THE ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, D. C. 20301-1200

HEALTH AFFAIRS

MAY 1 0 2005

The Honorable John W. Warner
Chairman, Committee on Armed Services
United States Senate
Washington, DC 20510-6050

Dear Mr. Chairman:

I am pleased to provide you with the enclosed Expanding Access to Mental Health Counselors: Evaluation of the TRICARE Demonstration Report to Congress. This report responds to the request outlined in section 731 of the National Defense Authorization Act for Fiscal Year 2001, Public Law 106-398, which required the Secretary of Defense to conduct a demonstration and evaluation project for expanded access to mental health counselors under TRICARE. As directed by the legislation, the Secretary of Defense conducted a demonstration project under which licensed and certified professional mental health counselors, who met eligibility requirements for participation as providers under the TRICARE program, provided services to covered beneficiaries under chapter 55 of Title 10, United States Code, without a referral by a physician or adherence to supervision requirements. The enclosed report and appendix represent results of the Department's effort to meet objectives as outlined in the public law.

As specified in the legislation, an evaluation of the demonstration's impact on utilization, costs, and outcomes of care was conducted. While the evaluation did not find a significant impact on beneficiaries' access to, use and costs of mental health care, it did reveal some findings that warrant consideration. For example, during the demonstration beneficiaries who used mental health services were less likely to see a physician for mental health care, less likely to receive a psychotropic medication, and more likely to have a psychiatric hospitalization as compared to beneficiaries who used mental health services in the comparison sites. Thus, the report raises serious concerns about the possible adverse impact on quality of care of utilizing mental health counselors to provide services without a referral by a physician and adherence to supervision requirements. I therefore believe that a change to our current policy (which requires a referral from a physician for each new clinical case and ongoing physician supervision of licensed or certified mental health counselor services) is not warranted at this time.

Thank you for your continued support of the Military Health System.

Sincerely,

William Winkenwerder, Jr., MD

Enclosure:
As stated

cc:
Senator Carl Levin

RESTRICTED
D R A F T

Expanding Access to Mental Health Counselors:

Evaluation of the TRICARE Demonstration

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PREFACE

The military health system serves roughly 9 million eligible beneficiaries, including active duty military personnel and their family members, retired military personnel and their family members, and surviving family members of deceased military personnel. Eligible beneficiaries access health care services through the TRICARE program. TRICARE provides coverage for most medically necessary mental health care services, including those delivered in inpatient, outpatient, and partial hospitalization settings by qualified providers, as well as for pharmaceuticals. Care is rendered by two distinct systems of health care delivery: the direct care system, which consists of military owned treatment facilities (clinics and hospitals), and the purchased care system, which consists of coverage for care rendered in the civilian sector.

In response to the National Defense Authorization Act (NDAA) for Fiscal Year 2001 (P.L. 106-398), the Department of Defense implemented a one-year demonstration project designed to expand access to mental health services by easing TRICARE restrictions on services provided by licensed or certified Mental Health Counselors (LMHCs).

Currently, LMHCs must meet several eligibility and administrative requirements to serve as authorized TRICARE providers. The administrative requirements include documentation of a referral from a physician for each new clinical case, ongoing supervision of their services by a physician, and certification of written communication and follow up with the physician following each service visit. Services provided by other non-physician mental health professionals, including licensed clinical social workers, clinical psychologists, pastoral counselors, marital and family therapists, and psychiatric nurse specialists, are currently reimbursed independent of referral or supervision by physician. Under the demonstration, licensed and certified professional mental health counselors who meet eligibility requirements for participation as providers under the TRICARE program were allowed to provide services to covered beneficiaries without referral by physicians or adherence to supervision requirements.

In the NDAA, Congress requested an evaluation of the demonstration's impact on utilization, costs, and outcomes. This report describes RAND's evaluation efforts and presents findings based on several sources of data. The report is organized to respond specifically to the evaluation objectives outlined in the NDAA FY01 and is written for inclusion in the sponsor's final report to Congress. The findings may also be of interest to Defense Health Policy makers and Mental Health policy makers more broadly.

The project under which these analyses were performed was sponsored by TRICARE Management Activity and carried out jointly by RAND Health's Center for Military Health Policy Research and the Forces and Resources Policy Center of the National Defense Research Institute. The latter is a federally funded research and development center sponsored by the Office of the Secretary of Defense,

the Joint Staff, the unified commands and the defense agencies. Comments are welcome and may be addressed to the principal investigator(s), Lisa Meredith (Lisa_Meredith@rand.org) and Terri Tanielian (territ@rand.org). For more information on RAND's Forces and Resources Policy Center, contact the Director, Susan Everingham (Susan_Everingham@rand.org ; 310-393-0411, ext. 7654). Susan Hosek (sue@rand.org ; 310-393-0411, ext. 7255) and Terri Tanielian (territ@rand.org ; 703-413-1100, ext. 5404) co-direct the RAND Center for Military Health Policy Research. The mailing address is RAND Corporation, 1776 Main Street, Santa Monica, California 90401. More information about RAND is available at www.rand.org.

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Legislative Directed Objectives and Findings:

- *Describe the effect on changes in expenditures:* Allowing for increased access to licensed or certified mental health counselors (LMHCs) had no measurable impact on expenditures for those that received care from LMHCs.
- *Provide data on utilization and reimbursement for non-physician mental health providers*: Opening up access to LMHCs may have created a small substitution effect, that is, beneficiaries in the demonstration area were less likely to see other non-physician mental health providers such as psychologists, social workers, and psychiatric nurse practitioners. Expenditures for care of those that sought care from non-physician mental health providers significantly increased in both the demonstration area as well as the non-demonstration area.
- *Provide data on utilization and reimbursement for physicians who provide mental health care*: Removing the referral and supervision requirements significantly decreased the likelihood that beneficiaries in the demonstration area would seek mental health care from a physician (psychiatrist or non-psychiatric physician). There was also a decreased likelihood that beneficiaries in the demonstration area would receive a psychotropic medication. Expenditures for MH care for those that saw physicians increased in both the demonstration as well as the non-demonstration regions, but only the increase in the non-demonstration non-psychiatric physician group was significant.
- *Describe the impact on Administrative Costs*: While difficult to quantify, our interviews revealed that the demonstration might have resulted in modest costs savings to LMHCs in terms of time and administrative burden. However, any savings to managed care contractors depended on their baseline enforcement procedures regarding supervision and referral (which was minimal in some cases).
- *Describe the impact on confidentiality of mental health and substance abuse services for TRICARE beneficiaries*: There was no evidence that independent reimbursement of LMHCs had any impact on patient confidentiality, given that the requirements for supervision and referral do not impact or contradict the standards for confidentiality set forth by HIPAA.
- *Describe the effect on health and treatment of TRICARE beneficiaries:* Using our survey data, we found no effect on perceived access to mental health services, no

effect on self-reported adherence to treatment, and no effect on self-reported mental health status. We found that survey respondents in the demonstration area reported greater satisfaction with mental health services, however, it is not possible to assess whether the demonstration created the greater satisfaction or if it existed prior to the demonstration.

- *Explain the impact on the willingness of LMHCs to participate in TRICARE:* Representatives from the national counseling associations indicated that the practice authority for LMHCs was a disincentive or barrier to participation of LMHCs in the TRICARE network prior to the demonstration. Interviews with LMHCs in the demonstration and non-demonstration areas revealed that LMHCs viewed this as a potential barrier for patients rather than a source of administrative burden to them per se. In the demonstration area, the change in practice authority may have been a motivator for network participation. Enrollment of LMHCs as networked providers increased slightly, however, there were no data to compare this increase to the enrollment of LMCHs in the non-demonstration areas.
- *Identify any policy requests or recommendation for LMHCs made by TRICARE plans or managed care organizations:* Based on interviews with representatives from TRICARE managed care support contractors as well as TRICARE staff, many believe that the adoption of formal credentialing standards could help to facilitate independent practice for LMHCs with rigorous licensing criteria and address any concerns about quality of care provided by LMHCs.

Background: The National Defense Authorization Act (NDAA) for Fiscal Year 2001 (FY01) required the Department of Defense to conduct a demonstration project for expanded access to a particular type of mental health services provider – licensed or certified mental health counselors (LMHCs) - under TRICARE. According to the legislation (P.L. 106-398), the Secretary of Defense was to conduct a demonstration project under which LMHCs who meet eligibility requirements for participation as providers under the TRICARE program may provide services to covered beneficiaries under chapter 55 of title 10, United States Code, without referral by physicians or adherence to existing supervision requirements.

When stipulating the requirements for the demonstration, Congress also required the Department of Defense (DoD) to conduct an evaluation of the demonstration's impact on the utilization, costs, and outcomes of services. DoD requested RAND to carry out this evaluation and to conduct the analyses needed to answer the evaluation objectives set forth by Congress. This report describes and presents findings from RAND's evaluation.

Under TRICARE, several provider groups are authorized to provide mental health services to beneficiaries, assuming the individual providers meet eligibility requirements established by TRICARE. The eligible provider groups include physicians, clinical psychologists, clinical social workers, psychiatric nurse specialists, marriage and family therapists, pastoral counselors, and LMHCs. For each provider group, TRICARE stipulates minimum certification or licensure requirements as relevant to the profession (see TRICARE Policy Manual).

In order to be a TRICARE authorized provider, LMHCs must meet several eligibility criteria with respect to training and administrative requirements for their practice. The administrative requirements for LMHCs to practice under TRICARE include documentation of a referral from a physician, ongoing supervision of their services by a physician, and certification of written communication and follow up with the physician following each service visit. However, services provided by other mental health professionals, including licensed clinical social workers, clinical psychologists, and psychiatric nurse specialists, are currently reimbursed independent of referral or supervision by physician. TRICARE placed these additional eligibility requirements on LMHCs because of concerns resulting from the lack of nationwide certification standards for this group of mental health professionals.

The professional organizations that represent LMHCs have expressed their concerns to TMA and Congress that the eligibility and practice restrictions placed on LMHCs by TRICARE may unduly restrict access to care or may lead potential clients to avoid seeking needed care.

The Demonstration: TRICARE Management Activity (TMA) chose to conduct this demonstration project in the Colorado Springs (Ft. Carson and USAF Academy) and Omaha (Offutt AFB) catchment areas within the TRICARE Central Region. TMA chose these regions for their high volume of LMHCs in order to ensure ample providers for the demonstration. For purposes of comparison, three non-demonstration catchment areas were chosen: Wright Patterson AFB, Luke AFB, and Ft. Hood. Similar data were collected for beneficiaries in both the demonstration and non-demonstration areas.

Beginning in 2002, Magellan Behavioral Health, the managed behavioral health care carve- out company for TRIWest, worked collaboratively with TMA to design and implement the demonstration. To advertise the demonstration opportunity, TRIWest used a mass mailing to approximately 230 LMHCs who practiced in these areas. LMHCs were informed that by participating in the demonstration, they were eligible to treat TRICARE beneficiaries, over the age of 18 years, without referral or supervision from a physician. In order to participate, LMHCs were required to sign and return the "Participation Agreement for the TRICARE Expanded Access to Mental Health Counselors Demonstration Project." By signing the Participation Agreement, counselors agreed to collect a TRICARE Mental Health Counselor Demonstration Project

Informed Consent Form (Appendix A) from each TRICARE patient seen during the demonstration. TRIWest began enrolling LMHCs into the demonstration in late 2002 in preparation for a January 1, 2003 start date. Maximum demonstration participation included 123 LMHCs. The participation rate (55 percent of those who received the mailing) was likely due to the use of only one mass mailing as a means of advertisement.

Evaluation Methods: Our evaluation was guided by a set of general hypotheses based on Donabedian's model of structure, process, and outcomes of health care (Donabedian, 1980). Accordingly, we expected that the demonstration, which allowed for independent practice by LMHCs, might affect beneficiaries and providers in the following ways: increased access to care delivered by LMHCs (as measured by the percentage of eligible beneficiaries who receive care from LMHCs), higher utilization of mental health services among the eligible beneficiary population in the demonstration area, decreased total costs of mental health care, and either increased or decreased quality of care.

In the context of this conceptual framework and the evaluation objectives defined by Congress, the purpose of our evaluation analyses was to examine and compare utilization, costs of care, and outcomes for adult beneficiaries receiving mental health services from LMHCs and compare the findings to those of beneficiaries seeking services from other mental health providers (including physicians, clinical psychologists, clinical social workers, and others). To assess the extent to which independent reimbursement of LMHCs affected service utilization, reimbursement costs, and treatment *processes*, we conducted *secondary analyses of service claims for covered beneficiaries* who received services from mental health providers. These analyses employed a pre-post intervention evaluation methodology that allowed for the identification of any changes over the one-year implementation period among covered beneficiaries in the demonstration versus non-demonstration catchment areas. To assess the impact on treatment and clinical outcomes, we collected and analyzed *primary survey data from a sample of beneficiaries* who received mental health services in the demonstration region as well as the non-demonstration control region. These analyses were limited by the requested cross-sectional design and thus allow for comparisons between respondents in the demonstration and non-demonstration catchment areas one year post-implementation but do not allow for a pre-post evaluation. We also used *semi-structured qualitative interviewing* techniques to gather relevant information from mental health care providers and managed care organizations before and after the implementation of the expanded access demonstration to determine the administrative costs associated with the documentation of referral and supervision and to assess the impact of independent reimbursement (provided by the demonstration) on provider willingness to participate in TRICARE.

We aimed to use both qualitative and quantitative data for this evaluation for several reasons. The type and source of data was typically driven by the nature of the evaluation question and our knowledge of the available and accessible data for responding. We provide additional detail for our methodologies in Appendix B.

Challenges associated with the Evaluation: In late 2002, as DoD moved forward with efforts to implement this demonstration and we developed our evaluation strategy, the United States began major deployments in preparation for Operation Iraqi Freedom. At the same time, military personnel were still deployed in Afghanistan for Operation Enduring Freedom. Major combat operations in Iraq began in Spring 2003, just as the expanded access demonstration was getting underway. Both the demonstration catchment areas as well as the non-demonstration areas include military installations with deployable forces, both active duty as well as reserve components. While detailed data about the number of personnel deployed from these regions were not available to us, forces were deployed from both the non-demonstration and the demonstration areas during the course of this study.

In an attempt to examine the potential impact of the war on mental health service needs and utilization, we included items on the survey of beneficiaries that were aimed at eliciting this information. We then aimed to use these data in our multivariable models to examine differences in self-reported need, barriers to access, and service utilization between respondents from the demonstration and non-demonstration regions. Since the survey data could not be linked to the administrative claims data, and there were no comparable administrative data available to us to indicate whether or not a particular beneficiary had a loved one deployed—we could not examine or control for the impact of the war in the administrative analyses of utilization and costs. Therefore, we offer caution here and again in the results that any increases in utilization and costs observed between the pre- and post period in either the demonstration region or non-demonstration region could be a consequence of the war in Iraq and not just the demonstration.

