40
260	WRWT41	Num	8	1290			Replicated/JackKnife Weight 41
261	WRWT42	Num	8	1298			Replicated/JackKnife Weight 42
262	WRWT43	Num	8	1306			Replicated/JackKnife Weight 43
263	WRWT44	Num	8	1314			Replicated/JackKnife Weight 44
264	WRWT45	Num	8	1322			Replicated/JackKnife Weight 45
265	WRWT46	Num	8	1330			Replicated/JackKnife Weight 46
266	WRWT47	Num	8	1338			Replicated/JackKnife Weight 47
267	WRWT48	Num	8	1346			Replicated/JackKnife Weight 48
268	WRWT49	Num	8	1354			Replicated/JackKnife Weight 49
269	WRWT50	Num	8	1362			Replicated/JackKnife Weight 50
270	WRWT51	Num	8	1370			Replicated/JackKnife Weight 51
271	WRWT52	Num	8	1378			Replicated/JackKnife Weight 52
272	WRWT53	Num	8	1386			Replicated/JackKnife Weight 53
273	WRWT54	Num	8	1394			Replicated/JackKnife Weight 54
274	WRWT55	Num	8	1402			Replicated/JackKnife Weight 55
275	WRWT56	Num	8	1410			Replicated/JackKnife Weight 56
276	WRWT57	Num	8	1418			Replicated/JackKnife Weight 57
277	WRWT58	Num	8	1426			Replicated/JackKnife Weight 58
278	WRWT59	Num	8	1434			Replicated/JackKnife Weight 59
279	WRWT60	Num	8	1442			Replicated/JackKnife Weight 60

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APPENDIX F

WEB SPECIFICATIONS FOR CHILD TRICARE BENEFICIARY REPORTS

CHILD TRICARE BENEFICIARY REPORTS

The findings from the child HCSDB are presented in the Child TRICARE Consumer Reports. This section provides background on the HCSDB for children and describes the structure and content of the Child Consumer Reports.

1. Background

The 2003 HCSDB questionnaire for children closely resembles the 2002 questionnaire, which includes questions from the CAHPS 2.0H survey instruments. This correspondence between surveys allows us to compare findings for children in the MHS with finding from the previous year and with findings from the National CAHPS Benchmarking Database (NCBD), which contains responses of privately insured children in the civilian sector. Most questions in the child survey are identical to the CAHPS questions, and some are unique to issues related to TRICARE. Most topics in the Consumer Reports are based on the CAHPS questions.

The sample for the HCSDB for children is stratified by three TRICARE Prime enrollment groups, three geographic areas, and three age groups:

- TRICARE Prime Enrollment. Children enrolled in Prime or not enrolled in Prime.
- Geographic Areas. Children residing in one of three geographic areas organized to reflect the relative maturity of the TRICARE Prime health plan in each regional group. The areas are referred to as new regions, where Prime was most recently implemented (Regions 1, 2, and 5); mature regions, where Prime is most "mature" (Regions 6, 9-12, and Alaska); and other regions (Regions 3, 4, and 7/8).
- Age Group. Children under age 6, ages 6 to 12, and ages 13 to 17.

2. Format

Like the Adult Consumer Reports, the Child Consumer Reports is produced in a tabular format. The reports cover the following four topics related to pediatric care in the MHS:

- Ease of Access
- Communication and Customer Service
- Parents' Satisfaction Ratings
- Primary Care Manager

Table I lists the CAHPS composite measures and overall ratings and the items that make up each of them. Table II lists the questions making up a composite measure of the respondents' experience with their primary care managers. Question numbers are from the 2003 Child HCSDB.

TABLE I

CAHPS 2.0 H COMPOSITE AND RATING QUESTIONS AND RESPONSE CHOICES

	GETTING NEEDED CARE	RESPONSE CHOICE
Q6	With the choices your child's health plan gave you, how much of a problem, if any, was it to get a personal doctor or nurse for your child you are happy with?	A big problem A small problem Not a problem
Q19	In the last 12 months, how much of a problem, if any, was it to get a referral to a specialist that your child needed to see?	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 care for your child that you or a doctor believed necessary?	A big problem A small problem Not a problem
Q37	In the last 12 months, how much of a problem, if any, were delays in your child's health care while you waited for approval from your child's health plan?	A big problem A small problem Not a problem
	GETTING CARE QUICKLY	
Q24	In the last 12 months, when you called during regular office hours, how often did you get the help or advice you needed for your child?	Never Sometimes Usually Always
Q26	In the last 12 months, how often did your child get an appointment for regular or routine health care as soon as you wanted?	Never Sometimes Usually Always
Q32	In the last 12 months, when your child needed care right away for an illness or injury, how often did your child get care as soon as you wanted?	Never Sometimes Usually Always
Q38	In the last 12 months, how often did your child wait in the doctor's office or clinic more than 15 minutes past the appointment time to see the person your child went to see?	Never Sometimes Usually Always

TABLE I (continued)

	How Well Doctors Communicate	Response Choice
Q41	In the last 12 months, how often did your child's doctors or other health providers listen carefully to you?	Never Sometimes Usually Always
Q42	In the last 12 months, how often did your child's doctors or other health providers explain things in a way you could understand?	Never Sometimes Usually Always
Q43	In the last 12 months, how often did your child's doctors or other health providers show respect for what you had to say?	Never Sometimes Usually Always
Q45	In the last 12 months, how often did your child's doctors or other health providers explain things in a way your child could understand?	Never Sometimes Usually Always
Q46	In the last 12 months, how often did doctors or other health providers spend enough time with your child?	Never Sometimes Usually Always
	Courteous and Helpful Office Staff	
Q39	In the last 12 months, how often did office staff at your doctor's office or clinic treat you and your child with courtesy and respect?	Never Sometimes Usually Always
Q40	In the last 12 months, how often were office staff at your child's doctor's office or clinic as helpful as you thought they should be?	Never Sometimes Usually Always
	Claims Handling	
Q73	In the last 12 months, how often did your child's health plan handle your child's claims in a reasonable time?	Never Sometimes Usually Always
Q74	In the last 12 months, how often did your child's health plan handle your child's claims correctly?	Never Sometimes Usually Always
	Customer Service	
Q77	In the last 12 months, how much of a problem, if any, was it to find or understand information in the written materials?	A big problem A small problem Not a problem
Q79	In the last 12 months, how much of a problem, if any, was it to get the help you needed when you called your child's health plan's customer service?	A big problem A small problem Not a problem
Q84	In the last 12 months, how much of a problem, if any, did you have with paperwork for your child's health plan?	A big problem A small problem Not a problem

TABLE I (continued)

	RATING OF ALL HEALTH CARE	RESPONSE CHOICE
Q56	We want to know your rating of all your child's health care in the last 12 months from all doctors and other health providers. Use any number from 0 to 10 where 0 is the worst health care possible, and 10 is the best health care possible. How would you rate all your child's health care.	0 Worst health care possible 1 2 3 4 5 6 7 8 9 10 Best health care possible
	RATING OF HEALTH PLAN	
Q85	We want to know your rating of all your experience with your child's health plan. Use any number from 0 to 10 where 0 is the worst health plan possible, and 10 is the best health plan possible. How would you rate your child's health plan now?	0 Worst health plan possible 1 2 3 4 5 6 7 8 9 10 Best health plan possible
	RATING OF SPECIALIST	
Q21	We want to know your rating of the specialist your child saw most often in the last 12 months, including a personal doctor if he or she was a specialist. Use any number from 0 to 10 where 0 is the worst specialist possible, and 10 is the best specialist possible. How would you rate your child's specialist?	0 Worst specialist possible 1 2 3 4 5 6 7 8 9 10 Best specialist possible

TABLE I (continued)

	RATING OF PERSONAL DOCTOR	
Q13	We want to know your rating of your child's personal doctor or nurse. If your child has more than one personal doctor or nurse, choose the person your child sees most often. Use 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. How would you rate your child's personal doctor or nurse now?	0 Worst personal doctor or nurse possible 1 2 3 4 5 6 7 8 9 10 Best personal doctor or nurse possible

TABLE II

PRIMARY CARE MANAGER COMPOSITE RATING QUESTIONS AND RESPONSE CHOICES

	TRICARE PRIME-PRIMARY CARE MANAGER	RESPONSE CHOICE
Q14	For members of TRICARE Prime, the primary point of contact regarding your child's health is called a primary care manager, or PCM. This may be the same person as your child's personal doctor or nurse. Does your child have a TRICARE primary care manager?	Yes No
Q15	Do you know the name of your child's TRICARE Prime care manager?	Yes No
Q16	In the last 12 months, how much of a problem was it for your child to see his or her TRICARE primary care manager?	A big problem A small problem Not a problem

3. Technical Description

a. Electronic Reporting

The Child Consumer Reports are designed to appear on the TMA web site. The reports consist of tables in two levels. The first level shows composite scores and ratings and the second level provides more information about scores in the first level. The second level contains tables presenting the questions making up a composite and tables comparing current scores with scores from previous years. The reports exist in an electronic format that allows the reader to drill down through the column headings in the first-level reports to obtain further detail on the reported composite scores. Readers are able to print the reports locally.

The reader accesses the report card through a menu presented on its index page. The menu requires the reader to first choose the geographic area of interest: CONUS MHS overall or aggregate findings for "new" regions (1, 2, and 5), "mature" regions (6, 9-12, and Alaska), or "other" regions (3, 4, and 7/8).

b. First-Level Report

In the first-level tables, the composite measures or average ratings for each topic are displayed for three age groups and four enrollment groups. The three age groups are under age 6, 6 to 12 years, and 13 to 17 years. The enrollment groups are enrolled in TRICARE Prime, enrolled in TRICARE Prime with a military PCM, enrolled in TRICARE Prime with a civilian PCM, and not enrolled in TRICARE Prime.

In most cases, CAHPS 2.0H version composites are used so that findings for children in the MHS can be compared with findings from the NCBD. Composites are calculated as the average of provider proportions as are composites from the adult survey. Benchmarks based on CAHPS data are shown alongside the results of the survey or each of the two younger age groups, but not for children age 13 to 17 because children of that age are not included in the NCBD. Benchmarks are taken from the 2001 NCBD because more responses are available from that year than from 2002.

In addition to these CAHPS composites, an additional composite measure describing respondents' experiences with their child's primary care manager is included. This score is calculated as the weighted average of the proportions expressing satisfaction with different aspects of their and their child's relationship with the child's personal doctor.

Parents' satisfaction with their children's care is the only aspect of care presented not as a composite score but as a rating (on a scale from 0 to 100, where 0 is worst and 100 is best). Parents' ratings of their child's personal doctor or nurse, their child's specialist, all the child's health care, and the child's health plan are displayed. Scores based on parents' ratings are the proportion giving a rating of 8 or above.

c. Second-Level Reports

Clicking on the column headings for composite scores in the first-level consumer report brings up a table showing findings for each aspect of care in a composite measure. These results are presented as weighted survey estimates for the same enrollment and age groups in the first-level report. There are no reports breaking down composite scores for the parents' satisfaction ratings, since each first-level rating represents the findings for a unique survey question.

By clicking on one of the buttons labeled Trend in the first row beneath the column headings in a first-level report, users are taken to another second-level table that shows the current scores for a rating or composite compared to previous year's.

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APPENDIX G

SAS CODE

G.1 - ..\ReportCards\CAHPS_ChildQ32003\STEP1C.SAS - Construct Variables for the TRICARE Beneficiary Reports.

```
*************************************************************************
*
*  PROJECT:  DoD - Annual Child Report Cards
*  PROGRAM:  STEP1C.SAS
*  PURPOSE:  Create Dummy and Recode Variables used in Child Report Card
*                Create a Female dummy variable
*                Create an Education dummy variable
*                Create 3 super region dummy variables.
*                Create 3 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 = 1 AND C03003=4 THEN GROUP1 = 1;
*                 IF XENR_PCM = 1 AND C03003=4 THEN GROUP2 = 1;
*                 IF XENR_PCM = 2 AND C03003=4 THEN GROUP3 = 1;
*                 IF XINS_COV IN (2,3)         THEN GROUP4 = 1;
*                 IF AGEUND6 = 1               THEN GROUP5 = 1;
*                 IF AGE0612 = 1               THEN GROUP6 = 1;
*                 IF AGE1317 = 1               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 for 3rd quarter
*               2000 child report cards.
*            3) October 2002 By Mike Scott, Updated for 3rd quarter
*               2002 child report cards.
*            4) September 2003 By Keith Rathbun, Updated for 3rd quarter
*               2003 child report cards.
*            5) November 2003 By Mike Scott, Added V612 to LIBNAME statements.
*               Pointed to CONVERT.SAS on DOD computer instead of J:, updated
*               for 3rd quarter 2003 child report cards.
*
*  INPUTS:   1) HCS03C_1.SD2 - DoD Q3 2003 HCS Database
*
*  OUTPUTS:  1) GROUP1-8.SD2 - DoD Q3 2003 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
*
*************************************************************************;
OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 NOFMTERR NOOVP COMPRESS=YES;
LIBNAME OUT V612 "DATA";
LIBNAME IN1 V612 "..\..\..\DATA\CFINAL";

TITLE1    'Program Saved as: STEP1C.SAS';
```

```
DATA ENTIRE;
   SET IN1.HCS03C_1(KEEP=
                MPRID
                DAGEQY
                FIELDAGE
                REGSMPL
                SUPREG
                CONUS
                ENBGSMPL
                C03109  /* Parent Education Level         */
                C03104  /* Childs Sex Reported by Parent  */
                SEXSMPL /* Childs Sex from DEERS file     */
                XBNFGRP
                STRATUM
                POSTSTR
                XINS_COV
                XENR_PCM
                WRWT
                /* Getting Needed Care */
                C03006
                C03019
                C03036
                C03037
                /* Getting Care Quickly */
                C03024
                C03026
                C03032
                C03038
                /* How Well Doctors Communicate */
                C03041
                C03042
                C03043
                C03045
                C03046
                /* Courteous and Helpful Office Staff */
                C03039
                C03040
                /* Customer Service */
                C03077
                C03079
                C03084
                /* Claims Processing */
                C03073
                C03074
                       /****************************/
                C03056 /* Health Care Rating        */
                C03085 /* Health Plan Rating        */
                C03013 /* Personal Doctor Rating    */
                C03021 /* Specialist Rating         */
                C03003 /* How Long in Health Plan   */
                C03089 /* Health Status             */
                C03107 /* Parents Age               */
                       /****************************/
               );
    FORMAT _ALL_;
    IF SUPREG = . THEN DELETE;
    ***********************************************************************
    * For now (8-24-2001) the plan is NOT to limit the subset to TRICARE;
    * IF XINS_COV NOT IN(1,2,3,6) THEN DELETE;
```

```
    ************************************************************************;
                       /* Note:  use tmp_cell in step2c.sas */
    LENGTH TMP_CELL 8;
    TMP_CELL = POSTSTR;
RUN;

*************************************************************************
* Create AGE, FEMALE and GROUP (Beneficiary/Enrollment)
* subsets. Create the region dummies.
*************************************************************************;
DATA ENTIRE;
   SET ENTIRE;
   LENGTH DEFAULT = 4;
   *************************************************************************
   * Create child AGE dummies using MPR-calculated child AGE at
   * start of fielding period.
   ************************************************************************;
   IF FIELDAGE NE "  " THEN DO;
      AGEUND6 = 0;
      AGE0612 = 0;
      AGE1317 = 0;

      IF      (FIELDAGE < 6)         THEN AGEUND6 = 1;
      ELSE IF (6  <= FIELDAGE <= 12) THEN AGE0612 = 1;
      ELSE IF (13 <= FIELDAGE <= 17) THEN AGE1317 = 1;
   END;

   *************************************************************************
   * Create parent AGE dummies using item response.  These dummy variables
   * will be used to adjust the scores based on the parents age.
   ************************************************************************;
   IF 1 <= C03107 <= 8 THEN DO;
      AGEUND18 = 0; AGE1824 = 0; AGE2534 = 0; AGE3544 = 0;
      AGE4554  = 0; AGE5564 = 0; AGE6574 = 0; AGE75UP = 0;
      IF      C03107 = 1 THEN AGEUND18 = 1;
      ELSE IF C03107 = 2 THEN AGE1824  = 1;
      ELSE IF C03107 = 3 THEN AGE2534  = 1;
      ELSE IF C03107 = 4 THEN AGE3544  = 1;
      ELSE IF C03107 = 5 THEN AGE4554  = 1;
      ELSE IF C03107 = 6 THEN AGE5564  = 1;
      ELSE IF C03107 = 7 THEN AGE6574  = 1;
      ELSE IF C03107 = 8 THEN AGE75UP  = 1;
   END;

   *************************************************************************
   * Create the FEMALE dummy variable based on childs sex reported by parent.
   ************************************************************************;
   IF C03104 = 2 OR SEXSMPL = 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 (XINS_COV = 1  AND C03003=4) THEN GROUP1 = 1;
IF (XENR_PCM = 1  AND C03003=4) THEN GROUP2 = 1;
IF (XENR_PCM = 2  AND C03003=4) THEN GROUP3 = 1;
IF XINS_COV IN (2,3)            THEN GROUP4 = 1;
IF AGEUND6  = 1                 THEN GROUP5 = 1;
IF AGE0612  = 1                 THEN GROUP6 = 1;
IF AGE1317  = 1                 THEN GROUP7 = 1;
     if C03038 = 4 then C03038=1;
else if C03038 = 3 then C03038=2;
else if C03038 = 2 then C03038=3;
else if C03038 = 1 then C03038=4;

*-------------------------------------------------------------;
* 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      C03073 = 1 THEN R03073 = 1;
ELSE IF C03073 = 2 THEN R03073 = 1;
ELSE IF C03073 = 3 THEN R03073 = 2;
ELSE IF C03073 = 4 THEN R03073 = 3;
ELSE IF C03073 < 0 THEN R03073 = .;

IF      C03074 = 1 THEN R03074 = 1;
ELSE IF C03074 = 2 THEN R03074 = 1;
ELSE IF C03074 = 3 THEN R03074 = 2;
ELSE IF C03074 = 4 THEN R03074 = 3;
ELSE IF C03074 < 0 THEN R03074 = .;

IF      C03024 = 1 THEN R03024 = 1;
ELSE IF C03024 = 2 THEN R03024 = 1;
ELSE IF C03024 = 3 THEN R03024 = 2;
ELSE IF C03024 = 4 THEN R03024 = 3;
ELSE IF C03024 < 0 THEN R03024 = .;

IF      C03026 = 1 THEN R03026 = 1;
ELSE IF C03026 = 2 THEN R03026 = 1;
ELSE IF C03026 = 3 THEN R03026 = 2;
ELSE IF C03026 = 4 THEN R03026 = 3;
ELSE IF C03026 < 0 THEN R03026 = .;

IF      C03032 = 1 THEN R03032 = 1;
ELSE IF C03032 = 2 THEN R03032 = 1;
ELSE IF C03032 = 3 THEN R03032 = 2;
ELSE IF C03032 = 4 THEN R03032 = 3;
ELSE IF C03032 < 0 THEN R03032 = .;

IF      C03038 = 1 THEN R03038 = 1;
ELSE IF C03038 = 2 THEN R03038 = 1;
ELSE IF C03038 = 3 THEN R03038 = 2;
ELSE IF C03038 = 4 THEN R03038 = 3;
ELSE IF C03038 < 0 THEN R03038 = .;
```

```
IF      C03041 = 1 THEN R03041 = 1;
ELSE IF C03041 = 2 THEN R03041 = 1;
ELSE IF C03041 = 3 THEN R03041 = 2;
ELSE IF C03041 = 4 THEN R03041 = 3;
ELSE IF C03041 < 0 THEN R03041 = .;

IF      C03042 = 1 THEN R03042 = 1;
ELSE IF C03042 = 2 THEN R03042 = 1;
ELSE IF C03042 = 3 THEN R03042 = 2;
ELSE IF C03042 = 4 THEN R03042 = 3;
ELSE IF C03042 < 0 THEN R03042 = .;

IF      C03043 = 1 THEN R03043 = 1;
ELSE IF C03043 = 2 THEN R03043 = 1;
ELSE IF C03043 = 3 THEN R03043 = 2;
ELSE IF C03043 = 4 THEN R03043 = 3;
ELSE IF C03043 < 0 THEN R03043 = .;

IF      C03045 = 1 THEN R03045 = 1;
ELSE IF C03045 = 2 THEN R03045 = 1;
ELSE IF C03045 = 3 THEN R03045 = 2;
ELSE IF C03045 = 4 THEN R03045 = 3;
ELSE IF C03045 < 0 THEN R03045 = .;

IF      C03046 = 1 THEN R03046 = 1;
ELSE IF C03046 = 2 THEN R03046 = 1;
ELSE IF C03046 = 3 THEN R03046 = 2;
ELSE IF C03046 = 4 THEN R03046 = 3;
ELSE IF C03046 < 0 THEN R03046 = .;

IF      C03039 = 1 THEN R03039 = 1;
ELSE IF C03039 = 2 THEN R03039 = 1;
ELSE IF C03039 = 3 THEN R03039 = 2;
ELSE IF C03039 = 4 THEN R03039 = 3;
ELSE IF C03039 < 0 THEN R03039 = .;

IF      C03040 = 1 THEN R03040 = 1;
ELSE IF C03040 = 2 THEN R03040 = 1;
ELSE IF C03040 = 3 THEN R03040 = 2;
ELSE IF C03040 = 4 THEN R03040 = 3;
ELSE IF C03040 < 0 THEN R03040 = .;

*-------------------------------------------------------------;
* Recode how long in health plan and childs health status
*-------------------------------------------------------------;
R03003  =  C03003;  IF R03003 < 0 THEN R03003 = .;
R03089  =  C03089;  IF R03089 < 0 THEN R03089 = .;

*-------------------------------------------------------------;
* Recode B/S/N variables to one missing condition ".";
*-------------------------------------------------------------;
R03006  =  C03006;  IF R03006 < 0 THEN R03006 = .;
R03019  =  C03019;  IF R03019 < 0 THEN R03019 = .;
R03036  =  C03036;  IF R03036 < 0 THEN R03036 = .;
R03037  =  C03037;  IF R03037 < 0 THEN R03037 = .;
R03077  =  C03077;  IF R03077 < 0 THEN R03077 = .;
R03079  =  C03079;  IF R03079 < 0 THEN R03079 = .;
R03084  =  C03084;  IF R03084 < 0 THEN R03084 = .;
```

```
   *-------------------------------------------------------------;
   * Recode the CAHPS rating variables.
   *-------------------------------------------------------------;
   R03056  =  C03056;  IF R03056  < 0 THEN R03056 = .; *Health Care;
   R03013  =  C03013;  IF R03013  < 0 THEN R03013 = .; *Personal Doctor;
   R03085  =  C03085;  IF R03085  < 0 THEN R03085 = .; *Health Plan;
   R03021  =  C03021;  IF R03021  < 0 THEN R03021 = .; *Specialty Care;

   ************************************************************************
   * Create super region dummies.
   ************************************************************************;
   IF SUPREG NE . THEN DO;
      ARRAY REGDUMS (3) REG01 REG02 REG03;
      DO I = 1 TO DIM(REGDUMS);
         REGDUMS(I)=0;
      END;

      IF       SUPREG = 1  THEN REG01 = 1;
      ELSE IF  SUPREG = 2  THEN REG02 = 1;
      ELSE IF  SUPREG = 3  THEN REG03 = 1;
   END;
RUN;

************************************************************************
* Recode item responses to proportional values using CONVERT.SAS.
************************************************************************;
%INCLUDE "..\..\..\..\..\8687\PROGRAMS\REPORTCARDS\CONVERT.SAS";

%CONT1(DSN=ENTIRE, NUM=7,  Y=R03006 R03019 R03036 R03037
                             R03077 R03079 R03084);

%CONT2(DSN=ENTIRE, NUM=4,  Y=R03056 R03085 R03013 R03021);

%CONT3(DSN=ENTIRE, NUM=13, Y=R03024 R03026 R03032 R03038
                             R03041 R03042 R03043 R03045
                             R03046 R03039 R03040 R03073 R03074);

************************************************************************
* 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 key information.
************************************************************************;
PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print some of the key information';
   VAR MPRID
       DAGEQY
       FIELDAGE
       REGSMPL
       SUPREG
```

```
       CONUS
       ENBGSMPL
       C03109  /* Parent Education Level         */
       C03104  /* Childs Sex Reported by Parent  */
       SEXSMPL /* Childs Sex from DEERS file     */
       STRATUM
       POSTSTR
       XINS_COV
       XENR_PCM
       WRWT
      ;
RUN;

*******************************************************************************
* Print AGE and SEX dummy variables.
*******************************************************************************;
PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of AGE, SEX and GROUP dummies';
   VAR DAGEQY   /* Childs Age Group */
       FIELDAGE /* Childs Age at start of fielding period */
       AGEUND6
       AGE0612
       AGE1317

       C03107   /* Parents Age Group used for adjustment purposes */
       AGEUND18
       AGE1824
       AGE2534
       AGE3544
       AGE4554
       AGE5564
       AGE6574
       AGE75UP

       C03104
       FEMALE
       SEXSMPL

       ENBGSMPL
       XINS_COV
       XENR_PCM
       XBNFGRP
       GROUP1
       GROUP2
       GROUP3
       GROUP4
       GROUP5
       GROUP6
       GROUP7
      ;
RUN;

PROC PRINT DATA=ENTIRE(OBS=60);
   TITLE2 'Print of recoded REGION variables';
   VAR REGSMPL
       SUPREG
       REG01
       REG02
       REG03
```

```
      ;
RUN;

PROC FREQ DATA=ENTIRE;
   TITLE2 'FREQ of Childs Age Group variables';
   TABLES FIELDAGE*(AGEUND6 AGE0612 AGE1317)
         /MISSING LIST;
RUN;

PROC FREQ DATA=ENTIRE;
   TITLE2 'FREQ of Parents Age Group variables used for adjustment purposes';
   TABLES
   C03107*(AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGE5564 AGE6574 AGE75UP)
        /MISSING LIST;
RUN;

PROC FREQ DATA=ENTIRE;
   TITLE2 'FREQ of recoded question variables: Getting Needed Care';
   TABLES C03006*R03006
          C03019*R03019
          C03036*R03036
          C03037*R03037
         /MISSING LIST;
RUN;

PROC FREQ DATA=ENTIRE;
   TITLE2 'FREQ of recoded question variables: Getting Care Quickly';
   TABLES C03024*R03024
          C03026*R03026
          C03032*R03032
          C03038*R03038
         /MISSING LIST;
RUN;

PROC FREQ DATA=ENTIRE;
   TITLE2 'FREQ of recoded question variables: How Well Doctors Communicate';
   TABLES C03041*R03041
          C03042*R03042
          C03043*R03043
          C03045*R03045
          C03046*R03046
         /MISSING LIST;
RUN;

PROC FREQ DATA=ENTIRE;
   TITLE2 'FREQ of recoded question variables: Courteous and Helpful Office
Staff';
   TABLES C03039*R03039
          C03040*R03040
         /MISSING LIST;
RUN;

PROC FREQ DATA=ENTIRE;
   TITLE2 'FREQ of recoded question variables: Customer Service';
   TABLES C03077*R03077
          C03079*R03079
          C03084*R03084
         /MISSING LIST;
RUN;
```

```
PROC FREQ DATA=ENTIRE;
   TITLE2 'FREQ of recoded question variables: Claims Processing';
   TABLES C03073*R03073
          C03074*R03074
         /MISSING LIST;
RUN;

PROC FREQ DATA=ENTIRE;
   TITLE2 'FREQ of recoded question variables: Ratings';
   TABLES C03056*R03056
          C03085*R03085
          C03013*R03013
          C03021*R03021
         /MISSING LIST;
RUN;

PROC FREQ DATA=ENTIRE;
   TITLE2 'FREQ of recoded question variables: How long in health plan and
health status';
   TABLES C03003*R03003
          C03089*R03089
         /MISSING LIST;
RUN;

*************************************************************************
* Create the 7 subgroups for processing by STEP2C.SAS.
*************************************************************************;
DATA OUT.GROUP1
     OUT.GROUP2
     OUT.GROUP3
     OUT.GROUP4
     OUT.GROUP5
     OUT.GROUP6
     OUT.GROUP7
     OUT.GROUP8;

     SET ENTIRE;

     DROP C03006
          C03019
          C03036
          C03037
          C03024
          C03026
          C03032
          C03038
          C03041
          C03042
          C03043
          C03045
          C03046
          C03039
          C03040
          C03077
          C03079
          C03084
          C03073
          C03074
```

```
          C03056
          C03085
          C03013
          C03021
          C03003
          C03089
        ;
      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.2 - ..\ReportCards\CAHPS_ChildQ32003\STEP2C.SAS - Calculate CAHPS Adjusted Scores.

```
/*****************************************************************
/*  Project:  DoD - 2003 Child Report Cards
/*  Program:  STEP2C.SAS
/*  Purpose:  2003 Child Report Card
/*  Requires program STEP1C.SAS to have been run
/*
/*  Modified: 1) August 2001 By Keith Rathbun, Updated for Q3 2000
/*               Child Report Cards.
/*            2) October 2002 By Mike Scott, Updated for Q3 2002
/*               Child Report Cards.  Changed INTERCEP to INTERCEPT.
/*               Added V612 to LIBNAME statements.
/*            3) September 2003 By Keith Rathbun, Updated for Q3 2003
/*               Child Report Cards.
/*
/*  Programming specifications for Child report card
/*  The Child 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
/*
/* SUBGROUPS
/* ____________________________________________________________________
/*    Seven subgroups          Definitions
/* ____________________________________________________________________
/* 1. Prime enrollees          XINS_COV IN(1,2,6) AND C03003=4
/* 2. Enrollees w/mil PCM      XENR_PCM IN(2,6)   AND C03003=4
/* 3. Enrollees w/civ PCM      XENR_PCM = 3       AND C03003=4
/* 4. Nonenrollees             XINS_COV IN(3,4,5)
/* 5. Active duty              AGEUND6=1
/* 6. Active duty dependents   AGE0612=1
/* 7. Retirees and dependents  AGE1317=1
/*
/*  PREV PGM:  STEP1C.SAS
/*****************************************************************/
OPTIONS NOCENTER LS=132 PS=78 SOURCE NOOVP COMPRESS=YES;
*OPTIONS NOCENTER LS=132 PS=78 SOURCE NOOVP MPRINT MLOGIC SYMBOLGEN STIMER;
LIBNAME  IN1   V612  "DATA";
LIBNAME  IN2   V612  "..\..\..\DATA\CFINAL";
LIBNAME  OUT   V612  "DATA";
LIBNAME  OUT2  V612  "DATA\CHILDHATFILES";

*--------------------------------------;
*-       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 = 24;

* set the number of subgroups to process;
%LET MIN_GRP = 1;
%LET MAX_GRP = 8;

* I expect these to remain the same for;
* a particular dependent variable run;
%LET WGT      = WRWT;
%LET IND_VAR1 = R03089;
%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 = Under Age 6;
%LET TITL6 = Age 6-12;
%LET TITL7 = Age 13-17;
%LET TITL8 = All major groups;


%* GETTING NEEDED CARE;
%LET DEPVAR1 = R03006;
%LET DEPVAR2 = R03019;
%LET DEPVAR3 = R03036;
%LET DEPVAR4 = R03037;

%* GETTING CARE QUICKLY;
%LET DEPVAR5 = R03024;
%LET DEPVAR6 = R03026;
%LET DEPVAR7 = R03032;
%LET DEPVAR8 = R03038;

%* HOW WELL DOCTORS COMMUNICATE;
%LET DEPVAR9  = R03041;
%LET DEPVAR10 = R03042;
%LET DEPVAR11 = R03043;
%LET DEPVAR12 = R03045;
%LET DEPVAR13 = R03046;

%* COURTEOUS AND HELPFUL OFFICE STAFF;
%LET DEPVAR14 = R03039;
%LET DEPVAR15 = R03040;

%* CUSTOMER SERVICE;
%LET DEPVAR16 = R03077;
%LET DEPVAR17 = R03079;
%LET DEPVAR18 = R03084;

%* CLAIMS PROCESSING;
%LET DEPVAR19 = R03073;
%LET DEPVAR20 = R03074;
```

```
%* RATING ALL HEALTH CARE: 0 - 10;
%LET DEPVAR21 = R03056;

%* RATING OF HEALTH PLAN: 0 - 10;
%LET DEPVAR22 = R03085;

%* RATING OF PERSONAL DR: 0 - 10;
%LET DEPVAR23 = R03013;

%* RATING OF SPECIALIST: 0 - 10;
%LET DEPVAR24 = R03021;

%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 = IN2.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 SUPREG &&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 SUPREG &&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=SUPREG NEWADJST);
    SET ADJUST;
    %INCLUDE 'REGARRAY.INC';
    LENGTH NAME $8;
    DO I=1 TO DIM(REGRHS);
       CALL VNAME(REGRHS(I),NAME);
       SUPREG=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 SUPREG;
  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=SUPREG REGCNT&IGRP REGWGT&IGRP);
      BY SUPREG;
      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  SUPREG;
  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 SUPREG)
           REGFILE1(KEEP = ADJ&IGRP SUPREG);
     BY SUPREG;
     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 SUPREG;
    DEPENDNT = "&&DEPVAR&IVAR";
    IF INS;
RUN;

PROC PRINT DATA=OUT.R_&&DEPVAR&IVAR;
     TITLE2 "Print of SUPER REGION 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(8) 8 aCNT1 - aCNT8;
      RETAIN AGECNT 0;
      RETAIN CNT 0;
      ARRAY AGENAM(8)  $8 AGENAM1 - AGENAM8;
      ARRAY AGENAMX(8) $8 AGENAMX1 - AGENAMX8;
      RETAIN AGENAM;
```

```
      RETAIN AGENAMX;
      ARRAY REGCNT(3)   8 REGCNT01 - REGCNT3;
      RETAIN CATCNT 0;
      RETAIN REGCNT 0;

      * create a name array for the parent age dummies;
      IF _N_ = 1 THEN DO;
         AGENAM(1) = "AGEUND18";
         AGENAM(2) = "AGE1824";
         AGENAM(3) = "AGE2534";
         AGENAM(4) = "AGE3544";
         AGENAM(5) = "AGE4554";
         AGENAM(6) = "AGE5564";
         AGENAM(7) = "AGE6574";
         AGENAM(8) = "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 AGEUND18 = 1 THEN AGECNT(1) + 1;
      IF AGE1824  = 1 THEN AGECNT(2) + 1;
      IF AGE2534  = 1 THEN AGECNT(3) + 1;
      IF AGE3544  = 1 THEN AGECNT(4) + 1;
      IF AGE4554  = 1 THEN AGECNT(5) + 1;
      IF AGE5564  = 1 THEN AGECNT(6) + 1;
      IF AGE6574  = 1 THEN AGECNT(7) + 1;
      IF AGE75UP  = 1 THEN AGECNT(8) + 1;

      * count records in each SUPREG group;
      * we will only use SUPER 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 SUPREG >= 1 AND SUPREG <= 3  THEN DO;
         REGCNT(SUPREG) = REGCNT(SUPREG) + 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 AGENAM(8) "  " AGECNT(8)=;
      PUT " ";

      DO I = 1 TO 3;
         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 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 8;
      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;
   DO I = 1 TO 3;   * 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 3;
        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;

%MEND MAKE_INC;

%MACRO R_SUDAAN(INFILE);
*****************************************************;
* use this macro to create standard err (variances);
* FOR: REGIONS                                      ;
*****************************************************;
%PUT ****************************************;
%PUT STARTING MACRO R_SUDAAN (SUPER REGIONS);
%PUT ****************************************;

DATA &INFILE;
   SET &INFILE;
   IF SUPREG > 0;
RUN;

* Sort data by STRATUM;
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 (SUPER REGION)';
        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 SUPREG;
   SUBGROUP SUPREG;
   LEVELS 3;
   OUTPUT  SEMEAN
         / TABLECELL=DEFAULT
           FILENAME=RS&DEP;
   RUN;

   DATA R&IGRP&&DEPVAR&IVAR;
        SET RS&DEP;
        KEEP SUPREG 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;
```

```
%*********************************;
%*  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.3 - ..\ReportCards\CAHPS_ChildQ32003\COMPOSIT.SAS - Calculate CAHPS Composite Scores.

```
/*****************************************************************
/*  Project:  DoD - 2003 Q3 Child Report Cards
/*  Program:  COMPOSIT.SAS
/*  Purpose:  Child Report Card
/*  Requires programs STEP1C and STEP2C.SAS
/*
/*  Modified: 1) Keith Rathbun, 07/18/2000: Updated for child survey.
/*            Added processing for 5th dependent variable.  Update
/*            macro calls.
/*              2) Keith Rathbun, 02/27/2001 By Keith Rathbun, Small changes to
input DSNs to
/*            accommodate the move of ALLSCORE.SAS functionality into the
/*            STEP2Q.SAS program.
/*            3) Keith Rathbun, 08/24/2001: Updated for Q3 2000 child survey.
/*            4) Mike Scott, 10/30/2002: Updated for Q3 2002 child survey.
/*            5) Keith Rathbun, 09/19/2003: Updated for Q3 2003 child survey.
/*            6) Mike Scott, 11/24/2003: Added V612 to LIBNAME statements.
/*
/*****************************************************************/
OPTIONS NOCENTER LS=132 PS=78 SOURCE SOURCE2 MLOGIC MPRINT NOOVP COMPRESS=YES;
libname in  V612 "data";
libname in2 V612 "data\childhatfiles";
libname out V612 "data";

 %MACRO COMPOSIT (TYPE=,COMPOS=,VAR1=,VAR2=,VAR3=,VAR4=,VAR5=,QCOUNT=);

  DATA _NULL_;
   %IF "&TYPE" = "R" %THEN %DO;
       CALL SYMPUT ('BYVAR','SUPREG');
   %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";
     IF "&VAR5" NE '' THEN PUT @8 "IN.&TYPE._&VAR5";
     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;
%if &i~=8 %then %do;
set in2.h&i.&var1(rename=(resid&i=r_&var1));
%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;
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;
%if &i~=8 %then %do;
set in2.h&i.&var2(rename=(resid&i=r_&var2));
%end;
%else %do;
set  in2.h5&var2(rename=(resid5=r_&var2))  in2.h6&var2(rename=(resid6=r_&var2))
in2.h7&var2(rename=(resid7=r_&var2));
%end;
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;
%if &i~=8 %then %do;
set in2.h&i.&var3(rename=(resid&i=r_&var3));
%end;
%else %do;
set  in2.h5&var3(rename=(resid5=r_&var3))  in2.h6&var3(rename=(resid6=r_&var3))
in2.h7&var3(rename=(resid7=r_&var3));
%end;
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;
%if &i~=8 %then %do;
set in2.h&i.&var4(rename=(resid&i=r_&var4));
%end;
%else %do;
set  in2.h5&var4(rename=(resid5=r_&var4))  in2.h6&var4(rename=(resid6=r_&var4))
in2.h7&var4(rename=(resid7=r_&var4));
%end;
%let m=%str(&m s_&var4);
proc sort data=r_&var4; by mprid;
%end;

%if &var5~= %then %do;
%let n=%str(&n r_&var5);
data s_&var5(rename=(semean&i=s_&var5));
set in.&type._&var5(keep=semean&i &byvar);
proc sort; by &byvar;
data r_&var5;
%if &i~=8 %then %do;
set in2.h&i.&var5(rename=(resid&i=r_&var5));
%end;
%else %do;
set  in2.h5&var5(rename=(resid5=r_&var5))  in2.h6&var5(rename=(resid6=r_&var5))
in2.h7&var5(rename=(resid7=r_&var5));
%end;
%let m=%str(&m s_&var5);
proc sort data=r_&var5; 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 wrwt;
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;
set final; by &byvar;
if first.&byvar then tv=0;
 tv+sde;
if last.&byvar then do;
sde&i=(tv**.5)/&qcount;
output;
end;
%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=R03006,var2=R03019,var3=R03036,var4=R03037,qcount=4);
%COMPOSIT
(type=R,compos=2,var1=R03024,var2=R03026,var3=R03032,var4=R03038,qcount=4);
%COMPOSIT
(type=R,compos=3,var1=R03041,var2=R03042,var3=R03043,var4=R03045,var5=R03046,qco
unt=5);
%COMPOSIT (type=R,compos=4,var1=R03039,var2=R03040,qcount=2);
%COMPOSIT (type=R,compos=5,var1=R03077,var2=R03079,var3=R03084,qcount=3);
%COMPOSIT (type=R,compos=6,var1=R03073,var2=R03074,qcount=2);
```

G.4.1 - ..\LOADWEB\CAHPS_ChildQ32003\LOADCAHC.SAS - Convert the CAHPS Scores Database into the WEB layout.

```
*******************************************************************************
*
* PROGRAM:  LOADCAHC.SAS
* TASK:     2003 DOD HEALTH CARE SURVEY REPORT CARDS (8860-410)
* PURPOSE:  Convert the CAHPS Scores Database into the WEB layout
*
* WRITTEN:  07/14/2000 BY KEITH RATHBUN
*
* MODIFIED:
*
* 1) 08/24/2001 BY KEITH RATHBUN to support the Q3 2000 child report cards.
* 2) 10/30/2002 BY MIKE SCOTT to support the Q3 2002 child report cards.
* 3) 09/18/2003 BY KEITH RATHBUN to support the Q3 2003 child report cards
*
* INPUTS:   1) CAHPS Individual and Composite data sets with adjusted scores
*
* OUTPUT:   1) LOADCAHC.SD2 - Combined CAHPS Scores Database in WEB layout
*
* INCLUDES: 1) LOADCAHC.INC - Format definitions for CAHPS Individual
*              and composite data sets
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - STEP1C.SAS - Recode questions and generate group files
*    - STEP2C.SAS - Calculate individual adjusted scores for group 1-7
*    - COMPOSIT.SAS - Calculate composite adjusted scores for group 1-8
*
* 2) The output file (LOADCAHC.SD2) will be run through the
*    MAKEHTMC.SAS program to generate the WEB pages.
*
* 3) This program is a modified version of LOADCAHP.SAS adapted to meet
*    the requirements of the child report card.
*
*******************************************************************************
* Assign data libraries and options
*******************************************************************************;
LIBNAME IN      V612 "..\..\REPORTCARDS\CAHPS_CHILDQ32003\DATA";
LIBNAME OUT     V612 "DATA";
LIBNAME LIBRARY V612 "..\..\..\DATA\CFINAL\FMTLIB";
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

*******************************************************************************
* Load Format definitions for CAHPS Individual and composite data sets.
*******************************************************************************;
%INCLUDE "..\LOADCAHC.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 = "2003";

*******************************************************************************
* 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 = 1 AND C03003 = 4
* 2. Enrollees w/mil PCM     XENR_PCM = 1 AND C03003 = 4
* 3. Enrollees w/civ PCM     XENR_PCM = 2 AND C03003 = 4
* 4. Nonenrollees            XINS_COV IN (2,3)
* 5. Under Age 6             AGEUND6 = 1
* 6. 6-12 Years              AGE0612 = 1
* 7. 13-17 Years             AGE1317 = 1
* 8. All beneficiaries       ALL Beneficiaries
*
*******************************************************************************;
DATA &QUESTION;
   SET IN.&QUESTION;

   LENGTH MAJGRP  $42;
   LENGTH ROWCAT  $30;
   LENGTH BENTYPE $75;
   LENGTH BENEFIT $50;

   ********************************************************************
   * For now, Initialize Significance test to zero.
   ********************************************************************;
   SIG = 0;
```

```
   ************************************************************************
   * Assign benefit and benefit type
   ************************************************************************;
   IF "&TYPE" = "INDIVIDUAL" THEN DO;
      IF DEPENDNT IN("R03056","R03013","R03085","R03021") THEN
         BENTYPE = PUT(&YEAR,$BENTYPF.);
      ELSE
         BENTYPE = PUT(DEPENDNT,$BENTYPF.);
      BENEFIT = PUT(DEPENDNT,$BENEF.);
   END;
   ELSE IF "&TYPE" = "COMPOSITE" THEN DO;
      BENTYPE = PUT(&YEAR,$BENTYPF.);
      BENEFIT = PUT(DEPENDNT,$BENEF.);
   END;
   ELSE PUT "ERROR: Invalid TYPE = &TYPE";

   ************************************************************************
   * Assign Super-Region to Major Group
   ************************************************************************;
   MAJGRP = PUT(SUPREG,MAJGRPF.);

   ************************************************************************
   * Output score records for the eight row categories
   ************************************************************************;
   %DO I = 1 %TO 8;
      ROWCAT = PUT(&I,ROWCATF.);
      SCORE  = ADJ&I;
      SEMEAN = SEMEAN&I;
      N_OBS  = &PREFIX.CNT&I;
      N_WGT  = &PREFIX.WGT&I;
      OUTPUT;
   %END;

KEEP MAJGRP
     ROWCAT
     BENTYPE
     BENEFIT
     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_R03006,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R03019,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R03036,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R03037,TYPE=INDIVIDUAL,REGCAT=Region);

************************************************************************
```

```
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS2,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R03024,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R03026,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R03032,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R03038,TYPE=INDIVIDUAL,REGCAT=Region);

************************************************************************
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS3,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R03041,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R03042,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R03043,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R03045,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R03046,TYPE=INDIVIDUAL,REGCAT=Region);

************************************************************************
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS4,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R03039,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R03040,TYPE=INDIVIDUAL,REGCAT=Region);

************************************************************************
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS5,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R03077,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R03079,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R03084,TYPE=INDIVIDUAL,REGCAT=Region);

************************************************************************
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*************************************************************************;
%PROCESS(QUESTION=RCOMPOS6,TYPE=COMPOSITE, REGCAT=Region);
%PROCESS(QUESTION=R_R03073,TYPE=INDIVIDUAL,REGCAT=Region);
%PROCESS(QUESTION=R_R03074,TYPE=INDIVIDUAL,REGCAT=Region);

************************************************************************
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*************************************************************************;
%PROCESS(QUESTION=R_R03056,TYPE=INDIVIDUAL,REGCAT=Region);

************************************************************************
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*************************************************************************;
%PROCESS(QUESTION=R_R03085,TYPE=INDIVIDUAL,REGCAT=Region)

************************************************************************
* INDIVIDUAL # 3.
```

```
* RATING OF PERSONAL DOCTOR: 0 - 10.
*************************************************************************;
%PROCESS(QUESTION=R_R03013,TYPE=INDIVIDUAL,REGCAT=Region);

*************************************************************************
* INDIVIDUAL # 4.
* RATING OF SPECIALIST: 0 - 10.
*************************************************************************;
%PROCESS(QUESTION=R_R03021,TYPE=INDIVIDUAL,REGCAT=Region);

*************************************************************************
*************************************************************************
* STACK up all of the files into one final output dataset.
*************************************************************************
*************************************************************************;
DATA OUT.LOADCAHC;
   SET R_R03006
       R_R03013
       R_R03019
       R_R03021
       R_R03036
       R_R03037
       R_R03024
       R_R03026
       R_R03032
       R_R03038
       R_R03041
       R_R03042
       R_R03043
       R_R03045
       R_R03046
       R_R03056
       R_R03073
       R_R03074
       R_R03039
       R_R03040
       R_R03077
       R_R03079
       R_R03084
       R_R03085
       RCOMPOS1
       RCOMPOS2
       RCOMPOS3
       RCOMPOS4
       RCOMPOS5
       RCOMPOS6
    ;
    IF SCORE = . THEN DELETE;
RUN;

TITLE1 "2003 DOD Health Survey Scores/Report Cards (8860-410)";
TITLE2 "Program Name: LOADCAHC.SAS By Keith Rathbun";
TITLE3 "Program Inputs: CAHPS Individual and Composite data sets with adjusted
scores";
TITLE4 "Program Outputs: LOADCAHC.SD2 - Combined CAHPS Scores Database in WEB
layout";

PROC FREQ;
TABLES BENEFIT BENTYPE MAJGRP ROWCAT
```

```
      /MISSING LIST;
RUN;
```

G.4.2 - ..\LOADWEB\LOADCAHC.INC - Format definitions for converting the Scores Database into the WEB layout.

```
*************************************************************************
*
* PROGRAM:  LOADCAHC.INC
* TASK:     2003 DOD HEALTH CARE SURVEY REPORT CARDS (8860-410)
* PURPOSE:  Format definitions for converting the CAHPS Scores Database
*           into the WEB layout
*
* WRITTEN:  07/14/2000 BY KEITH RATHBUN
*
* MODIFIED:
*
* 1) 08/24/2001 BY KEITH RATHBUN to support the Q3 2000 child report cards.
* 2) 11/15/2002 BY KEITH RATHBUN, Added parameters for 2002 survey.  Also
*    added BENTYPF = 2001-2005.
* 2) 09/18/2003 BY KEITH RATHBUN, Added parameters for 2003 survey.
*
* INPUTS:   No direct input
*
* OUTPUT:   No direct output
*
*************************************************************************
;
*************************************************************************
* FORMAT Definitions
*************************************************************************;
PROC FORMAT;
   VALUE MAJGRPF
      0 = "All Children"
      1 = "Children in New Regions (1, 2, & 5)"
      2 = "Children in Mature Regions (6, 9-12, & 16)"
      3 = "Children in Other Regions (3, 4, & 7/8)"
   ;
   VALUE ROWCATF
      1 = "Prime Enrollees"             /* XINS_COV = 1 AND C02003 = 4 */
      2 = "Enrollees with Military PCM" /* XENR_PCM = 1 AND C02003 = 4 */
      3 = "Enrollees with Civilian PCM" /* XENR_PCM = 2 AND C02003 = 4 */
      4 = "Non-enrolled Beneficiaries"  /* XINS_COV IN (2,3)           */
      5 = "Under Age 6"                 /* AGEUND6 = 1                 */
      6 = "6-12 Years"                  /* AGE0612 = 1                 */
      7 = "13-17 Years"                 /* AGE1317 = 1                 */
      8 = "CONUS MHS"                   /* ALL Beneficiaries           */
   ;
   VALUE $BENTYPF
    "2000"     = "2000"
    "2001"     = "2001"
    "2002"     = "2002"
    "2003"     = "2003"
    "2004"     = "2004"
    "2005"     = "2005"
    /*****************************/
    /* Admin. Year Defn.         */
    /* 2001        2002      2003 */
    /*****************************/
    "R00006  ", "R02006", "R03006" = "Problems Getting Personal Doctor/Nurse"
    "R00014  ", "R02014", "R03019" = "Problems Getting Referral to Specialist"
```

```
    "R00031  ", "R02031", "R03036" = "Problems Getting Necessary Care"
    "R00032  ", "R02032", "R03037" = "Delays in Care While Awaiting Approval"
    "R00019  ", "R02019", "R03024" = "Advice over Telephone"
    "R00021  ", "R02021", "R03026" = "Wait for Routine Visit"
    "R00024  ", "R02024", "R03032" = "Wait for Urgent Care"
    "R00033    ",  "R02033",  "R03038"  =  "Wait  More  Than  15  Minutes  Past
Appointment"
    "R00036  ", "R02036", "R03041" = "Listens Carefully"
    "R00037  ", "R02037", "R03042" = "Explains so you can Understand"
    "R00038  ", "R02038", "R03043" = "Shows Respect"
    "R00040  ", "R02040", "R03045" = "Explains so your child can Understand"
    "R00041  ", "R02041", "R03046" = "Spends Time with your child"
    "R00034  ", "R02034", "R03039" = "Courteous and Respectful"
    "R00035  ", "R02035", "R03040" = "Helpful"
    "R00049   ",  "R02049",  "R03077"  =  "Problem  Finding/Understanding  Written
Material"
    "R00051    ",  "R02051",  "R03079"  =  "Problem  Getting  Help  from  Customer
Service"
    "R00056  ", "R02056", "R03084" = "Problem with Paperwork"
    "R00045  ", "R02045", "R03073" = "Claims Handled in a Reasonable Time"
    "R00046  ", "R02046", "R03074" = "Claims Handled Correctly"
    "R00042  ", "R02042", "R03056" = "Health Care"
    "R00057  ", "R02057", "R03085" = "Health Plan"
    "R00008  ", "R02008", "R03013" = "Personal Doctor or Nurse"
    "R00016  ", "R02016", "R03021" = "Speciality Care"
   ;
   VALUE $BENEF
    "RCOMPOS1","R00006","R00014","R00031","R00032",
               "R02006","R02014","R02031","R02032",
               "R03006","R03019","R03036","R03037"
    = "Getting Needed Care"
    "RCOMPOS2","R00019","R00021","R00024","R00033",
               "R02019","R02021","R02024","R02033",
               "R03024","R03026","R03032","R03038"
    = "Getting Care Quickly"
    "RCOMPOS3","R00036","R00037","R00038","R00040","R00041",
               "R02036","R02037","R02038","R02040","R02041",
               "R03041","R03042","R03043","R03045","R03046"
    = "How Well Doctors Communicate"
    "RCOMPOS4","R00034","R00035",
               "R02034","R02035",
               "R03039","R03040"
    = "Courteous and Helpful Office Staff"
    "RCOMPOS5","R00049","R00051","R00056",
               "R02049","R02051","R02056",
               "R03077","R03079","R03084"
    = "Customer Service"
    "RCOMPOS6","R00045","R00046",
               "R02045","R02046",
               "R03073","R03074"
    = "Claims Processing"
    /*****************************/
    /* Admin. Year Defn.         */
    /* 2001      2002      2003  */
    /*****************************/
    "R00042", "R02042", "R03056" = "Health Care"
    "R00057", "R02057", "R03085" = "Health Plan"
    "R00008", "R02008", "R03013" = "Personal Doctor or Nurse"
    "R00016", "R02016", "R03021" = "Speciality Care"
```

```
    ;
RUN;
```