Results:

The Beneficiary Population. Overall, the survey respondent sample was evenly distributed across age group (14 to 23 percent per age group) and was predominantly female (82 percent). Nearly a third had a college education (27 percent); 81 percent were white and 10 percent were African-American. The majority of the survey respondents were US born (89 percent) and had children (80 percent). Of those with children, 24 percent reported that their children had also gotten counseling in the past 6 months. Only 12 percent lived alone, and about half (44.9 percent) were currently working. A fifth of the survey respondents (20 percent) reported that they were not currently working due to health problems. Several demographic differences were noted between the demonstration and non-demonstration respondent populations: Respondents in the

demonstration region were younger, more likely to be college educated, less likely to be African-American and more likely to be white, less likely to live alone, and more likely to be currently working compared with beneficiaries in the non-demonstration regions. It should be noted that these differences exist among beneficiaries who use MH services as well as those who do not, and likely reflect the differences associated with these catchment areas. For example, the student population at the USAF Academy would likely influence the age distribution in the demonstration region that includes that catchment area. Several differences were also noted in use of mental health services. Few beneficiaries in the study areas reported awareness of the demonstration.

Beneficiary Outcomes. Little effect of the demonstration was observed on beneficiary outcomes. With two exceptions, no differences by demonstration area were found in measures of access to mental health services, adherence to treatment, or mental health status: Beneficiaries in living the demonstration areas (regardless of MH provider type) had a a 36 percent greater chance of reporting emotional problems that affected their functioning, but a 32 percent lower likelihood of reported having received counseling from a mental health provider in the past six months.

A number of differences between the demonstration and non-demonstration areas were found on Health Plan Employer Data and Information Set (HEDIS: a set of indicators used to rate the quality of services provided by health plans and providers) indicators of mental health services. Being in the demonstration area was associated with greater odds of favorably rating counseling and treatment, a greater chance of reporting an ability to "usually or always" get urgent treatment as soon as needed, greater odds of being able to "usually or always" get an appointment as soon as desired, a greater chance of reporting the ability to get help by telephone, and a lower risk of never having to wait 15 minutes or more to see a clinician.

Other factors associated with access to mental health care included age group, perceived barriers to care, perceived job stigma, and whether a close relative or acquaintance of the beneficiary was deployed to the war on Iraq. Beneficiaries under 25 and those who perceived greater job-related stigma to seeking care were less likely to report seeking mental health services in the survey. Those who perceived that stigma was a barrier to care were more likely to be taking a prescription medication for a mental health problem. Deployment of a friend or relative was associated with a higher likelihood of receiving counseling from a mental health provider and a lower likelihood of receiving prescription medications for a mental health problem.

Patient confidentiality did not appear to be affected in any way by the demonstration, based on the findings of the beneficiary surveys and provider interviews.

Impact on Providers. Interviews with LMHCs were conducted prior to and following the demonstration to assess their attitudes toward the administrative burden of the referral and supervision requirements and their perceptions of the impact of those requirements on beneficiary access to services. Prior to the demonstration, LMHCs tended to regard the referral requirements as a discriminatory policy that reduced access to their services, rather than as a source of administrative burden or increased practice costs. After the demonstration, participating counselors noted that the demonstration had reduced the time needed to obtain referrals. The theme that emerged from the interviews regarding supervision was that baseline supervision practices under TRICARE are highly varied, that some counselors are deeply committed to obtaining supervision regardless of TRICARE's requirements, and that compliance with the supervision requirement involves more form than substance. Follow-up interviews with providers revealed that removal of the supervision requirement during the demonstration was not perceived as having a major effect on their practice.

Changes in perceptions of professional roles and activities were also assessed. Following the demonstration, LMHCs indicated no demonstration-related changes in their professional roles and activities, apart from reducing the administrative time they spent seeking physician referrals. The primary effect of the demonstration as perceived by LMHCs was facilitated access to treatment for TRICARE beneficiaries. Perceptions of other types of MH providers regarding supervision and the scope of LMHC functions were mixed.

Utilization records showed that the number of LMHCs who participated in the demonstration increased during the first few months of the demonstration but leveled out during the middle of the demonstration period (likely due to the fact that TMA relied on only one mailing to advertise the demonstration opportunity). During the demonstration period, the number of LMHCs who enrolled in the TRICARE network steadily and modestly increased in both demonstration areas. Unfortunately, no data were available on the number of enrolled LMHCs in the non-demonstration areas. Thus it was not possible to assess the role of the demonstration on enrollment.

Impact on TRICARE. The study assessed changes in utilization of mental health services over the demonstration period and endeavored to quantify administrative costs associated with these changes. Controlling for differences in the demonstration and non-demonstration populations, beneficiaries in the demonstration region were significantly less likely in the post-demo period to see a mental health provider other than a LMHC or a psychiatrist, a decrease in the likelihood of seeing a non-psychiatric physician (such as a primary care physician) for mental health care, and an increase in the likelihood of inpatient psychiatric hospitalization. In addition, we found that those who saw LHMCs in the demonstration region were significantly less likely to

ACKNOWLEDGMENTS

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Finally, we also thank the military health system beneficiaries who took the time to complete the survey instrument; without their responses, this report would not have been possible.

see a psychiatrist or to receive a prescription for a psychotropic medication than those seeing LMHCs in the non-demonstration region. Based on the administrative nature of the data used to identify these changes, which generally lacks clinical information about symptom severity, it was not possible to determine whether the lower likelihood of seeing a psychiatrist or receiving a psychotropic medication had any clinical significance for this population. That is, it is not possible to determine whether a beneficiary's clinical condition warranted their receiving medication/psychiatric treatment; however, as a result of the demonstration there was a lower likelihood of them receiving such treatment.

Changes in patient costs associated with the changes in service utilization were minimal. Attempts to quantify administrative costs associated with referral and supervision and the impact of changes in these policies raised the question of the source of such costs and who, in fact, bears the costs. Costs associated with paperwork would be expected to fall on LMHCs, whereas those associated with supervision would be expected to fall on the supervising physician; however, neither can be billed to TRICARE. Yet, another potential administrative cost associated with supervision and referral is the greater demand for and utilization of higher-cost mental health providers that may result from any disincentives to seeking care from LMHCs. To assess the burden of administrative costs to TRICARE, the researchers interviewed representatives from the managed care support contractors (MCSCs) that administered benefits for the demonstration and non-demonstration areas. The consistent theme that emerged from these interviews was that the advantage of the demonstration was manifest not in reducing administrative costs to MCSCs but in increasing access to therapy services for TRICARE beneficiaries. The likelihood that barriers to seeking services from LMHCs would lead beneficiaries to seek care from other, potentially more costly providers was cited.

Regarding the issue of quality of care, the MCSCs were asked to assess the potential effect on quality of allowing LMHCs greater autonomy. While respondents were divided on whether quality of care might be affected, they agreed that improving credentialing standards such as through the use of standardized curriculum, for LMHCs would be a more effective way to promote quality of care and safeguard beneficiaries who seek mental health care.

Conclusions: In summary, our evaluation of the DoD Mental Health Counselor Demonstration for expanded access to mental health counselors under TRICARE found that the demonstration had minimal impact with respect to the variety of outcomes studied here. There were no key effects on expenditures, reimbursement, administrative costs, or patient confidentiality. While we did see increases in utilization and costs for mental health care over the demonstration period, these increases could not be attributed to allowing independent practice authority. Using the administrative data, we found evidence suggesting that the demonstration

did affect the type of providers from whom beneficiaries sought mental health care as well as the likelihood of receiving a psychotropic medication. After controlling for differences in the characteristics of those who see LMHCs, our results revealed a significant decrease in the likelihood of seeing a psychiatrist as well as a decrease in the likelihood of receiving a psychotropic drug in the demonstration areas. However, based on administrative data alone, it is not possible to determine whether these changes had a clinically significant impact on beneficiaries.

Where we did observe changes in ratings of satisfaction related to the demonstration, the results were mostly positive. According to self-report survey data from beneficiaries, the demonstration resulted in improved ratings of mental health services.

The effects on administrative costs associated with the requirements for LMHCs were also unclear. From the interviews with LMHCs and other MH providers, it has been apparent that supervision and referral has not been that onerous to begin with and that any administrative costs associated with the requirements were in fact minimal at the outset. Taken as a whole, our findings suggest that the impact of expanding access to LMHCs for providers and beneficiaries was minimal on beneficiaries, providers, and the TRICARE program.

Interviews with representatives from two of the Counselor associations revealed that removal of the referral and supervision requirements for LMHCs remains a top legislative agenda item. Although the Counseling associations have been able to garner the support of some beneficiary advocacy groups, neither Senate nor House Armed Services Committee staff members indicated any other official requests for policy changes had been submitted by beneficiary groups during the most recent session of Congress.

Finally, Table S.1 summarizes the key findings and implications for each of the nine legislative objectives for this evaluation that were mandated by Congress.

The findings from this demonstration are important in that they show that merely lifting administrative requirements for the provision of mental health care - by itself - is unlikely to result in expanded access and utilization, especially when beneficiaries already have access to other types of mental health providers who do not have the same administrative requirements as the LMHCs but can provide many similar services. Therefore, if the motivation of this demonstration was to reduce stigma associated with seeking mental health care and expand access to mental health care services for the military beneficiary population, our findings suggest that efforts need to go beyond merely lifting the administrative requirements on LMHCs.

Table S.1 Summary of Evaluation Findings and Implications Cross-Walked with Legislation Objectives

Legislation Objective*	Key Findings	Implications
(1) Describe effect on changes in expenditures	▪ Controlling for beneficiary characteristics, there was no significant change in expenditures for inpatient and outpatient care among the eligible population or among those seeing LMHCs.	Allowing for increased access to MH counselors has no measurable impact on expenditures for mental health services for those that received care from LMHCs.
(2) Provide data on utilization and reimbursement for non-physician MH professionals	▪ Among those MH users in the OMH provider group, the mean number of visits increased in both the demonstration and non-demonstration regions. ▪ For those in the OMH group, total expenditures for MH care increased in both the demonstration and non-demonstration regions. ▪ Comparing the changes pre-post and demo vs. non-demo, we found a decrease in the likelihood of seeing an OMH provider in the demonstration region.	Opening up access to LMHCs may have created a substitution effect, that is, beneficiaries were less likely to see other non-physician mental health providers such as psychologists, social workers, and psychiatric nurse practitioners.
(3) Provide data on utilization and reimbursement for physicians who collaborate with MH counselors	▪ Among those MH users in the psychiatrist group, there were no significant changes in the mean number of outpatient MH visits in the demonstration region or the non-demonstration region. ▪ For those MH users in the Other Physician group, there was a statistically significant increase in the mean number of outpatient visits in the non-demonstration region, but not the demonstration region. ▪ Mean expenditures for MH care among MH users in the psychiatrist and other physician groups increased pre vs. post in both the demonstration and non-demonstration regions, but only the increase in the other non-demonstration physician group was statistically significant.	Removing the referral and supervision requirements significantly decreased the likelihood that beneficiaries would get MH care from a physician (psychiatrist or other physician) and as such decreased the likelihood that they would also get a psychotropic medication to treat their mental illness.

	Comparing the changes pre-post and demo vs. non demonstration, we found a significant decrease in the likelihood of seeing a physician for MH care in the demonstration regions (psychiatrist or other physician).	
(4) Describe administrative costs incurred	▪ According to the LMHCs in our interviews, eliminating physician referral requirement saves time previously spent in telephone consultation to obtain, confirm referrals, and authorize therapy.	Demonstration probably resulted in modest cost savings to LMHCs in terms of time and administrative burden. Any savings to MCSCs depended on their baseline enforcement procedures regarding supervision and referral (which was minimal in some cases).
(5) Compare effect for items outlined in items one through four, over a one year (pre-post) in the demonstration region as compared to a non-demonstration regions	▪ All results outlined above are based on analyses that compared data gathered from one year prior to the demonstration with one year following the demonstration in both the demonstration region as well as the selected non-demonstration regions.	Not applicable
(6) Describe impact on confidentiality of MH and substance abuse services for TRICARE beneficiaries	▪ No evidence that eliminating the supervision requirement would change standards for confidentiality	Independent reimbursement of LMHCs would have no impact on confidentiality.
(7) Describe effect on health and treatment of TRICARE beneficiaries	▪ No effect on perceived access to MH services. ▪ No effect on self-reported adherence to MH treatment. ▪ No effect on self-reported MH status. ▪ Potential positive effect on HEDIS ratings of mental health services, however, positive ratings may have also been evident prior to the demonstration.	Increased access to LMHC had no adverse effect on TRICARE beneficiaries and may be associated with greater satisfaction with MH services.
(8) Explain the impact on the willingness of LMHCs to participate in TRICARE	▪ Lack of independent practice authority for LMHCs was viewed as a disincentive or barrier to participation prior to demonstration. ▪ Demonstration participation increased initially and leveled around the middle of the demonstration period. ▪ Enrollment of LMHCs as TRICARE	Suggests that demonstration may have been a motivator to network participation (though we have no data on network enrollment for the non-demonstration catchment areas during the same time period to use for comparison).

	networked provider increased during the demonstration period, but is likely not the result of the changing practice authority since this was a temporary demonstration.	
(9) Identify any policy requests or recommendations for MH counselors made by TRICARE plans or MCOs	▪ Removal of the referral and supervision requirements for LMHCs remains a top legislative priority for AMHCA and ACA. ▪ According to MCSC representatives, quality concerns could be addressed by development of appropriate and standardized credentialing mechanisms.	Adoption of formal credentialing standards could help to facilitate independent practice for counselors in states with rigorous licensing, while helping to promote the implementation of similar standards elsewhere.

GLOSSARY, LIST OF SYMBOLS, ETC.

Abbreviation	Definition
ACA	American Counselors Association
AFB	Air Force Base
AMHCA	American Mental Health Counselors Association
CHCS	Composite Health Care System
CPT	Current Procedural Terminology
DEERS	Defense Eligibility Enrollment System
DMDC	Defense Manpower Data Center
DoD	Department of Defense
ECHO	Experiences of Care and Health Outcomes
FY	Fiscal Year
GAO	Government Accounting Office
HCPR	Health Care Provider Record
HCSR	Health Care Service Record
HEDIS	Health and Employer Data and Information Set
HPAE	Health Program Analysis and Evaluation
ICD	International Classification of Diseases
LMHC	Licensed and/or certified Mental Health Counselor
MCO	Managed Care Organization
MCSC	Managed Care Support Contractor
MHS	Military Health System
MH	Mental Health
MOS	Medical Outcomes Study
MTF	Military Treatment Facility
NCQA	National Commission on Quality Assurance
NDAA	National Defense Authorization Act
NDC	National Drug Code
NMOP	National Mail Order Pharmacy
OMH	Other Mental Health
PBM	Pharmacy Benefits Manager
PDTS	Pharmacy Data Transaction Service
PHQ	Patient Health Questionnaire

PIC	Partners In Care
Rx	Prescription
PITE	Point in Time Extract
SADR	Standard Ambulatory Data Record
SIDR	Standard Inpatient Data Record
TMA	TRICARE Management Activity
TRICARE	Department of Defense's Managed Care Program

1. INTRODUCTION

OVERVIEW

The National Defense Authorization Act (NDAA) for Fiscal Year 2001 (FY01) required the Department of Defense to conduct a demonstration project for expanded access to mental health counselors under TRICARE. According to the legislation (P.L. 106-398), the Secretary of Defense was to conduct a demonstration project under which licensed and certified professional mental health counselors who meet eligibility requirements for participation as providers under the TRICARE program may provide services to covered beneficiaries under chapter 55 of title 10, United States Code, without referral by physicians or adherence to supervision requirements.