G.5 - ..\ReportCards\MPR_ChildQ32003\MPRCOMPC.SAS - Calculate MPR Preventive Care Composite Scores.

```
*****************************************************************
*  Project:   DoD Reporting and Analysis 8860-410
*  Program:   MPRCOMPC.SAS
*  Author:    Chris Rankin
*  Date:      7/17/2000
*  Modified:  1) 10/09/2001 Modified for 2000
*                2nd composite questions from 1999 dropped from
*                questionnaire for 2000
*             2) 10/31/2002 by Mike Scott: Updated for Q3 2002
*                child report cards.
*             3) 9/22/2003 by Keith Rathbun: Updated for Q3 2003
*                child report cards.
*             4) 12/3/2003 by Mike Scott: Added V612 to libnames.
*
*  Purpose:   Calculate MPR Preventive Care Composites
*             CHILD VERSION
*  Input:     HCS03C_1.SD2
*  Output:    RCMPSUM.SD2
*             MCMPSUM.SD2
*  Include
*   Files:    LOADCAHP.INC
*             CACRTP.INC
*    Note:    Next program is Loadmprc.sas
*****************************************************************;

OPTIONS NOCENTER LS=124 PS=74 SOURCE SOURCE2 MLOGIC MPRINT COMPRESS=YES;

LIBNAME  IN   V612  "..\..\..\DATA\CFINAL";
LIBNAME  OUT  V612  ".";
LIBNAME LIBRARY "..\..\..\DATA\CFINAL\FMTLIB";

%LET WGT=WRWT;
%LET DEBUG=Y;      /** Set to Y for Debug print of datasets **/
%LET YR=03;        /** used to name variables               **/
%LET INDATA=HCS03C_1;

/***** The following parameters are used in the Variance ****/
/***** calcuation macro for region and catchment area    ****/

%LET GRPNUM=8;     /** number of groups          **/
%LET COMPNUM=3;   /** numper of variables       **/
%LET CMPNUM1=3;    /** number of variables in first compostie  **/
%LET CMPNUM2=0;    /** number of variables in second composite **/

%LET COMPCNT=1;    /** number of composites                    **/

%INCLUDE "..\..\LOADWEB\LOADCAHC.INC";

/**** Note:  output all data to a single dataset for macro  **/
/**** call                                                  **/
/**** Note:  for child data, all responses are in CONUS     **/

*****************************************************************************
*
* Beneficiary Groups:
```

```
*
*    Adjusted Score           Definitions
*    Group Number
* 1. Prime enrollees          XINS_COV = 1 AND C03003=4
* 2. Enrollees w/mil PCM      XENR_PCM = 1 AND C03003=4
* 3. Enrollees w/civ PCM      XENR_PCM = 2 AND C03003=4
* 4. Nonenrollees             XINS_COV IN (2,3)
* 5. Under Age 6              AGEUND6 = 1
* 6. 6-12 Years               AGE0612 = 1
* 7. 13-17 Years              AGE1317 = 1
* 8. All beneficiaries        All beneficiaries
*
*************************************************************************;

DATA HCSDB(KEEP=BGROUP SUPREG  &WGT MPRVAR1-MPRVAR&COMPNUM
                NUM&YR.V1-NUM&YR.V&COMPNUM. DEN&YR.V1-DEN&YR.V&COMPNUM.);

  SET IN.&INDATA(RENAME=(STRATUM=XSTRATUM FIELDAGE=ZAGE));

  /**** note:  for PCM composite, the numerator and denominator are not *****/
  /**** the same question(s)                                              *****/

  MPRVAR1=C03014;    **  had a PCM                          ;
  MPRVAR2=C03015;    **  know the name of PCM               ;
  MPRVAR3=C03016;    **  how much of a problem -- PCM       ;

  /**** set up numerator and denominator for proportions ****/

  ARRAY MPRVAR(*) MPRVAR1-MPRVAR&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=1 THEN DO;
        DENOM(I)=1;
        IF C03014=1 THEN NUMER(I)=1;
        ELSE NUMER(I)=0;
     END;
     ELSE IF I IN (2,3) THEN DO;
        IF C03014=1 THEN DENOM(I)=1;
           IF I=2 THEN DO;
           IF MPRVAR(I) = 1 THEN NUMER(I) = 1;
           ELSE NUMER(I)=0;
        END;
        ELSE IF I=3 THEN DO;
           IF MPRVAR(I)=3 THEN NUMER(I)=1;
           ELSE NUMER(I)=0;
        END;
     END;
  END;

  DROP I;
  ************************************************************************;
  * taken from cahps, step 1 program ;

  IF (ZAGE NE " ") THEN DO;
      AGEUND6 = 0;
      AGE0612 = 0;
```

```
      AGE1317 = 0;
      IF      (ZAGE < "006")         THEN AGEUND6 = 1;
      ELSE IF ("006" <= ZAGE <= "012") THEN AGE0612 = 1;
      ELSE IF ("013" <= ZAGE <= "017") THEN AGE1317 = 1;
  END;

  * create the beneficiary group/enrollment group subsets;
  * groups 1-3 modified 10/09/2000                      ;

  IF (XINS_COV = 1 AND C03003=4) THEN DO;
     BGROUP = 1; OUTPUT;
  END;

  IF (XENR_PCM = 1 AND C03003=4) THEN DO;
     BGROUP = 2; OUTPUT;
  END;

  IF (XENR_PCM = 2 AND C03003=4) THEN DO;
     BGROUP = 3; OUTPUT;
  END;

  IF XINS_COV IN (2,3) THEN DO;
     BGROUP = 4; OUTPUT;
  END;

  IF AGEUND6 = 1 & (XINS_COV = 1 AND C03003=4) THEN DO;
     BGROUP = 5; OUTPUT;
  END;

  IF AGE0612 = 1 & (XINS_COV = 1 AND C03003=4) THEN DO;
     BGROUP = 6; OUTPUT;
  END;

  IF AGE1317 = 1 & (XINS_COV = 1 AND C03003=4) THEN DO;
     BGROUP = 7; OUTPUT;
  END;

  IF (XINS_COV = 1 AND C03003=4) THEN DO;
     BGROUP = 8; OUTPUT;
  END;

RUN;

*********************************************************************;
**** Next, check catchment areas for requisite number of observations *;
**** for the macro calls (exclude ENBGSMPL w/ <2 obs)                  *;
**** also, keep list of region/catchment area combinations            *;
*********************************************************************;

** Note:  this section of code removed, 10/04/2001 C. Rankin ;

**PROC FREQ NOPRINT DATA=&YRDATA;
**   TABLE BGROUP*SUPREG*CACSMPL/MISSING LIST
**   OUT=OBSCNT(DROP=PERCENT);
**RUN;

**PROC SORT DATA=&YRDATA;
**BY BGROUP SUPREG CACSMPL;
**RUN;
```

```
**DATA HCSDB /*FAILED*/; /** Note:  include all catchment areas **/
  **MERGE &YRDATA(IN=IN_ALL) OBSCNT(IN=IN_OBS);
  **BY BGROUP SUPREG CACSMPL;

  **IF COUNT < 2 THEN PUT "Less than 2 obs: SUPREG=" SUPREG "CACSMPL=" CACSMPL;
  ** OUTPUT FAILED;
  **END;
  **ELSE DO;
  **OUTPUT HCSDB;
  **END;
**RUN;

**DATA OBSCNT;
**  SET OBSCNT;
**  RENAME BGROUP=GROUP;
**RUN;

**PROC SORT NODUPKEY DATA=OBSCNT;
** BY GROUP CACSMPL;
**RUN;


*************************************************************************;
*** Note:  for child MPR Composites, no significance tests are performed  ***;
*** so standard errors are not calcuated                                  ***;
*** A_Sudaan, Getcor, and Getsig macros are not needed(see adult program  ***;
*************************************************************************;

*******************************************************;
****  Macro to derive composites for each             ***;
****  beneficiary group, level                        ***;
****  output one dataset for each group               ***;
*******************************************************;

%MACRO GETPROP(BYVAR);

 %LET COMP1 = %EVAL(&CMPNUM1+1);
 %LET COMP2 = %EVAL(&CMPNUM1+&CMPNUM2);

 %IF %UPCASE(&BYVAR)=SUPREG %THEN %LET PREF=R;
 %ELSE %IF %UPCASE(&BYVAR)=CONUS %THEN %LET PREF=M;


 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=HCSDB;
    CLASS BGROUP &BYVAR;
    VAR DEN&YR.V1-DEN&YR.V&COMPNUM;
    OUTPUT OUT=&PREF.DGFR(DROP=_TYPE_ _FREQ_)
    SUM= OBS&YR.V1-OBS&YR.V&COMPNUM;
 RUN;
```

```
DATA ALLCAT;
  MERGE &PREF.CMPSUM(RENAME=(_FREQ_=N_OBS&YR.))
        &PREF.DGFR;
  BY BGROUP &BYVAR;
RUN;


PROC MEANS NWAY NOPRINT DATA=ALLCAT; /** summarize for all children **/
   CLASS BGROUP;
   VAR OBS&YR.V1-OBS&YR.V&COMPNUM
       NUM&YR.V1-NUM&YR.V&COMPNUM
       DEN&YR.V1-DEN&YR.V&COMPNUM;
   OUTPUT OUT=ALLCHILD(DROP=_TYPE_ _FREQ_)
   SUM= ;
RUN;


DATA OUT.MPRCOMPC;
  SET ALLCAT
      ALLCHILD;

  IF SUPREG = . THEN SUPREG = 0;  /** all children dataset **/;

  MAJGRP=PUT(SUPREG, MAJGRPF.);

  /**** set up group variable  **/

  RENAME BGROUP=GROUP;

  /**** set up proportions, and composites **/

  ARRAY PROPORT PRP&YR.V1-PRP&YR.V&COMPNUM;
  ARRAY NUMER   NUM&YR.V1-NUM&YR.V&COMPNUM;
  ARRAY DENOM   DEN&YR.V1-DEN&YR.V&COMPNUM;

  DO J=1 TO DIM(PROPORT);
     PROPORT(J) = NUMER(J)/DENOM(J);
  END;
  DROP J;

  /**** 2 composites **/

  %DO Q=1 %TO &COMPCNT;
     %IF &Q=1 %THEN %DO;
        CP&YR.NUM&Q.=SUM(OF NUM&YR.V1-NUM&YR.V&CMPNUM1);
        CP&YR.DEN&Q.=SUM(OF DEN&YR.V1-DEN&YR.V&CMPNUM1);
        CP&YR.OBS&Q.=SUM(OF OBS&YR.V1-OBS&YR.V&CMPNUM1);
     %END;
     %ELSE %IF &Q=2 %THEN %DO;
        CP&YR.NUM&Q.=SUM(OF NUM&YR.V&COMP1.-NUM&YR.V&COMP2);
        CP&YR.DEN&Q.=SUM(OF DEN&YR.V&COMP1.-DEN&YR.V&COMP2);
        CP&YR.OBS&Q.=SUM(OF OBS&YR.V&COMP1.-OBS&YR.V&COMP2);
     %END;
     COMP&YR.&Q.=CP&YR.NUM&Q./CP&YR.DEN&Q.;
  %END;

  /** Note:  don't need weights for benchmarks **/
```

```
   %IF &DEBUG=Y AND &PREF=R %THEN %DO;

      PROC PRINT DATA=OUT.MPRCOMPC;  /* print out final dataset */
      RUN;                           /* for region to check     */
   %END;

%MEND GETPROP;

%GETPROP(SUPREG);

ENDSAS;
```

G.6 - ..\ReportCards\MPR_ChildQ32003\LOADMPRC.SAS - Convert the MPR Scores Database into the WEB layout.

```
/*****************************************************************
/*  Project:   DoD Reporting and Analysis 8860-410               *
/*  Program:   LOADMPR.SAS                                       *
/*  Author:    Chris Rankin                                      *
/*  Date:      08/01/2000                                        *
/*  Modified:  1) 10/31/2002 by Mike Scott: Updated for Q3 2002  *
/*                child report cards.                            *
/*             2) 12/3/2003 by Mike Scott: Updated for Q3 2003   *
/*                child report cards.                            *
/*  Purpose:   Load MPR composites for child data                *
/*                                                               *
/*   Input:    RFINAL.SD2                                        *
/*             MFINAL.SD2                                        *
/*   Output:   Loadmprc.sd2                                      *
/*****************************************************************/


OPTIONS COMPRESS=YES NOCENTER LS=124 PS=74 SOURCE SOURCE2;

LIBNAME  INLIB    V612  ".";
LIBNAME  OUT      V612  ".";
LIBNAME  LIBRARY  V612  "..\..\..\DATA\CFINAL\FMTLIB";
LIBNAME  IN2      V612  "..\..\LOADWEB";

%LET COMPNUM=3; /*** number of questions in all composites  ***/
%LET COMPCNT=1; /*** number of composites                   ***/

%LET YR=03;
%LET YEAR=2003;

%INCLUDE "..\..\LOADWEB\LOADCAHC.INC";

PROC FORMAT;
 VALUE BENF
  1-4, 7 = 'Primary Care Manager             ';

RUN;


DATA OUT.LOADMPRC(KEEP=MAJGRP ROWCAT BENEFIT BENTYPE SCORE N_OBS N_WGT);
  LENGTH MAJGRP  $42;
  LENGTH ROWCAT  $30;
  LENGTH BENTYPE $75;
  LENGTH BENEFIT $50;

  SET INLIB.MPRCOMPC;

  ARRAY PROPORT{*} PRP&YR.V1-PRP&YR.V&COMPNUM. COMP&YR.1;
  ARRAY    NOBS{*} OBS&YR.V1-OBS&YR.V&COMPNUM. CP&YR.OBS1;
  ARRAY    NWGT{*} DEN&YR.V1-DEN&YR.V&COMPNUM. CP&YR.DEN1;

  DO I=1 TO 4;
     SCORE=PROPORT{I}*100;
     ** SIG=SIGNIF{I};
     N_OBS=NOBS{I};
```

```
     N_WGT=NWGT{I};
     ROWCAT=PUT(GROUP,ROWCATF.);
     BENEFIT=PUT(I,BENF.);
     IF I=1 THEN DO;
        BENTYPE="Had a TRICARE PCM";
        OUTPUT;
     END;
     ELSE IF I=2 THEN DO;
        BENTYPE="Parent Knows Child's PCM's Name";
        OUTPUT;
     END;
     ELSE IF I=3 THEN DO;
        BENTYPE= "Had a 'Big Problem' Getting to See PCM";
        OUTPUT;
     END;

     ELSE IF I=4 THEN DO;
        BENTYPE= "&YEAR";
        OUTPUT;
     END;
  END;
RUN;



PROC PRINT DATA=OUT.LOADMPRC;
RUN;
```

G.7.1 - ..\Benchmark\BENCHC01.SAS - Extract CAHPS Questions and assign them names consistent with MPR survey variables.

```
*******************************************************************************
*
* PROGRAM:  BENCHC01.SAS
* TASK:     2003 DOD HEALTH CARE SURVEY ANALYSIS (8860-410)
* PURPOSE:  Extract 2001 Child CAHPS Questions
*
* WRITTEN:  07/14/2000 BY KEITH RATHBUN
*
* MODIFIED: 1) 09/05/2001 BY KEITH RATHBUN, Updated variable names to
*              accommodate the 2000 Q3 Child DOD survey.  Removed unnecessary
*              references to C99D65.
*           2) 10/05/2001 BY KEITH RATHBUN, Added specialty care (C00016).
*           3) 10/31/2002 BY MIKE SCOTT, Updated variable names to
*              accommodate the 2002 Q3 Child DOD survey.
*           4) 12/03/2003 BY MIKE SCOTT, Updated variable and question names
*              for Q3 2003 Child survey.  Deleted line in first data step:
*              IF CC37=. THEN CC38=.  Added code to make PRODUCT numeric for
*              NEST statement in BENCHC03_5.  Added V612 to libnames.
*
* INPUTS:   1) CC_2001M.SD2 - 2001 Child CAHPS Questions
*
* OUTPUT:   1) BENCHC01.SD2 - 2001 Child CAHPS Questions Renamed to be
*              consistent with the 2003 Q3 Child DOD Survey.
*
* NOTES:
*
* 1) This program will generate the input for BENCHC02.SAS.
*
*******************************************************************************
* Assign data libraries and options
*******************************************************************************;
LIBNAME IN   V612   "..\..\..\2001Child_NCBD";
LIBNAME OUT  V612   ".";
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

DATA OUT.BENCHC01;
   SET IN.CC_2001M;
   FORMAT _ALL_;
   C03006   = CC06_01;
   C03013   = CC09_01;
   C03019   = CC11_01;
   C03021   = CC13_01;
   C03024   = CC16_01;
   C03026   = CC18_01;
   C03032   = CC21_01;
   C03036   = CC25_01;
   C03037   = CC26_01;
   C03038   = CC27_01;
   C03039   = CC28_01;
   C03040   = CC29_01;
   C03041   = CC30_01;
   C03042   = CC31_01;
   C03043   = CC32_01;
   C03045   = CC34_01;
   C03046   = CC35_01;
```

```
C03056   = CC36_01;
C03073   = CC38_01;
C03074   = CC39_01;
C03077   = CC42_01;
C03079   = CC44_01;
C03084   = CC49_01;
C03085   = CC50_01;
AGEGROUP = CC56_01; * Parents Age Grouping;
ZAGE     = CC52_01; * Childs Age;
XSEXA    = CC53_01; * Childs Sex;
SREDHIGH = CC58_01; * Parents Education Level;
C03089   = CC51_01; * Childs Health Status;
if product='FFS' then model=4;
if product='PPO' then model=2;
if product='HMO' then model=1;
if product='HMO/POS' then model=6;
if product='HMO/PCCM' then model=5;
if product='POS' then model=3;

LABEL C03006   = "CC06_01 - CAHPS variable"
      C03013   = "CC09_01 - CAHPS variable"
      C03019   = "CC11_01 - CAHPS variable"
      C03021   = "CC13_01 - CAHPS variable"
      C03024   = "CC16_01 - CAHPS variable"
      C03026   = "CC18_01 - CAHPS variable"
      C03032   = "CC21_01 - CAHPS variable"
      C03036   = "CC25_01 - CAHPS variable"
      C03037   = "CC26_01 - CAHPS variable"
      C03038   = "CC27_01 - CAHPS variable"
      C03039   = "CC28_01 - CAHPS variable"
      C03040   = "CC29_01 - CAHPS variable"
      C03041   = "CC30_01 - CAHPS variable"
      C03042   = "CC31_01 - CAHPS variable"
      C03043   = "CC32_01 - CAHPS variable"
      C03045   = "CC34_01 - CAHPS variable"
      C03046   = "CC35_01 - CAHPS variable"
      C03056   = "CC36_01 - CAHPS variable"
      C03073   = "CC38_01 - CAHPS variable"
      C03074   = "CC39_01 - CAHPS variable"
      C03077   = "CC42_01 - CAHPS variable"
      C03079   = "CC44_01 - CAHPS variable"
      C03084   = "CC49_01 - CAHPS variable"
      C03085   = "CC50_01 - CAHPS variable"
      AGEGROUP = "CC56_01 - CAHPS variable" /* Parents Age Grouping    */
      ZAGE     = "CC52_01 - CAHPS variable" /* Childs Age              */
      XSEXA    = "CC53_01 - CAHPS variable" /* Childs Sex              */
      SREDHIGH = "CC58_01 - CAHPS variable" /* Parents Education Level */
      C03089   = "CC51_01 - CAHPS variable" /* Childs Health Status    */
      ;
KEEP C03006
     C03013
     C03019
     C03021
     C03024
     C03026
     C03032
     C03036
     C03037
     C03038
```

```
        C03039
        C03040
        C03041
        C03042
        C03043
        C03045
        C03046
        C03056
        C03073
        C03074
        C03077
        C03079
        C03084
        C03085
        AGEGROUP
        ZAGE
        XSEXA
        SREDHIGH
        C03089
        WESPLNID
        MODEL
        ;
RUN;

DATA OUT.BENCHC01 (DROP=WESPLNID);
  SET OUT.BENCHC01;
  LENGTH PRODUCT 8;
  PRODUCT = WESPLNID;
RUN;

TITLE1 "Extract 2001 Child CAHPS Questions (8860-410)";
TITLE2 "Program Name: BENCHC01.SAS By Keith Rathbun";
TITLE3 "Program Input: CHILD.SD2";
TITLE4 "Program Output: BENCHC01.SD2";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES _ALL_ /MISSING LIST;
RUN;
```

G.7.2 - ..\Benchmark\BENCHC02.SAS - Recode CAHPS Questions to have scales consistent with MPR survey variables.

```
*******************************************************************************
*
* PROGRAM:  BENCHC02.SAS
* TASK:     2003 DOD HEALTH CARE SURVEY ANALYSIS (8860-410)
* PURPOSE:  Recode 2001 Child CAHPS Questions
*
* WRITTEN:  07/17/2000 BY KEITH RATHBUN
*
* MODIFIED: 1) 09/05/2001 BY KEITH RATHBUN, Updated variable names to
*              accommodate the 2000 Q3 Child DOD Survey.
*           2) 10/05/2001 BY KEITH RATHBUN, Added specialty care (C00016).
*           3) 11/29/2001 BY KEITH RATHBUN, Removed reverse ordering
*              of C00033.
*           4) 10/31/2002 BY MIKE SCOTT, Updated variable names to
*              accommodate the 2002 Q3 Child DOD Survey.
*           5) 12/05/2003 BY MIKE SCOTT, Updated variable names for Q3 2003
*              Child survey.  Added code for C03073 and C03074.  Added V612
*              to libnames.
*
* INPUT:    1) BENCHC01.SD2 - 2001 Child CAHPS Questions Renamed to be
*              consistent with the 2003 Q3 Child DOD Survey.
*
* OUTPUT:   1) BENCHC02.SD2 - Recoded 2001 Child CAHPS Questions Renamed
*              to be consistent with the 2003 Q3 Child DOD Survey.
*
* NOTES:
*
* 1) Run this program after BENCHC01.SAS.
* 2) This program will generate the input for BENCHC03.SAS.
*
*******************************************************************************
* Assign data libraries and options
*******************************************************************************;
LIBNAME IN   V612   ".";
LIBNAME OUT  V612   ".";
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

DATA OUT.BENCHC02;
   SET IN.BENCHC01;

   ****************************************************************************
   * 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 C03038 =4 THEN C03038=1;
   ELSE IF C03038=3 THEN C03038=2;
   ELSE IF C03038=2 THEN C03038=3;
   ELSE IF C03038=1 THEN C03038=4;

   IF C03024 = 1      THEN R03024 = 1;
   ELSE IF C03024 = 2 THEN R03024 = 1;
   ELSE IF C03024 = 3 THEN R03024 = 2;
   ELSE IF C03024 = 4 THEN R03024 = 3;
```

```
ELSE IF C03024 < 0 THEN R03024 = .;

IF C03026 = 1      THEN R03026 = 1;
ELSE IF C03026 = 2 THEN R03026 = 1;
ELSE IF C03026 = 3 THEN R03026 = 2;
ELSE IF C03026 = 4 THEN R03026 = 3;
ELSE IF C03026 < 0 THEN R03026 = .;

IF C03032 = 1      THEN R03032 = 1;
ELSE IF C03032 = 2 THEN R03032 = 1;
ELSE IF C03032 = 3 THEN R03032 = 2;
ELSE IF C03032 = 4 THEN R03032 = 3;
ELSE IF C03032 < 0 THEN R03032 = .;

IF C03038 = 1      THEN R03038 = 1;
ELSE IF C03038 = 2 THEN R03038 = 1;
ELSE IF C03038 = 3 THEN R03038 = 2;
ELSE IF C03038 = 4 THEN R03038 = 3;
ELSE IF C03038 < 0 THEN R03038 = .;

IF C03041 = 1      THEN R03041 = 1;
ELSE IF C03041 = 2 THEN R03041 = 1;
ELSE IF C03041 = 3 THEN R03041 = 2;
ELSE IF C03041 = 4 THEN R03041 = 3;
ELSE IF C03041 < 0 THEN R03041 = .;

IF C03042 = 1      THEN R03042 = 1;
ELSE IF C03042 = 2 THEN R03042 = 1;
ELSE IF C03042 = 3 THEN R03042 = 2;
ELSE IF C03042 = 4 THEN R03042 = 3;
ELSE IF C03042 < 0 THEN R03042 = .;

IF C03043 = 1      THEN R03043 = 1;
ELSE IF C03043 = 2 THEN R03043 = 1;
ELSE IF C03043 = 3 THEN R03043 = 2;
ELSE IF C03043 = 4 THEN R03043 = 3;
ELSE IF C03043 < 0 THEN R03043 = .;

IF C03045 = 1      THEN R03045 = 1;
ELSE IF C03045 = 2 THEN R03045 = 1;
ELSE IF C03045 = 3 THEN R03045 = 2;
ELSE IF C03045 = 4 THEN R03045 = 3;
ELSE IF C03045 < 0 THEN R03045 = .;

IF C03046 = 1      THEN R03046 = 1;
ELSE IF C03046 = 2 THEN R03046 = 1;
ELSE IF C03046 = 3 THEN R03046 = 2;
ELSE IF C03046 = 4 THEN R03046 = 3;
ELSE IF C03046 < 0 THEN R03046 = .;

IF C03039 = 1      THEN R03039 = 1;
ELSE IF C03039 = 2 THEN R03039 = 1;
ELSE IF C03039 = 3 THEN R03039 = 2;
ELSE IF C03039 = 4 THEN R03039 = 3;
ELSE IF C03039 < 0 THEN R03039 = .;

IF C03040 = 1      THEN R03040 = 1;
ELSE IF C03040 = 2 THEN R03040 = 1;
ELSE IF C03040 = 3 THEN R03040 = 2;
```

```
ELSE IF C03040 = 4 THEN R03040 = 3;
ELSE IF C03040 < 0 THEN R03040 = .;

IF C03089 = 1      THEN R03089 = 5;
ELSE IF C03089 = 2 THEN R03089 = 4;
ELSE IF C03089 = 3 THEN R03089 = 3;
ELSE IF C03089 = 4 THEN R03089 = 2;
ELSE IF C03089 = 5 THEN R03089 = 1;
ELSE IF C03089 > 5 | C03089 < 1 THEN R03089 = .;

IF C03073 = 1      THEN R03073 = 1;
ELSE IF C03073 = 2 THEN R03073 = 1;
ELSE IF C03073 = 3 THEN R03073 = 2;
ELSE IF C03073 = 4 THEN R03073 = 3;
ELSE IF C03073 < 0 THEN R03073 = .;

IF C03074 = 1      THEN R03074 = 1;
ELSE IF C03074 = 2 THEN R03074 = 1;
ELSE IF C03074 = 3 THEN R03074 = 2;
ELSE IF C03074 = 4 THEN R03074 = 3;
ELSE IF C03074 < 0 THEN R03074 = .;

*********************************************************************
* Recode variables to one missing condition "."
* This also renames all the "C03xxx" to 'R03xxx".
*********************************************************************;
R03006 = C03006;  IF R03006 < 0 THEN R03006 = .;
R03019 = C03019;  IF R03019 < 0 THEN R03019 = .;
R03036 = C03036;  IF R03036 < 0 THEN R03036 = .;
R03037 = C03037;  IF R03037 < 0 THEN R03037 = .;
R03077 = C03077;  IF R03077 < 0 THEN R03077 = .;
R03079 = C03079;  IF R03079 < 0 THEN R03079 = .;
R03084 = C03084;  IF R03084 < 0 THEN R03084 = .;
R03056 = C03056;  IF R03056 < 0 THEN R03056 = .;
R03085 = C03085;  IF R03085 < 0 THEN R03085 = .;
R03013 = C03013;  IF R03013 < 0 THEN R03013 = .;
R03021 = C03021;  IF R03021 < 0 THEN R03021 = .;

LABEL R03006   = "CC06_01 - Recoded CAHPS variable"
      R03013   = "CC09_01 - Recoded CAHPS variable"
      R03019   = "CC11_01 - Recoded CAHPS variable"
      R03021   = "CC13_01 - Recoded CAHPS variable"
      R03024   = "CC16_01 - Recoded CAHPS variable"
      R03026   = "CC18_01 - Recoded CAHPS variable"
      R03032   = "CC21_01 - Recoded CAHPS variable"
      R03036   = "CC25_01 - Recoded CAHPS variable"
      R03037   = "CC26_01 - Recoded CAHPS variable"
      R03038   = "CC27_01 - Recoded CAHPS variable"
      R03039   = "CC28_01 - Recoded CAHPS variable"
      R03040   = "CC29_01 - Recoded CAHPS variable"
      R03041   = "CC30_01 - Recoded CAHPS variable"
      R03042   = "CC31_01 - Recoded CAHPS variable"
      R03043   = "CC32_01 - Recoded CAHPS variable"
      R03045   = "CC34_01 - Recoded CAHPS variable"
      R03046   = "CC35_01 - Recoded CAHPS variable"
      R03056   = "CC36_01 - Recoded CAHPS variable"
      R03073   = "CC38_01 - Recoded CAHPS variable"
      R03074   = "CC39_01 - Recoded CAHPS variable"
      R03077   = "CC42_01 - Recoded CAHPS variable"
```

```
         R03079   = "CC44_01 - Recoded CAHPS variable"
         R03084   = "CC49_01 - Recoded CAHPS variable"
         R03085   = "CC50_01 - Recoded CAHPS variable"
         R03089   = "CC51_01 - Recoded CAHPS variable"
         PRODUCT  = "Product ID - CAHPS variable";
       ;
RUN;

TITLE1 "Recode 2001 Child CAHPS Questions (8860-410)";
TITLE2 "Program Name: BENCHC02.SAS By Keith Rathbun";
TITLE3 "Program Input: BENCHC01.SD2";
TITLE4 "Program Output: BENCHC02.SD2";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES  AGEGROUP
        ZAGE
        XSEXA
        SREDHIGH
        C03006 * R03006
        C03013 * R03013
        C03019 * R03019
        C03021 * R03021
        C03024 * R03024
        C03026 * R03026
        C03032 * R03032
        C03036 * R03036
        C03037 * R03037
        C03038 * R03038
        C03039 * R03039
        C03040 * R03040
        C03041 * R03041
        C03042 * R03042
        C03043 * R03043
        C03045 * R03045
        C03046 * R03046
        C03056 * R03056
        C03073 * R03073
        C03074 * R03074
        C03077 * R03077
        C03079 * R03079
        C03084 * R03084
        C03085 * R03085
        C03089 * R03089
   /MISSING LIST;
RUN;
```

G.7.3 - ..\Benchmark\BENCHC03_5.SAS - Adjust Child CAHPS Benchmark Scores.

```
*************************************************************************
*
* PROGRAM:  BENCHC03.SAS
* TASK:     2003 DOD HEALTH CARE SURVEY ANALYSIS (8860-410)
* PURPOSE:  Recode 2001 Child CAHPS Questions
*
* WRITTEN:  June 2000 BY ERIC SCHONE
*
* MODIFIED: 1) June 2000 BY KEITH RATHBUN - Output permanent datasets with
*              scores and standard errors and process the rest of the
*              composites and ratings.
*           2) July 2000 BY KEITH RATHBUN - Update macro calls for child
*              survey.  Update to accommodate a 5th dependent variable.
*           3) September 2001 BY KEITH RATHBUN - Update macro calls for 2000
*              Q3 Child survey.  Let wgt = wrwt.  Update libnames.  Added
*              specialty care.
*           4) October 2002 BY MIKE SCOTT, Updated variable names to
*              accommodate the 2002 Q3 Child DOD survey.  Changed INTERCEP
*              to INTERCEPT.
*           5) December 2003 BY MIKE SCOTT, Updated variable names and libnames
*              for Q3 2003 Child survey.  Pointed to CONVERT.SAS on DOD computer
*              instead of J:.  Added v612 to libnames.  Added 03073 and 03074
*              to %CONT3 call.  Added code block at end of program for Claims
*              Processing.  Set %COMP parameter to 6, and changed other
*              parameters from 6-9 to 7-10.
*
* INPUT:    1) BENCHC02.SD2 - 2001 Child CAHPS Questions Renamed to be
*              consistent with the 2003 Q3 Child DOD Survey.
*
* OUTPUTS:  1) Benchmark Composite Scores Data Sets
*
* INCLUDES: 1) CONVERT.SAS - Convert item responses to proportional values
*              for consistency with TOPS.
*
* NOTES:
*
* 1) Run this program after BENCHC02.SAS.
* 2) This program will generate the input for BENCHC04.SAS.
*
*************************************************************************
* Assign data libraries and options
*************************************************************************;
libname in  v612 '.';
libname in2 v612 '..\reportcards\cahps_childq32003\data';
libname out v612 'datachild';

%let wgt = wrwt;

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;
proc print;

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(rename=(_freq_=denom)) count2;
 set count;
 if _type_=0 then output count;
 else output count2;
run;

data count(keep=pweight product);
 if _n_=1 then set count;
 set count2;
 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;
  proc reg data=temp outest=c_&x;
 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=5 %to 5;
  %if &i=8 %then %do;

   data group8;
    set in2.group5 in2.group6 in2.group7;
   run;
```

```
   PROC CONTENTS DATA=GROUP8;
     TITLE "CONTENTS GROUP 8";
   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,e);
 %if &a~= %then %do;
    %let n=r_&a;
    %let m=s_&a;
    %do i=5 %to 5;
        %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=5 %to 5;
        %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;
    %let n=%str(&n r_&c);
    %let m=%str(&m s_&c);
    %do i=5 %to 5;
        %let p&i=%str(&&p&i &c._&i);
    %end;
    %let grpnum=3;
    proc sort data=r_&c;
       by mpid;
    run;
 %end;

 %if &d~= %then %do;
    %let n=%str(&n r_&d);
    %let m=%str(&m s_&d);
    %do i=5 %to 5;
        %let p&i=%str(&&p&i &d._&i);
    %end;
```

```
    %let grpnum=4;
    proc sort data=r_&d;
       by mpid;
    run;
 %end;

 %if &e~= %then %do;
    %let n=%str(&n r_&e);
    %let m=%str(&m s_&e);
    %do i=5 %to 5;
        %let p&i=%str(&&p&i &e._&i);
    %end;
    %let grpnum=5;
    proc sort data=r_&e;
       by mpid;
    run;
 %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;
  %if &e~= %then %do;
   set s_&e;
  %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=5 %to 5;
 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.benchc02 out=setup;
 by product;
run;

data setup;
 set setup; by product;
 mpid=_n_;
 IF (ZAGE NE . AND ZAGE NE 255) THEN DO;
      AGEUND6 = 0;
      AGE0612 = 0;
      AGE1317 = 0;

      IF      (ZAGE < 6)         THEN AGEUND6 = 1;
      ELSE IF (6  <= ZAGE <= 12) THEN AGE0612 = 1;
      ELSE IF (13 <= ZAGE <= 17) THEN AGE1317 = 1;
```

```
   END;
if agegroup ne . then do;
 ageund18=0; age1824=0; age2534=0; age3544=0; age4554=0; age5564=0; age6574=0;

      if agegroup=0 then ageund18 = 1;
 else 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 ageund6=1;
run;

%INCLUDE "..\..\..\..\8687\PROGRAMS\REPORTCARDS\CONVERT.SAS";

%CONT1(DSN=SETUP, NUM=7,  Y=R03006 R03019 R03036 R03037
                           R03077 R03079 R03084);

%CONT2(DSN=SETUP, NUM=4,  Y=R03056 R03085 R03013 R03021);

%CONT3(DSN=SETUP, NUM=13, Y=R03024 R03026 R03032 R03038
                           R03041 R03042 R03043 R03045
                           R03046 R03039 R03040 R03073 R03074);
/* GETTING NEEDED CARE */
%ADJUST(R03006,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03019,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03036,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03037,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(1,R03006,R03019,R03036,R03037);

/* GETTING NEEDED CARE QUICKLY */
%ADJUST(R03024,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03026,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03032,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03038,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(2,R03024,R03026,R03032,R03038);

/* HOW WELL DOCTORS COMMUNICATE */
%ADJUST(R03041,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03042,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03043,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03045,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03046,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(3,R03041,R03042,R03043,R03045,R03046);

/* COURTEOUS AND HELPFUL OFFICE STAFF */
%ADJUST(R03039,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03040,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(4,R03039,R03040);

/* CUSTOMER SERVICE */
%ADJUST(R03077,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03079,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03084,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(5,R03077,R03079,R03084);

/* CLAIMS PROCESSING */
```

```
%ADJUST(R03073,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03074,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(6,R03073,R03074);

/* RATING ALL HEALTH CARE: 0 - 10 */
%ADJUST(R03056,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(7,R03056);

/* RATING OF HEALTH PLAN: 0 - 10 */
%ADJUST(R03085,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(8,R03085);

/* RATING OF PERSONAL DR: 0 - 10 */
%ADJUST(R03013,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(9,R03013);

/* RATING OF SPECIALTY CARE: 0 - 10 */
%ADJUST(R03021,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(10,R03021);
```

G.7.4 - ..\Benchmark\BENCHC03_6.SAS - Adjust Child CAHPS Benchmark Scores.

```
*************************************************************************
*
* PROGRAM:  BENCHC03.SAS
* TASK:     2003 DOD HEALTH CARE SURVEY ANALYSIS (8860-410)
* PURPOSE:  Recode 2001 Child CAHPS Questions
*
* WRITTEN:  June 2000 BY ERIC SCHONE
*
* MODIFIED: 1) June 2000 BY KEITH RATHBUN - Output permanent datasets with
*              scores and standard errors and process the rest of the
*              composites and ratings.
*           2) July 2000 BY KEITH RATHBUN - Update macro calls for child
*              survey.  Update to accommodate a 5th dependent variable.
*           3) September 2001 BY KEITH RATHBUN - Update macro calls for 2000
*              Q3 Child survey.  Let wgt = wrwt.  Update libnames.  Added
*              specialty care.
*           4) October 2002 BY MIKE SCOTT, Updated variable names to
*              accommodate the 2002 Q3 Child DOD survey.  Changed INTERCEP
*              to INTERCEPT.
*           5) December 2003 BY MIKE SCOTT, Updated variable names and libnames
*              for Q3 2003 Child survey.  Pointed to CONVERT.SAS on DOD computer
*              instead of J:.  Added v612 to libnames.  Added 03073 and 03074
*              to %CONT3 call.  Added code block at end of program for Claims
*              Processing.  Set %COMP parameter to 6, and changed other
*              parameters from 6-9 to 7-10.
*
* INPUT:    1) BENCHC02.SD2 - 2001 Child CAHPS Questions Renamed to be
*              consistent with the 2003 Q3 Child DOD Survey.
*
* OUTPUTS:  1) Benchmark Composite Scores Data Sets
*
* INCLUDES: 1) CONVERT.SAS - Convert item responses to proportional values
*              for consistency with TOPS.
*
* NOTES:
*
* 1) Run this program after BENCHC02.SAS.
* 2) This program will generate the input for BENCHC04.SAS.
*
*************************************************************************
* Assign data libraries and options
*************************************************************************;
libname in  v612  '.';
libname in2 v612  '..\reportcards\cahps_childq32003\data';
libname out v612  'datachild';

%let wgt=wrwt;

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(rename=(_freq_=denom)) count2;
 set count;
 if _type_=0 then output count;
 else output count2;
run;

data count(keep=pweight product);
 if _n_=1 then set count;
 set count2;
 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;
  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=6 %to 6;
  %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,e);
 %if &a~= %then %do;
    %let n=r_&a;
    %let m=s_&a;
    %do i=6 %to 6;
        %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=6 %to 6;
        %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;
    %let n=%str(&n r_&c);
    %let m=%str(&m s_&c);
    %do i=6 %to 6;
        %let p&i=%str(&&p&i &c._&i);
    %end;
    %let grpnum=3;
    proc sort data=r_&c;
       by mpid;
    run;
 %end;

 %if &d~= %then %do;
    %let n=%str(&n r_&d);
    %let m=%str(&m s_&d);
    %do i=6 %to 6;
        %let p&i=%str(&&p&i &d._&i);
    %end;
    %let grpnum=4;
    proc sort data=r_&d;
       by mpid;
    run;
 %end;
```

```
 %if &e~= %then %do;
    %let n=%str(&n r_&e);
    %let m=%str(&m s_&e);
    %do i=6 %to 6;
        %let p&i=%str(&&p&i &e._&i);
    %end;
    %let grpnum=5;
    proc sort data=r_&e;
       by mpid;
    run;
 %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;
  %if &e~= %then %do;
   set s_&e;
  %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=6 %to 6;
 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.benchc02 out=setup;
 by product;
run;

data setup;
 set setup; by product;
 mpid=_n_;
 IF (ZAGE NE . AND ZAGE NE 255) THEN DO;
      AGEUND6 = 0;
      AGE0612 = 0;
      AGE1317 = 0;

      IF      (ZAGE < 6)         THEN AGEUND6 = 1;
      ELSE IF (6  <= ZAGE <= 12) THEN AGE0612 = 1;
      ELSE IF (13 <= ZAGE <= 17) THEN AGE1317 = 1;
   END;
if agegroup ne . then do;
 ageund18=0; age1824=0; age2534=0; age3544=0; age4554=0; age5564=0; age6574=0;

      if agegroup=0 then ageund18 = 1;
 else 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 age0612=1|ageund6=1;
run;

%INCLUDE "..\..\..\..\8687\PROGRAMS\REPORTCARDS\CONVERT.SAS";

%CONT1(DSN=SETUP, NUM=7,  Y=R03006 R03019 R03036 R03037
                           R03077 R03079 R03084);

%CONT2(DSN=SETUP, NUM=4,  Y=R03056 R03085 R03013 R03021);

%CONT3(DSN=SETUP, NUM=13, Y=R03024 R03026 R03032 R03038
                           R03041 R03042 R03043 R03045
                           R03046 R03039 R03040 R03073 R03074);
/* GETTING NEEDED CARE */
%ADJUST(R03006,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03019,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03036,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03037,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(1,R03006,R03019,R03036,R03037);

/* GETTING NEEDED CARE QUICKLY */
%ADJUST(R03024,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03026,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03032,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03038,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(2,R03024,R03026,R03032,R03038);

/* HOW WELL DOCTORS COMMUNICATE */
%ADJUST(R03041,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03042,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03043,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03045,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03046,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(3,R03041,R03042,R03043,R03045,R03046);

/* COURTEOUS AND HELPFUL OFFICE STAFF */
%ADJUST(R03039,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03040,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(4,R03039,R03040);

/* CUSTOMER SERVICE */
%ADJUST(R03077,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03079,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03084,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(5,R03077,R03079,R03084);

/* CLAIMS PROCESSING */
%ADJUST(R03073,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%ADJUST(R03074,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(6,R03073,R03074);

/* RATING ALL HEALTH CARE: 0 - 10 */
%ADJUST(R03056,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
```

```
%COMP(7,R03056);

/* RATING OF HEALTH PLAN: 0 - 10 */
%ADJUST(R03085,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(8,R03085);

/* RATING OF PERSONAL DR: 0 - 10 */
%ADJUST(R03013,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(9,R03013);

/* RATING OF SPECIALTY CARE: 0 - 10 */
%ADJUST(R03021,AGEUND18 AGE1824 AGE2534 AGE3544 AGE4554 AGEUND6 R03089);
%COMP(10,R03021);
```

G.7.5 - ..\Benchmark\BENCHC04.SAS - Convert the CAHPS Benchmark Scores Database into the WEB layout.

```
*******************************************************************************
*
* PROGRAM:  BENCHC04.SAS
* TASK:     2003 DOD HEALTH CARE SURVEY ANALYSIS (8860-410)
* PURPOSE:  Convert the Benchmark Scores Database into the WEB layout
*
* WRITTEN:  07/17/2000 BY KEITH RATHBUN
*
* MODIFIED: 1) September 2001 BY KEITH RATHBUN - Update macro calls for 2000
*              Q3 Child survey.  Updated libnames and file references.
*           2) 10/05/2001 BY KEITH RATHBUN, Added specialty care (C00016).
*           3) 10/31/2002 BY MIKE SCOTT, Updated variable names to
*              accommodate the 2002 Q3 Child DOD survey.
*           4) 11/24/2003 BY MIKE SCOTT, Updated variable names and libnames
*              for Q3 2003 Child survey.
*           5) 12/06/2003 BY MIKE SCOTT, Added %PROCESS call at end of program
*              for Claims Processing.  Set CNUM parameter to 6, and changed
*              CNUMs after that from 6-9 to 7-10.  Added COMP10_5 and COMP10_6
*              to SET statement at end of program.
*
* INPUTS:   1) Benchmark data sets with adjusted scores
*              (COMPn_i.SD2 where n = composite number and i = group number)
*
* OUTPUT:   1) BENCHC04.SD2 - Combined Benchmark Scores Database in WEB layout
*
* INCLUDES: 1) LOADCAHC.INC - Format definitions for CAHPS Individual
*              and composite data sets
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - BENCHC01.SAS - Extract Benchmark variables
*    - BENCHC02.SAS - Recode Benchmark variables
*    - BENCHC03.SAS - Construct Scores and SEMEAN datasets
*
* 2) The output file (BENCHC04.SD2) will be run through the
*    MAKEHTML.SAS program to generate the WEB pages.
*
* 3) The child-based CAHPS composite measures are based on children 12
*    years old or younger.  Therefore, we will only produce benchmarks
*    for groups 5 (Under Age 6) and 6 (6-12 Years).
*
*******************************************************************************
* Assign data libraries and options
*******************************************************************************;
LIBNAME IN      V612 "DATACHILD";
LIBNAME OUT     V612 "DATACHILD";
LIBNAME LIBRARY V612 "..\..\DATA\CFINAL\FMTLIB";
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

*******************************************************************************
* Load Format definitions for CAHPS Individual and composite data sets.
*******************************************************************************;
%INCLUDE "..\LOADWEB\LOADCAHC.INC";
```

```
*******************************************************************************
*******************************************************************************
*
* Process Macro Input Parameters:
*
* 1) CNUM = Composite or rating variable number (1-8)
* 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 = 1 AND C03003=4
* 2. Enrollees w/mil PCM      XENR_PCM = 1 AND C03003=4
* 3. Enrollees w/civ PCM      XENR_PCM = 2 AND C03003=4
* 4. Nonenrollees             XINS_COV IN (2,3)
* 5. Under Age 6              AGEUND6 = 1
* 6. 6-12 Years               AGE0612 = 1
* 7. 13-17 Years              AGE1317 = 1
* 8. All beneficiaries        All beneficiaries
*
*******************************************************************************
*******************************************************************************;
%MACRO PROCESS(CNUM=, GNUM=, NVAR=, VARS=, SE=);
*******************************************************************************
* Assign value for BENTYPE composite year
*******************************************************************************;
%LET YEAR = "2003";

*******************************************************************************
* Convert benchmark scores datasets into WEB layout.
*******************************************************************************;
DATA COMP&CNUM._&GNUM;
   SET IN.COMP&CNUM._&GNUM;

   LENGTH MAJGRP  $42;
   LENGTH ROWCAT  $30;
   LENGTH BENTYPE $75;
   LENGTH BENEFIT $50;

   ********************************************************************
   * For now, assign SIG = 0
   ********************************************************************;
   SIG = 0;

   ********************************************************************
   * Assign Row Category
   ********************************************************************;
   IF      &GNUM = 5 THEN ROWCAT = "Under Age 6-Benchmark";
   ELSE IF &GNUM = 6 THEN ROWCAT = "6-12 Years-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 = "Personal Doctor or Nurse";
   ELSE IF &CNUM = 10 THEN BENEFIT = "Speciality Care";

   BENTYPE = PUT(&YEAR,$BENTYPF.);

   ************************************************************************
   * Assign composite score and SEMEAN
   ************************************************************************;
   SCORE = TOTADJ;
   SEMEAN = SDE;

   ************************************************************************
   * Assign major groups and output composite score records
   ************************************************************************;
   DO I = 0 TO 3; DROP I;
      MAJGRP  = PUT(I,MAJGRPF.);
      OUTPUT;
   END;

   ************************************************************************
   * Now, output the individual score records
   ************************************************************************;
   IF &NVAR GT 1 THEN DO;
      ARRAY ITEMS &VARS;
      ARRAY SE    &SE;
      LENGTH NAME $8;
      DO I = 1 TO DIM(ITEMS); DROP I;
         CALL VNAME(ITEMS(I),NAME);
         NAME = SUBSTR(NAME,1,6);
         SCORE  = ITEMS(I);
         SEMEAN = SE(I);
         BENTYPE = PUT(NAME,$BENTYPF.);
         DO J = 0 TO 3; DROP J;
            MAJGRP  = PUT(J,MAJGRPF.);
            OUTPUT;
         END;
      END;
   END;

KEEP MAJGRP
     ROWCAT
     BENTYPE
     BENEFIT
     SEMEAN
     SCORE
     SIG
   ;
RUN;

%MEND;

************************************************************************
* COMPOSITE # 1.
```

```
* GETTING NEEDED CARE VARIABLES.
*************************************************************************;
%PROCESS(CNUM=1, GNUM=5, NVAR=4, VARS=R03006_5 R03019_5 R03036_5 R03037_5,
                                 SE=S_R03006 S_R03019 S_R03036 S_R03037);
%PROCESS(CNUM=1, GNUM=6, NVAR=4, VARS=R03006_6 R03019_6 R03036_6 R03037_6,
                                 SE=S_R03006 S_R03019 S_R03036 S_R03037);

************************************************************************
* COMPOSITE # 2.
* GETTING CARE QUICKLY VARIABLES.
*************************************************************************;
%PROCESS(CNUM=2, GNUM=5, NVAR=4, VARS=R03024_5 R03026_5 R03032_5 R03038_5,
                                 SE=S_R03024 S_R03026 S_R03032 S_R03038);
%PROCESS(CNUM=2, GNUM=6, NVAR=4, VARS=R03024_6 R03026_6 R03032_6 R03038_6,
                                 SE=S_R03024 S_R03026 S_R03032 S_R03038);

************************************************************************
* COMPOSITE # 3.
* HOW WELL DOCTORS COMMUNICATE.
*************************************************************************;
%PROCESS(CNUM=3,  GNUM=5,  NVAR=5,  VARS=R03041_5  R03042_5  R03043_5  R03045_5
R03046_5,
                                 SE=S_R03041    S_R03042    S_R03043    S_R03045
S_R03046);
%PROCESS(CNUM=3,  GNUM=6,  NVAR=5,  VARS=R03041_6  R03042_6  R03043_6  R03045_6
R03046_6,
                                 SE=S_R03041    S_R03042    S_R03043    S_R03045
S_R03046);

************************************************************************
* COMPOSITE # 4.
* COURTEOUS AND HELPFUL OFFICE STAFF.
*************************************************************************;
%PROCESS(CNUM=4, GNUM=5, NVAR=2, VARS=R03039_5 R03040_5, SE=S_R03039 S_R03040);
%PROCESS(CNUM=4, GNUM=6, NVAR=2, VARS=R03039_6 R03040_6, SE=S_R03039 S_R03040);

************************************************************************
* COMPOSITE # 5.
* CUSTOMER SERVICE.
*************************************************************************;
%PROCESS(CNUM=5, GNUM=5, NVAR=3, VARS=R03077_5 R03079_5 R03084_5,
                                 SE=S_R03077 S_R03079 S_R03084);
%PROCESS(CNUM=5, GNUM=6, NVAR=3, VARS=R03077_6 R03079_6 R03084_6,
                                 SE=S_R03077 S_R03079 S_R03084);

************************************************************************
* COMPOSITE # 6.
* CLAIMS PROCESSING.
*************************************************************************;
%PROCESS(CNUM=6, GNUM=5, NVAR=2, VARS=R03073_5 R03074_5,
                                 SE=S_R03073 S_R03074);
%PROCESS(CNUM=6, GNUM=6, NVAR=2, VARS=R03073_6 R03074_6,
                                 SE=S_R03073 S_R03074);

************************************************************************
* INDIVIDUAL # 1.
* RATING OF ALL HEALTH CARE: 0 - 10.
*************************************************************************;
%PROCESS(CNUM=7, GNUM=5, NVAR=1, VARS=R03056_5, SE=S_R03056);
```

```
%PROCESS(CNUM=7, GNUM=6, NVAR=1, VARS=R03056_6, SE=S_R03056);

*************************************************************************
* INDIVIDUAL # 2.
* RATING OF HEALTH PLAN: 0 - 10.
*************************************************************************;
%PROCESS(CNUM=8, GNUM=5, NVAR=1, VARS=R03085_5, SE=S_R03085);
%PROCESS(CNUM=8, GNUM=6, NVAR=1, VARS=R03085_6, SE=S_R03085);

*************************************************************************
* INDIVIDUAL # 3.
* RATING OF PERSONAL DOCTOR: 0 - 10.
*************************************************************************;
%PROCESS(CNUM=9, GNUM=5, NVAR=1, VARS=R03013_5, SE=S_R03013);
%PROCESS(CNUM=9, GNUM=6, NVAR=1, VARS=R03013_6, SE=S_R03013);

*************************************************************************
* INDIVIDUAL # 4.
* RATING OF SPECIALITY CARE: 0 - 10.
*************************************************************************;
%PROCESS(CNUM=10, GNUM=5, NVAR=1, VARS=R03021_5, SE=S_R03021);
%PROCESS(CNUM=10, GNUM=6, NVAR=1, VARS=R03021_6, SE=S_R03021);

*************************************************************************
*************************************************************************
* STACK up all of the files into one final output dataset.
*************************************************************************
*************************************************************************;
DATA OUT.BENCHC04;
   SET COMP1_5  COMP1_6
       COMP2_5  COMP2_6
       COMP3_5  COMP3_6
       COMP4_5  COMP4_6
       COMP5_5  COMP5_6
       COMP6_5  COMP6_6
       COMP7_5  COMP7_6
       COMP8_5  COMP8_6
       COMP9_5  COMP9_6
       COMP10_5 COMP10_6
    ;
    IF SCORE = . THEN DELETE;
RUN;

TITLE1 "2003 DOD Health Survey Scores/Report Cards (8860-410)";
TITLE2 "Program Name: BENCHC04.SAS By Keith Rathbun";
TITLE3 "Program Inputs: Benchmark Individual and Composite data sets with
adjusted scores";
TITLE4 "Program Outputs: BENCHC04.SD2 - Combined Benchmark Scores Database in
WEB layout";

PROC CONTENTS; RUN;

PROC FREQ;
TABLES BENEFIT BENTYPE MAJGRP ROWCAT
      /MISSING LIST;
RUN;
```

G.8 - ..\LOADWEB\FAKEC.SAS - Generate the WEB layout/template file.

```
*********************************************************************
*
* PROJECT:  8860 - 2003 Annual Child Survey
* PROGRAM:  FAKEC.SAS
* PURPOSE:  Generate Fake Data for Report Cards
* AUTHOR:   Natalie Justh
*
* MODIFIED: 1) 10/5/2001 By Keith Rathbun to accommodate 2000 version
*              of the child report card layout file.  Added YEAR
*              parameter for ease of maintenance.  Deleted Attitudes
*              Toward TRICARE Prime and added Speciality Care and
*              Claims Processing.  Removed unnecessary code used to
*              assign SCORE and SIG values.
*
*           2) 10/18/2001 By Chris Rankin to change the order that
*              the data appear in the report cards.
*
*           3) 11/1/2002 By Mike Scott and Keith Rathbun to
*              accommodate the 2002 version of the child report card
*              layout file.
*
*           4) 12/3/2003 By Mike Scott - Updated for Q3 2003.
*********************************************************************;

LIBNAME  OUT V612 '.';
OPTIONS COMPRESS=YES;

PROC FORMAT;
  VALUE ROWMAT
    1  = 'CONUS MHS                 '
    2  = 'Under Age 6               '
    3  = 'Under Age 6-Benchmark     '
    4  = '6-12 Years                '
    5  = '6-12 Years-Benchmark      '
    6  = '13-17 Years               '
    7  = 'Prime Enrollees           '
    8  = 'Enrollees with Military PCM'
    9  = 'Enrollees with Civilian PCM'
   10  = 'Non-enrolled Beneficiaries ';

  VALUE BEN
  1 = 'Getting Needed Care              '
  2 = 'Getting Care Quickly             '
  3 = 'How Well Doctors Communicate     '
  4 = 'Claims Processing                '
  5 = 'Courteous and Helpful Office Staff'
  6 = 'Customer Service                 '
  7 = 'Personal Doctor or Nurse         '
  8 = 'Health Care                      '
  9 = 'Speciality Care                  '
 10 = 'Health Plan                      '
 11 = 'Primary Care Manager             '

  ;

  VALUE MAJOR
```

```
  1 = 'All Children'
  2 = 'Children in New Regions (1, 2, & 5)'
  3 = 'Children in Mature Regions (6, 9-12, & 16)'
  4 = 'Children in Other Regions (3, 4, & 7/8)';

RUN;


%LET YEAR = 2003;

DATA OUT.FAKEC;

  KEEP MAJGRP ROWCAT BENEFIT BENTYPE SCORE SIG;

  LENGTH MAJGRP $  42
         ROWCAT $  30
         BENTYPE $ 75;

  DO I=1 TO 4;             ** 4 Major groups **;

     MAJGRP=PUT(I,MAJOR.);

     DO J=1 TO 10;         ** Age/Enrollment **;

     ROWCAT=PUT(J,ROWMAT.);


        DO K=1 TO 11;      ** 11 Benefits **;

        BENEFIT=PUT(K,BEN.);

          IF K=1 THEN DO;
              BENTYPE="Problems Getting Personal Doctor/Nurse"; OUTPUT;
              BENTYPE="Problems Getting Referral to Specialist"; OUTPUT;
              BENTYPE="Problems Getting Necessary Care"; OUTPUT;
              BENTYPE="Delays in Care While Awaiting Approval"; OUTPUT;
              BENTYPE="&YEAR"; OUTPUT;
              BENTYPE=COMPRESS(%EVAL(&YEAR-1)); OUTPUT;
              BENTYPE=COMPRESS(%EVAL(&YEAR-2)); OUTPUT;
              BENTYPE="Trend"; OUTPUT;
          END;
          ELSE IF K=2 THEN DO;
              BENTYPE="Advice over Telephone"; OUTPUT;
              BENTYPE="Wait for Urgent Care"; OUTPUT;
              BENTYPE="Wait for Routine Visit"; OUTPUT;
              BENTYPE="Wait More Than 15 Minutes Past Appointment"; OUTPUT;
              BENTYPE="&YEAR"; OUTPUT;
              BENTYPE=COMPRESS(%EVAL(&YEAR-1)); OUTPUT;
              BENTYPE=COMPRESS(%EVAL(&YEAR-2)); OUTPUT;
              BENTYPE="Trend"; OUTPUT;
          END;
          ELSE IF K=3 THEN DO;
              BENTYPE="Listens Carefully"; OUTPUT;
              BENTYPE="Explains so you can Understand"; OUTPUT;
              BENTYPE="Explains so your child can Understand"; OUTPUT;
              BENTYPE="Shows Respect"; OUTPUT;
              BENTYPE="Spends Time with your child"; OUTPUT;
              BENTYPE="&YEAR"; OUTPUT;
              BENTYPE=COMPRESS(%EVAL(&YEAR-1)); OUTPUT;
```

```
            BENTYPE=COMPRESS(%EVAL(&YEAR-2)); OUTPUT;
            BENTYPE="Trend"; OUTPUT;
          END;
          ELSE IF K=4 THEN DO;
            BENTYPE="Claims Handled in a Reasonable Time"; OUTPUT;
            BENTYPE="Claims Handled Correctly"; OUTPUT;
            BENTYPE="&YEAR"; OUTPUT;
            BENTYPE=COMPRESS(%EVAL(&YEAR-1)); OUTPUT;
            BENTYPE=COMPRESS(%EVAL(&YEAR-2)); OUTPUT;
            BENTYPE="Trend"; OUTPUT;
          END;
          ELSE IF K=5 THEN DO;
            BENTYPE="Courteous and Respectful"; OUTPUT;
            BENTYPE="Helpful"; OUTPUT;
            BENTYPE="&YEAR"; OUTPUT;
            BENTYPE=COMPRESS(%EVAL(&YEAR-1)); OUTPUT;
            BENTYPE=COMPRESS(%EVAL(&YEAR-2)); OUTPUT;
            BENTYPE="Trend"; OUTPUT;
          END;
          ELSE IF K=6 THEN DO;
            BENTYPE="Problem Getting Help from Customer Service"; OUTPUT;
            BENTYPE="Problem Finding/Understanding Written Material"; OUTPUT;
            BENTYPE="Problem with Paperwork"; OUTPUT;
            BENTYPE="&YEAR"; OUTPUT;
            BENTYPE=COMPRESS(%EVAL(&YEAR-1)); OUTPUT;
            BENTYPE=COMPRESS(%EVAL(&YEAR-2)); OUTPUT;
            BENTYPE="Trend"; OUTPUT;
          END;
          ELSE IF K=11 THEN DO;
            BENTYPE="Had a TRICARE PCM"; OUTPUT;
            BENTYPE="Parent Knows Child's PCM's Name"; OUTPUT;
            BENTYPE="Had a 'Big Problem' Getting to See PCM"; OUTPUT;
            BENTYPE="&YEAR"; OUTPUT;
            BENTYPE=COMPRESS(%EVAL(&YEAR-1)); OUTPUT;
            BENTYPE=COMPRESS(%EVAL(&YEAR-2)); OUTPUT;
            BENTYPE="Trend"; OUTPUT;
          END;
          ELSE IF K IN (7,8,9,10) THEN DO;
            BENTYPE="&YEAR"; OUTPUT;
            BENTYPE=COMPRESS(%EVAL(&YEAR-1)); OUTPUT;
            BENTYPE=COMPRESS(%EVAL(&YEAR-2)); OUTPUT;
            BENTYPE="Trend"; OUTPUT;
          END;
        END;
      END;
    END;
    SCORE = .;
    SIG   = .;
RUN;

PROC FREQ;
  TABLES MAJGRP ROWCAT BENTYPE BENEFIT SIG;
RUN;
```