When stipulating the requirements for the demonstration, Congress also required the Department of Defense (DoD) to conduct an evaluation of the demonstration's impact on the utilization, costs, and outcomes of services. DoD requested RAND to carry out this evaluation and to conduct analyses required to answer the evaluation objectives set forth by Congress. These objectives are outlined in greater detail in chapter 3. This report describes and presents findings from RAND's evaluation.

This report is organized into seven chapters. In this introductory chapter we provide a brief overview of the TRICARE program, describe TRICARE's coverage for mental health services and policies regarding providers, and discuss the motivation for the demonstration. In chapter 2, we provide a description of the demonstration itself, including details on how and where the Department of Defense implemented the program, outline the evaluation objectives, present our conceptual framework for approaching the study, and discuss the methods we employed. In chapters 3 through 5, we present findings of the demonstration's impact on utilization, cost, and outcomes, from the perspective of the beneficiary, the provider, and the system, respectively. Finally, in chapter 6, we present our conclusions and discuss the implications as well as the limitations of our findings. We also include several appendices with the technical documentation of our work.

BACKGROUND ON TRICARE

The TRICARE program was established in 1992 to reorganize the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). TRICARE created a comprehensive managed health care program for the delivery and financing of health care services in the military health system (MHS). Entitlement to TRICARE benefits is set forth and defined in Title 10 of the U. S. Code and generally includes all active duty personnel and military retirees and their eligible

dependents. With a few exceptions, identified in Title 10, those eligible for TRICARE must be listed in the Defense Enrollment Eligibility Reporting System (DEERS) in order to receive care.[1] In Fiscal Year 2003, it was estimated that approximately 9.1 million individuals were eligible for benefits within the military health system, including approximately 1.87 million active duty personnel, 2.45 million family members of active duty, and 4.76 million retirees and their family members. This estimate represents an increase from prior fiscal years (8.4 million in FY01 and 8.7 million in FY02), largely due to the mobilization of large numbers of National Guard and Reserve members and the extension of health benefits to their family members as well (Institute for Defense Analyses et al., 2004).

For military beneficiaries under age 65, TRICARE offers several options for care: TRICARE Prime, Standard, and Extra. TRICARE Prime is essentially a health maintenance organization; the provider network consists primarily of Military Treatment Facilities (MTFs) (the "direct care" system), supplemented by care from designated civilian providers as authorized (the "purchased care" system). Active duty personnel are automatically enrolled in Prime. Non-active duty beneficiaries (family members) who enroll in TRICARE Prime receive priority access to care at MTFs, and are required to follow the referral and utilization management guidance of a primary care manager. In FY2003, roughly 67 percent of all eligible beneficiaries enrolled in TRICARE Prime (Institute for Defense Analyses et al., 2004). Beneficiaries who do not enroll in TRICARE Prime are automatically eligible for TRICARE Standard/Extra; these beneficiaries remain eligible for MTF care on a space-available basis, with low priority. TRICARE Standard and Extra function essentially as a preferred provider organization; TRICARE Extra refers to the use of in-network providers, and Standard refers to the use of out-of-network providers. During FY2003, nearly 75 percent of all eligible beneficiaries under the age of 65 used at least one MHS service from either a direct or purchased source of care, so while there are close to 9 million eligible MHS beneficiaries, approximately 6.75 million use the MHS. (Institute for Defense Analyses, et al., 2004).

TRICARE COVERAGE POLICIES

TRICARE coverage policies are set forth in 32 CFR Part 199. The TRICARE Management Activity (as delegated by the Assistant Secretary of Defense for Health Affairs) has authority for developing policies and regulations required to administer and manage the

[1] The exceptions include Medal-of-Honor recipients and eligible dependents, NATO dependents in the US on a peacekeeping mission, abused dependents of discharged active duty personnel, and newborns born within the year of the DEERS identification.

TRICARE program effectively. Basic coverage in TRICARE's programs includes most medically necessary care rendered to beneficiaries by authorized providers. Benefits include specified medical services and supplies from authorized civilian sources such as hospitals, other authorized institutional providers (residential treatment centers), physicians, other authorized individual professional providers (nurse practitioners, physician assistants, clinical social workers), and professional ambulance services, prescription drugs, authorized medical supplies, and rental or purchase of durable medical equipment. Detailed definitions, inclusions and exclusions, and requirements for coverage are outlined in 32 CFR Part 199.4

At the time this research was conducted, TRICARE benefits and coverage policies were implemented through TRICARE Managed Care Support Contracts (MCSC) covering 12 geographical health-care regions within the United States.[2] The TRICARE's Quality and Utilization Review Peer Review Organization Program assists in monitoring utilization, reviewing claims, and considering appeals for coverage. Currently, TRICARE claims are processed by private claims-processing contractors.

Currently, TRICARE covers most treatments for most conditions; however, the statute prohibits treatment for smoking cessation and weight management and restricts inpatient psychiatric care to 30 days per fiscal year for adults. TRICARE covers 80 percent of most outpatient mental health services (including psychotherapy) provided by qualified providers but imposes some restrictions on the frequency and length of visits to be covered (e.g., preauthorization is required for more than eight psychotherapy visits and coverage is limited to 60 visits for substance abuse treatment in a benefit period[3]). Up to eight additional psychotherapy visits can be pre-authorized per request if deemed necessary by the contractor. However, some variation exists among MCSCs in how these visits are preauthorized. TRICARE also provides beneficiaries with pharmacy benefits: TRICARE beneficiaries incur nominal co-payments for psychotropic medications depending on the type of drug (generic versus brand) and on the mode of prescription fulfillment (MTF, mail order pharmacy, network retail pharmacy or non-network retail pharmacy).

PRACTICE AUTHORITY FOR MENTAL HEALTH PROVIDERS

Under TRICARE, several provider groups are authorized to provide mental health services to beneficiaries, assuming the individual providers meet eligibility requirements established by TRICARE. The eligible provider groups include psychiatrists as well as non-psychiatric

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[2] As of November 1, 2004, these 12 geographic regions had been condensed into 4 regions.

[3] A benefit period is defined as 12 months, or one year.

physicians, clinical psychologists, clinical social workers, psychiatric nurse specialists, marriage and family therapists, pastoral counselors, and mental health counselors. For each provider group, TRICARE stipulates minimum certification or licensure requirements as relevant to the profession (see TRICARE Policy Manual, Chapter 10).

Licensed or certified mental health counselors (LMHCs) must meet several eligibility and administrative requirements to be an authorized TRICARE provider. The eligibility requirements for LMHCs are similar to those stipulated for clinical social workers and include:

- a master's degree in mental health counseling or an allied mental health field from a regionally accredited institution; and
- two years of post-master's experience to include 3,000 hours of clinical work and 100 hours of face-to-face supervision; and
- licensure or certification as a mental health counselor; if a jurisdiction does not offer licensure/certification, the counselor must be (or meet all requirements to become) a Certified Clinical Mental Health Counselor as determined by the National Board of Certified Counselors.

The administrative requirements for LMHCs to practice under TRICARE include documentation of a referral from a physician, ongoing supervision of their services by a physician, and certification of written communication and follow up with the physician following each service visit. However, services provided by other mental health professionals, including licensed clinical social workers, clinical psychologists, and psychiatric nurse specialists, are currently reimbursed independent of referral or supervision by physician.

MOTIVATION AND IMPETUS FOR THE DEMONSTRATION

Ensuring TRICARE beneficiaries' access to quality mental health care is critically important. Beneficiaries are typically family members of active duty military members or retired service personnel who depend on the TRICARE health plan for all or nearly all of their health care. The lives of military families, unlike those of most civilian families, are subject to unique stresses such as deployments of the service member (often to sites of extreme danger), alerts, and frequent relocation (Orasanu and Backer, 1996), all of which can be disruptive and may, in some cases, precipitate new or exacerbate existing mental health problems. For example, from recent DoD Surveys of Health Related Behaviors Among Military Personnel, we know that the majority of active duty personnel report "some" to "a lot" of stress associated with work, with deployment and separation from family being listed as the most frequently indicated stressors (Bray et al., 2003). Bray et al (2003) also reported substantial prevalence of anxiety and

depression symptoms (16.6 percent and 18.8 percent, respectively) among the active duty respondents. Yet, while 19 percent of the personnel responding reported a need for mental health care, only about two thirds of them also reported receiving this care.

The risk for mental health problems and the need for mental health services are greater during wars and conflicts. The results of a recent study published in the New England Journal of Medicine (Hoge et al., 2004) showed that overseas deployment increased the rate of mental disorders among service personnel. This study of Army and Marine personnel serving in Iraq and Afghanistan found that a higher percent of military members were at-risk for mental illness than prior to deployment. Only a small proportion of those experiencing symptoms sought mental health care and stigma was a key barrier. Army troops in Iraq have also been reported to have a significantly higher rate of suicide than the general population (StrategyPage.com, 2004). Since a large proportion of these military personnel are married and many have children, the potential consequences for spouses and children must be considered. All of these factors (e.g., stress associated with work, separation from family and anxiety and depressive symptoms among military members) can have indirect consequences on the mental health of family members of active duty and former military members.

So while military health system beneficiaries may have a great need for mental health services, studies have indicated that their own concerns about stigma may be a major barrier to their ability to access and receive care. So, why implement this particular demonstration?

During qualitative interviews with Congressional staff as well as representatives from military beneficiary groups and the national Counselor associations, we learned that the legislation mandating the demonstration was developed based upon requests initiated in 1999 from the Counselor associations to Congress, requesting a change in practice authority for LMHC's under TRICARE. The Counselor associations articulated concerns among their constituents about the referral process creating a barrier to beneficiaries seeking care. They also expressed concerns that the supervision requirement posed an additional administrative cost to the program and created a potential barrier to professional autonomy and patient confidentiality. They based these concerns on phone calls and other anecdotal reports from their membership. To the best of our knowledge and research, while beneficiaries have expressed concerns about access to TRICARE-eligible providers in general (particularly in rural or remote areas) and to mental health services in particular (Schone, Huskamp, and Williams, 2003), there were no available data indicating a specific beneficiary concern about accessing LMHCs.

According to the Counselor associations, independent practice authority under TRICARE had been granted to clinical social workers, psychiatric nurse practitioners and marriage and family therapists in the 1980s, and the Counseling associations stated that their members wanted

the same opportunities. Representatives from the TMA, however, indicated that the administrative referral and supervision requirements in place for LMHCs are based on concerns about quality. In an information paper provided to Congress at the time of the legislation and the study team during our evaluation, TMA noted the lack of a homogeneous standard curriculum nationwide that guides the training of these counselors. Further, the paper clarified that the purpose of the physician supervision is to ensure that the quality of care provided to TRICARE beneficiaries is not compromised by differences in scope of training and experience from other currently authorized groups of providers.

Responding to the requests from the Counselor associations, Congressman Walter Jones (NC) introduced language into the National Defense Authorization Act for FY01 to change practice authority for LMHCs under TRICARE. Due to concerns about the impact on utilization and costs, House Armed Service Committee staff suggested a compromise position and revised the language to include a demonstration and subsequent evaluation of its impact. The NDAA for FY01, including this requirement, was passed as Public Law 106-398.

2. EVALUATING THE IMPACT OF THE DEMONSTRATION: IMPLEMENTATION, OBJECTIVES, FRAMEWORK, AND METHODS

IMPLEMENTATION OF THE DEMONSTRATION

In response to this legislation, the TMA chose to conduct this demonstration project in the Colorado Springs (Ft. Carson and USAF Academy) and Omaha (Offutt AFB) catchment areas within the TRICARE Central Region (New Mexico; Nevada; Arizona except the Yuma area; the southwestern corner of Texas, which includes El Paso; Colorado; Utah; Wyoming; most of Idaho, Montana; North and South Dakota; Nebraska; Kansas; Minnesota; Iowa; and Missouri except for the St. Louis area).[4] At the time of the demonstration, the Managed Care Support Contractor in this region was TRIWest. Beginning in 2002, Magellan Behavioral Health, the managed behavioral carve out company for TRIWest, worked collaboratively with TMA to design and implement the demonstration. Implementation plans called for a mass mailing to approximately 230 licensed or certified mental health counselors (LMHCs) who practice in these areas to advertise the demonstration opportunity. Counselors enrolled in the TRICARE network as well as those not enrolled (but eligible for enrollment) were eligible for participation. Thus, the mailing was targeted to both LMHCs enrolled in the TRICARE network and non-enrollees (additional information for mailing lists was supplied by the American Counselors Association). LMHC's were informed that by participating in the demonstration, they were eligible to treat TRICARE beneficiaries, over the age of 18 years, without referral or supervision from a physician.

In order to participate, LMHCs were required to sign and return the "Participation Agreement for the TRICARE Expanded Access to Mental Health Counselors Demonstration Project." By signing the Participation Agreement, counselors agreed to collect a TRICARE Mental Health Counselor Demonstration Project Informed Consent Form (Appendix A) from each TRICARE patient seen during the demonstration. If counselors did not return the Participation Agreement to TRIWest, they were excluded from the demonstration and were required to comply with the TRICARE physician referral and supervision requirements.

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[4] As of November 1, 2004, all TRICARE regional transitions were completed and the 12 geographic regions were reduced to 4 regions. At that time this region became TRICARE West and includes Alaska, Arizona, California, Colorado, Hawaii, Idaho, Iowa (except 82 Iowa zip codes that are in the Rock Island [Illinois] area), Kansas, Minnesota, Missouri (except the St. Louis area), Montana, Nebraska, Nevada, New Mexico, North Dakota, Oregon, South Dakota, Texas (the southwestern corner, including El Paso, only) Utah, Washington, and Wyoming.

Plans for the demonstration were published in the Federal Register (67 FR 57581). TRIWest began enrolling LMHCs into the demonstration in late 2002 in preparation for a January 1, 2003 start date.

Beginning in December 2002 and each subsequent month through December 2003, TRIWest submitted a detailed report to TMA on enrollment of LMHC participants. Table 2.1 summarizes the number of participating counselors for each month of the demonstration, as reported by TRIWest. Maximum demonstration participation included 123 LMHCs.

Table 2.1 Demonstration Participation by Catchment Area by Month

Month	Colorado Springs	Omaha	Total
January 03	41	41	82
February 03	57	53	110
March 03	62	55	117
April 03	64	55	119
May 03	67	55	122
June 03	68	55	123
July 03	68	55	123
August 03	68	55	123
September 03	67	55	122
October 03	66	55	121
November 03	66	55	121
December 03	66	55	121

The demonstration ended on December 31, 2003, at which time LMHC participation was terminated. At the same time, referral and supervision requirements for new patients and episodes of care were reinstated.[5]

SELECTION OF NON-DEMONSTRATION COMPARISON SITES

As stipulated by legislation (P.L. 106-398), the evaluation of the demonstration's impact would require comparison of utilization, costs, and outcomes of care provided by LMHCs under the demonstration with comparable data for a similar area in which the demonstration was not being implemented. In late 2002, TMA project officers selected three catchment areas to serve as comparison sites for data collection and analyses. These included:

- Wright-Patterson AFB near Dayton, Ohio
- Luke Air Force Base near Phoenix, Arizona

[5] Participating LMHCs were allowed to continue independent treatment of patients who began treatment before 12-31-03 and were still within a current episode of authorized care (e.g. first 8 therapy visits) without referral or supervision.

- Ft. Hood near Killen, Texas.