G.9 - ..\LOADWEB\MERGFINC.SAS - Merge the final CAHPS and MPR Scores Databases into the WEB layout.

```
*************************************************************************
*
* PROGRAM:  MERGFINC.SAS
* TASK:     2003 DOD HEALTH CARE SURVEY REPORT CARDS (8860-410)
* PURPOSE:  Merge the final CAHPS and MPR Scores Databases
*           into the WEB layout preserving the order of the FAKEC.SD2.
*
* WRITTEN:  06/07/2000 BY KEITH RATHBUN
*
* INPUTS:   1) MPR and CAHPS Individual and Composite data sets with adjusted
*              scores, and benchmark data for 2003 DoD HCS.
*              - LOADMPRC.SD2 - MPR Scores Database
*              - LOADCAHC.SD2 - CAHPS Scores Database
*              - BENCHC04.SD2 - 2001 CAHPS Benchmark Database
*              - FAKEC.SD2    - WEB Layout in Column order
*
* OUTPUT:   1) MERGFINC.SD2 - Combined Scores Database in WEB layout
*
* MODIFIED: 1) 07/24/2000 By Keith Rathbun - Adapted from MERGFINL.SAS to
*              reflect the requirements of the Child Report Card.
*           2) 08/24/2001 By Keith Rathbun - Updated for Q3 2000 Child
*              Report Cards.
*           3) 10/31/2002 By Mike Scott and Keith Rathbun - Updated for
*              Q3 2002 Child Report Cards.  Recoded BENTYPE, and deleted
*              recoding for ROWCAT.
*           4) 12/06/2003 By Mike Scott - Updated for Q3 2003.
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*  - STEP1C.SAS      - Recode questions and generate CAHPS group files
*  - STEP2C.SAS      - Calculate CAHPS individual adjusted scores for groups 1-8
*  - COMPOSIT.SAS    - Calculate composite adjusted scores for group 1-8
*  - MPRCOMPC.SAS    - Calculate MPR individual and composite scores
*  - LOADMPRC.SAS    - Load MPR individual and composite scores into WEB layout
*  - BENCHC01-04.SAS - Convert 1999 Benchmark Scores into WEB layout
*  - LOADCAHC.SAS    - Convert 2000 CAHPS Scores Database into WEB layout
*
* 2) The output file (MERGFINC.SD2) will be run through the
*    MAKEHTMC.SAS program to generate the WEB pages.
*
*************************************************************************
* Assign data libraries and options
*************************************************************************;
LIBNAME IN02 V612 "..\..\..\Q3_2002\PROGRAMS\LOADWEB2003";
LIBNAME IN1  V612 ".";
LIBNAME IN2  V612 "CAHPS_CHILDQ32003\DATA";
LIBNAME IN3  V612 "..\REPORTCARDS\MPR_CHILDQ32003";
LIBNAME IN4  V612 "..\BENCHMARK\DATACHILD";
LIBNAME OUT  V612 ".";
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

*************************************************************************
* Extract the pre-existing composites from last years file.
*************************************************************************;
```

```
DATA COMP02;
   SET IN02.CONUS_C;
   IF BENTYPE IN ("2001","2002") AND
      BENEFIT NOT IN("Attitudes Toward TRICARE Prime ",
                     "Waiting times");
                     * "Getting Care Quickly");
RUN;

*************************************************************************
* Construct ORDERing variable from WEB layout
*************************************************************************;
DATA ORDER;
   SET IN1.FAKEC;
   ORDER = _N_;
   LENGTH KEY $200;
   KEY = UPCASE(TRIM(BENEFIT)) ||
         UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  ||
         UPCASE(TRIM(ROWCAT));
   KEEP KEY ORDER;
RUN;

PROC SORT DATA=ORDER; BY KEY; RUN;

*************************************************************************
* Merge the Scores Databases
*************************************************************************;
DATA MERGFINC;
   SET IN2.LOADCAHC(IN=INCAHP03)
       IN3.LOADMPRC(IN=INMPR03)
       IN4.BENCHC04(IN=INBEN01)
       COMP02(IN=INCMP02);
   SVCAHP03 = INCAHP03;
   SVMPR03  = INMPR03 ;
   SVBEN01  = INBEN01 ;
   SVCMP02  = INCMP02;
   LENGTH KEY     $200;
   KEY = UPCASE(TRIM(BENEFIT)) ||
         UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  ||
         UPCASE(TRIM(ROWCAT));
   IF SCORE = . THEN DELETE;
RUN;

PROC SORT DATA=MERGFINC; BY KEY; RUN;

*************************************************************************
* Append ORDERing variable to the merged Scores database file
*************************************************************************;
DATA MERGFINC OUT.MISSING;
   MERGE MERGFINC(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 SVCAHP03 = 1 THEN SOURCE = "CAHPS 2003    ";
   IF SVMPR03  = 1 THEN SOURCE = "MPR 2003      ";
   IF SVBEN01  = 1 THEN SOURCE = "BENCHMARK 2001";
   IF SVCMP02  = 1 THEN SOURCE = "2001 and 2002 COMPOSITES";

   *IF FLAG = "IN SCORES DB ONLY" THEN DELETE;

   IF IN1 AND NOT IN2 THEN OUTPUT OUT.MISSING; *Missing from layout;
   IF IN1 THEN OUTPUT MERGFINC;
RUN;

*************************************************************************
* Reorder file according to WEB layout
*************************************************************************;
PROC SORT DATA=MERGFINC OUT=OUT.MERGFINC; BY ORDER; RUN;

DATA FAKEC;
   SET IN1.FAKEC;
   ORDER = _N_;
RUN;

DATA LAYONLY;
   MERGE FAKEC(IN=IN1) OUT.MERGFINC(IN=IN2 KEEP=ORDER);
   BY ORDER;
   IF IN1 AND NOT IN2;
RUN;

TITLE1 "2003 DOD Health Survey Scores/Report Cards (8860-410)";
TITLE2 "Program Name: MERGFINC.SAS By Keith Rathbun";
TITLE3 "Program Inputs: MPR and CAHPS Combined Scores data sets and WEB Layout";
TITLE4 "Program Outputs: MERGFINC.SD2 - Merged Final Scores Database for input
to MAKEHTMC.SAS";

TITLE5 "MERGFINC.SD2 Data source counts";
PROC FREQ DATA=OUT.MERGFINC;
TABLES SOURCE FLAG SVCAHP03 SVMPR03 SVBEN01 SVCMP02
                   SVCAHP03*SVMPR03*SVBEN01*SVCMP02
      /MISSING LIST;
RUN;

TITLE5 "MERGFINC.SD2 Data attribute counts";
PROC FREQ DATA=OUT.MERGFINC;
TABLES BENEFIT BENTYPE MAJGRP ROWCAT
      /MISSING LIST;
RUN;

TITLE5 "LAYONLY.SD2 Data attribute counts";
PROC FREQ DATA=LAYONLY;
TABLES BENEFIT BENTYPE MAJGRP ROWCAT
      /MISSING LIST;
RUN;

TITLE5 "No matching record found in LAYOUT file (FAKEC.SD2)";
PROC FREQ DATA=OUT.MISSING;
TABLES MAJGRP ROWCAT BENTYPE BENEFIT
       MAJGRP*ROWCAT*BENTYPE*BENEFIT
      /MISSING LIST;
RUN;
```

```
TITLE5 "No matching record found in LAYOUT file (FAKEC.SD2)";
PROC PRINT DATA=OUT.MISSING;
VAR MAJGRP ROWCAT BENTYPE BENEFIT;
RUN;
```

G.10 - ..\LOADWEB\CONUS_C.SAS - Generate CAHPS CONUS scores and perform significance tests.

```
*******************************************************************************
*
* PROGRAM:  CONUS_C.SAS
* TASK:     2003 DOD HEALTH CARE SURVEY REPORTING (8860-410)
* PURPOSE:  Generate CAHPS CONUS scores and significance tests
*
* WRITTEN:  07/27/2000 BY KEITH RATHBUN
*
* MODIFIED: 1) 09/14/2001 BY KEITH RATHBUN, Updated to accommodate the Q3 2000
*              child survey: added claims processing and specialty care and
*              updated parameters.
*           2) 11/04/2002 BY MIKE SCOTT, Updated to accommodate the Q3 2002
*              child survey.
*           3) 12/06/2003 BY MIKE SCOTT, Updated for Q3 2003.
*
* INPUTS:   1) SIGNIF_C.SD2 - Scores Database in WEB Layout
*           2) MERGFINC.SD2 - Merged Scores Databases in WEB Layout
*           3) FAKEC.SD2 - Scores Database WEB Layout
*
* OUTPUT:   1) CONUS_C.SD2 - Combined CAHPS/MPR Scores Database in WEB layout
*           2) LT30C.SD2 - Records with <= 30 observations
*
* NOTES:
*
* 1) The following steps need to be run prior to this program:
*    - STEP1C.SAS    - Recode questions and generate group files
*    - STEP2C.SAS    - Calculate individual adjusted scores for group 1-8
*    - COMPOSIT.SAS - Calculate composite adjusted scores for group 1-8
*    - MERGFINC.SAS - Merge the final CAHPS and MPR Scores Databases
*    - SIGNIF_C.SAS - Perform significance tests for CAHPS scores
*
*******************************************************************************
* Assign data libraries and options
*******************************************************************************;
LIBNAME IN1  V612  ".";
LIBNAME OUT  V612  ".";
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

*******************************************************************************
*******************************************************************************
*
* Process Macro Input Parameters:
*
* 1) BENTYPE = Benefit Type
* 2) BENEFIT = COMPOSITE Benefit Type
* 3) ROWCAT  = Row Category
*
*******************************************************************************
*******************************************************************************;
* Set up empty template file for data merge purposes and set first time flag
*******************************************************************************;
%LET DSN = SIGNIF_C;
DATA INIT;
   SET IN1.&DSN;
   DELETE;
```

```
RUN;
%LET FLAG = 0;

%MACRO PROCESS(BENTYPE=,BENEFIT=,ROWCAT=);
DATA TEMP;
   SET IN1.&DSN END=FINISHED;
   WHERE BENTYPE = "&BENTYPE" AND
         ROWCAT  = "&ROWCAT"  AND
         BENEFIT = "&BENEFIT" AND
         MAJGRP NE "All Children";
RUN;

DATA TEMP;
   SET TEMP END=FINISHED;
   IF _N_ = 1 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;
   ************************************************************************
   * Note: For the Child Survey only CONUS were sent surveys
   ************************************************************************;
   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 FINISHED THEN GOTO FINISHED;
   RETURN;

KEEP MAJGRP ROWCAT BENTYPE BENEFIT SIG SCORE SEMEAN N_OBS N_WGT
     FLAG SOURCE SUMSCOR1 SUMWGT1 SUMSE2 KEY;

FINISHED:
   SCORE   = SUMSCOR1/SUMWGT1;
   SEMEAN  = SQRT(SUMSE2)/SUMWGT1;
   N_OBS   = N_OBS1;
   N_WGT   = SUMWGT1;
   SOURCE  = "CONUS";
   FLAG    = "CONUS";
   MAJGRP  = "All Children";
   KEY = UPCASE(TRIM(BENEFIT)) ||
         UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  ||
         UPCASE(TRIM(ROWCAT));
   OUTPUT;
RUN;

%IF &FLAG = 0 %THEN %DO;
   DATA FINAL;
      SET TEMP;
   RUN;
%END;
%ELSE %DO;
   DATA FINAL;
      SET FINAL TEMP;
   RUN;
%END;
```

```
%LET FLAG = 1;

%MEND;

*******************************************************************************
* Process 2003 CONUS Composites
*******************************************************************************
*******************************************************************************
* 1) Create CONUS for Getting Needed Care
*******************************************************************************;
%PROCESS(BENTYPE=2003,
         ROWCAT=Under Age 6                , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=6-12 Years                 , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=13-17 Years                , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=Prime Enrollees            , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=CONUS MHS                  , BENEFIT=Getting Needed Care);

%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse,
         ROWCAT=Under Age 6                , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse,
         ROWCAT=6-12 Years                 , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse,
         ROWCAT=13-17 Years                , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse,
         ROWCAT=Prime Enrollees            , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Personal Doctor/Nurse,
         ROWCAT=CONUS MHS                  , BENEFIT=Getting Needed Care);

%PROCESS(BENTYPE=Problems Getting Referral to Specialist,
         ROWCAT=Under Age 6                , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist,
         ROWCAT=6-12 Years                 , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist,
         ROWCAT=13-17 Years                , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist,
         ROWCAT=Prime Enrollees            , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Referral to Specialist,
```

```
         ROWCAT=CONUS MHS                  , BENEFIT=Getting Needed Care);

%PROCESS(BENTYPE=Problems Getting Necessary Care,
         ROWCAT=Under Age 6                , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Necessary Care,
         ROWCAT=6-12 Years                 , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Necessary Care,
         ROWCAT=13-17 Years                , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Necessary Care,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Necessary Care,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Necessary Care,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Necessary Care,
         ROWCAT=Prime Enrollees            , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Problems Getting Necessary Care,
         ROWCAT=CONUS MHS                  , BENEFIT=Getting Needed Care);

%PROCESS(BENTYPE=Delays in Care While Awaiting Approval,
         ROWCAT=Under Age 6                , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Delays in Care While Awaiting Approval,
         ROWCAT=6-12 Years                 , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Delays in Care While Awaiting Approval,
         ROWCAT=13-17 Years                , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Delays in Care While Awaiting Approval,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Delays in Care While Awaiting Approval,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Delays in Care While Awaiting Approval,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Delays in Care While Awaiting Approval,
         ROWCAT=Prime Enrollees            , BENEFIT=Getting Needed Care);
%PROCESS(BENTYPE=Delays in Care While Awaiting Approval,
         ROWCAT=CONUS MHS                  , BENEFIT=Getting Needed Care);

*************************************************************************
* 2) Create CONUS for Getting Care Quickly
*************************************************************************;
%PROCESS(BENTYPE=2003,
         ROWCAT=Under Age 6                , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=2003,
         ROWCAT=6-12 Years                 , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=2003,
         ROWCAT=13-17 Years                , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=2003,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=2003,
         ROWCAT=Prime Enrollees            , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=2003,
         ROWCAT=CONUS MHS                  , BENEFIT=Getting Care Quickly);

%PROCESS(BENTYPE=Advice over Telephone,
         ROWCAT=Under Age 6                , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Advice over Telephone,
```

```
         ROWCAT=6-12 Years                 , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Advice over Telephone,
         ROWCAT=13-17 Years                , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Advice over Telephone,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Advice over Telephone,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Advice over Telephone,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Advice over Telephone,
         ROWCAT=Prime Enrollees            , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Advice over Telephone,
         ROWCAT=CONUS MHS                  , BENEFIT=Getting Care Quickly);

%PROCESS(BENTYPE=Wait for Urgent Care,
         ROWCAT=Under Age 6                , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait for Urgent Care,
         ROWCAT=6-12 Years                 , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait for Urgent Care,
         ROWCAT=13-17 Years                , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait for Urgent Care,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait for Urgent Care,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait for Urgent Care,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait for Urgent Care,
         ROWCAT=Prime Enrollees            , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait for Urgent Care,
         ROWCAT=CONUS MHS                  , BENEFIT=Getting Care Quickly);

%PROCESS(BENTYPE=Wait for Routine Visit,
         ROWCAT=Under Age 6                , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait for Routine Visit,
         ROWCAT=6-12 Years                 , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait for Routine Visit,
         ROWCAT=13-17 Years                , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait for Routine Visit,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait for Routine Visit,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait for Routine Visit,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait for Routine Visit,
         ROWCAT=Prime Enrollees            , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait for Routine Visit,
         ROWCAT=CONUS MHS                  , BENEFIT=Getting Care Quickly);

%PROCESS(BENTYPE=Wait More Than 15 Minutes Past Appointment,
         ROWCAT=Under Age 6                , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait More Than 15 Minutes Past Appointment,
         ROWCAT=6-12 Years                 , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait More Than 15 Minutes Past Appointment,
         ROWCAT=13-17 Years                , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait More Than 15 Minutes Past Appointment,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait More Than 15 Minutes Past Appointment,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait More Than 15 Minutes Past Appointment,
```

```
        ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait More Than 15 Minutes Past Appointment,
        ROWCAT=Prime Enrollees           , BENEFIT=Getting Care Quickly);
%PROCESS(BENTYPE=Wait More Than 15 Minutes Past Appointment,
        ROWCAT=CONUS MHS                 , BENEFIT=Getting Care Quickly);

*************************************************************************
* 3) Create CONUS for How Well Doctors communicate
*************************************************************************;
%PROCESS(BENTYPE=2003,
        ROWCAT=Under Age 6                       , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=2003,
        ROWCAT=6-12 Years                        , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=2003,
        ROWCAT=13-17 Years                       , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=2003,
        ROWCAT=Enrollees with Military PCM, BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=2003,
        ROWCAT=Enrollees with Civilian PCM, BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=2003,
        ROWCAT=Non-enrolled Beneficiaries , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=2003,
        ROWCAT=Prime Enrollees                   , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=2003,
        ROWCAT=CONUS MHS                         , BENEFIT=How Well Doctors
Communicate);

%PROCESS(BENTYPE=Listens Carefully,
        ROWCAT=Under Age 6                       , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Listens Carefully,
        ROWCAT=6-12 Years                        , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Listens Carefully,
        ROWCAT=13-17 Years                       , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Listens Carefully,
        ROWCAT=Enrollees with Military PCM, BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Listens Carefully,
        ROWCAT=Enrollees with Civilian PCM, BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Listens Carefully,
        ROWCAT=Non-enrolled Beneficiaries , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Listens Carefully,
        ROWCAT=Prime Enrollees                   , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Listens Carefully,
        ROWCAT=CONUS MHS                         , BENEFIT=How Well Doctors
Communicate);
```

```
%PROCESS(BENTYPE=Explains so you can Understand,
         ROWCAT=Under Age 6                          , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Explains so you can Understand,
         ROWCAT=6-12 Years                           , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Explains so you can Understand,
         ROWCAT=13-17 Years                          , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Explains so you can Understand,
         ROWCAT=Enrollees with Military PCM, BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Explains so you can Understand,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Explains so you can Understand,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Explains so you can Understand,
         ROWCAT=Prime Enrollees                      , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Explains so you can Understand,
         ROWCAT=CONUS MHS                            , BENEFIT=How Well Doctors
Communicate);

%PROCESS(BENTYPE=Explains so your child can Understand,
         ROWCAT=Under Age 6                          , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Explains so your child can Understand,
         ROWCAT=6-12 Years                           , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Explains so your child can Understand,
         ROWCAT=13-17 Years                          , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Explains so your child can Understand,
         ROWCAT=Enrollees with Military PCM, BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Explains so your child can Understand,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Explains so your child can Understand,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Explains so your child can Understand,
         ROWCAT=Prime Enrollees                      , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Explains so your child can Understand,
         ROWCAT=CONUS MHS                            , BENEFIT=How Well Doctors
Communicate);

%PROCESS(BENTYPE=Shows Respect,
         ROWCAT=Under Age 6                          , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Shows Respect,
         ROWCAT=6-12 Years                           , BENEFIT=How Well Doctors
Communicate);
%PROCESS(BENTYPE=Shows Respect,
         ROWCAT=13-17 Years                          , BENEFIT=How Well Doctors
Communicate);
```

```
%PROCESS(BENTYPE=Shows Respect,
         ROWCAT=Enrollees  with  Military  PCM,  BENEFIT=How  Well  Doctors
Communicate);
%PROCESS(BENTYPE=Shows Respect,
         ROWCAT=Enrollees  with  Civilian  PCM,  BENEFIT=How  Well  Doctors
Communicate);
%PROCESS(BENTYPE=Shows Respect,
         ROWCAT=Non-enrolled  Beneficiaries  ,  BENEFIT=How  Well  Doctors
Communicate);
%PROCESS(BENTYPE=Shows Respect,
         ROWCAT=Prime  Enrollees                  ,  BENEFIT=How  Well  Doctors
Communicate);
%PROCESS(BENTYPE=Shows Respect,
         ROWCAT=CONUS  MHS                         ,  BENEFIT=How  Well  Doctors
Communicate);

%PROCESS(BENTYPE=Spends Time with your child,
         ROWCAT=Under  Age  6                      ,  BENEFIT=How  Well  Doctors
Communicate);
%PROCESS(BENTYPE=Spends Time with your child,
         ROWCAT=6-12  Years                        ,  BENEFIT=How  Well  Doctors
Communicate);
%PROCESS(BENTYPE=Spends Time with your child,
         ROWCAT=13-17  Years                       ,  BENEFIT=How  Well  Doctors
Communicate);
%PROCESS(BENTYPE=Spends Time with your child,
         ROWCAT=Enrollees  with  Military  PCM,  BENEFIT=How  Well  Doctors
Communicate);
%PROCESS(BENTYPE=Spends Time with your child,
         ROWCAT=Enrollees  with  Civilian  PCM,  BENEFIT=How  Well  Doctors
Communicate);
%PROCESS(BENTYPE=Spends Time with your child,
         ROWCAT=Non-enrolled  Beneficiaries  ,  BENEFIT=How  Well  Doctors
Communicate);
%PROCESS(BENTYPE=Spends Time with your child,
         ROWCAT=Prime  Enrollees                  ,  BENEFIT=How  Well  Doctors
Communicate);
%PROCESS(BENTYPE=Spends Time with your child,
         ROWCAT=CONUS  MHS                         ,  BENEFIT=How  Well  Doctors
Communicate);

*************************************************************************
* 4) Create CONUS for Courteous and Helpful Office Staff
*************************************************************************;
%PROCESS(BENTYPE=2003,
         ROWCAT=Under  Age  6                    ,  BENEFIT=Courteous  and  Helpful
Office Staff);
%PROCESS(BENTYPE=2003,
         ROWCAT=6-12  Years                      ,  BENEFIT=Courteous  and  Helpful
Office Staff);
%PROCESS(BENTYPE=2003,
         ROWCAT=13-17  Years                     ,  BENEFIT=Courteous  and  Helpful
Office Staff);
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees  with  Military  PCM,  BENEFIT=Courteous  and  Helpful
Office Staff);
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees  with  Civilian  PCM,  BENEFIT=Courteous  and  Helpful
Office Staff);
```

```
%PROCESS(BENTYPE=2003,
         ROWCAT=Non-enrolled  Beneficiaries  ,  BENEFIT=Courteous  and  Helpful
Office Staff);
%PROCESS(BENTYPE=2003,
         ROWCAT=Prime  Enrollees                , BENEFIT=Courteous and Helpful
Office Staff);
%PROCESS(BENTYPE=2003,
         ROWCAT=CONUS  MHS                      , BENEFIT=Courteous and Helpful
Office Staff);

%PROCESS(BENTYPE=Courteous and Respectful,
         ROWCAT=Under  Age  6                   , BENEFIT=Courteous and Helpful
Office Staff);
%PROCESS(BENTYPE=Courteous and Respectful,
         ROWCAT=6-12  Years                     , BENEFIT=Courteous and Helpful
Office Staff);
%PROCESS(BENTYPE=Courteous and Respectful,
         ROWCAT=13-17  Years                    , BENEFIT=Courteous and Helpful
Office Staff);
%PROCESS(BENTYPE=Courteous and Respectful,
         ROWCAT=Enrollees  with  Military  PCM,  BENEFIT=Courteous  and  Helpful
Office Staff);
%PROCESS(BENTYPE=Courteous and Respectful,
         ROWCAT=Enrollees  with  Civilian  PCM,  BENEFIT=Courteous  and  Helpful
Office Staff);
%PROCESS(BENTYPE=Courteous and Respectful,
         ROWCAT=Non-enrolled  Beneficiaries  ,  BENEFIT=Courteous  and  Helpful
Office Staff);
%PROCESS(BENTYPE=Courteous and Respectful,
         ROWCAT=Prime  Enrollees                , BENEFIT=Courteous and Helpful
Office Staff);
%PROCESS(BENTYPE=Courteous and Respectful,
         ROWCAT=CONUS  MHS                      , BENEFIT=Courteous and Helpful
Office Staff);

%PROCESS(BENTYPE=Helpful,
         ROWCAT=Under  Age  6                   , BENEFIT=Courteous and Helpful
Office Staff);
%PROCESS(BENTYPE=Helpful,
         ROWCAT=6-12  Years                     , BENEFIT=Courteous and Helpful
Office Staff);
%PROCESS(BENTYPE=Helpful,
         ROWCAT=13-17  Years                    , BENEFIT=Courteous and Helpful
Office Staff);
%PROCESS(BENTYPE=Helpful,
         ROWCAT=Enrollees  with  Military  PCM,  BENEFIT=Courteous  and  Helpful
Office Staff);
%PROCESS(BENTYPE=Helpful,
         ROWCAT=Enrollees  with  Civilian  PCM,  BENEFIT=Courteous  and  Helpful
Office Staff);
%PROCESS(BENTYPE=Helpful,
         ROWCAT=Non-enrolled  Beneficiaries  ,  BENEFIT=Courteous  and  Helpful
Office Staff);
%PROCESS(BENTYPE=Helpful,
         ROWCAT=Prime  Enrollees                , BENEFIT=Courteous and Helpful
Office Staff);
%PROCESS(BENTYPE=Helpful,
         ROWCAT=CONUS  MHS                      , BENEFIT=Courteous and Helpful
Office Staff);
```

```
*************************************************************************
* 5) Create CONUS for Customer Service
*************************************************************************;
%PROCESS(BENTYPE=2003,
         ROWCAT=Under Age 6                , BENEFIT=Customer Service);
%PROCESS(BENTYPE=2003,
         ROWCAT=6-12 Years                 , BENEFIT=Customer Service);
%PROCESS(BENTYPE=2003,
         ROWCAT=13-17 Years                , BENEFIT=Customer Service);
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Customer Service);
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Customer Service);
%PROCESS(BENTYPE=2003,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Customer Service);
%PROCESS(BENTYPE=2003,
         ROWCAT=Prime Enrollees            , BENEFIT=Customer Service);
%PROCESS(BENTYPE=2003,
         ROWCAT=CONUS MHS                  , BENEFIT=Customer Service);

%PROCESS(BENTYPE=Problem Getting Help from Customer Service,
         ROWCAT=Under Age 6                , BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service,
         ROWCAT=6-12 Years                 , BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service,
         ROWCAT=13-17 Years                , BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service,
         ROWCAT=Prime Enrollees            , BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem Getting Help from Customer Service,
         ROWCAT=CONUS MHS                  , BENEFIT=Customer Service);

%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,
         ROWCAT=Under Age 6                , BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,
         ROWCAT=6-12 Years                 , BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,
         ROWCAT=13-17 Years                , BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,
         ROWCAT=Prime Enrollees            , BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem Finding/Understanding Written Material,
         ROWCAT=CONUS MHS                  , BENEFIT=Customer Service);

%PROCESS(BENTYPE=Problem with Paperwork,
         ROWCAT=Under Age 6                , BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem with Paperwork,
         ROWCAT=6-12 Years                 , BENEFIT=Customer Service);
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%PROCESS(BENTYPE=Problem with Paperwork,
         ROWCAT=13-17 Years                , BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem with Paperwork,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem with Paperwork,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem with Paperwork,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem with Paperwork,
         ROWCAT=Prime Enrollees            , BENEFIT=Customer Service);
%PROCESS(BENTYPE=Problem with Paperwork,
         ROWCAT=CONUS MHS                  , BENEFIT=Customer Service);

*************************************************************************
* 7) Create CONUS for Claims Processing
*************************************************************************;
%PROCESS(BENTYPE=2003,
         ROWCAT=Under Age 6                , BENEFIT=Claims Processing);
%PROCESS(BENTYPE=2003,
         ROWCAT=6-12 Years                 , BENEFIT=Claims Processing);
%PROCESS(BENTYPE=2003,
         ROWCAT=13-17 Years                , BENEFIT=Claims Processing);
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Claims Processing);
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Claims Processing);
%PROCESS(BENTYPE=2003,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Claims Processing);
%PROCESS(BENTYPE=2003,
         ROWCAT=Prime Enrollees            , BENEFIT=Claims Processing);
%PROCESS(BENTYPE=2003,
         ROWCAT=CONUS MHS                  , BENEFIT=Claims Processing);

%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,
         ROWCAT=Under Age 6                , BENEFIT=Claims Processing);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,
         ROWCAT=6-12 Years                 , BENEFIT=Claims Processing);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,
         ROWCAT=13-17 Years                , BENEFIT=Claims Processing);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Claims Processing);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Claims Processing);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Claims Processing);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,
         ROWCAT=Prime Enrollees            , BENEFIT=Claims Processing);
%PROCESS(BENTYPE=Claims Handled in a Reasonable Time,
         ROWCAT=CONUS MHS                  , BENEFIT=Claims Processing);

%PROCESS(BENTYPE=Claims Handled Correctly,
         ROWCAT=Under Age 6                , BENEFIT=Claims Processing);
%PROCESS(BENTYPE=Claims Handled Correctly,
         ROWCAT=6-12 Years                 , BENEFIT=Claims Processing);
%PROCESS(BENTYPE=Claims Handled Correctly,
         ROWCAT=13-17 Years                , BENEFIT=Claims Processing);
%PROCESS(BENTYPE=Claims Handled Correctly,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Claims Processing);
%PROCESS(BENTYPE=Claims Handled Correctly,
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         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Claims Processing);
%PROCESS(BENTYPE=Claims Handled Correctly,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Claims Processing);
%PROCESS(BENTYPE=Claims Handled Correctly,
         ROWCAT=Prime Enrollees            , BENEFIT=Claims Processing);
%PROCESS(BENTYPE=Claims Handled Correctly,
         ROWCAT=CONUS MHS                  , BENEFIT=Claims Processing);

*************************************************************************
* 8) Create CONUS for Health Care
*************************************************************************;
%PROCESS(BENTYPE=2003,
         ROWCAT=Under Age 6                , BENEFIT=Health Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=6-12 Years                 , BENEFIT=Health Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=13-17 Years                , BENEFIT=Health Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Health Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Health Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Health Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=Prime Enrollees            , BENEFIT=Health Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=CONUS MHS                  , BENEFIT=Health Care);

*************************************************************************
* 9) Create CONUS for Health Plan
*************************************************************************;
%PROCESS(BENTYPE=2003,
         ROWCAT=Under Age 6                , BENEFIT=Health Plan);
%PROCESS(BENTYPE=2003,
         ROWCAT=6-12 Years                 , BENEFIT=Health Plan);
%PROCESS(BENTYPE=2003,
         ROWCAT=13-17 Years                , BENEFIT=Health Plan);
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Health Plan);
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Health Plan);
%PROCESS(BENTYPE=2003,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Health Plan);
%PROCESS(BENTYPE=2003,
         ROWCAT=Prime Enrollees            , BENEFIT=Health Plan);
%PROCESS(BENTYPE=2003,
         ROWCAT=CONUS MHS                  , BENEFIT=Health Plan);

*************************************************************************
* 10) Create CONUS for Personal Doctor or Nurse
*************************************************************************;
%PROCESS(BENTYPE=2003,
         ROWCAT=Under Age 6                , BENEFIT=Personal Doctor or Nurse);
%PROCESS(BENTYPE=2003,
         ROWCAT=6-12 Years                 , BENEFIT=Personal Doctor or Nurse);
%PROCESS(BENTYPE=2003,
         ROWCAT=13-17 Years                , BENEFIT=Personal Doctor or Nurse);
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Personal Doctor or Nurse);
```

```
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Personal Doctor or Nurse);
%PROCESS(BENTYPE=2003,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Personal Doctor or Nurse);
%PROCESS(BENTYPE=2003,
         ROWCAT=Prime Enrollees            , BENEFIT=Personal Doctor or Nurse);
%PROCESS(BENTYPE=2003,
         ROWCAT=CONUS MHS                  , BENEFIT=Personal Doctor or Nurse);

*************************************************************************
* 11) Create CONUS for Speciality Care
*************************************************************************;
%PROCESS(BENTYPE=2003,
         ROWCAT=Under Age 6                , BENEFIT=Speciality Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=6-12 Years                 , BENEFIT=Speciality Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=13-17 Years                , BENEFIT=Speciality Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees with Military PCM, BENEFIT=Speciality Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=Enrollees with Civilian PCM, BENEFIT=Speciality Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=Non-enrolled Beneficiaries , BENEFIT=Speciality Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=Prime Enrollees            , BENEFIT=Speciality Care);
%PROCESS(BENTYPE=2003,
         ROWCAT=CONUS MHS                  , BENEFIT=Speciality Care);

*************************************************************************
* Store missing values into SIG and SCORE for FAKEC.SD2 records
*************************************************************************;
DATA FAKEC;
   SET IN1.FAKEC;
   SIG = .;
   SCORE = .;
   ORDER = _N_;
   KEY = UPCASE(TRIM(BENEFIT)) ||
         UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  ||
         UPCASE(TRIM(ROWCAT));
RUN;

PROC SORT DATA=FAKEC; BY KEY; RUN;
PROC SORT DATA=FAKEC  OUT=TEMP(KEEP=ORDER KEY); BY KEY; RUN;
PROC SORT DATA=FINAL; BY KEY; RUN;

DATA FINAL;
   MERGE FINAL(IN=IN1) TEMP(IN=IN2);
   BY KEY;
   IF IN1 AND IN2;
RUN;

*************************************************************************
* Append 2003 BENCHMARK records to perform significance tests
*************************************************************************;
DATA BENCH1(KEEP=T MAJGRP ROWCAT BENEFIT BENTYPE BSCORE BSEMEAN);
   SET IN1.MERGFINC;
   WHERE ROWCAT IN("6-12 Years-Benchmark","Under Age 6-Benchmark")
```

```
                AND SVMPR03 = 0;
   LENGTH T $10;
   IF ROWCAT = "6-12 Years-Benchmark" THEN T = "6-12";
   ELSE T = "UNDER 6";
   RENAME SCORE  = BSCORE;
   RENAME SEMEAN = BSEMEAN;
RUN;
PROC SORT DATA=BENCH1; BY T MAJGRP BENEFIT BENTYPE; RUN;

DATA BENCH2(KEEP=ORDER KEY N_OBS N_WGT T MAJGRP BENEFIT BENTYPE SCORE SEMEAN
SOURCE FLAG);
   SET FINAL;
   LENGTH T $10;
   IF ROWCAT = "6-12 Years" THEN T = "6-12";
   ELSE T = "UNDER 6";
   IF ROWCAT IN("6-12 Years","Under Age 6") THEN OUTPUT BENCH2;
RUN;
PROC SORT DATA=BENCH2; BY T MAJGRP BENEFIT BENTYPE; RUN;

*************************************************************************
* Extract scores to perform significance tests
*************************************************************************;
DATA SIGTESTS(KEEP=ORDER SIG);
   MERGE BENCH1(IN=IN1) BENCH2(IN=IN2);
   BY T MAJGRP BENEFIT BENTYPE;
   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 IN1 AND IN2;
RUN;
PROC SORT DATA=SIGTESTS; BY ORDER; RUN;
PROC SORT DATA=FINAL;    BY ORDER; RUN;

DATA SIGTESTS;
   MERGE FINAL(IN=IN1) SIGTESTS(IN=IN2);
   BY ORDER;
   SOURCE = "CONUS_C";
   FLAG   = "CONUS_C";
   IF IN1;
   KEEP ORDER KEY MAJGRP ROWCAT BENEFIT BENTYPE N_OBS N_WGT
        FLAG SOURCE SCORE SEMEAN SIG;
RUN;
%LET DSN = SIGNIF_C;
*************************************************************************
* Get records from SIGNIF_C.SD2 that are NOT FAKE ONLY
*************************************************************************;
DATA &DSN;
   SET IN1.&DSN;
   IF FLAG NE "FAKE ONLY";
RUN;
PROC SORT DATA=&DSN; BY ORDER; RUN;

*************************************************************************
* Combine previously created records with the new file
*************************************************************************;
DATA COMBINE OUT.LT30C;
   SET &DSN SIGTESTS;
```

```
   BY ORDER;
   ************************************************************************
   * Remove N_OBS < 30 OR N_WGT < 200
   ************************************************************************;
   IF (N_OBS < 30 OR N_WGT < 200) AND
      (ROWCAT NOT IN("Under Age 6-Benchmark","6-12 Years-Benchmark"))
      THEN OUTPUT OUT.LT30C;
   ELSE OUTPUT COMBINE;
RUN;

PROC SORT DATA=FAKEC; BY ORDER; RUN;
DATA FAKEONLY;
   MERGE COMBINE(IN=IN1) FAKEC(IN=IN2);
   BY ORDER;
   SOURCE = "FAKE ONLY";
   FLAG   = "FAKE ONLY";
   IF IN2 AND NOT IN1;
RUN;

DATA OUT.CONUS_C;
   SET FAKEONLY COMBINE;
   BY ORDER;
   ************************************************************************
   * Convert CAHPS Composites and Individual to 1-100 scale
   ************************************************************************;
   IF BENEFIT NE "Primary Care Manager" AND BENTYPE NOT IN ("2001","2002") THEN
      SCORE = 100*(SCORE);
   IF BENEFIT = "Primary Care Manager" THEN DO;
      IF ROWCAT = "Non-enrolled Beneficiaries" THEN SCORE = .P;
      IF ROWCAT IN("Under Age 6-Benchmark","6-12 Years-Benchmark") THEN
         SCORE = .A;
   END;
RUN;

TITLE1 "2003 DOD Health Survey Scores/Report Cards (8860-410)";
TITLE2 "Program Name: CONUS_C.SAS By Keith Rathbun";
TITLE3 "Program Inputs: SIGNIF_C.SD2 - Scores Database in WEB Layout";
TITLE4 "Program Outputs: CONUS_C.SD2 - CONUS Scores Database in WEB layout";

PROC FREQ;
TABLES FLAG SOURCE SIG BENEFIT BENTYPE MAJGRP ROWCAT
      /MISSING LIST;
RUN;
```