The rationale and criteria used to select these sites are detailed in Appendix B.

EVALUATION OBJECTIVES

In specifying the objectives of the required evaluation, Congress requested analyses to determine the extent of the demonstration's impact on the utilization, costs, and outcomes of care provided by LMHCs as well as other mental health providers (PL 106-398). Congress requested that the final evaluation report include:

(1) A description of the extent to which expenditures for reimbursement of licensed or certified professional mental health counselors changed as a result of allowing the independent practice of licensed and/or certified mental health counselors.

(2) Data on utilization and reimbursement regarding non-physician mental health professionals other than licensed or certified professional mental health counselors under CHAMPUS and the TRICARE program.

(3) Data on utilization and reimbursement regarding physicians who make referrals to, and supervise, mental health counselors.

(4) A description of the administrative costs incurred as a result of the requirement for documentation of referral to mental health counselors and supervision activities for such counselors.

(5) For each of the categories described in paragraphs (1) through (4), a comparison of data for a 1-year period for the area in which the demonstration project is being implemented with corresponding data for a similar area in which the demonstration project is not being implemented.

(6) A description of the ways in which allowing for independent reimbursement of licensed or certified professional mental health counselors affects the confidentiality of mental health and substance abuse services for covered beneficiaries under CHAMPUS and the TRICARE program.

(7) A description of the effect, if any, of changing reimbursement policies on the health and treatment of covered beneficiaries under CHAMPUS and the TRICARE program, including a comparison of the treatment outcomes of covered beneficiaries who receive mental health services from licensed or certified professional mental health counselors acting under physician referral and supervision, other non-physician mental health providers recognized under CHAMPUS and the TRICARE program, and physicians, with treatment outcomes under the demonstration project allowing independent practice of professional counselors on the same basis as other non-physician mental health providers.

(8) The effect of policies of the Department of Defense on the willingness of licensed or certified professional mental health counselors to participate as health care providers in CHAMPUS and the TRICARE program.

(9) Any policy requests or recommendations regarding mental health counselors made by health care plans and managed care organizations participating in CHAMPUS or the TRICARE program.

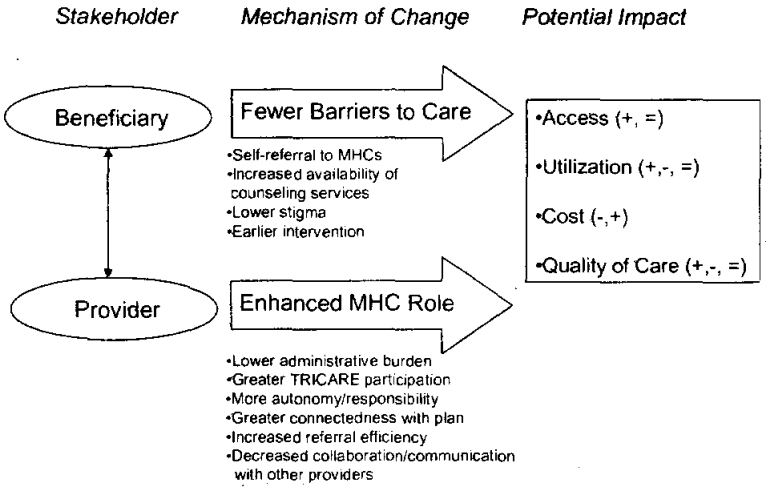
CONCEPTUAL MODEL

Our evaluation was guided by a set of general hypotheses based on Donabedian's model of structure, process, and outcomes of health care (Donabedian, 1980). Accordingly, we expected the demonstration, which allowed for independent practice by LMHCs, might affect beneficiaries and providers in the following ways:

- Increased **access** to care delivered by mental health counselors resulting from fewer procedural barriers and diminished stigma for counseling services, in contrast with no increased access to psychotropic medication care.
- Higher **utilization** of mental health services (especially counseling) as a function of direct access to LMHCs. There may be an increase in beneficiaries receiving both medication and counseling.
- Decreased total **cost** of care, again due to more use of mental health counselors (as a lower cost alternative to other mental health specialists) as well as elimination of supervision costs.
- Increased or decreased **quality of care** among those seeing mental health counselors. Increased quality of care could be due to professional role changes, including greater autonomy and responsibility, earlier access to care, and earlier interventions. However, the demonstration could decrease quality of care through lower rates of collaboration with other professionals, especially for psychotropic medication treatment in collaboration with physicians; or through inappropriate visits, or based on some characteristics potentially associated with counselors (such as lower use of evidence-based therapy, lack of clinical skill to detect problems).

In Figure 2.1, we illustrate how different mechanisms of change may operate to affect these different outcomes. The framework incorporates two interrelated perspectives (Beneficiary and Provider).

Figure 2.1 Conceptual Framework for Evaluating the Effects of the DoD Mental Health Counselor Demonstration



One perspective represents the effects of the demonstration on beneficiaries' access, utilization, cost, and quality of care for mental health problems. The demonstration adds several pathways to care by increasing the independence of mental health counselors. In particular, under the demonstration beneficiaries may now self-refer directly to a mental health counselor. By contrast, non-demonstration conditions mental health counselors may see only patients who are referred to them by other providers. Self-referral may lead to greater availability of counseling services but would not be expected to change the availability of services for medications. On the other hand, self-referral to counselors might change the demand for medications, since the demonstration could result in more people receiving both of these main forms of treatment. From the beneficiary's point of view, seeking care directly from a mental health counselor may carry less stigma, since it is no longer necessary to obtain approval for a referral from a physician. This may be particularly true for those individuals not willing to discuss mental health concerns with primary care providers they see on base.

The other perspective accounts for systemic effects on providers (mental health counselors, psychiatrists, other mental health specialists, and primary care physicians) including their perceptions of professional autonomy and role changes. We expect variation in the impact to different provider groups, for example we anticipate a potential increase in utilization of mental health counselors, but a potential decrease or no change in utilization of other mental health specialists and physicians (including psychiatrists). With the demonstration, we might expect lower administrative burden because documentation for referrals and supervision is no longer

required. We also expect more participation by LMHC in the TRICARE network. The ability for mental health counselors to practice independently will allow for more professional autonomy and greater responsibly for beneficiaries and this could potentially lead to better care. In fact, LMHCs may pay greater attention to TRICARE policies and could become more involved in quality improvement activities. The referral process would be more efficient for many of the same reasons noted above. However, a potential negative impact on outcomes could result from less interaction between providers, which might lead to uncoordinated, duplicative, and unsupervised care. The remainder of this report is organized around this framework. We first present results from the perspective of TRICARE beneficiaries followed by those from the providers' perspective. Finally, we present data obtained from administrative data to represent systemic effects.

EVALUATION METHODOLOGY

With this conceptual framework and the evaluation objectives as context, the purpose of our evaluation analyses was to examine and compare utilization, costs of care, and outcomes for beneficiaries receiving mental health services from LMHCs and compare such outcomes to beneficiaries seeking services from other mental health providers (including physicians, clinical psychologists, clinical social workers, etc.). To assess the extent to which independent reimbursement of LMHCs impacts service utilization, reimbursement costs, and treatment process outcomes, we conducted *secondary analyses* of service claims for covered beneficiaries receiving services from mental health providers. These analyses employed a pre-post intervention evaluation methodology that allow for the identification of any changes over the one-year implementation period among covered beneficiaries in the demonstration versus non-demonstration catchment areas. To assess the impact on treatment and clinical outcomes, we collected and analyzed primary *survey data* from beneficiaries in the demonstration region as well as the non-demonstration control region. These analyses were limited by the requested cross-sectional design and thus allow for comparisons between respondents in the demonstration and non-demonstration catchment areas one year post-implementation but do not allow for a pre-post evaulation. We also used *semi-structured qualitative interviewing* techniques to gather relevant information from mental health care providers and managed care organizations (before and after the implementation of the expanded access demonstration) to determine the administrative costs associated with the documentation of referral and supervision and to assess the impact of independent reimbursement on provider willingness to participate in TRICARE.

We aimed to use both qualitative and quantitative data for this evaluation for several reasons. The type and source of data was typically driven by the nature of the evaluation question and our knowledge of the available and accessible data for responding. For example,

claims data are best suited for examining utilization and costs, but do not contain any information about satisfaction with or outcomes of care. We believe that combining qualitative and quantitative data and the multiple data sources adds to the breadth of the perspectives we were able to capture for the evaluation. We provide additional detail for each of these methodologies below, as well as in Appendix B.

Secondary Analysis of Claims Data

To assess the extent to which independent reimbursement of LMHCs impacts service utilization and expenditures, we conducted analyses of service claims for covered beneficiaries receiving services from mental health providers. We compared data on claims for care provided within the demonstration region to data from a non-demonstration region (the comparison sites) using both one year of data pre- and one year of data post- implementation of the demonstration.

Data Sources. To conduct these analyses, our study relied upon several DoD health data sets. We requested Calendar Year 2002 and 2003 Health Care Service Records and pharmacy records from the Pharmacy Data Transaction Service for TRICARE beneficiaries who received mental health services (broadly defined, see below) in the specified catchment areas (demonstration and comparison). We also requested data from the Defense Eligibility Enrollment System (DEERS, e.g., the most recent available MDR PITE) so that we could estimate mental health service utilization rates among eligible beneficiaries for each catchment area of interest.

Definition of Mental Health User. To ensure comprehensiveness in our sample, we employed a broad definition of mental health service use to include beneficiaries who received TRICARE covered care, during the one year period before the implementation of the demonstration or during the one year period following the implementation of the demonstration, that met one or more of the following criteria:

- Visit to a mental health specialty provider (defined by the provider codes for licensed/certified mental health counselor, clinical social worker; psychologist, family/marital therapist, or psychiatrist)
- Visit for a mental health service (defined by the Physicians Current Procedural Terminology (CPT) code or ICD-procedural codes for psychotherapy, psychoanalysis, psychiatric management, counseling, or group/family therapy, etc.)
- Claim for a psychotropic medication prescription (defined by National Drug Codes/NDC for psychotropic medication: antidepressants, stimulants, antipsychotics, anxiolytics, etc); or
- A mental health diagnosis (ICD 9-CM codes: 292-312, 314) appeared in one of the diagnosis fields. For those beneficiaries with a secondary or tertiary mental health diagnosis, they were only considered mental health service users if one of the other criteria were met.

Analytic Design. For the majority of these analyses, we employed a pre-post intervention evaluation methodology. Once the data were formatted and prepared for analyses, using the pre-post intervention design, we examined utilization patterns and reimbursement data for a one-year period prior to the demonstration (i.e., baseline) and a one-year period of data following full implementation of the demonstration. The main evaluation analyses measured changes pre- and post-demonstration in the amount, type, and cost of mental health services provided to TRICARE beneficiaries. All analyses examined group differences between beneficiaries in the demonstration site and those receiving care in the non-demonstration (comparison) site as well as differences by type of provider (LMHCs, Other Mental Health Providers, and Physicians, we further break out Psychiatrists and Other non-Psychiatrist Physicians). Using a hierarchical approach, we grouped by LMHC first, followed by psychiatrists, non-physician Other Mental Health (OMH) providers, then by other physicians (e.g., primary care, internal medicine, etc). We used this hierarchical approach to isolate those beneficiaries who received care from LMHCs as the primary group of interest and then to eliminate overall among the groups. We do not intend these hierarchical groups to be directly comparable to one another. Because those seeing LMHCs may also be seeing a psychiatrist, primary care physician, or other mental health provider. Instead, we intend them to allow within-group comparisons across time (pre versus post demonstration): first, to determine if there was a shift toward use of LMHCs; second, to determine how the demonstration impacted utilization among LMHC users; and third, to determine how the demonstration may have affected utilization among those seeing only non-LMHC MH provider types.

Definition of Measures. Using the variables available in the administrative claim records provided by TMA, we constructed several measures of interest: outpatient visit counts, inpatient episodes, expenditures for outpatient visits and inpatient episodes, and payments to providers. Our operational definition of each of these measures is included in Appendix B.

Statistical Tests. All analyses were conducted using SAS version 8.02. To measure differences pre- and post- demonstration, where appropriate to the variable we used chi-square tests and tested differences in means with t-tests. To control for population differences, we used propensity score weighting to adjust the non-demonstration group population for differences in age, sex, member category, and interactions between these characteristics. Using the propensity score weights to control for variation in the only personal information we had available about the populations of interest, we compared weighted means across the two groups to test for statistical differences between the demonstration and non-demonstration areas on variables of interest. We first compared utilization across the two eligible populations, including the rate of any mental health care use and of counselor use. We then compared rates of use among those

seeing a LMHC. To determine if the demonstration had a significant impact on the variables of interest, we used a difference-in-difference approach to determine whether the differences (e.g., in utilization or costs) between pre and post in the demonstration area are significantly different than the differences between pre and post in the non-demonstration area.

Survey of Beneficiaries

To assess the extent to which the changing of reimbursement policies for LMHCs impacts the health and treatment of covered beneficiaries under the TRICARE program, we designed a cross-sectional self-report survey. This cross-sectional survey was administered approximately nine months after full implementation of the demonstration. Using administrative claims data for mental health service users, we drew a random stratified (by catchment area and provider group) sample of 1,200 beneficiaries who met our definition of a mental health user (e.g., all respondents were adult users of mental health services). Our final response rate was 46 percent using various prompts and re-mailings (but no financial or other incentive). This response rate is among the highest in the range obtained (between 6 percent and 47 percent) in field tests of the Experiences of Care and Health Outcomes (ECHO, Shaul et al., 2001). See Appendix C for details on survey fielding methods. Data collected allowed for a comparison of treatment outcomes of covered beneficiaries who receive mental health services from licensed or certified professional mental health counselors acting under physician referral and supervision, other non-physician mental health providers recognized under CHAMPUS and the TRICARE program, and physicians, with treatment outcomes under the demonstration project allowing independent practice of professional counselors on the same basis as other non-physician mental health providers."

Survey Content. An overview of the survey content is shown in Table 3.1. Much of the content was drawn from established and validated instruments used in both research and managed care. For example, we included key portions of the Experience of Care and Health Outcomes (ECHO) Survey that was developed by the Consumer Assessment of Health Plans measurement team (Eisen et al., 1999; 2000). We also drew items from the Patient Health Questionnaire (PHQ, Spitzer, et al., 1999; Kroenke, et al., 2001) to assess common mental disorders, from the survey instruments used in the Partners In Care (PIC, Wells, et al., 2000) study and the Medical Outcomes Study (MOS, Ware & Sherbourne, 1992).

In addition, we also asked some new and unique items to assess knowledge about the demonstration and exposure to the war in Iraq, which was ongoing during the field period, to understand their impact on mental health service use and outcomes. Because of the timing of the field period and the ongoing war, the evaluation of the demonstration effect is subject to

confounding. In other words, it would be difficult to ascertain whether any effects we observe are due to the demonstration or to the war itself. Therefore, we thought it critical to incorporate some measures of the war's impact into our evaluation by including a proxy for "war exposure." This would at the very least allow us to measure its impact and where we observe variation, examine any demonstration effects over and above any differences due to the war.