G.11 - ..\LOADWEB\TREND_C.SAS - Add TREND records to Scores database.

```
*************************************************************************
*
* PROGRAM:  TREND_C.SAS
* TASK:     2003 DOD HEALTH CARE SURVEY ANALYSIS (8860-410)
* 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) 11/09/2001 BY KEITH RATHBUN -- Rewritten for Q3 child 2000.
*           3) 11/15/2002 BY MIKE SCOTT and Keith Rathbun -- Updated
*              for Q3 2002 Child Survey.
*           4) 12/04/2003 BY MIKE SCOTT -- Updated for Q3 2003.
*
* INPUTS:   1) CONUS_C.SD2 - 2001 and 2003 Scores Databases in WEB layout
*           2) FAKEC.SD2 - Scores Database WEB Layout
*
* OUTPUT:   1) TREND_C.SD2 - Combined Scores Database in WEB layout
*
* NOTES:
*
* 1) All of the scores and load DB programs must be run prior to
*    running this program.  All report card records must be merged prior
*    to the trend calculations.
*
* 2) The output file (TREND_C.SD2) will be used by the MAKEHTMC.SAS
*    program to generate the HTML Web pages.
*
*************************************************************************
* Assign data libraries and options
*************************************************************************;
LIBNAME IN   V612  ".";
LIBNAME OUT  V612  ".";

OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER;

*************************************************************************
* GLOBAL MACRO VARIABLES
*************************************************************************;

*** MACRO VARIABLES TO INDICATE VALUE FOR THE YEAR ***;

%LET FULLYR1 = 2001;
%LET FULLYR2 = 2003;

*** ABBREVIATED YEAR MACRO VARIABLES ***;

%LET YR1 = 01;
%LET YR2 = 03;

*************************************************************************
* Extract records to calculate TRENDs.  Trends have already been
* calculated for MPR scores so these records are removed from consideration.
* Also, remove benchmark records.
*************************************************************************;
```

```
DATA TEMP&FULLYR1;
   SET IN.CONUS_C;
   WHERE BENTYPE = "&FULLYR1";
   IF ROWCAT = "Enrollees with military PCM" THEN
      ROWCAT = "Enrollees with Military PCM";
   IF ROWCAT = "Enrollees with civilian PCM" THEN
      ROWCAT = "Enrollees with Civilian PCM";
   IF ROWCAT = "Non-enrolled beneficiaries" THEN
      ROWCAT = "Non-enrolled Beneficiaries";
*   IF ROWCAT = "6-12 Years-Benchmark" OR
      ROWCAT = "Under Age 6-Benchmark"
      THEN DELETE;
   KEEP MAJGRP ROWCAT BENTYPE BENEFIT SCORE N_OBS N_WGT SEMEAN;
RUN;

PROC SORT DATA=TEMP&FULLYR1;
   BY MAJGRP ROWCAT BENEFIT BENTYPE;
RUN;

DATA TEMP&FULLYR2;
   SET IN.CONUS_C;
   WHERE BENTYPE = "&FULLYR2";
*   IF ROWCAT = "6-12 Years-Benchmark" OR
      ROWCAT = "Under Age 6-Benchmark"
      THEN DELETE;
   KEEP MAJGRP ROWCAT BENTYPE BENEFIT SCORE N_OBS N_WGT SEMEAN;
RUN;

PROC SORT DATA=TEMP&FULLYR2;
   BY MAJGRP ROWCAT BENEFIT BENTYPE;
RUN;

*************************************************************************
* Establish 2001 and 2003 pairs.
*************************************************************************;
PROC SORT DATA=TEMP&FULLYR1
          OUT=KEY&FULLYR1(KEEP=MAJGRP ROWCAT BENEFIT) NODUPKEY;
   BY MAJGRP ROWCAT BENEFIT;
RUN;

PROC SORT DATA=TEMP&FULLYR2
          OUT=KEY&FULLYR2(KEEP=MAJGRP ROWCAT BENEFIT) NODUPKEY;
   BY MAJGRP ROWCAT BENEFIT;
RUN;

DATA PAIRS;
   MERGE KEY&FULLYR1(IN=IN1) KEY&FULLYR2(IN=IN2);
   BY MAJGRP ROWCAT BENEFIT;
   IF IN1 AND IN2;
RUN;

DATA PAIR&FULLYR1 ONLY&FULLYR1;
   MERGE PAIRS(IN=IN1) TEMP&FULLYR1(IN=IN2);
   BY MAJGRP ROWCAT BENEFIT;
   IF IN1 AND IN2 THEN OUTPUT PAIR&FULLYR1;
   ELSE OUTPUT ONLY&FULLYR1;
RUN;

DATA PAIR&FULLYR2 ONLY&FULLYR2;
```

```
   MERGE PAIRS(IN=IN1) TEMP&FULLYR2(IN=IN2);
   BY MAJGRP ROWCAT BENEFIT;
   IF IN1 AND IN2 THEN OUTPUT PAIR&FULLYR2;
   ELSE OUTPUT ONLY&FULLYR2;
RUN;

*************************************************************************
* Calculate TRENDs keeping only the TREND records
*************************************************************************;
DATA TREND_C;
   SET PAIR&FULLYR1 PAIR&FULLYR2;
   BY MAJGRP ROWCAT BENEFIT BENTYPE;
   IF BENTYPE = "&FULLYR1" THEN DO;
      SCORE&YR1 = SCORE;
      SE&YR1=SEMEAN;
      N&YR1=N_OBS;
      W&YR1=N_WGT;
   END;
   RETAIN SCORE&YR1 SE&YR1 N&YR1 W&YR1;
   IF BENTYPE = "&FULLYR2" THEN DO;
      SCORE&YR2 = SCORE;
      SE&YR2=SEMEAN;
      N&YR2=N_OBS;
      W&YR2=N_WGT;
   END;
   RETAIN SCORE&YR2 SE&YR2 N&YR2 W&YR2;
   IF BENTYPE = "&FULLYR2" THEN DO;
      BENTYPE = "Trend";
      KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
            UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(ROWCAT));
      FLAG   = "TREND";
      SOURCE = "TREND";
      SEMEAN = SQRT(SE&YR1**2+SE&YR2**2);
      N_OBS  = MIN(N&YR1,N&YR2);
      N_WGT  = MIN(W&YR1,W&YR2);
      SCORE  = SCORE&YR2-SCORE&YR1;
      OUTPUT;
   END;
   DROP SCORE&YR1 SCORE&YR2 SE&YR1 SE&YR2 N&YR1 W&YR1 N&YR2 W&YR2;
RUN;
proc sort data=trend_c; by majgrp benefit descending rowcat;
data trend_c(drop=temp test bscore bsemean);
set trend_c; by majgrp benefit;
retain bsemean bscore 0;
if rowcat in (’6-12 Years-Benchmark’,’Under Age 6-Benchmark’)  then do;
bsemean=semean; bscore=score;
end;
if rowcat in(’6-12 Years’,’Under Age 6’)  then do;
 TEMP = (SCORE-BSCORE)/(100*SQRT(BSEMEAN**2+SEMEAN**2));
   TEST = 2*(1-PROBT(ABS(TEMP),N_OBS-1));
   SIG = 0;
   IF N_OBS >= 30 AND TEST < 0.05 & test ne . THEN SIG = 1;
   IF SCORE < BSCORE THEN SIG = -SIG; end;

PROC SORT DATA=TREND_C; BY KEY; RUN;

*************************************************************************
* Construct ORDERing variable from WEB layout
*************************************************************************;
```

```
DATA ORDER;
   SET IN.FAKEC;
   ORDER = _N_;
   LENGTH KEY $200;
   KEY = UPCASE(TRIM(BENEFIT)) || UPCASE(TRIM(BENTYPE)) ||
         UPCASE(TRIM(MAJGRP))  || UPCASE(TRIM(ROWCAT));
   KEEP KEY ORDER;
RUN;
PROC SORT DATA=ORDER; BY KEY; RUN;

DATA MERGTRND;
   MERGE TREND_C(IN=IN1) ORDER(IN=IN2);
   BY KEY;
   IF IN1;
RUN;

PROC SORT DATA=MERGTRND; BY ORDER; RUN;
PROC SORT DATA=IN.CONUS_C
          OUT=CONUS_C
     (WHERE=(BENTYPE NE "Trend" /*OR
            (ROWCAT IN("6-12 Years-Benchmark", "Under Age 6-Benchmark") )*/ ));
   BY ORDER;
RUN;

DATA OUT.TREND_C;
   SET CONUS_C MERGTRND;
   BY ORDER;
   IF BENTYPE = "Trend" THEN DO;
      IF ROWCAT IN("Under Age 6-Benchmark","6-12 Years-Benchmark") THEN DO;
         SIG = 0;
 *        SCORE = .A;
      END;
      IF BENEFIT = "Primary Care Manager" AND
         ROWCAT = "Non-enrolled Beneficiaries" THEN SCORE = .P;
   END;
RUN;

TITLE1 "&FULLYR2 DOD Health Survey Scores/Report Cards (8860-410)";
TITLE2 "Program Name: TREND_C.SAS By Keith Rathbun";
TITLE3 "Program Inputs: MPR and CAHPS data records in WEB Layout";
TITLE4 "Program Outputs: TREND_C.SD2 - Merged Final Scores Database with TRENDs
for Input to SIGNIF_C.SAS";

TITLE5 "FREQs of TREND_C.SD2";
PROC FREQ;
   TABLES SOURCE FLAG MAJGRP ROWCAT BENEFIT BENTYPE
  /MISSING LIST;
RUN;

TITLE5 "FREQs of FAKEC.SD2";
PROC FREQ DATA=IN.FAKEC;
   TABLES MAJGRP ROWCAT BENEFIT BENTYPE
  /MISSING LIST;
RUN;
```

G.12 - ..\LOADWEB\SIGNIF_C.SAS - Perform significance tests for CAHPS scores.

```
*************************************************************************
*
* PROGRAM:  SIGNIF_C.SAS
* TASK:     2003 DOD HEALTH CARE SURVEY REPORTING (8860-410)
* PURPOSE:  Perform significance tests for CAHPS scores
*
* WRITTEN:  07/27/2000 BY KEITH RATHBUN
*
* MODIFIED: 1) 09/14/2001 BY KEITH RATHBUN, Minor changes to accommodate
*              the Q3 2000 child survey.
*           2) 11/01/2002 BY MIKE SCOTT, Updated to accommodate the
*              Q3 2002 child survey.
*           3) 12/06/2003 BY MIKE SCOTT, Updated for Q3 2003.
*
* INPUTS:   1) MERGFINC.SD2 - MPR and CAHPS Scores Database in WEB layout
*           2) FAKEC.SD2 - Scores Database WEB Layout
*
* OUTPUT:   1) SIGNIF_C.SD2 - Combined Scores Database in WEB layout
*
* NOTES:
*
* 1) This is the 2nd to last program to be run in the scores DB series.  All
*    report card records must be merged (MERGFINC.SAS) prior to the
*    significance tests.
*
* 2) The output file (SIGNIF_C.SD2) will be run through the
*    CONUS_C.SAS program to generate the CONUS scores.
*
*************************************************************************
* Assign data libraries and options
*************************************************************************;
LIBNAME IN1  V612  ".";
LIBNAME OUT  V612  ".";
OPTIONS PS=79 LS=132 COMPRESS=YES NOCENTER ERRORS=1;

*************************************************************************
* Append 2003 BENCHMARK records to perform significance tests
*************************************************************************;
DATA BENCH1(KEEP=T MAJGRP ROWCAT BENEFIT BENTYPE BSCORE BSEMEAN);
   SET IN1.MERGFINC;
   WHERE ROWCAT IN("6-12 Years-Benchmark","Under Age 6-Benchmark")
               AND SVMPR03 = 0 and SVCMP02 = 0
               ;
   LENGTH T $10;
   IF ROWCAT = "6-12 Years-Benchmark" THEN T = "6-12";
   ELSE T = "UNDER 6";
   RENAME SCORE  = BSCORE;
   RENAME SEMEAN = BSEMEAN;
RUN;
PROC SORT DATA=BENCH1; BY T MAJGRP BENEFIT BENTYPE; RUN;

DATA BENCH2(KEEP=N_WGT N_OBS T MAJGRP BENEFIT BENTYPE SCORE SEMEAN ORDER);
   SET IN1.MERGFINC;
   WHERE ROWCAT IN("6-12 Years","Under Age 6")
               AND SVMPR03 = 0 and SVCMP02 = 0
               ;
```

```
   LENGTH T $10;
   IF ROWCAT = "6-12 Years" THEN T = "6-12";
   ELSE T = "UNDER 6";
RUN;
PROC SORT DATA=BENCH2; BY T MAJGRP BENEFIT BENTYPE; RUN;

*************************************************************************
* Extract scores to perform significance tests
*************************************************************************;
DATA BENCHMRK(KEEP=ORDER SIG);
   MERGE BENCH1(IN=IN1) BENCH2(IN=IN2);
   BY T MAJGRP BENEFIT BENTYPE;
   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 IN1 AND IN2;
RUN;
PROC SORT DATA=BENCHMRK; BY ORDER; RUN;

*************************************************************************
* Extract MPR records
*************************************************************************;
/*
DATA MPR;
   SET IN1.MERGFINC;
   BY ORDER;
   WHERE SVMPR02 = 1;
RUN;
PROC SORT DATA=MPR; BY ORDER; RUN;
*/
DATA BENCHMRK;
   MERGE IN1.MERGFINC(IN=IN1) BENCHMRK(IN=IN2);
   BY ORDER;
   IF IN2;
RUN;

*************************************************************************
* Combine newly created CAHPS SIG values with MPR records
*************************************************************************;
DATA ALLSCORE;
   SET BENCHMRK IN1.MERGFINC;
   BY ORDER;
RUN;

*************************************************************************
* Store missing values into SIG and SCORE for FAKE.SD2 records
*************************************************************************;
DATA FAKEC;
   SET IN1.FAKEC;
   SIG = .;
   SCORE = .;
   ORDER = _N_;
RUN;

DATA FAKEONLY;
   MERGE ALLSCORE(IN=IN1) FAKEC(IN=IN2);
   BY ORDER;
```

```
   SOURCE = "FAKE ONLY";
   FLAG   = "FAKE ONLY";
   IF IN2 AND NOT IN1;
RUN;

DATA OUT.SIGNIF_C;
   SET FAKEONLY ALLSCORE;
   BY ORDER;
   IF FIRST.ORDER; *KRR added 11/14/2001;
RUN;

TITLE1 "2003 DOD Health Survey Scores/Report Cards (8860-410)";
TITLE2 "Program Name: SIGNIF_C.SAS By Keith Rathbun";
TITLE3 "Program Inputs: MPR and CAHPS data records in WEB Layout";
TITLE4 "Program Outputs: SIGNIF_C.SD2 - Merged Final Scores Database for input
to MAKEHTMC.SAS";

TITLE5 "FREQs of SIGNIF_C.SD2";
PROC FREQ;
   TABLES SIG SOURCE FLAG MAJGRP ROWCAT BENEFIT BENTYPE
  /MISSING LIST;
RUN;

TITLE5 "FREQs of FAKEC.SD2";
PROC FREQ DATA=IN1.FAKEC;
   TABLES MAJGRP ROWCAT BENEFIT BENTYPE
  /MISSING LIST;
RUN;
```