Table 2.2 Summary of Survey Content and Flow

Domain/Concept	Source
Treatment for Personal or Emotional Problems	ECHO
Counseling or Treatment	PIC
Medication and Other Health Remedies	PIC
Health Plan and Mental Health Benefits	ECHO
Health Status	PHQ, ECHO
Attitudes about Health and Health Care	MOS, PIC (DiMatteo et al., 1992; 1993; Link et al, 1991)
Knowledge of the TRICARE Demonstration	New items
Exposure to war in Iraq	New items
Demographics	Standard

Analysis. We created sample weights to adjust for differences across respondent age groups. To derive the weights, we first examined results from a logistic regression model that predicted response from a key set of variables we thought would affect findings (age group, provider type, gender, and demonstration region). In this model, only age group was a significant predictor of response/non-response. To adjust for this potential bias, we used that logistic regression model to predict the probability of response for all of the responders, and computed the non-response weight as 1/(predicted probability of response). All survey analyses are presented for the weighted data e.g., with the sample size inflated to represent the distribution across age groups for the entire sampling frame.

Our first set of analyses examined the bivariate differences for beneficiaries who received mental health care services from a provider in the demonstration sites compared with those receiving services in the matched non-demonstration comparison sites. We used Chi-square statistics to analyze differences for binary indicators and categorical measures and we used t-tests to compare means for continuous measures. We then included key variables (e.g., indicator of demonstration status, demographics) along with clinical, service/treatment use, and

attitude/perception variables in multivariable models if they were significant in the bivariate analysis. In addition to examining the impact of the demonstration, we also identified key factors associated with those outcomes. We also tested the impact of the Iraq war on TRICARE beneficiaries. We asked respondents whether any of their family members or close friends were deployed for the recent war in Iraq and also among those who had, whether any of them were back from their tour of duty. These measures were included in multivariable analyses to evaluate the impact of war factors on service use above and beyond adjustment for other types of variation in the respondent sample. All analyses were weighted to reflect the survey sample of 1,200. Thus our multivariable models adjusted for demographics, barriers to care, stigma, and impact of the Iraq war.

For these multivariable analyses, we selected a subset of outcome measures that we believed could have been affected by the demonstration. We included measures of access to mental health care (receipt of mental health care in the last 6 months, receipt of counseling from a mental health care provider in the past 4 weeks, taking any medication for a mental health problem in the past 6 months, and taking a prescription medication for a mental health problem in the past 6 months), adherence to mental health treatment (general adherence, adherence with medications, and adherence with counseling), indicators of mental health status (whether emotional or personal problems affected functioning, probability of having major depression, probability of having panic disorder, and probability of having somatic disorder), and selected HEDIS indicators of mental health care services (overall rating of counseling/treatment, whether they got urgent treatment as soon as needed, whether they got an appointment as soon as wanted, whether they got help by telephone, and whether they waited more than 15 minutes to see a clinician). These binary indicators were scored from the ECHO items to assess consumer experience with specialty behavioral health care. Thus, the indicators have broader application because they identify current performance standards in managed behavioral healthcare organizations and are compatible with the National Commission on Quality Assurance (NCQA) accreditation requirements.

Qualitative Interviewing

We implemented a series of qualitative interviews with LMHCs and other relevant stakeholders regarding the implications and effects of independent LMHC practice under TRICARE. Our interviewing efforts were particularly designed to elicit data on five of the key issues posed by Congress (PL 106-398):

- Administrative costs incurred as a result of required referrals to, and supervision of, LMHCs;

- Effects of independent practice for LMHCs on confidentiality for TRICARE beneficiaries;
- Effects of independent practice policies on MHCs' willingness to participate as providers in TRICARE;
- Any policy requests or recommendations regarding LMHCs made by health care plans or MCOs participating in TRICARE.

Data Sources. In order to address these items, we undertook three separate sets of interviews. First, we spoke with TRICARE clinical providers, including LMHCs, clinical psychologists, and psychiatrists, from both the demonstration and non-demonstration regions. An initial round of baseline interviewing was undertaken with all of the providers at the beginning of the demonstration period. In addition, a follow-up round of interviewing was undertaken at the end of the project, with those providers who participated in the demonstration. All of our interviewing was semi-structured and based on formal interview protocols. Copies of these protocols (baseline and follow-up) are available from the authors upon request. The focus of our interviewing with clinical providers was on administrative costs related to MHC practice requirements; on patterns of practice, supervision, and clinical outcomes in connection with MHC practice requirements; and on patient confidentiality and communications practices as related to MHC practice requirements.

Second, we undertook a separate set of interviews with TRICARE MCSCs responsible for administering mental health benefits. Again, we conducted baseline interviews with MCSC officials in both demonstration and non-demonstration regions, and then did follow-up interviews with MCSC officials in the demonstration region. All of our MCSC interviewing was semi-structured and based on formal interview protocols, and copies of these protocols are available upon request. The primary focus of these interviews was to investigate administrative costs to MCSC associated with MHC practice requirements; MCSCs' perceptions of effects on clinical outcomes and confidentiality associated with independent MHC practice; and any related policy requests or recommendations made by the MCSC.

Lastly, we conducted several additional interviews with other stakeholders affected by TRICARE's practice requirements for LMHCs. In particular, we spoke with representatives from national counseling organizations (the American Counseling Association, and the American Mental Health Counselors Association), with a representative from the Military Association of Officers Association of American (formerly known as The Retired Officers Association, a membership advocacy group), with an official from the Clinical Quality Programs Division within the office of the Chief Medical Officer for TRICARE at Department of Defense, and with a congressional staff person on one of the defense oversight committees (with responsibility for the authorizing legislation for the TRICARE Demonstration). These interviews were undertaken to

obtain background information on practice by LMHCs, the historical origins of current administrative requirements in TRICARE, and potential policy implications for the TRICARE Demonstration. These interviews were less structured and more open-ended than those involving clinical providers or MCSCs, since the purpose of these interviews was to provide context and background information, rather than primary data for evaluating results from the demonstration.

Analytic Approach. Qualitative data analysis for the evaluation was conducted primarily by generating matrices of interview findings, and by examining responses to specific interview questions as aggregated by respondents' demonstration status (participating vs. not participating) and by clinical profession (e.g., LMHCs vs. other clinical providers). In addition, pre- and post-comparisons of interview findings were generated for those clinicians and MCOs who actually participated in the demonstration. Based on the patterns of responses reflected in these matrices, we endeavored to address several major evaluation issues concerning the impact of the demonstration on administrative costs, confidentiality, willingness by LMHCs to serve as TRICARE providers, and related policy recommendations concerning LMHC practice requirements. In addition, where qualitative findings were relevant, we drew from those findings to supplement our interpretation of the quantitative data from our analyses of TRICARE claims, and of survey responses of TRICARE beneficiaries.

CHALLENGES ASSOCIATED WITH THE EVALUATION

In late 2002, as DoD moved forward with efforts to implement this demonstration and we developed our evaluation strategy, the United States began major deployments in preparation for Operation Iraqi Freedom. At the same time, military personnel were still deployed in Afghanistan for Operation Enduring Freedom. Major combat operations in Iraq began in Spring 2003, just as the expanded access demonstration was getting underway. Both the demonstration catchment areas as well as the non-demonstration areas include military installations with deployable forces, both active duty as well as reserve components. While detailed data about the number of personnel deployed from these regions were not available to us, forces were deployed from both the non-demonstration as well as the demonstration areas during the course of this study.

As we outlined earlier, military life and related deployments can have a psychological impact on the families and loved ones of military personnel both during peacetime as well as during wartime. This impact is likely to cause increased stress and could result in a higher need for mental health support and services. As a result, changes in mental health service utilization patterns among military health beneficiaries can be expected during major deployments and combat operations. It should therefore be recognized that the impact of the war and these major

deployments might confound any effort to isolate the impact the demonstration on utilization (and thus costs) of mental health care.

In an attempt to examine the potential impact of the war on mental health service need and utilization, we developed items for inclusion on the survey of beneficiaries. We then aimed to use these data in our multivariable models to examine differences in self-reported need, barriers to access, and service utilization between respondents from the demonstration and non-demonstration regions.

Since the survey data could not be linked to the administrative claims data, and there were no comparable administrative data available to us with respect to whether or not a particular beneficiary had a loved one deployed—we could not examine or control for the impact of the war in the administrative analyses of utilization and costs. Therefore, we offer caution here and again in the results that any increases in utilization and costs observed between the pre and post period in either the demonstration region or non-demonstration could be a related consequence associated with the war in Iraq and not just the demonstration.

It should be noted that the major deployments over the past three year might also impact the availability of mental health services for beneficiaries—such that if mental health personnel who were also reservists (and working in the civilian, purchased care sector) may have been deployed, decreasing the number of the available providers to treat military health system beneficiaries.

PRESENTATION OF RESULTS

In the following three chapters, we present the results of these efforts organized by the relevant perspective of impact. Referring back to Figure 1, we first present findings with respect to the impact the demonstration had on two primary stakeholders of interest: TRICARE beneficiaries (Chapter 3) and TRICARE providers (Chapter 4), using data from the survey of beneficiaries and the qualitative interviews. Then, we present the overall findings with respect to the impact on the TRICARE system (Chapter 5) as a whole with respect to utilization and costs based on the administrative claims data. We recognize that beneficiaries and providers are part of the overall TRICARE system, however, organizing the results in this fashion allowed us to use the conceptual framework to categorize the objectives of the evaluation and sources of data. Data presented in tables throughout this report may not add to 100% due to rounding.

3. IMPACT ON BENEFICIARIES

To address the evaluation objective of determining the extent of the demonstration's impact on outcomes, we developed and fielded a survey of TRICARE beneficiaries using mental health services in the demonstration and non-demonstration comparison catchment areas. In this chapter, we present data from the sample of 553 respondents who completed the survey.[6] A copy of the survey and details about its development and fielding procedures are provided in Appendix C. To our knowledge, this is the first survey that has examined the perspectives of TRICARE beneficiaries who use mental health services. In addition, these data represent the only independent study to examine mental health symptoms and other factors related to use of mental health services for this population. This chapter also discusses the potential impact of the demonstration on beneficiary confidentiality.

CREATION OF DERIVED VARIABLES

From the raw survey items, we created a set of derived variables that were used in the final analyses. These variables are described fully in Table D.1 of Appendix D. We include the scoring rules and show descriptive data for the overall sample of respondents e.g., the mean and standard deviation for continuous measures or the percent for binary measures. These variables include characteristics of the study design (e.g., an indicator of demonstration versus non-demonstration, sample selection criteria, exposure to demonstration), demographic characteristics (e.g., age group, gender, education, race/ethnicity), health characteristics (e.g., clinical status, functioning), use of mental health services and treatments (e.g., reported utilization, use of psychotropic medications), and perceived access to mental health care (e.g., perceived and experienced barriers to care, adherence, HEDIS indicators from the ECHO survey). We also included indicators for personal experience with the recent deployment of a close friend or family member and the extent to which this impacted on the use of mental health services.

DATA ANALYSIS

All of the data presented in this chapter for the 533 respondents are weighted to represent the eligible sample of 1,200 beneficiaries. We present the weighted bivariate means (for continuous measures) or percentage (for binary indicators) comparing TRICARE beneficiaries in the demonstration (demo) catchment areas with beneficiaries in the non-demo catchment areas.

Statistical significance for these 2-group comparisons is shown in the form of t-tests for continuous measures or Chi-square statistics for categorical or binary measures. Tables D.2-D.12 in Appendix D are organized by type of measure (e.g., health characteristics, use of services, etc.). We also present results from a set of multivariable regression models (ordinary least squares for continuous outcomes and logistic regression for binary outcomes). These models adjust for key design and demographic variables, variables that differed significantly by demonstration status, and other factors (e.g., barriers to mental health care, impact of Iraq war) that would be expected to affect outcomes. While we highlight many of these findings in the text, these analyses are summarized in a complete set of Tables (D.14-D.17) in Appendix D. .

SURVEY RESPONDENT SAMPLE DESCRIPTION

Overall, the sample was evenly distributed across age category (14 to 23 percent per age category), was predominantly female (82 percent), close to a third had a college education (27 percent), and 81percent were white. The majority of the respondents were US born (89 percent) and had children (80 percent). Of those with children, 24 percent reported that their children had also gotten counseling in the past 6 months. Only 12 percent lived alone and about half (44.9 percent) were currently working. Surprisingly, a fifth of the respondents (20 percent) was not currently working due to health problems.

COMPARISON OF DEMONSTRATION VS NON DEMONSTRATION MENTAL HEALTH USERS

Using responses from the survey of beneficiaries, we examined differences in characteristics of mental health users in the demonstration catchment areas as compared to those in the non-demonstration areas. In bivariate analyses (Table 3.1 and Tables D.2-D.13 in Appendix D), we found differences in several demographic characteristics by demo vs non-demo site. Beneficiaries in the demonstration region were younger (χ^2=29.5, p<.001), more likely to be college educated (χ^2=4.2, p<.05), less likely to be African-American (χ^2=7.0, p<.01) and more likely to be white (χ^2=4.3, p<.05), less likely to live alone (χ^2=5.9, p<.05), and more likely to be currently working (χ^2=6.6, p<.05) compared with beneficiaries in the non-demonstration regions. Table 3.1 shows the demographic characteristics of survey respondents by demonstration site.

Table 3.1 Demographic Characteristics of Survey Respondents

Characteristic (%)	Non-Demo (N=282)	Demo (N=271)	t or X^2
Age Group			29.46***

18-24	13.1	18.8	7.00**
25-34	19.5	18.8	0.08
35-44	19.1	23.5	3.38
45-54	18.8	21.4	1.24
55-64	16.5	11.3	6.59*
65+	13.0	6.2	15.67***
Male	19.1	17.0	0.94
Education			17.74**
High school or less	24.3	25.5	0.24
Some college	50.9	44.9	4.21*
College graduate	24.8	29.6	3.34
Latino Ethnicity	6.0	6.0	0.00
Race			13.11*
White	82.4	86.9	4.33*
Black	10.9	6.5	7.04**
Other	6.7	6.6	0.00
US Born	89.7	89.2	0.10
Have Children	79.2	81.0	0.58
Child(ren) Received MH Care	32.0	30.8	0.17
Live Alone	14.9	10.2	5.93*
Working	41.9	49.3	6.55*
Not Working Due to Health	31.7	27.2	2.00

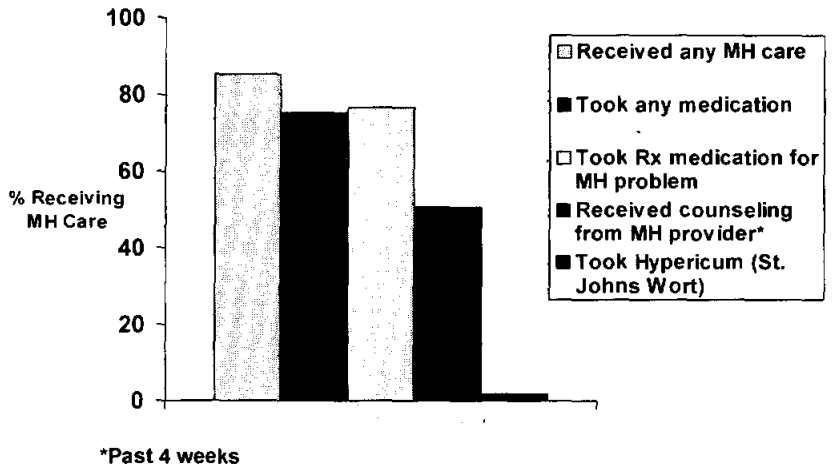
p<.05, ** p<.01, ***p<.001

Percentages may not add to 100% due to rounding.