G.13 - ..\LOADWEB\MAKEHTMC.SAS - Generate HTML and XLS files for TRICARE Beneficiary Reports.

```
*=================================================================;
*   Programmer:  Mark A. Brinkley                                 ;
*                                                                 ;
*        Title:  MAKEHTMC.SAS                                     ;
*       Client:  8860-410                                         ;
*         Date:  05-03-2000                                       ;
*     Modified:  10/08/2001 C. Rankin -- changed for 2000         ;
*                11/20/2001 D. Beahm -- Added Trend pages and Code to  ;
*                                       output excel files        ;
*                11/15/2002 M. Scott -- Updated for Q3 2002.      ;
*                11/27/2002 K. Rathbun -- More Updates for Q3 2002.    ;
*                12/05/2002 M. Scott -- Updated colmns and xlscols     ;
*                                       numbers for Q3 2002.      ;
*                12/06/2002 M. Scott -- Added code to set COLUMNS,     ;
*                           D. Beahm    SPAN1, and SPAN2 for component ;
*                                       pages of Claims Processing and ;
*                                       Courteous and Helpful Office   ;
*                                       Staff.                    ;
*                12/07/2002 M. Scott -- Added code to print NA and *** ;
*                                       for extra column in Q3 2002.   ;
*                12/09/2002 M. Scott -- Changed *** to NA for all      ;
*                                       Trend columns (except Getting  ;
*                                       Care Quickly)             ;
*                12/07/2003 M. Scott -- Updated for Q3 2003.      ;
*                                                                 ;
*      Purpose:  This program is to create                        ;
*                report cards for the 2003 DOD project (CHILD)    ;
*                                                                 ;
*  Input files:  TREND_C.SD2                                      ;
*                                                                 ;
* Output files:  DATA\                                            ;
*                                                                 ;
*=================================================================;

OPTIONS MLOGIC MPRINT;

%LET HTMLSP=%NRSTR( );       /**changes STR to NRSTR so SAS would recognize
&**/
%LET QUOTE=%STR("");
%LET OUTXLS=1;                     /** 1=Make XLS file/0=Don't   Added 10-24 CR
**/
%LET fontface=%STR(Arial,Helvetica,Swiss,Geneva);
%LET hdcolr=%STR('white');
%LET  BLUE=%STR('#663300');          /**BLUE is ACTUALLY THE DARK RED USED FOR
BENCHMARKS**/
%LET GREEN=%STR('#009933');
%LET RED=%STR('#cc0000');
%LET GRAY=%STR('white');
%LET COMMA=%STR(',');
%LET LOGO=%STR('child_side.gif');
%LET HELP_BUTTON=%STR('help75.gif');
%LET HOME_BUTTON=%STR('home75.gif');
%LET BACK_BUTTON=%STR('back75.gif');
```

```
LIBNAME SRC1 '.' ACCESS=READONLY;
OPTIONS LS=132;
OPTIONS NOXWAIT;

*********************************************************************;
****   Macro to create html pages                                   ****;
****          var1=major group                                      ****;
****          var2=0                                                ****;
****          var3=benefit                                          ****;
****       seppage=separate page for trend data                     ****;
****             0=no separate page                                 ****;
***              1=1st separate page                                ****;
***              2=2nd separate page                                ****;
*********************************************************************;

/** C. Rankin -- added variable for separate page, similar to adult **/
/**              consumer reports                                    **/

%MACRO MKHTML(var1,var2,var3,seppage);

/** Load in data **/

DATA SUBSET;
  SET SRC1.trend_c;
  LENGTH MAJGRPA $ 48;

  IF MAJGRP="Children in Mature Regions (6, 9-12, & 16)" THEN
     MAJGRPA="Children in Mature Regions (6, 9-12, & Alaska)";
  ELSE IF MAJGRP="All Children" THEN MAJGRPA="Children in CONUS MHS";
  ELSE MAJGRPA=MAJGRP;
  IF ROWCAT="CONUS MHS" THEN ROWCAT="All Children";
  IF BENEFIT="Speciality Care" THEN BENEFIT="Specialty Care";   *****DKB ADDED
Because SPECIALTY SPELLED INCORRECTLY IN TREND_C FILE****;
  IF BENTYPE="Had a 'Big Problem' Getting to See PCM" THEN BENTYPE="Not a
Problem Getting to See PCM";  *****DKB Because Column Header Wrong****;
  IF -.5<SCORE <.5 and SCORE NOT IN (.P, .A, .) THEN SCORE=0;   *****DKB ADDED
TO GET RID OF -0 VALUES****;

  /*** VAR1 indicated major group ***/
  %if &var1.=1 %then %let major=%STR(Children in CONUS MHS);
  %if &var1.=2 %then %let major=%STR(Children in New Regions (1, 2, & 5));
  %if &var1.=3 %then %let major=%STR(Children in Mature Regions (6, 9-12, &
Alaska));
  %if &var1.=4 %then %let major=%STR(Children in Other Regions (3, 4, & 7/8));

  IF MAJGRPA="&major.";    /*** Subset data by major group ***/
  /*** Added C. Rankin 10/24/2001 (from makehtmq.sas)*/
  /*** Create macro variables to refer to Component or Trend pages ***/
  /*** SEPPAGE=0 indicates Component page***/
  %if &seppage.=0 %then %do;
     %let q=;
     %let unq=;
     %let click_alt=Click for Component data;
     %let click_image=component.gif;
  %end;

  /****else if not a component then must be a trend page and file name will end
in q****/
  %else %do;
```

```
     %let q=q;
     %let unq=q;
     %let click_alt=Click for Trend data;
     %let click_image=trend.gif;
  %end;

  /*****  CREATE FILE NAME *****/

  FILEOUT1=COMPRESS("htmc\c&var1.-&var2.-&var3.&q..htm");

  /*** Added 10-24-2001 CR  If creating Excel then don't create HTML ***/

  %if &outxls.=1 %then %let fileout1= NUL;

  %else %do;
      call symput('fileout1',FILEOUT1);

  %end;

  /*--------------------------*/
  /* 2000/11: begin xls code */
  /*--------------------------*/

  FILEOUTX=COMPRESS("htmc\c&var1.-&var2.-&var3..xls");           /* create run-
specific xls file */
  CALL SYMPUT('fileoutX',FILEOUTX);                                    /* via
global macro vars        */

  TEMPLATE=COMPRESS("Templates_c\Template&var3..xls");
  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 %let headvar=BENTYPE;

  /*** Link to XLS file ***/
  HREFXLS=COMPRESS("c&var1.-&var2.-&var3..xls");
  call symput('hrefxls',HREFXLS);

RUN;



/*** Subset data by Benefit ***/
/*** columns and colmns used to determine how many rows in html files***/
/*** xlscols used to determine how many rows to use in EXCEL file. The EXCEL
     FILES INCLUDE BOTH THE TREND AND THE SUB BENEFIT PAGES IN ONE SHEET SO
     THE NUMBER OF COLUMNS NEEDED IN THE EXCEL FILE IS DIFFERENT THAN IN THE
     HTML FILE ****/
```

```
DATA SUBSET;
  SET SUBSET;

  %if &var3.=0  %then %do;
     IF BENTYPE ="2003";
     %let columns=11;
     %let colmns=12;
     %let xlscols=13;
  %end;
  %else %if &var3.=1  %then %do;
     IF BENEFIT="Getting Needed Care";
     %let columns=4;
     %let colmns=5;
     %let xlscols=9;
  %end;
  %else %if &var3.=2  %then %do;          *** MJS 12/5/02 - Changed colmns and
xlscols numbers ;
     IF BENEFIT="Getting Care Quickly";  *** (until"RUN") for extra column in Q3
2002.        ;
     %let columns=4;
     %let colmns=5;
     %let xlscols=9;
  %end;
  %else %if &var3.=3  %then %do;
     IF BENEFIT="How Well Doctors Communicate";
     %let columns=5;
     %let colmns=6;
     %let xlscols=10;
  %end;
  %else %if &var3.=4 %then  %do;
     IF BENEFIT="Claims Processing";
     %let columns=2;
     %let colmns=5;
     %let xlscols=7;
  %end;
  %else %if &var3.=5  %then %do;
     IF BENEFIT="Courteous and Helpful Office Staff";
     %let columns=2;
     %let colmns=5;
     %let xlscols=7;
  %end;
  %else %if &var3.=6  %then %do;
     IF BENEFIT="Customer Service";
     %let columns=3;
     %let colmns=5;
     %let xlscols=8;
  %end;
  %else %if &var3.=7  %then %do;
     IF BENEFIT="Personal Doctor or Nurse";
     %let columns=3;
     %let colmns=5;
     %let xlscols=5;
  %end;
  %else %if &var3.=8 %then %do;
     IF BENEFIT="Health Care";
     %let columns=3;
     %let colmns=5;
     %let xlscols=5;
  %end;
```

```
  %else %if &var3.=9  %then %do;
     IF BENEFIT="Specialty Care";
     %let columns=3;
     %let colmns=5;
     %let xlscols=5;
  %end;
  %else %if &var3.=10  %then %do;
     IF BENEFIT="Health Plan";
     %let columns=3;
     %let colmns=5;
     %let xlscols=5;
  %end;
  %else %if &var3.=11  %then %do;
     IF BENEFIT="Primary Care Manager";
     %let columns=3;
     %let colmns=5;
     %let xlscols=8;
  %end;

  %else %if &seppage. = 2 %then %do;
     %let columns=3;
     %let colmns=4;
     %let xlscols=8;
  %end;

  *** Set sub_ben variable to appear in title ***;
  %if &var3.=0 %then %do;
      %let sub_ben=%STR(2003 Composite Scores);
  %end;
  %else %do;
    call symput('sub_ben',BENEFIT);
  %end;

RUN;


************************************;
****  Put out 1st rows of table   ****;
************************************;

DATA HTML;
  SET SUBSET;

  IF ROWCAT IN ("All Children");
  HREFTOP=COMPRESS("c&var1.-0-0.htm");
  /*** Create macro variable date with today's date ***/
  DATETIME=DATETIME();
  CALL SYMPUT ('DATETIME',left(put(datetime,datetime20.)));
  DROP DATETIME;


RUN;

/*** Initialize HTML page ***/

DATA _NULL_;
  FILE "&FILEOUT1.";

  PUT "<! Created &datetime.>";
```

```
  PUT "<html><head><title>";
  PUT "&major., &sub_ben.";
  PUT "</title></head>";
  PUT  "<body  bgcolor='#999999'  text='#000099'  link='#660066'  alink='#660066'
vlink='#996699'>";

RUN;


/*----------------------------*/
/* 2000/11: begin xls code    */
/* determine rows and columns */
/* to be filled in            */
/*----------------------------*/
%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:R2C&xlscols." NOTAB;          /* xls
rows 1 & 2 (titles)                    */
  FILENAME XLSDATA DDE "excel|Sheet1!R6C1:R15C&xlscols." NOTAB;          /* xls
rows 6+ (Age Group/Enrollment Groups)              */
  FILENAME XLSDATA1 DDE "excel|Sheet1!R6C2:R15C&xlscols." NOTAB;         /* xls
rows 6+ (scores)                */
  FILENAME XLSDATA2 DDE "excel|Sheet1!R17C1:R100C&xlscols." NOTAB;       /* xls
rows 6+ (footnotes)                */


%end;
/*--------------------------*/
/* 2000/11: end xls code   */
/*--------------------------*/

/*** If ALL benefits then do special column headers ***/

%if &var3.=0 %then %do;

DATA _NULL_;
  SET HTML END=EOF;
  FILE "&FILEOUT1." MOD;

  IF _N_=1 THEN DO;
     /** MF Changes ROW 1 **/
     PUT    "<center><table    border='1'    cellpadding='2'    cellspacing='0'
bgcolor='#D8D8D8'
           cols=13 width='90%'>";
     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='index.htm'><img  src=&home_button.  border='0'
alt='Return to
                    Main Page'></a>&htmlsp. &htmlsp.";
     PUT  "             <a  href="""  HREFTOP   +(-1)  """><img  src=&back_button.
border='0'
                   alt='Return to Top Level'></a>&htmlsp. &htmlsp.";
```

```
     PUT  "                <a  href='help.htm'><img  src=&help_button.  border='0'
alt='Help'></a></div>";
     PUT "    </td>";
     PUT "</tr>";

     /** MF Changes ROW 2 **/
     PUT "<tr>";
     PUT "        <td colspan='13' bgcolor='#D8D8D8'>";
     PUT "            <center>";
     PUT   "                                          <h2><font   face='&fontface.'
color='#3333cc'>&major.<br>";
     PUT "                 &sub_ben.</font></h2>";
     PUT "            </center>";
     PUT "        </td>";
     PUT "</tr>";

     PUT "<tr bgcolor= &hdcolr.>";            /*** Print out 1st row ***/
     PUT "<td>&htmlsp.</td>";
     PUT  "<td  ALIGN=CENTER  colspan=2><font  face='Arial'  size=-1><b>Ease  of
Access</b>
          </font></td>";
     PUT "<td ALIGN=CENTER colspan=4><font face='Arial' size=-1><b>Communication
and
           Customer Service</b></font></td>";
     PUT  "<td  ALIGN=CENTER  colspan=4><font  face='Arial'  size=-1><b>Parents'
Ratings</b></font>
          </td>";
     PUT  "<td  ALIGN=CENTER  colspan=1><font  face='Arial'  size=-1><b>Primary
Care</b></font></td>";
     PUT "</tr>";
     PUT "<tr bgcolor= &hdcolr.>";

     /*** Print out 1st column of 2nd row ***/
     %if &var2.=0 %then %do;
       PUT "<td width='7%'><font face='&fontface.'>&htmlsp.</font></td>";
     %end;

     bennum=1;

         /*---------------------------*/
         /* 2000/11: begin xls code   */
         /*output title for main page */
         /*---------------------------*/
         %if &outxls.=1 %then %do;
           FILE XLSTITLE;
           PUT "&major.";
           PUT "%cmpres(&sub_ben.)";
         %end;
         /*-------------------------*/
         /* 2000/11: begin xls code */
         /*-------------------------*/

  END;

  /** Claims Processing Added 10/15/2001 C.Rankin **/

  /*** Put Benefits across columns ***/
```

```
 IF BENEFIT IN ("Getting Needed Care","Getting Care Quickly",
                "How Well Doctors Communicate",
                "Courteous and Helpful Office Staff",
                "Claims Processing","Customer Service",
                "Primary Care Manager") THEN DO;
     IF BENEFIT = "Primary Care Manager" THEN BENNUM=11;
     HREF=COMPRESS("c&var1.-&var2.-"||bennum||".htm");
     PUT      "<td      width='7%'      align='center'      valign='bottom'><font
face='&fontface.'size='1'>
          <a href=""" HREF +(-1) """>" &HEADVAR. "</a></font></td>";
     bennum+1;
  END;
  ELSE DO;
     HREF=COMPRESS("help.htm#q&var3.");
     PUT      "<td      width='7%'      align='center'      valign='bottom'><font
face='&fontface.'size='1'>
          <a href=""" HREF +(-1) """>" &HEADVAR. "</a></font></td>";
  END;


  IF EOF THEN PUT "</tr>";

RUN;




DATA _NULL_;
  SET HTML END=EOF;
  *FILE "&FILEOUT1." MOD;
  LENGTH HREFQ LMAJGRP $ 31;
  RETAIN LMAJGRP;

  IF _N_=1 THEN DO;
     LMAJGRP=" ";
     ROW=0;



*********************************;

    /** Added 10/24/2001 C.Rankin -- from makehtmq.sas **/
    /*** Add TREND LINKS TO MAIN PAGE           **/

    %let columns_less1=%EVAL(&columns.-1);

    /***seppage=0 indicates that it is the main page ***/
    /***The following code produces the necessary HTML to produce the pink trend
buttons
        and also to create the links to the correct trend pages when you click
on the
        buttons***/

    %if &seppage.=0 %then %do;
          FILE "&FILEOUT1." MOD ;   /* 2000/11: moved inside if stmt */
          PUT      "<tr      bgcolor=      &gray.><td><font      face='&fontface.'
size='2'><b>Trends</b>
               </font></td>";
```

```
          %do i=1 %to 11;

                 HREFQ=COMPRESS("c&var1.-&var2.-&i.q.htm");

              PUT  "<td><a  href='"  HREFQ  "'><CENTER><img  src='trend_row.gif'
border=0>
                   </CENTER></a></td>";
          %end;

          PUT "</tr>";
    %end;
END;



*********************************;

%end;


/*** If Sub-benefit then do differently ***/
%else %do;

DATA _NULL_;
  SET HTML END=EOF;
  FILE "&FILEOUT1." MOD;

  *** MJS DKB 12/6/02 - Added code (IF to END, ELSE DO, and END below) to set
COLUMNS, SPAN1, ;
  ***                     and SPAN2 for component pages of Claims Processing and
Courteous and  ;
  ***                         Helpful Office Staff for extra column in Q3 2002.
;
  IF &SEPPAGE.=0 AND &VAR3. IN (4,5) THEN DO;
     COLUMNS=4;
     SPAN1=2;
     SPAN2=2;
  END;
  ELSE DO;
     COLUMNS=&colmns.;
     SPAN1=ROUND(COLUMNS/2,1);
     SPAN2=COLUMNS-SPAN1;
  END;

  IF _N_=1 then do;
     *** put table title ***;
     **PUT   "<h2><center><font   face='&fontface.'>   &major.   <br>   &sub_ben.
</font></center></h2>";
     /** MF Changes ROW 1 **/
     PUT    "<center><table    border='1'    cellpadding='2'    cellspacing='0'
bgcolor='#D8D8D8'
          width='85%'>";
     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'>";
     IF &seppage.=0 and BENEFIT NOT IN ("Personal Doctor or Nurse","Health
Care","Specialty Care","Health Plan") then do;
        PUT "          <a href='c&var1.-&var2.-&var3.q.htm'><img src='trend.gif'
alt='Click for trend page' border=0></a>&htmlsp.";
     END;
     ELSE IF &seppage.ne 0 and BENEFIT NOT IN ("Personal Doctor or
Nurse","Health Care","Specialty Care","Health Plan") then do;
           PUT "                    <a href='c&var1.-&var2.-&var3..htm'><img
src='component.gif' alt='Click for component page' border=0></a>&htmlsp.";
     END;

     PUT "              <a href='index.htm'><img src=&home_button. border='0'
alt='Return to Main
                    Page'></a>&htmlsp. &htmlsp.";
     PUT "             <a href=""" HREFTOP  +(-1) """><img src=&back_button.
border='0'
                    alt='Return to Top Level'></a>&htmlsp. &htmlsp.";
     PUT "              <a href='help.htm'><img src=&help_button. border='0'
alt='Help'></a></div>";
     PUT "    </td>";
     PUT "</tr>";
     /** MF Changes ROW 2 **/
     PUT "<tr>";
     PUT "        <td colspan=""" COLUMNS +(-1) """ bgcolor='#D8D8D8'>";
     PUT "            <center>";
     PUT "                  <h2><font face='&fontface.' color='#3333cc'>&major.
<br>";
     PUT "                &sub_ben.</font></h2>";
     PUT "            </center>";
     PUT "        </td>";
     PUT "</tr>";


     PUT "<tr bgcolor= &hdcolr.><font face='&fontface.'>";
     PUT "<td width='10%'>&htmlsp.</td>";
  END;



  /***PRINT OUT HEADINGS FOR SUBSET PAGES WITH LINKS TO HELP PAGE***/


  IF &HEADVAR not in ("2003", "2002", "2001", "Trend") and &seppage.=0 THEN DO;
***KRR added 2000 on 11/27/2002;
     HREF=COMPRESS("help.htm#q&var3");
     PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.'
size='2'>
          <a href=""" HREF +(-1) """><b>" &HEADVAR. "</b></a></font></td>";

 END;



 /***PRINT OUT HEADINGS FOR TREND PAGES WITH LINKS TO HELP PAGE***/
 /***CODE BELOW PROVIDES LINKS APPROPRIATE HELP PAGES FOR PERSONAL DR (var3=7),
     HEALTH CARE (var3=8), SPECIALTY CARE (var3=9), and HEALTH PLAN (var3=10)
     BECAUSE THERE ARE TREND PAGES FOR THESE RATINGS EVEN THOUGH THERE ARE
     NO SUBSET PAGES****/
```

```
  IF &HEADVAR in ("2003", "2002", "2001", "Trend") and &seppage.=2 and &var3 not
in (7,8,9,10)  THEN DO; ***KRR added 2000 on 11/27/2002;
     HREF=COMPRESS("help.htm#q&var3");
     PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.'
size='2'>
          <a href=""" HREF +(-1) """><b>" &HEADVAR. "</b></a></font></td>";
  END;

  ELSE IF &HEADVAR in ("2003", "2002", "2001", "Trend") and &seppage.=2 and
&var3 in (7,8,9,10)  THEN DO; ***KRR added 2000 on 11/27/2002;
     HREF=COMPRESS("help.htm#q0");
     PUT "<td width='10%' align='center' valign='bottom'><font face='&fontface.'
size='2'>
          <a href=""" HREF +(-1) """><b>" &HEADVAR. "</b></a></font></td>";
  END;

  /** Scale Taken out 10/15/2001 C.Rankin **/

  IF EOF THEN PUT "</font></tr>";

         /*-------------------------*/
         /* 2000/11: begin xls code */
         /* to output title         */
         /*-------------------------*/
         %if &outxls.=1 %then %do;
           FILE XLSTITLE;
           PUT "&major.";
           PUT "%cmpres(&sub_ben.)";
         %end;
         /*-----------------------*/
         /* 2000/11: end xls code */
         /*-----------------------*/

%end;



proc print data=html;
var bentype;
run;



**********************************;
****  Put out rest of table      ****;
****  Colored scores and Stub    ****;
**********************************;

DATA HTML;
  SET SUBSET;
RUN;

***** All Regions ****;
%if &var2.=0 %then %do;
DATA HTML;
  SET HTML END=EOF;
```

```
  FILE "&FILEOUT1." MOD;

  LENGTH LROWCAT $41;
  RETAIN LROWCAT;

  IF _N_=1 THEN DO;
     LROWCAT=" ";
     ROWNUM=1;
     ROW=1;
  END;

  IF LROWCAT^=ROWCAT THEN DO;              *** Start new row ***;
     ROW+1;
     IF LROWCAT^=" " THEN PUT "</tr>";  *** terminate previous row ***;
     IF  ROWCAT="All  Children"  THEN  PUT  "<tr><td><b><font  face='&fontface.'
size='2'>" ROWCAT "</font></b></td>";
     ELSE IF ROWCAT="Under Age 6" THEN DO;
        PUT     "<tr     bgcolor=     &gray.><td     width='90%'     ALIGN=LEFT
colspan=&COLMNS><b><font face='&fontface.' size='2'>Age Group</font></b></td>";
        PUT     "<tr><td><b><font     face='&fontface.'     size='2'>"     ROWCAT
"</font></b></td>";
     END;
     ELSE IF ROWCAT="Under Age 6-Benchmark" THEN
        PUT    "<tr><td><b><font    color=&blue.    face='&fontface.'    size='2'>
&HTMLSP.&HTMLSP.Benchmark</font></b></td>";
     ELSE IF ROWCAT="6-12 Years" THEN DO;
    /* Added by N Justh 2/15/01 */
        PUT    "<tr><td    width='90%'    ALIGN=LEFT    colspan=&COLMNS><b><font
face='&fontface.' size='2'></font></b></td>";
        PUT     "<tr><td><b><font     face='&fontface.'     size='2'>"     ROWCAT
"</font></b></td>";
     END;
     ELSE   IF   ROWCAT="6-12   Years-Benchmark"   THEN   PUT   "<tr><td><b><font
color=&blue. face='Arial' size=-1>&HTMLSP.&HTMLSP.Benchmark</font></b></td>";
     ELSE IF ROWCAT="13-17 Years" THEN DO;
        /* Added by N Justh 2/15/01 */
        PUT    "<tr><td    width='90%'    ALIGN=LEFT    colspan=&COLMNS><b><font
face='&fontface. ' size='2'></font></b></td>";
        PUT     "<tr><td><b><font     face='&fontface.'     size='2'>"     ROWCAT
"<sup>*</sup></font> </b></td>";
     END;
     ELSE IF ROWCAT="Prime Enrollees" THEN DO;
        /* Added by N Justh 2/9/2001 */
        PUT     "<tr><td><b><font     color=&blue.     face='Arial'     size=-
1>&HTMLSP.&HTMLSP.Benchmark </font></b></td>";
        IF &SEPPAGE=0 THEN DO;
           DO I=1 TO &COLUMNS;
              PUT       "<td       align='center'       valign='bottom'><b><font
face='Arial,Helvetica,Swiss,Geneva'                              color='#663300'
size='2'>NA<!CODE=00000></font></b></td>";
           END;
        END;
        ELSE IF &SEPPAGE=2 and BENEFIT NE "Getting Care Quickly" then DO;  ***
MJS 12/7/02 - Changed 3 to 4 for extra column in Q3 2002. ;
           DO I=1 TO 4;
              PUT       "<td       align='center'       valign='bottom'><b><font
face='Arial,Helvetica,Swiss,Geneva'                              color='#663300'
size='2'>NA<!CODE=00000></font></b></td>";
```

```
          END;
        END;
        ELSE IF &SEPPAGE=2 and BENEFIT = "Getting Care Quickly" then do;
           PUT        "<td        align='center'        valign='bottom'><b><font
face='Arial,Helvetica,Swiss,Geneva'                              color='#663300'
size='2'>NA<!CODE=00000></font></b></td>";
           PUT        "<td        align='center'        valign='bottom'><b><font
face='Arial,Helvetica,Swiss,Geneva'                              color='#663300'
size='2'>NA<!CODE=00000></font></b></td>";
           *** MJS 12/7/02 - Added line below for extra column in Q3 2002. ;
           PUT        "<td        align='center'        valign='bottom'><b><font
face='Arial,Helvetica,Swiss,Geneva'                              color='#663300'
size='2'>NA<!CODE=00000></font></b></td>";
           PUT        "<td        align='center'        valign='bottom'><b><font
face='Arial,Helvetica,Swiss,Geneva'                              color='#663300'
size='2'>**<!CODE=00000></font></b></td>";
        END;
        PUT     "<tr     bgcolor=     &gray.><td     width='90%'     ALIGN=LEFT
colspan=&COLMNS><b><font          face='&fontface.'          size='2'>Enrollment
Group</font></b></td>";
        PUT     "<tr><td><b><font     face='&fontface.'     size='2'>"     ROWCAT
"</font></b></td>";
     END;
     ELSE IF ROWCAT IN ("Enrollees with Military PCM",
                        "Enrollees  with  Civilian  PCM")  THEN  PUT  "<tr><td><b>
<font face='&fontface.' size='2'>&HTMLSP.&HTMLSP." ROWCAT "</font> </b></td>";
     ELSE  IF  ROWCAT="Non-enrolled  Beneficiaries"  THEN  PUT  "<tr><td><b><font
face='&fontface.' size='2'>" ROWCAT "</font></b></td>";
        LROWCAT=ROWCAT;
  END;

  /*--------------------------*/
  /* 2000/11: begin xls code  */
  /* output column A headings */
  /*--------------------------*/
  %if &outxls.=1 %then %do;
      if _n_=1 then do;
         FILE XLSDATA;
         PUT "All Children" '09'x;
         PUT "Under Age 6" '09'x;
         PUT "Benchmark" '09'x;
         PUT "6-12 Years" '09'x;
         PUT "Benchmark" '09'x;
         PUT "13-17 Years *" '09'x;
         PUT "Prime Enrollees" '09'x;
         PUT "Enrollees with Military PCM" '09'x;
         PUT "Enrollees with Civilian PCM" '09'x;
         PUT "Non-enrolled Beneficiaries" '09'x;
      end;
  %end;
  /*-------------------------*/
  /* 2000/11: end xls code   */
   /*-------------------------*/
%end;

*****************************************;
**** Need to output different formats    ****;
**** FOR BENCHMARKS                      ****;
*****************************************;
```

```
   %if &var3.=0  %then %do;

     IF ROWCAT IN("Under Age 6-Benchmark",
                  "6-12 Years-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 IF SCORE=.P THEN DO;
           PUT  "<td  align='center'  valign='bottom'><font  face='&fontface.'
size='2'>NP<!CODE= " +(-1) ORDER Z5.  "></font></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       */
  /* OUTPUT DATA FOR REST OF TABLE */
  /* SINCE PRIMARY CARE MANAGER    */
  /* LAST COLUMN IN TABLE DO NOT   */
  /* USE THE @@ SIGN SO SAS WILL   */
  /* GO TO NEXT ROW IN TABLE.      */
  /*--------------------------------*/
  %if &outxls.=1 %then %do;
```

```
    FILE XLSdata1;


    IF BENEFIT NE "Primary Care Manager" and ROWCAT NOT IN("Under Age 6-
Benchmark",
                  "6-12 Years-Benchmark") THEN DO;
         IF SCORE=. THEN        PUT "***" '09'x @@;
         ELSE IF SCORE=.A THEN  PUT "NA"  '09'x @@;
         ELSE IF SCORE=.P THEN  PUT "NP"  '09'x @@;
         ELSE                   PUT SCORE '09'x @@;
    END;
    ELSE IF BENEFIT NE "Primary Care Manager" AND ROWCAT IN  ("Under Age 6-
Benchmark",
                  "6-12 Years-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 IF BENEFIT = "Primary Care Manager" and ROWCAT NOT IN("Under Age 6-
Benchmark",
                  "6-12 Years-Benchmark") THEN DO;
         IF SCORE=. THEN        PUT "***" '09'x;
         ELSE IF SCORE=.A THEN  PUT "NA"  '09'x;
         ELSE IF SCORE=.P THEN  PUT "NP"  '09'x ;
         ELSE                  PUT SCORE '09'x;
    END;

    ELSE IF BENEFIT = "Primary Care Manager" and ROWCAT IN("Under Age 6-
Benchmark",
                  "6-12 Years-Benchmark") THEN DO;
        IF SCORE =. THEN PUT "***" '09'x;
        ELSE IF SCORE =.A THEN PUT "NA" '09'x;
        ELSE PUT SCORE '09'x;

    END;
%end;
  /*-------------------------*/
  /* 2000/11: end xls code   */
  /*-------------------------*/




   %end;

/* SUBSETS */

   %else %do;
     IF BENTYPE not in ("2003","2002","2001","Trend") and &seppage. =0 then do;
***KRR added 2000 on 11/27/2002;
        IF BENEFIT IN("Getting Needed Care",
                      "Getting Care Quickly",
                      "How Well Doctors Communicate",
                      "Claims Processing",
                      "Courteous and Helpful Office Staff",
                      "Customer Service",
```

```
                    "Primary Care Manager") THEN DO; *** format=3.2 ***;

          IF ROWCAT IN("Under Age 6-Benchmark",
                       "6-12 Years-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 IF SCORE=.P THEN DO;
                PUT      "<td      align='center'      valign='bottom'><b><font
face='&fontface.' size='2'>NP<!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;
       END;
       ELSE IF BENEFIT = "Getting Care Quickly" THEN DO; *** format=3.2 ***;
          IF ROWCAT IN("Under Age 6-Benchmark",
                       "6-12 Years-Benchmark") THEN DO;  *** no significance
***;
             IF BENTYPE="Wait More Than 15 Minutes Past Appointment" THEN PUT
"<td  align='center'  valign='bottom'><b><font  face='&fontface.'  color=&blue.
size='2'>NA<!CODE= " +(-1) ORDER Z5.  "><sup>
```

```
              ELSE     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;
        END;
        ELSE DO; *** format=3.0 ***;
           IF ROWCAT IN("Under Age 6-Benchmark",
                        "6-12 Years-Benchmark") THEN DO;   *** no significance
***;
              IF SCORE=. THEN PUT "<td align='center' valign='bottom'><b><font
face='&fontface.   '   color=&blue.   size='2'>NA<!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 IF SCORE=.P THEN DO;
                PUT "<td align='center' valign='bottom'><font face='&fontface.'
size='2'>NP<!CODE= " +(-1) ORDER Z5.  "></font></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;
       END;
    END;


  /*-------------------------*/
  /* 2000/11: begin xls code */
  /*-------------------------*/
  %if &outxls.=1 %then %do;
    FILE XLSdata1;

    IF BENTYPE NE "Trend" and BENEFIT NE "Getting Care Quickly" and ROWCAT NOT
IN("Under Age 6-Benchmark",
                 "6-12 Years-Benchmark") THEN DO;
         IF SCORE=. THEN        PUT "***" '09'x @@;
         ELSE IF SCORE=.A THEN  PUT "NA"  '09'x @@;
         ELSE IF SCORE=.P THEN  PUT "NP"  '09'x @@;
         ELSE                   PUT SCORE '09'x @@;
    END;
    ELSE IF BENTYPE NE "Trend" and BENEFIT NE "Getting Care Quickly" and ROWCAT
IN  ("Under Age 6-Benchmark",
                 "6-12 Years-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 IF BENTYPE = "Trend" and BENEFIT NE "Getting Care Quickly"  THEN DO;
         IF SCORE=. THEN        PUT "***" '09'x;
         ELSE IF SCORE=.A THEN  PUT "NA"  '09'x;
         ELSE IF SCORE=.P THEN  PUT "NP"  '09'x ;
         ELSE                  PUT SCORE '09'x;
    END;

    ELSE IF BENTYPE ="Trend" and BENEFIT = "Getting Care Quickly" THEN PUT "**"
'09'x;

    ELSE IF BENTYPE in ("2001") and BENEFIT = "Getting Care Quickly" and ROWCAT
IN  ("Under Age 6-Benchmark",
                  "6-12 Years-Benchmark")THEN PUT "NA" '09'x @@;
    ELSE IF BENTYPE NOT IN ("2001","Trend") and BENEFIT = "Getting Care Quickly"
and ROWCAT IN  ("Under Age 6-Benchmark",
                  "6-12 Years-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 IF BENTYPE NOT IN ("Trend") and BENEFIT = "Getting Care Quickly" and
ROWCAT NOT IN ("Under Age 6-Benchmark",
                  "6-12 Years-Benchmark")THEN DO;

     IF SCORE=. THEN        PUT "***" '09'x @@;
         ELSE IF SCORE=.A THEN  PUT "NA"  '09'x @@;
         ELSE IF SCORE=.P THEN  PUT "NP"  '09'x @@;
         ELSE                   PUT SCORE '09'x @@;
    END;


%end;

  /*-----------------------*/
  /* 2000/11: end xls code */
  /*-----------------------*/

   %end;


  *****TREND PAGES****;

%if &seppage.=2 %then %do;


IF BENTYPE IN ("2003","2002","2001","Trend") THEN DO; ***KRR 11/27/2002 added
2000;

     IF BENEFIT IN("Getting Needed Care",
                   "How Well Doctors Communicate",
                   "Claims Processing",
                   "Courteous and Helpful Office Staff",
                   "Customer Service",
                   "Personal Doctor or Nurse",
```

```
                    "Health Care",
                    "Specialty Care",
                    "Health Plan",
                    "Primary Care Manager") THEN DO;



        IF ROWCAT IN("Under Age 6-Benchmark",
                     "6-12 Years-Benchmark") THEN DO;  *** no significance ***;
*** MJS 12/9/02 - Changed *** to NA. ;
           IF SCORE=. THEN PUT "<td align='center' valign='bottom'><b><font
face='&fontface.'  color=&blue.  size='2'>NA<!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 IF SCORE=.P THEN DO;
              PUT "<td align='center' valign='bottom'><b><font face='&fontface.'
size='2'>NP<!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;
     END;

     ELSE IF BENEFIT = "Getting Care Quickly" THEN DO; *** format=3.2 ***;
```

```
        IF BENTYPE="Trend" and ROWCAT NOT IN ("Under Age 6-Benchmark",
                     "6-12  Years-Benchmark")  THEN  PUT    "<td  align='center'
valign='bottom'><b><font face='&fontface.' size='2'>**<!CODE= " +(-1) ORDER Z5.
"></font></b></td>";
        ELSE IF BENTYPE="Trend" and ROWCAT IN ("Under Age 6-Benchmark",
                     "6-12  Years-Benchmark")  THEN  PUT  "<td  align='center'
valign='bottom'><b><font face='&fontface.' size='2' color=&blue.>**<!CODE= " +(-
1) ORDER Z5.  "></font></b></td>";
        ELSE  IF  ROWCAT  IN("Under  Age  6-Benchmark",  /*** KRR Added 11-27-2002
***/
                     "6-12 Years-Benchmark") and BENTYPE = "2001" THEN PUT  "<td
align='center'    valign='bottom'><b><font    face='&fontface.'    color=&blue.
size='2'>NA<!CODE= " +(-1) ORDER Z5.  "></font><
        ELSE IF ROWCAT IN("Under Age 6-Benchmark",
                     "6-12 Years-Benchmark") and BENTYPE = "2002" THEN PUT  "<td
align='center'    valign='bottom'><b><font    face='&fontface.'    color=&blue.
size='2'>" Score 3.0"<!CODE= " +(-1) ORDER Z5.
        ELSE IF ROWCAT IN("Under Age 6-Benchmark",
                     "6-12 Years-Benchmark") and BENTYPE = "2003" THEN PUT  "<td
align='center'    valign='bottom'><b><font    face='&fontface.'    color=&blue.
size='2'>" Score 3.0"<!CODE= " +(-1) ORDER Z5.

        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 PUT "<td align='center' valign='bottom'><font face='&fontface.'
size='2'>" SCORE 3.0 "<!CODE= " +(-1) ORDER Z5.  "></font></td>";


          /*
           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>";
                                          <!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;
     END;


     ELSE DO;
        IF ROWCAT IN("Under Age 6-Benchmark",
                     "6-12 Years-Benchmark") THEN DO;
           IF SCORE=. THEN PUT "<td align=’center’ valign=’bottom’><b><font
face=’&fontface. ’ color=&blue. size=’2’>NA<!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 IF SCORE=.P THEN DO;
              PUT  "<td  align=’center’  valign=’bottom’><font  face=’&fontface.’
size=’2’>NP<!CODE= " +(-1) ORDER Z5.  "></font></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=.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;
     END;

  END;



%end;
```

```
  IF EOF THEN DO;
     IF BENEFIT = "Getting Care Quickly" THEN DO;

        /** MF Changes **/
        PUT "<tr>";
        PUT       "                              <td       colspan='&colmns.'><font
face='Arial,Helvetica,Swiss,Geneva' size='2'>
                  Source: 2003 Health Care Survey of DOD Beneficiaries</font>
                  <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 benchmark not available</font><br>";
        PUT "    <font face='Arial,Helvetica,Swiss,Geneva' size='2'><sup>*</sup>
                  Benchmarks are only available for children under age 6 and 6 to
12-year-olds.
                  </font><br>";
        PUT  "         <font  face='Arial,Helvetica,Swiss,Geneva'  size='2'>***
Suppressed due to small sample size.</font>";
        PUT   "            <center><a   href='&hrefxls.'><img   src='excel.gif'
border=0>Download
                   Page</a></center> </td>";
        PUT "</tr>";

     END;
     ELSE IF (BENEFIT = "Primary Care Manager" OR &var3.=0) THEN DO;
        /** MF Changes **/
        PUT "<tr>";
        PUT       "                              <td       colspan='&colmns.'><font
face='Arial,Helvetica,Swiss,Geneva' size='2'>
                   Source: 2003 Health Care Survey of DOD Beneficiaries</font>
                   <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
benchmark
                   not available</font><br>";
        PUT "    <font face='Arial,Helvetica,Swiss,Geneva' size='2'>NP Indicates
not enrolled
                   in TRICARE Prime</font><br>";
        PUT    "                  <font    face='Arial,Helvetica,Swiss,Geneva'
size='2'><sup>*</sup>Benchmarks are
                   only available for children under age 6 and 6 to 12-year-
olds.</font><br>";
```

```
        PUT  "         <font  face='Arial,Helvetica,Swiss,Geneva'  size='2'>***
Indicates significance
                  not available</font>";
        PUT   "            <center><a   href='&hrefxls.'><img   src='excel.gif'
border=0>Download
                  Page</a></center> </td>";
        PUT "</tr>";
     END;
     ELSE DO;
        /** MF Changes **/
        PUT "<tr>";
        PUT       "                              <td      colspan='&colmns.'><font
face='Arial,Helvetica,Swiss,Geneva' size='2'>
                  Source: 2003 Health Care Survey of DOD Beneficiaries</font>
                  <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
benchmark not
                  available</font><br>";
        PUT    "                  <font    face='Arial,Helvetica,Swiss,Geneva'
size='2'><sup>*</sup>Benchmarks are
                  only  available  for  children  under  age  6  and  6  to  12-year-
olds.</font><br>";
        PUT  "         <font  face='Arial,Helvetica,Swiss,Geneva'  size='2'>***
Indicates significance
                  not available</font>";
        PUT   "            <center><a   href='&hrefxls.'><img   src='excel.gif'
border=0>Download
                  Page</a></center> </td>";
        PUT "</tr>";
     END;
  END;


        /*-------------------------*/
        /* 2000/11: begin xls code */
        /* OUTPUT FOOTNOTES        */
        /*-------------------------*/


         %if &outxls.=1 %then %do;
            FILE XLSDATA2;

            IF _n_=1 and BENEFIT = "Getting Care Quickly" THEN DO;

               PUT "Source: 2003 Health Care Survey of DOD Beneficiaries";
               PUT "Indicates score significantly exceeds benchmark";
               PUT "Indicates score significantly falls short of benchmark";
               PUT "NA Indicates benchmark not available";
               PUT "*Benchmarks are only available for children under age 6 and
6 to 12-year-olds";
               PUT "*** Suppressed due to small sample size.";
```

```
            END;

            ELSE IF  _n_=1 and (BENEFIT = "Primary Care Manager" OR &var3.=0)
THEN DO;

               PUT "Source: 2003 Health Care Survey of DOD Beneficiaries";
               PUT "Indicates score significantly exceeds benchmark";
               PUT "Indicates score significantly falls short of benchmark";
               PUT "NA Indicates benchmark not available";
               PUT "NP Indicates not enrolled in TRICARE Prime";
               PUT "*Benchmarks are only available for children under age 6 and
6 to 12-year-olds.";
               PUT "*** Indicates significance not available";
            END;

           ELSE IF _n_=1 THEN DO;
               PUT "Source: 2003 Health Care Survey of DOD Beneficiaries";
               PUT "Indicates score significantly exceeds benchmark";
               PUT "Indicates score significantly falls short of benchmark";
               PUT "NA Indicates benchmark not available";
               PUT "*Benchmarks are only available for children under age 6 and
6 to 12-year-olds.";
               PUT "*** Indicates significance not available";

           END;

         %end;


        /*-------------------------*/
        /* 2000/11: end xls code   */
        /*-------------------------*/



RUN;

proc print data=html (obs=50);
var rowcat;
run;



**********************************;
****  Print out footer info      ****;
**********************************;

DATA _NULL_;
  FILE "&FILEOUT1." MOD;
  LENGTH MAJGRP1 MAJGRP2 MAJGRP3 MAJGRP4 $ 30;

  HREFTOP=COMPRESS("c&var1.-0-0.htm");
  /** MF Changes **/
  PUT "<tr>";
  PUT "   <td colspan='&colmns.'>";
  PUT "      <center>";
  PUT "         <a href='index.htm'><img src=&home_button. border='0'
               alt='Return to Main Page'></a>&htmlsp.&htmlsp.";
  PUT "         <a href=""" HREFTOP  +(-1) """><img src=&back_button. border='0'
```

```
                alt='Return to Top Level'></a>&htmlsp.&htmlsp.";
  PUT  "                 <a  href='help.htm'><img  src=&help_button.  border='0'
alt='Help'></a><br>";
  PUT "         <font face='Arial,Helvetica,Swiss,Geneva' size='2'>
               <b>Click below to view this table by other groups<br>";
  PUT "         </b></font>";

  IF &SEPPAGE.=0 THEN DO;
     majgrp1=COMPRESS("c1-&var2.-&var3..htm");
     majgrp2=COMPRESS("c2-&var2.-&var3..htm");
     majgrp3=COMPRESS("c3-&var2.-&var3..htm");
     majgrp4=COMPRESS("c4-&var2.-&var3..htm");
  END;

  ELSE IF &SEPPAGE.=2 THEN DO;
     majgrp1=COMPRESS("c1-&var2.-&var3.q.htm");
     majgrp2=COMPRESS("c2-&var2.-&var3.q.htm");
     majgrp3=COMPRESS("c3-&var2.-&var3.q.htm");
     majgrp4=COMPRESS("c4-&var2.-&var3.q.htm");
  END;

  PUT "<a href="" MAJGRP1 +(-1) ""><font face='&fontface.' size='2'>
       All CONUS MHS Children</font></a>&htmlsp.&htmlsp.";
  PUT "<a href="" MAJGRP2 +(-1) ""><font face='&fontface.' size='2'>
       Children in Regions 1, 2 & 5</font></a>&htmlsp.&htmlsp.";
  PUT "<a href="" MAJGRP3 +(-1) ""><font face='&fontface.' size='2'>
       Children in Regions 6, 9-12 & Alaska</font></a>&htmlsp.&htmlsp.";
  PUT "<a href="" MAJGRP4 +(-1) ""><font face='&fontface.' size='2'>
       Children in Regions 3, 4 & 7/8</font></a>";

RUN;

/*** Close HTML page ***/

DATA _NULL_;
  FILE "&FILEOUT1." MOD;

  PUT "</center></td></tr></table>";
  PUT "</body></html>";

RUN;

/*-------------------------------*/
/* 2000/12: begin xls color code */
/* THIS CODE COLORS AND CENTERS  */
/* DATA IN EXCEL TABLE           */
/*-------------------------------*/
%if &outxls.=1 %then %do;
  FILENAME CMDS DDE 'excel|system';

  /* Align 2 titles */
  DATA _NULL_;
     FILE CMDS;
     CELL=COMPRESS("[SELECT(""R1C1:R1C"||&xlscols.||""")]"); PUT CELL;
     PUT '[ALIGNMENT(3, False, 3,0, False,,,True)]';  /** Merges titles across
columns **/
     CELL=COMPRESS("[SELECT(""R2C1:R2C"||&xlscols.||""")]"); PUT CELL;
     PUT '[ALIGNMENT(3, False, 3,0, False,,,True)]';  /** Merges titles across
columns **/
```

```
  RUN;

  DATA _NULL_;
    FILE CMDS;
    SET HTML(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 COLUMN>&xlscols. 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 ROWCAT IN("Under Age 6-Benchmark",
                        "6-12 Years-Benchmark") THEN
                        PUT '[FORMAT.FONT("Arial",10,True,False,False,False,9)]';
/*** BOLD & DARK RED ***/
    ELSE IF BENEFIT NE "Getting Care Quickly" AND 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;
    ELSE   IF   BENEFIT   =   "Getting   Care   Quickly"   AND   BENTYPE   NOT   IN
("2001","2002","2003","Trend") AND 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;
    ELSE PUT '[FORMAT.FONT("Arial",10,False,False,False,False,5)]';    /*** BLUE
***/



    /*** 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;

/*************************************************************************
The following MACRO creates the macro calls for MKHTML which will create XLS
files if outxls=1. There are four groups (All CONUS MHS CHILDREN; CHILDREN IN
REGIONS 1,2,& 5; Children in Regions 6, 9-12 & Alaska; and     Children in
Regions
3, 4 & 7/8. For each region, there are 11 RATINGS: (GETTING NEEDED CARE, GETTING
CARE
QUICKLY, HOW WELL DOCTORS COMMUNICATE, CLAIMS PROCESSING, COURTEOUS AND HELPFUL
OFFICE STAFF, CUSTOMER SERVICE, PERSONAL DOCTOR OR NURSE, HEALTH CARE, SPECIALTY
CARE,
HEALTH PLAN, and PRIMARY CARE MANAGER).

THE FIRST PARAMATER IN THE MACRO CALL INDICATES THE GROUP, THE THIRD PARAMATER
INDICATES THE RATING, and since the trend pages appear on the same spreadsheet
as the subbenefit information there is no need to specify the fourth paramater
as anything other than zero

*************************************************************************
**/

%MACRO EXCEL1();
      %DO J=1 %TO 4;        /** 4 Groups **/
          %DO K=0 %TO 11;   /** 11 Benefits Plus one main page for all benefits
**/
              %MKHTML(&J.,0,&K,0);  /** Main page, by Group **/
          %END;
      %END;

%MEND EXCEL1;
```

```
/*** Run macro to create Excel files ONLY ***/

%EXCEL1;

/************************************************************************
The following MACRO creates the macro calls for MKHTML. There are four
groups (All CONUS MHS CHILDREN; CHILDREN IN REGIONS 1,2,& 5;
Children in Regions 6, 9-12 & Alaska; and    Children in Regions 3, 4 & 7/8.
For each region, there are 11 RATINGS: (GETTING NEEDED CARE, GETTING CARE
QUICKLY, HOW WELL DOCTORS COMMUNICATE, CLAIMS PROCESSING, COURTEOUS AND
HELPFUL OFFICE STAFF, CUSTOMER SERVICE, PERSONAL DOCTOR OR NURSE, HEALTH
CARE, SPECIALTY CARE, HEALTH PLAN, and PRIMARY CARE MANAGER).

THE FIRST PARAMATER IN THE MACRO CALL INDICATES THE GROUP, THE THIRD PARAMATER
INDICATES THE RATING, and the FOURTH PARAMATER INDICATES IF IT IS A MAIN or SUB
PAGE(=0)
OR IF IT IS A TREND PAGE (=2)

THIS MACRO CREATES A SEPARATE HTML PAGE FOR THE MAIN PAGE(1-0-0), SUB-PAGES1-0-1
through 11
FOR EACH RATING (EXCEPT PARENT'S RATINGS) AND A TREND PAGE FOR EACH RATING (1-0-
1 through 11q
************************************************************************/

%MACRO DOALL1();
   %DO J=1 %TO 4;       /** 4 Groups **/
       %DO K=0 %TO 11;  /** 11 RATINGS PLUS ONE MAIN PAGE FOR ALL RATINGS **/
           %MKHTML(&J.,0,&K.,0);     /** Main page, by Group **/
           %IF &K NE 0 %THEN %DO;    ***KRR added 11-27-2002;
               %MKHTML(&J.,0,&K.,2)  /** Trend page, by Group **/
           %END;
       %END;
   %END;

%MEND DOALL1;

/** SET OUTXLS=0 so can create the HTML and the EXCEL FILES at one time **/
/** SET THIS EQUAL TO 1 IF YOU ONLY WANT TO RUN THE EXCEL FILES         **/

%LET OUTXLS=0;
%DOALL1;



/** Excel Macro added, based on makehtmq.sas, C.Rankin 10/24/2001 **/


endsas;
```

G.14 - ..\LOADWEB\QC_CHILD.SAS - Compare HTML scores with cooresponding scores in the Scores Database.

```
*===================================================================;
*                                                                   ;
*   Programmer:  Mark A. Brinkley                                   ;
*        Title:  QC_child.SAS                                       ;
*       Client:  8687-100                                           ;
*         Date:  03-29-2000                                         ;
*                                                                   ;
*      Purpose:  This program is designed to read in ALL adult html ;
*                files, extract the table data, and then compare    ;
*                this data to the input data which was used to      ;
*                create the html report cards.  If everything is OK,;
*                then the comparison should yield no differences.   ;
*                                                                   ;
*  Input files:  1) All F*.HTM files                                ;
*                2) TREND_C.SD2                                     :
*                                                                   ;
*  Modifications:                                                   ;
*  1) 02/14/2001 - Keith Rathbun, Remove outputting of permanent    ;
*     SAS Dataset.  Deleted directory output file.  Removed white   ;
*     space from program.  Removed BY statement from proc compares. ;
*     Added titles.  Setup to run in LOADWEB directory on Jdrive.   ;
*                                                                   ;
*  2) 04/18/2001 - Chris Rankin -- added Macro to process           ;
*                  frames and non-frames version separately         ;
*                                                                   ;
*  3) 11/27/2001 - Daniele Beahm -- revised code to check child     ;
*                  html files                                       ;
* Output files: Comparison summary listing                          ;
*                                                                   ;
*===================================================================;
LIBNAME IN  ".";
OPTIONS NOCENTER LS=132 PS=79 COMPRESS=NO;

*******************************************************************;
*****    Run batch command to create dir of all F*.HTM files   *****;
*******************************************************************;
OPTIONS NOXWAIT;

%MACRO COMPARE(INCOND=,TITLE=);

X "DIR HTMC\&INCOND..HTM /B > HTMC\QC_CHILD.DAT";
X "CD HTMC";

*******************************************************************;
*****    Read in QC_CHILD which was just created               *****;
*******************************************************************;

DATA QC_CHILD;
   INFILE "QC_CHILD.DAT" LRECL=15 PAD;
   INPUT HTMLFILE $ 1-15;
RUN;

*******************************************************************;
*******       Read in all F*.HTM files                        *******;
*******************************************************************;
```

```
DATA HTMLS;
   SET QC_CHILD;
   INFILE FILEREF FILEVAR=HTMLFILE  LRECL=175 PAD END=DONE;
   DO UNTIL(DONE);
      INPUT TEMPVAR $ 1-175;
      OUTPUT;
   END;
RUN;

DATA TEMP;
   SET HTMLS;
   LENGTH ORDER 5;
   IF INDEX(TEMPVAR,"CODE")>0;
   PLACEI=INDEX(TEMPVAR,"CODE");
   ORDER=SUBSTR(TEMPVAR,PLACEI+5,5);
RUN;

DATA TESTFILE(DROP=PLACE PLACE2 PLACE3 SRCH PLACEI LNGTH TEMPVAR COLOR SCORE);
   SET TEMP;
   LENGTH COLOR $6;
   LENGTH SCORE_ 3;
   LENGTH SCORE $4;
   LENGTH SIG_ 3;
   IF INDEX(TEMPVAR,"color")>0 THEN DO;
      PLACE=INDEX(TEMPVAR,"color");
      COLOR=SUBSTR(TEMPVAR,PLACE+8,6);
      SRCH=SUBSTR(TEMPVAR,PLACE,30);
      IF INDEX(SRCH,">")>0 AND INDEX(SRCH,"<")>0 THEN DO;
         PLACE2=INDEX(SRCH,">");
         PLACE3=INDEX(SRCH,"<");
         LNGTH=PLACE3-PLACE2-1;
         SCORE=SUBSTR(SRCH,PLACE2+1,LNGTH);
      END;
   END;
   ELSE DO;
      PLACE=INDEX(TEMPVAR,"CODE");
      SCORE=SUBSTR(TEMPVAR,PLACE-5,3);
      COLOR='.';
   END;
   IF COLOR='663300' THEN SIG_=.;
   ELSE IF COLOR='cc0000' THEN SIG_=-1;
   ELSE IF COLOR='009933' THEN SIG_=1;
   ELSE IF COLOR='.' THEN SIG_=0;
   IF SCORE='***' THEN SCORE_=.;
   ELSE IF SCORE='>**' THEN SCORE_=.;
   ELSE IF SCORE='**' THEN SCORE_=.;
   ELSE IF SCORE='NA' THEN SCORE_=.A;
   ELSE IF SCORE='>NP' THEN SCORE_=.P;
   ELSE SCORE_=SCORE;
RUN;

PROC SORT DATA=TESTFILE;
   BY ORDER;
RUN;


DATA TESTFILE;
   SET TESTFILE;
```

```
   BY ORDER;
   IF FIRST.ORDER;
RUN;

DATA MERGED(KEEP=ORDER SIG SIG_ SCORE SCORE_ SCORE1 BENEFIT BENTYPE ROWCAT);
   MERGE TESTFILE(IN=IN1)
         IN.TREND_C;
   BY ORDER;
   IF IN1;
   LENGTH SCORE1 3;
   SCORE1=ROUND(SCORE);
   IF (SIG=. AND SIG_=0) THEN SIG_=.;
   ELSE IF (SIG=0 AND SIG_=.) THEN SIG_=0;
   IF (SCORE1=. AND (SCORE_=.A OR SCORE_=.P)) THEN SCORE_=.;
RUN;

TITLE1 "Validate child DoD Health Survey Scores/Report Cards (8687-100)";
TITLE2 "Program Name: QC_CHILD.SAS By Daniele Beahm";
TITLE3 "Program Inputs: TREND_C.SD2 - Scores Database in WEB Layout and report
card HTML files";
TITLE4 &TITLE;

PROC COMPARE DATA=MERGED BRIEF;
   VAR SIG;
   WITH SIG_;
RUN;

PROC COMPARE DATA=MERGED BRIEF;
   VAR SCORE1;
   WITH SCORE_;
RUN;

PROC PRINT DATA=MERGED;
where sig ne sig_;
var rowcat benefit bentype sig sig_;
TITLE " WHERE SIG NOT EQUAL TO SIG_";
RUN;

PROC PRINT DATA=MERGED;
where score1 ne score_;
var rowcat benefit bentype score score1 score_;
TITLE " WHERE SCORE1 NOT EQUAL TO SCORE_";
RUN;


X "DEL QC_CHILD.DAT";
X "CD ..";

%MEND COMPARE;

%COMPARE(INCOND=C*-*,TITLE="NON-FRAMES VERSION");
```

APPENDIX H

SUDAAN CODE FOR VARIANCE ESTIMATION

```
************************************************************
*  program:   SUDTEST.SAS
*  purpose:   to demonstrate SAS callable SUDAAN
*  input: j:\DOD\Q3_2003\DATA\cfinal\hcs03c_1.sd2
************************************************************
*;
options ps=79 ls=132;
libname in 'j:\DOD\Q3_2003\DATA\cfinal';
libname library  'j:\DOD\Q3_2003\DATA\cfinal\fmtlib';


***SORT FILE BY STRATUM****;
PROC SORT DATA=IN.HCS03C_1 (keep=SUPREG C03020 C03021 WRWT stratum);
BY STRATUM;
RUN;


************************************************************
Can estimate means or proportions
************************************************************;
title 'Output file from SUDAAN for estimating means';
title2 'Average rating of the specialist (Q21) by Super region';
title3 'Proportion of beneficiaries who have seen specialists (Q20) by Super
Region';

PROC DESCRIPT DATA=IN.HCS03C_1 DESIGN=STRWR NOPRINT;
 WEIGHT   WRWT;        ******  sampling/FINAL SURVEY WEIGHT     ********;
 NEST STRATUM / missunit;
 VAR  C03020 C03021;     ******  VARIABLES TO BE ESTIMATED**;
 TABLES SUPREG;
 SUBGROUP SUPREG;
 LEVELS 3;
 OUTPUT MEAN SEMEAN deffmean/ TABLECELL=DEFAULT FILENAME=mnsDAT;
 ***SEMEAN=standard error and deffmean=design effect**;
RUN;

proc print data=mnsdat;
run;
```