Figure 3.1 shows the extent to which mental health service users received particular types of care for their personal or emotional problems during the past 6 months. While the sampling frame was defined based on recorded use of mental health services, only 85 percent of the survey respondents reported having used some type of mental health service or treatment during the evaluation period. Most reported using some type of medication during this period (75.5 percent), and the same proportion reported taking a prescription medication for their mental health problem (76.7 percent). Slightly more than half of the survey respondents (50.8 percent) reported having received counseling from a mental health specialist in the past 4 weeks. Very

few of the beneficiaries in this survey respondents reported using available alternative over-the-counter remedies e.g., Hypericum or St. John's Wort (1.9 percent).

Figure 3.1 Use of Mental Health Services and Treatments in the Past 6 Months

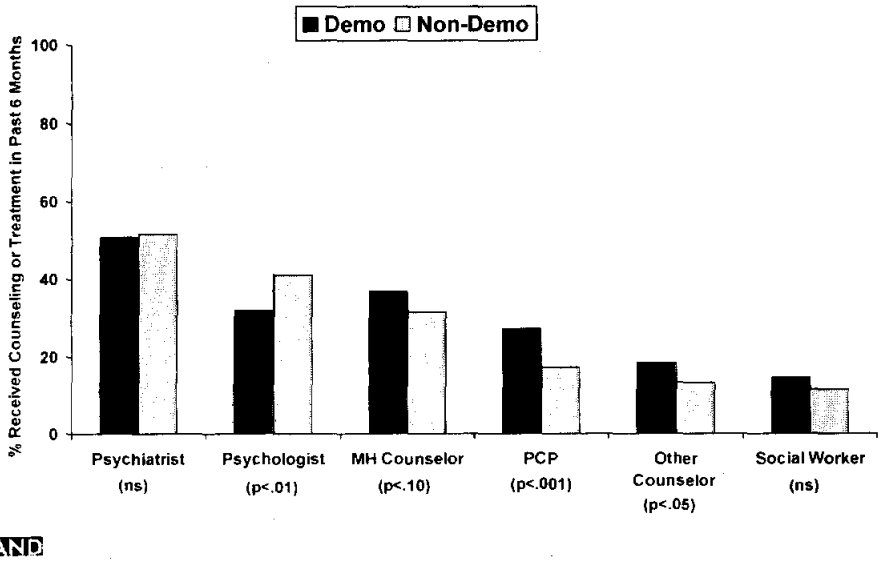


In terms of demonstration differences in reported use of services, we found that beneficiaries in the demonstration region also were 4.3 percent more likely to have received MH care within the past six months (χ^2=4.3, p<.05). However, we also found that beneficiaries in the demo were 8.1 percent less likely to have received counseling from a MH provider (χ^2=6.5, p<.05).

Figure 3.2 shows the percent of beneficiaries reporting the type of provider that they talked to or saw for counseling or treatment in the past six months. Respondents could have seen multiple types of providers so we allowed for overlap. These provider utilization rates (ordered by prevalence) are based on 85 percent of the survey respondents, as 15 percent did not answer this question. The figure shows that psychiatrists were visited at the highest rates (by 51.1 percent of beneficiaries) followed by psychologists (36.3 percent) and MH counselors at a roughly equivalent rate (34.3 percent). Nearly a quarter of the respondents (22.5 percent)

reported seeing a primary care provider. Other mental health providers (psychiatric nurses, chaplain/religious counselors, or marriage/family counselors) and social workers and were visited at the lowest rates (15.9 percent and 13.2 percent respectively). We did not find differences by demonstration respondents as compared to non-demonstration respondents for use of psychiatrists or social workers but did observe differences for other types of providers. Beneficiaries in the demonstration regions compared with those in non-demonstration regions were significantly less likely to use psychologists (χ^2=9.3, p<.01) and more likely to use PCPs (χ^2=13.8, p<.001), other counselors (χ^2=5.1, p<.05), and there was a trend for slightly greater (not significant) use of LMHCs (χ^2=2.9, p<.10). We also examined the distribution of provider type that respondents reported having seen most recently (not shown). These distributions are not directly comparable to the data in Figure 3.2 because the question about past 6 months allowed for multiple responses and the question about the most recent provider required only a single choice. However, the patterns are very similar, albeit lower overall, with the highest rates of use for psychiatrists, psychologists, and mental health counselors. There was a highly significant difference overall in this distribution by demo region (χ^2=30.4, p<.001) with the most striking differences for psychologists (less use in the demo region) and mental health counselors (more use in the demo region).

Figure 3.2 Type of Provider Seen for Counseling or Treatment in the Past 6 Months



We also found several differences in health and service use characteristics. For example, differences included greater frequency in emotional or personal problems that affected functioning (72.6 percent vs. 66.3 percent, $\chi 2=5.6$, $p<.01$) among respondents in demonstration region compared with non-demonstration region, more perceived barriers to mental care due to family-related problems (28.6 percent vs. 19.4 percent, $\chi 2=13.2$, $p<.01$). Beneficiaries in the demonstration also reported more use of mood stabilizers (9.1 percent vs. 5.4 percent, $p<.05$) and antipsychotic medications (13 percent vs. 6.0 percent, $\chi 2=4.7$, $p<.001$), along with lower use of benzodiazepenes (12.4 percent vs. 18.2 percent, $p<.01$) relative to those in non-demonstration areas. In terms of HEDIS indicators of access to care, we observed a handful of differences. Beneficiaries in the demonstration areas were more likely to report improvement in dealing with daily problems (42.4 percent vs. 36.6 percent, $p<.05$), to report that they always got urgent treatment as soon as needed (44.9 percent vs. 28.5 percent, $p<.01$), that they got help by telephone (25.7 percent vs. 28.5 percent, $p<.01$), but less likely to report that they never waited more than 15 minutes for an appointment (55.7 percent vs. 58.5 percent, $p<.05$). Among demonstration area beneficiaries, there was a higher percent with a close friends or family members deployed for the recent war in Iraq (34.5 percent vs. 28.5 percent, $\chi 2=5.0$, $p<.05$), and among those reporting deployments, a higher percent reporting that those deployed had not returned from duty (19.8 percent vs. 14.4 percent, $\chi 2=6.2$, $p<.05$) for beneficiaries in the demonstration regions compared with non-demonstration controls. We found no bivariate differences by demonstration status in mental health symptoms or probable disorder, use of services and treatments, other barriers to care, or HEDIS indicators of access to mental health care.

To test the extent to which survey respondents who were TRICARE users of mental health services were aware of the changes made to expand access to LMHCs, we looked at their reported awareness. Overall, only 4.8 percent of beneficiaries knew about the demonstration project before receiving the survey, and while there was a slight trend for awareness to be higher among beneficiaries in the demonstration compared with those from non-demonstration catchment areas, this difference was not statistically significant (5.9 percent vs. 3.7 percent, $\chi 2=3.2$, $p=.07$).

IMPACT OF DEMONSTRATION ON BENEFICIARY TREATMENT OUTCOMES

In multivariable analyses, we observed little effect of the demonstration on beneficiary outcomes. We observed no differences by demonstration area in measures of access to mental health services (Table D.14), adherence to treatment (Table D.15), or mental health status, including in endorsement of symptoms of probable mental disorders such as depression, anxiety,

panic as well as suicidal ideation (Table D.16). There were two exceptions. Beneficiaries living in the demonstration areas had a 32 percent lower likelihood of having received counseling from a mental health provider in the past 6 months (OR=0.68, 95 percent CI: .51, .90, p<.01). Beneficiaries living in the demonstration also had a 36 percent greater chance of having emotional problems affect their functioning (OR=1.34, 95 percent CI: 1.00, 1.81, p<.05).

We found a number of effects of the demonstration on HEDIS indicators of mental health services (Table D.17). Living in the demonstration area was associated with a nearly twofold greater odds of favorably rating counseling and treatment as a 9 or 10 on the 0-10 scale (OR=1.95, 95 percent CI: 1.40, 2.70, p<.001), a greater chance of reporting an ability to "usually or always" get urgent treatment as soon as needed (OR=3.97, 95 percent CI: 1.76, 8.95, p<.001), a 1.5 greater odds of being able to "usually or always" get an appointment as soon as wanted (OR=1.54, 95 percent CI: .96, 2.50, p=.08), a more than threefold greater chance of rating that they could get help by telephone (OR=3.59, 95 percent CI: 1.59, 8.12, p<.001), but a 46percent lower odds of never having to wait 15 minutes or more to see a clinician (OR=0.54, 95 percent CI: .34, .86, p<.05). It should be noted however, that these differences may have existed prior to the demonstration period as well, particularly given that the demonstration area was known to have high mental health service utilization prior to the demonstration and was chosen based on this utilization and provider availability.

PERCEIVED ACCESS TO MENTAL HEALTH CARE

Other factors associated with access to mental health care include age group, perceived barriers to care, perceived job stigma, and whether the beneficiary knew someone close deployed to the war on Iraq. Older beneficiaries were more likely to receive counseling and to be taking medication for a mental health problem (Table D.14). For example, both those age 35-44 and those age 55 or over were twice as likely as those under age 25 to have gotten counseling (OR=2.04, 95 percent CI: 1.27, 3.28, p<.01) and those age 44-54 were more than twice as likely to be taking a prescription medication for a mental health problem (OR=2.43, 95 percent CI: 1.33, 4.42, p<.01).

Despite all respondents having a claim record for mental health service use, survey respondents beneficiaries with a higher score on the job stigma scale were less likely to have reported receiving mental health care (OR=0.81, 95 percent CI: .69, .94, p<.01) and those who perceived that stigma was a barrier to care were nearly three times as likely to be taking a prescription medication for a mental health problem (OR=2.84, 95 percent CI: 1.80, 4.47, p< .001).

Another significant factor associated with access was whether or not anyone close to the beneficiary was deployed to the Iraq war. Deployment of a friend or family member was associated with a higher likelihood of receiving counseling from a mental health provider (OR=1.74, 95 percent CI: 1.26, 12.41, $p < .001$) and a lower likelihood of taking a prescription medication for a MH problem (OR=0.58, 95 percent CI: 0.40, .84, $p<.01$).

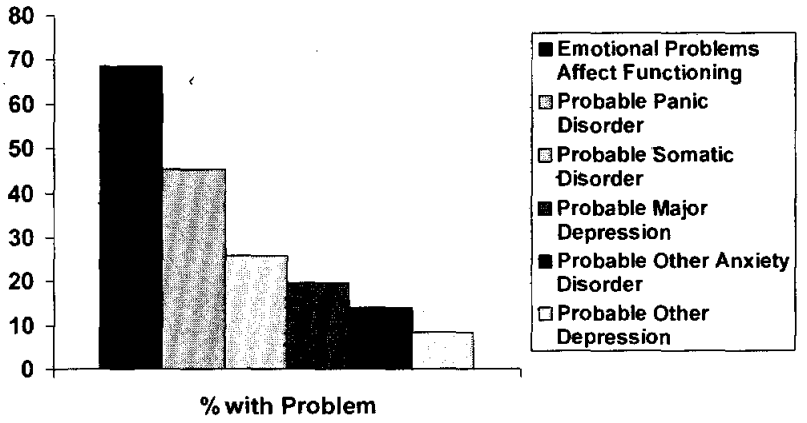
ADHERENCE TO CARE

Very few of the factors studied were linked with adherence. As with access, relative to the youngest group of beneficiaries, older beneficiaries scored higher on the medication adherence scale. For example, beneficiaries age 25 or over relative to those under age 25 were 8-10 times more likely to adhere to their medication regimens. In addition, beneficiaries who perceived that not being able to get help was a barrier to care had lower general adherence.

MENTAL HEALTH STATUS

Figure 3.3 shows the percent of survey respondents who have mental health problems by type of problem (either probable disorder or problems interfered with functioning). Close to 69 percent reported having an emotional or personal problem that made it difficult for them to do work, take care of things at home, or get along with other people. As much as 45.2 percent of the respondents endorsed items in the PHQ that indicate a high probability of having panic disorder. The probability of having one of the other mental health disorders ranged from eight percent to 26 percent.

Figure 3.3 Percent of Beneficiaries with Mental Health Problems



RAND

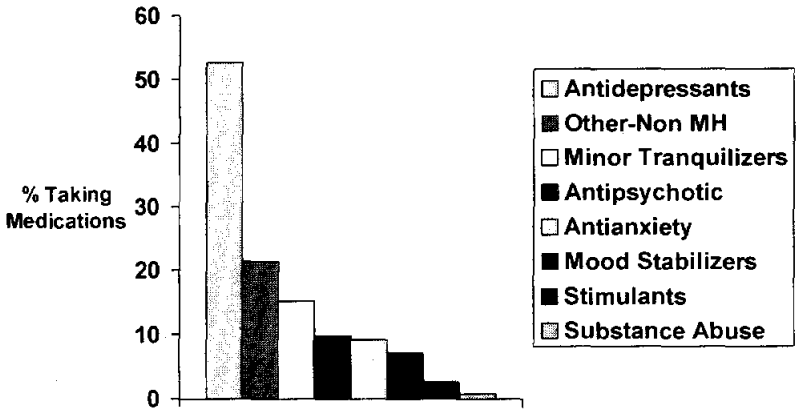
We found that age was a significant predictor of mental health status. Being age 45-54 was associated with a two-fold greater odds of reporting that an emotional or personal problem affected functioning, a more than threefold greater risk of having probable major depression, and a two-fold increase in probable somatic disorder relative to other age groups. Being a college graduate was associated with a lower likelihood of having probable disorder (major depression, panic, or somatic) as was being black. Beneficiaries who were currently employed were 42 percent less likely to have panic disorder (OR=0.58, 95 percent CI: 0.43, .77, p<.001). Endorsing several perceived barriers also affected mental health status. Family barriers were associated with more functioning problems (OR=1.99, 95 percent CI: 1.31, 3.01, p<.01) and a greater likelihood of having major depression (OR=1.81, 95 percent CI: 1.19, 2.75, p<.01). Perceiving an inability to find help was associated with more than a threefold odds of having major depression (OR=3.43, 95 percent CI: 2.11, 5.58, p<.001) and a two-fold odds of having somatic disorder (OR=2.04, 95 percent CI: 1.27, 3.25, p<.01).

Having received mental health care due to the war on Iraq had a significant association with three of the four mental health status outcomes shown in Table D.16. Those who got mental health care for war-related reasons were five times more likely to have emotional or personal problems that affected functioning (OR=5.01, 95 percent CI: 2.46, 10.17, p<.001), 3.89 times more likely to have probable major depression (p<.001), and 2.75 time more likely to have probable somatic disorder (p<.001).

SATISFACTION WITH AND USE OF MENTAL HEALTH CARE SERVICES

The overall weighted distribution of medication use is shown in Figure 3.4. Over half (52.7 percent) of the survey sample of mental health service users reported taking an antidepressant medication whereas only 21.4 percent were taking some other non-MH medication for a mental health problem. There was also a somewhat high rate of benzodiazapine (e.g., minor tranquilizers) use (15.3 percent).

Figure 3.4 Percent Taking Psychotropic Medications by Type



RAND

Additionally, beneficiaries who perceived barriers to access were significantly less likely to rate their counseling and treatment as high (OR=0.45, 95 percent CI: 0.30, .67, p<.001) and less likely to get an appointment as soon as they wanted (OR=0.26, 95 percent CI:0.13, .50, p<.001) whereas beneficiaries reporting professional circumstances as a barrier to care more than three times greater odds of getting urgent mental health care as quickly as needed (OR=3.27, 95 percent CI: 1.37, 7.82, p<.01, Table D.17).

IMPACT OF IRAQ WAR

Across the entire survey sample, 31.5 percent reported that they had a close family member or friend deployed to the war in Iraq. Among those experiencing a deployment, 17.1

percent reported that the person had not yet returned from duty. Twelve and a half percent of the survey respondents said that they had received mental health care due to the war.

We also ran a logistic regression model that predicted receipt of mental health counseling due to the war in Iraq to identify the factors associated with this type of service use (not shown). There was a slight tendency for survey respondents in the demonstration areas to have less use ($p<.05$), for older beneficiaries to have received less care of this type ($p<.01$), for working beneficiaries to use less ($p<.001$), for cost barriers to lower use ($p<.05$), for perceptions of access and family-related barriers to be associated with receiving more mental health care, and we observed a nearly 20 times greater odds of use among those who knew someone close that was deployed (OR=19.94, 95 percent CI: 11.22, 35.43, $p<.001$).

IMPACT ON BENEFICIARY CONFIDENTIALITY

The legislation requested a description of the ways in which allowing for independent reimbursement of counselors affects the confidentiality of mental health and substance abuse services for covered beneficiaries under the TRICARE program. Below we summarize our findings on the potential impact on beneficiary confidentiality.

As a threshold matter, LMHCs who provide clinical care to TRICARE beneficiaries are subject to the same legal privacy requirements as are all other healthcare providers under federal law. Pursuant to HIPAA and the Privacy Rules promulgated there under,[7] healthcare providers and healthcare plans have broad non-disclosure obligations in connection with personally identifiable health information. Providers (including counselors) are also required to take affirmative steps to protect the security of such information, by implementing specified administrative, physical, and technical safeguards. The Privacy Rules include a number of exceptions that allow providers to disclose protected health information. Most important among these is an exception for "treatment, payment, and operations" (TPO), which permits clinical providers to use and share protected health information in the ordinary course of delivering healthcare.

In principle, one could imagine at least two potential effects on confidentiality as a result of independent practice by LMHCs. First, to the extent that clinical supervision is designed to ensure counselors' compliance with privacy requirements, then removal of supervision might plausibly undermine that compliance. In practice, we found no evidence that the supervision requirement for LMHCs actually serves this purpose, nor that the removal of supervision was

[7] Health Insurance Portability and Accountability Act (HIPAA) of 1996, Pub. Law No. 104-191, 110 Stat. 1936 (codified as amended in scattered sections of 42 U.S.C.). Federal privacy and security rules enacted under HIPAA are codified at 45 C.F.R. Parts 160 and 164 (2004).

associated with any change in confidentiality standards. Second and at the other extreme, clinical supervision of LMHCs necessarily entails additional communications between providers, and could involve additional record-keeping by the supervisors and/or supervisees. In the abstract, any additional communication involving protected health information creates some incremental risk for wrongful or inadvertent disclosure. Here again, however, we found no direct evidence connected with the demonstration to show this kind of effect, in connection with supervised practice by LMHCs.

In order to investigate the effect on confidentiality of independent LMHC practice, we asked a series of related questions in our interviews with counselors themselves, with psychiatrists and psychologists, with TRICARE MCSC executives, with officials from the Department of Defense, and with representatives from several national professional organizations for counselors. In none of these interviews did we learn of any unique confidentiality issues or problems raised by the practice of LMHCs, whether supervised or independent. On a somewhat different note, a few providers did raise concerns regarding their uncertainty about what happens to patient information once it is communicated to TRICARE, and whether TRICARE has achieved compliance with all applicable HIPAA standards. These comments, however, were unrelated to the issue of independent practice by LMHCs.

4. THE IMPACT ON PROVIDERS

To understand the impact of the demonstration on TRICARE providers, we engaged in a series of interviews with TRICARE clinical providers in both demonstration and non-demonstration regions, both before and during the demonstration. We spoke with LMHCs, as well as with psychologists and psychiatrists, and in those interviews we addressed topics ranging from the providers' perspectives on TRICARE referral and supervision requirements, to the clinical roles of LMHCs in providing care to TRICARE beneficiaries. The purpose of the interviews was to address several of the evaluation questions originally posed by Congress, particularly with regard to the impact of the TRICARE referral and supervision policies on LMHCs and their scope of practice. More specifically, the interviews explored the impact of TRICARE's policies in terms of their effects on administrative burdens and costs, on providers' perceptions of autonomy, and on quality of care provided to beneficiaries. The dominant theme that emerged from the interviews was that the administrative requirement for physician referral was perceived as particularly burdensome by LMHCs, and that the removal of that requirement made it easier for LMHCs to see TRICARE beneficiaries. Far less clear from the interviews, however, were any specific or actual administrative (financial) costs to LMHCs connected with the referral and supervision requirements, other than the use of their time: Several counselors described the administrative demands under TRICARE as being as good as, or better than, those under many private-sector health plans. On a different note, LMHCs described a broad range of baseline practices with regard to supervision under TRICARE, with some counselors having engaged in very intensive supervision arrangements, and others describing much more sporadic or superficial experiences with supervision. Interview findings generally suggested that major changes in the nature of care provided, or in the clinical roles of LMHCs, were not likely to result from the removal of referral and supervision requirements. Taken collectively, these findings suggest that the demonstration may have yielded modest administrative savings for some LMHCs under TRICARE, while leaving unchanged their scope and patterns of practice, commitments to confidentiality, etc.

PERCEPTIONS OF AUTONOMY AMONG COUNSELORS

Administrative Burden Associated with Referral and Supervision

We began our interviews with LMHCs by asking them to describe the referral and supervision requirements under TRICARE, and their own administrative costs in complying with those requirements. Counselors from both demonstration and non-demonstration regions

indicated that the baseline policy under TRICARE required patients to receive a referral from a physician such as a psychiatrist or PCP as a predicate to their being seen by an LMHC. Once having obtained that referral, counselors reported that their TRICARE patients were generally entitled to 8 therapy sessions, with opportunity for more sessions based on a subsequent written authorization request made by the LMHC to TRICARE. Several of the counselors (from both demonstration and non-demonstration regions) said that the requirement that beneficiaries obtain a physician-referral in order to seek therapy from LMHCs had been a significant burden to their patients, and an impediment to beneficiaries receiving care from LMHCs as opposed to other sorts of therapists, e.g., social workers, psychologists, etc. Generally, though, this impediment was described as a discriminatory policy that made it harder for patients to access LMHCs, rather than as a source of administrative burden to counselors *per se*. Prior to the demonstration, none of the counselors identified the physician-referral requirement in itself as posing a substantial administrative burden or costs directly to them. After the demonstration, counselors who participated did say that the demonstration had reduced the amount of time they previously spent in telephoning physicians to try to obtain, or to confirm, referrals to authorize therapy.

With regard to fulfilling TRICARE's baseline requirements for supervision, the LMHCs with whom we spoke described a range of supervision practices. Some indicated that they received regular supervision from physician or psychologist colleagues (particularly in mixed group-practice settings), while others indicated that supervision was minimal, not required of them, or else (typically) limited to a review of session notes by a supervisor. Notably, two of the non-demonstration LMHCs we spoke with said that they did not believe they were required to receive supervision under TRICARE, and one said that she would not otherwise have been able to afford seeing TRICARE patients. For those counselors who participated in the demonstration, removal of the supervision requirement was reportedly not associated with major changes in their practice patterns or administrative burden/overhead. To the extent that LMHCs felt they experienced administrative savings in the course of the demonstration, they tended to attribute those savings more to the elimination of the physician referral requirement, rather than to the elimination of supervision. The theme that emerged from the interviews on supervision was that baseline supervision practices under TRICARE are highly varied, that some counselors are deeply committed to obtaining supervision regardless of TRICARE's requirements, and that in other instances compliance with the supervision requirement involves more form than substance. In consequence, it should perhaps not be surprising that removal of the supervision requirement during the demonstration was not perceived as having a major effect by participating LMHCs. During several of our interviews with LMHC, other mental health professionals, and managed care representatives, respondents suggested that credentialing and licensing standards might be

more useful as a quality-control mechanism than the current TRICARE requirements for supervision and referrals.

In order to try to understand the administrative burden associated with LMHCs' baseline practice under TRICARE, we asked counselors some broad questions about their administrative practices and activities, and about their experience of the comparative administrative burdens between TRICARE and other private-sector insurers. The counselors described their administrative activities as generally involving the writing of session notes, the formulation of treatment plans, the filing of claims for payment, periodic communications with psychiatrists and other collaborators in treatment (including, presumably, supervision-related communications), and requests for authorization to TRICARE for more therapy sessions beyond the original set of eight pre-approved sessions. Most of these types of activities were reportedly unaffected by counselors' actual experiences in the demonstration. Interestingly, more than half of the counselors, including both of those who actually participated in the demonstration, described TRICARE as being relatively easy and non-burdensome to work with from an administrative standpoint, as compared with other insurers. Only one of the 4 counselors we spoke to expressed a contrary opinion.

We also asked counselors to try to estimate the amount of time that they spent each week on TRICARE administrative activities, and for those who participated in the demonstration, the amount of time that they ultimately felt they saved as a result of the provisional independent practice authority. These estimates proved to be difficult for counselors to make in a consistent way, since some of them carried very small TRICARE case loads, others described receiving significant support from clerical assistants, and still others drew a distinction between time spent on "ordinary" administrative activities vs. appeals of disputed TRICARE claims. Notwithstanding these potential confounds, of the four counselors who sought to answer this question, the average amount of time reportedly spent on TRICARE administrative matters was about 10-15 minutes per patient per week. For the two counselors we interviewed who participated in the demonstration, both indicated that during the course of the demonstration, they saved administrative costs by reducing time spent seeking authorizations from physicians on behalf of TRICARE beneficiaries. One counselor estimated saving about 1 hour of related administrative time per week, on a caseload of about 25 or 30 TRICARE patients per week. The other estimated saving about 1 hour of administrative time per TRICARE case, over the lifetime of each case [of which the length was not specified]. Both participating counselors described these administrative savings as making their practices under TRICARE significantly less burdensome than they had been prior to the demonstration.

Perceptions of Role Change Among Counselors

In addition to asking LMHCs about the administrative costs and burdens of working with TRICARE patients, we also asked them several questions about the nature of their clinical practice, about LMHCs' roles under TRICARE, and about any likely advantages, disadvantages, or changes that they might anticipate as a result of eliminating the referral and supervision requirements. In general, the counselors described providing a broad range of psychotherapy services to adult, adolescent, and child clients. The majority of the counselors with whom we spoke did not feel that LMHCs needed to be supervised for these types of clinical activities, and several asserted that there was no reason for discriminating between LMHCs and other sorts of clinicians (e.g., social workers) on a professional basis. The counselors uniformly expressed the opinion that there would be little change in their professional roles as a result of the removal of TRICARE referral and supervision requirements. Several noted that it would probably become easier and/or quicker for LMHCs to see TRICARE patients under the demonstration, and one of them suggested that public and professional perceptions about LMHCs might improve as a result of independent practice authority. None of the counselors identified any unique disadvantages accruing to unsupervised practice by LMHCs, but some did suggest advantages for TRICARE beneficiaries, including: (1) the possibility of more rapid access to crisis services, and (2) improved access to therapists generally during wartime mobilizations (when many TRICARE psychologists and psychiatrists might themselves be deployed overseas).

The two participating counselors with whom we spoke following the demonstration indicated that there had been no demonstration-related changes in their professional roles and activities, apart from reducing the administrative time they spent seeking physician referrals. Both perceived that the main effect of the demonstration had been to facilitate access by TRICARE beneficiaries, allowing them to enter treatment more easily and more quickly. Based on their experiences under the demonstration, both participating counselors expressed the hope that TRICARE would remove the referral and supervision requirements on a permanent basis.

PERSPECTIVES OF PSYCHOLOGISTS AND PSYCHIATRISTS ON INDEPENDENT PRACTICE BY LMHCS

In order to supplement our information on the potential administrative savings and clinical implications of independent practice for LMHCs, we also undertook interviews with several psychologists and psychiatrists practicing under TRICARE. We spoke with these providers for several reasons. First, we wanted to obtain some sense of the administrative activities and burdens of TRICARE practice, as perceived by mental health clinicians other than LMHCs. Second, we wanted to explore administrative issues relating to the supervision of LMHCs with some of the people who might actually perform a supervisory function (note that there is no

formal documentation that was readily available to indicate which providers actually conduct the supervision of LMHCs, since there is no official paper trail of the referral or the supervision). Third, we wanted to obtain some general impressions about LMHCs' practice and clinical roles, from the perspective of allied professional disciplines. Note that we initially intended also to speak with PCPs under TRICARE, who (among other things) potentially serve as a major referral pathway for patients to LMHCs. In practice, however, no PCPs were willingto take the time to speak with us about the TRICARE Demonstration and the associated roles and responsibilities of LMHCs. Our experience suggests that practice issues relating to LMHCs are likely a very minor concern from the perspective of TRICARE PCPs, most of whose time and energy is devoted to other clinical and administrative challenges.

The psychologists and psychiatrists with whom we spoke had diverging opinions about the administrative burden of practicing under TRICARE. One psychologist and two psychiatrists described the administrative burdens associated with practice under TRICARE as not very great, or no greater than those of other health plans. A second psychologist indicated that TRICARE is very burdensome in the procedures it requires for requesting additional therapy sessions (beyond the initially pre-approved eight sessions). On a related note, one of the psychiatrists said that TRICARE's documentation requirements concerning medication management have been greatly simplified in recent years and are now very limited. He suggested that practice under TRICARE was likely to be more administratively burdensome for non-physician psychotherapists. In general, the psychologists and psychiatrists described similar administrative activities and record-keeping for their TRICARE patients, as did LMHCs. Again, these activities include the writing of intake evaluations and session notes, the formulation of treatment plans, the filing of claims for payment, periodic communications with collaborators in treatment, and (at least for psychologists) requests for authorization to TRICARE for more therapy sessions beyond the original set of eight sessions. And again, the providers had difficulty in quantifying their own administrative costs associated with these tasks. One of the psychologists estimated that he spent about 10-15 minutes per TRICARE patient per week on related administrative activities.

With regard to supervising LMHCs under TRICARE, only one psychiatrist from among our four respondents actually had direct experience in performing such supervision. He indicated that LMHCs under his supervision had submitted written documentation to him about the treatments that they provided and that he had been required to report the appropriateness of such documentation to TRICARE. The psychiatrist described this supervisory process as very burdensome and as "jumping through hoops." He also indicated that the administrative costs of his supervisory time were borne by the LMHCs that he supervised, not by TRICARE. The psychiatrist concluded that from his perspective, this system of supervision was not effective as a

quality-control device for LMHCs, and he did not identify any specific concerns or disadvantages related to the prospect of unsupervised practice by LMHCs under the demonstration. Both the psychiatrist and a psychologist (both of whom practiced within the demonstration region) indicated that they had some experience with making treatment referrals to LMHCs. Neither felt that such referrals posed any significant administrative burden or costs from their own point of view.

With regard to the scope of LMHC practice, their general qualifications, and the advantages and disadvantages of eliminating referral and supervisory requirements under TRICARE, the psychologists and psychiatrists held mixed views. One psychologist said that he had no familiarity with LMHCs, their credentialing requirements, or their qualifications for independent practice. The other respondents all indicated that at least some LMHCs were qualified to provide independent treatment for at least some types of patients or psychiatric conditions, subject to having appropriate training and expertise. One provider said that he would refer patients only to LMHCs whom he personally knew were experienced and qualified to provide services. Another indicated that he would not send patients with cognitive impairments to LMHCs. Although one provider noted that the current supervision and referral requirements for LMHCs are not effective in ensuring quality of care (see above), another pointed out that the credentialing rules for counselors in his state were very lax, and that removing the supervision requirement would carry the disadvantage of removing whatever [putative] quality controls that supervision might offer. A second provider agreed that removal of LMHC supervision and referral requirements would do nothing to ensure or improve the quality of care. He did suggest that elimination of the referral requirement might help some TRICARE patients to gain access to therapy more quickly than they otherwise would.

PROVIDER WILLINGNESS TO PARTICIPATE IN TRICARE

Beyond the issues described above, the NDAA FY01 also requested a description of the effect of policies of the Department of Defense on the willingness of licensed or certified professional mental health counselors to participate as health care providers in CHAMPUS and the TRICARE program. During our qualitative interviews with representatives from the Counseling associations, the lack of independent practice authority for LMHCs was cited as a major reason why their members indicated an unwillingness to join the TRICARE provider networks. While these organizations had no quantitative data available to assess the effect of this particular DoD policy, the representatives noted that this issue was among the most frequently cited concerns among their members.

To evaluate the impact of the demonstration (which offered independent practice authority for LMHCs) in encouraging LMHCs to participate in TRICARE, we reviewed the trends in the number of participating LMHCs in the demonstration as well as the trends in the number of LMHCs enrolled as networked TRICARE providers (see Table 4.1). [8]

We examined two sources of data from TriWest (the MCSC responsible for the TRICARE network in the demonstration regions). To obtain the trends in the number of LMHCs participating in the demonstration, we relied upon the monthly reports provided by TriWest to TMA. Beginning with their August 2003 monthly report, TriWest also began to indicate which of the demonstration participants were enrolled network providers (that is, LMHCs were enrolled as TRICARE Preferred providers—which refers to those providers who have agreed to take a negotiated lower rate for services). Therefore, in Table 4.1 we also present the percentage of demonstration participants who were TRICARE network enrolled providers. As shown in this table, the number of demonstration participants increased during the first few months of the demonstration but then leveled out during the middle of the demonstration period, likely due to the fact that TMA only used one mailing to advertise the demonstration opportunity to LMHCs. During the demonstration period, the number of network enrolled LMHCs steadily and modestly increased in both regions serving the demonstration catchment areas. Unfortunately, data on the number of enrolled LMHCs in the non-demonstration catchment areas were not made available and therefore cannot be used for comparison purposes. As such, we cannot examine the extent to which the temporary independent practice authority may have influenced the modest increase in the number of enrolled networked LMHCs during the demonstration period. It is also important to note that whether or not providers are likely to enroll as network TRICARE providers is likely a function of their willingness to accept the in-network reimbursement rate for their services rather than solely a function of practice authority.

Table 4.1 Participation in Demonstration and TRICARE Network by Region and Month

Month	Colorado Springs		Omaha	
	Demo Participants (% of participants who also participate in network)	MHCs Enrolled in Network	Demo Participants (% of participants who also participate in network)	MHCs Enrolled in Network

[8] Enrollment as a TRICARE Network Provider implies that the provider has agreed to serve as a preferred provider for TRICARE Extra beneficiaries and accept network reimbursement rates. It should be noted, however, that any LMHC who is authorized to provide services under TRICARE can provide services and receive reimbursement.

January 2003	41	99	41	88
February 2003	57	100	53	89
March 2003	62	101	55	90
April 2003	64	101	55	92
May 2003	67	101	55	92
June 2003	68	103	55	92
July 2003	68	104	55	92
August 2003	68 (59%)	105	55 (53%)	92
September 2003	67 (59%)	107	55 (53%)	92
October 2003	66 (59%)	107	55 (53%)	91
November 2003	66 (67%)	108	55 (55%)	91
December 2003	66 (67%)	109	55 (55%)	96

5. IMPACT ON TRICARE

As we outlined in chapter 2, expanding access to mental health counselors, might be expected to impact the TRICARE program in a number of ways. First, by opening up access to mental health services it might change the volume and type of users, as well as the volume of use and costs of mental health care provided to TRICARE beneficiaries. Second, changing administrative procedures for LMHCs might also have an impact on the administrative costs associated with the delivery of MH care. This chapter provides data on the impact the demonstration had on the TRICARE program overall, in terms of utilization and costs of MH care.

For comparison purposes, we present data on beneficiaries in demonstration and non-demonstration catchment areas. Demonstration areas included the following catchment areas: Offutt Air Force Base (NE), US Air Force Academy (CO), and Fort Carson (CO); non-demonstration catchment areas include: Wright-Patterson Air Force Base (OH), Luke Air Force Base (AZ), and Fort Hood (TX).[9] The pre-demonstration period is defined as the one-year period beginning January 1, 2002 and ending December 31, 2002. The post-demonstration Period is defined as the period of the demonstration's implementation and includes the one-year period beginning January 1, 2003 and ending December 31, 2003. We use administrative data from TRICARE claims to describe the level and cost of mental health care use over this period. We then present a difference-in-difference analysis designed to assess the impact of the demonstration on utilization and costs of MH care. Table 5.1 provides a brief overview of the number of eligible beneficiaries and users of mental health services in the demonstration and non-demonstration areas during the years of study. As noted, there were 12,462 unique MH users in the demonstration area and 19,965 in the non-demonstration areas in 2002. The number of individuals who met our inclusion criteria increased in both the demonstration and non-demonstration areas during the demonstration period (2003). As a percentage of eligible beneficiaries, demonstration users rose from 9.3 percent to 10.1 percent ($\chi 2^2$=57.05, p<.0001) and non-demonstration users rose from 9.6 percent to 10.4 percent ($\chi 2^2$=58.70, p<.0001).

[9] Please see Chapter 1 and Appendix A for additional detail on the selection of these catchment areas.

Table 5.1 Eligible Beneficiaries and MH Users by Region and Year

	Demonstration		Non-Demonstration	
	Pre	Post	Pre	Post
Total Eligible Beneficiaries (18+ years)[10]	134616	137187	208770	212794
Total MH Users[11]	12462	13876	19965	22154
Users as a Percent of Eligible Beneficiaries	9.3%	10.1%	9.6%	10.3%

DEMOGRAPHIC CHARACTERISTICS OF USERS

Table 5.2 describes the demographic characteristics of the mental health service users by demonstration area and by year of study. Data on race and marital status are not presented (NP) due to the very high frequency of 'missing' in the files provided by DoD.[12]

Table 5.2 Demographic Characteristics of MH Users by Region and Year

	Demonstration		Non-Demonstration	
	Pre (%)	Post (%)	Pre (%)	Post (%)
Gender				
Female	8472 (68%)	9453 (68.1%)	13917 (69.7%)	15469 (69.8%)
Race	NP	NP	NP	NP
Marital Status	NP	NP	NP	NP
Member Category/Type				
Active Duty	594 (4.8%)	585 (4.2%)	540 (2.7%)	573 (2.6%)
Active Duty Dependent	2326 (18.7%)	2663 (19.2%)	3360 (16.8%)	3695 (16.7%)
Retired	2897 (23.2%)	3274 (23.6%)	4786 (24.0%)	5387 (24.3%)
Retiree Dependent	5162 (41.4%)	5727 (41.3%)	8889 (44.5%)	9891 (44.6%)
Student/Other	235 (1.9%)	349 (2.6%)	316 (1.6%)	464 (2.1%)

[10] Data on the actual number of eligible beneficiaries were drawn as of April 30 of the study year. The number of eligible beneficiaries can change throughout the year as new beneficiaries become eligible or ineligible for TRICARE coverage.

[11] Mental Health User is defined broadly to include anyone 18 years or older who during the year: saw a MH provider, had a MH diagnosis on at least one claim, received a MH service, and or filled a prescription for a psychotropic medication (see Chapter 2 for a fuller description of this definition).

[12] Rates of 'missing' data on race and marital status did not differ between users and non-users, across demonstration and non-demonstration, or across pre and post.

Missing	1248 (10.0%)	1278 (9.2%)	2074 (10.4%)	2144 (9.7%)
Age				
18-24	1598 (12.8%)	1774 (12.8%)	2089 (10.5%)	2258 (10.2%)
25-34	1467 (11.8%)	1778 (12.8%)	2228 (11.2%)	2469 (11.1%)
35-44	1948 (15.6%)	2064 (14.9%)	2508 (12.6%)	2696 (12.2%)
45-54	2108 (16.9%)	2306 (16.6%)	2972 (14.9%)	3301 (14.9%)
55-64	1724 (13.8%)	1954 (14.1%)	3020 (15.1%)	3433 (15.5%)
65 and over	3617 (29.0%)	4000 (28.8%)	7148 (35.8%)	7997 (36.1%)

Percentages may not add to 100% due to rounding.

In appendix E, Table E.2 provides a breakdown of demographic characteristics by users and non-users in each year. As compared to the non-demonstration region, there are a higher percentage of beneficiaries in the demonstration region who are active duty (AD), dependents of active duty (ADD), or dependents of retirees (RDD) and fewer who are over 65 years. It should be noted that these differences exist in the both the MH user and non-MH user beneficiary population and likely reflect the differences associated with these catchment areas. For example, the student population at the USAF Academy would likely influence the age distribution in the demonstration region that includes that catchment area. It should also be noted that compared to the whole eligible population across the groups, MH users are more often female, dependents of Active Duty or Retirees; and between the ages of 18 and 45 (see table E.2).

For purposes of the analyses presented in this chapter, we separated MH service users into four analytic groups based on the type of providers from whom they received outpatient services. To isolate beneficiaries who received services from LMHCs for purposes of comparison and to eliminate overlap among groups, we grouped beneficiaries into only one category even if they received services from more than one provider type during the year. Using a hierarchical approach, we devised the following groups: by LMHC first; followed by psychiatrists; non-physician Other Mental Health (OMH) providers; then by "other physicians" (e.g., primary care, internal medicine, etc).[13] We used this hierarchical approach to isolate those beneficiaries who received care from LMHCs as the primary group of interest and then to eliminate overlap among the groups; however, it should be noted that beneficiaries in the LMHC, OMH provider, and psychiatrist group may have also received care from another type of MH

[13] These data were drawn from the administrative claims submitted to TRICARE for care rendered in the purchased care system, that is, if the beneficiary only saw a provider inside the MTF, they were not in the claim files we used for these analyses.

provider. It should also be noted that the number of beneficiaries who saw an 'other physician' are individuals who met our inclusion criteria based either on a claim for a psychotropic medication (we included only those medications routinely provided for psychotropic uses) or on having a mental health diagnoses listed on a physician claim, but did not have any claims for visits to a mental health provider during the year of study.[14]

Table 5.3 shows how users were distributed across these hierarchical groups. As a proportion of MH users who met our inclusion criteria, those who saw LMHCs represent 4.8 percent and 3.0 percent during the pre-demonstration period in the demonstration and non-demonstration respectively. During the demonstration period, these proportions rose to 5.4 percent (χ2=4.32, p=0.04) and 3.1 percent (χ2=1.14, p=0.29) respectively. The percent of users seeing a psychiatrist (but not a LMHC) rose, but not significantly, in the demonstration region (12.3 percent to 12.6 percent, χ^2=0.68, p=0.41) and fell significantly in the non-demo region (14.1 percent to 13.2 percent χ^2=7.70, p=0.006). The percent of MH users seeing a mental health provider other than an LMHC or psychiatrist fell in both regions, with a significant change in the demonstration region only (16.5 percent to 13.7 percent, χ^2=39.80, p<.0001). The percent of MH users not seeing any mental health provider was significantly higher in the non-demonstration regions in both the pre (73.1 percent vs. 66.5 percent, χ^2=163.31, p<.0001) and post (73.9 percent vs. 68.3 percent χ^2=131.35, p<.0001) periods, and increased in both regions (demonstration χ^2= 10.52, p=0.001; non-demonstration χ^2=3.55, p=0.06.) The percent seeing each of the mental health provider types in the non-demonstration region was correspondingly lower in both periods, with the exception of those seeing a physician (psychiatrist and other physician) in the post period (where the percent seeing a psychiatrist and an other physician in the non-demonstration post period was higher than the percent seeing a psychiatrist and other physician in the demonstration post period).

Table 5.3 MH Users by Type of MH Provider

	Demonstration		Non-Demonstration	
	Pre (%)	Post (%)	Pre (%)	Post (%)

[14] Individuals who met our inclusion criteria but did not see a mental health provider (for example, they met our inclusion criteria based on having a mental health diagnosis on a claim during the year OR who received a psychotropic medication (see table E.3) we grouped in the 'other physician' category. However, some of these individuals did not have a claim for a mental health related outpatient physician visit.

Total MH Users	12462	13876	19965	22154
Saw a LMHC[15]	603 (4.8%)	750 (5.4%)	595 (3.0%)	700 (3.1%)
Saw an OMH Provider	2050 (16.5%)	1897 (13.7%)	1959 (9.8%)	2160 (9.7%)
Saw a Physician				
Psychiatrist	1527 (12.3%)	1747 (12.6%)	2815 (14.1%)	2918 (13.2%)
Other Physician	8282 (66.5%)	9482 (68.3%)	14596 (73.1%)	16376 (73.9%)

Percentages may not add to 100% due to rounding.

Using these same provider-based analytic groups, we provide a breakdown of the demographic characteristics of MH users by year (Table E.3). The distribution of age and member category among MH users varied significantly by provider group across both years and regions, with the MH users seeing only non-MH physicians (labeled as "Other Physician" herein after) more likely to be over 65, retired or retired dependents, and male, than those seeing any of the mental health provider types.

In Table E.4 we present the distribution of users by MH diagnoses (diagnoses were reported on the administrative claims and are grouped according to diagnostic groups from the DSM-IV, APA 1994). As noted in these tables, the distribution of mental health diagnoses within study year are significantly different (using χ^2tests, $p<.0001$) across provider groups. For example, mood disorders are the most common of the MH diagnoses among MH users who see psychiatrists and those who see LMHCs (e.g., 71.3 percent and 64.3% percent of demonstration MH users in the pre-demo period, respectively). Adjustment disorders are the most common diagnoses among those who see OMH providers (e.g., 48.0 percent in the demonstration region and 56.7 percent in the non-demonstration regions at the per period). These patterns held across demonstration and non-demonstration regions both pre- and post-demonstration.

DESCRIPTION OF UTILIZATION

One of the questions outlined in the legislation was what effect, if any, the demonstration had on utilization of mental health services provided by LMHCs, OMH providers, and physicians. We provide estimates of utilization of mental health care within each of the analytic groups of interest below. Again, these data are based on administrative claims paid by TRICARE for services rendered in the purchased care sector during the years of study. We provide data on

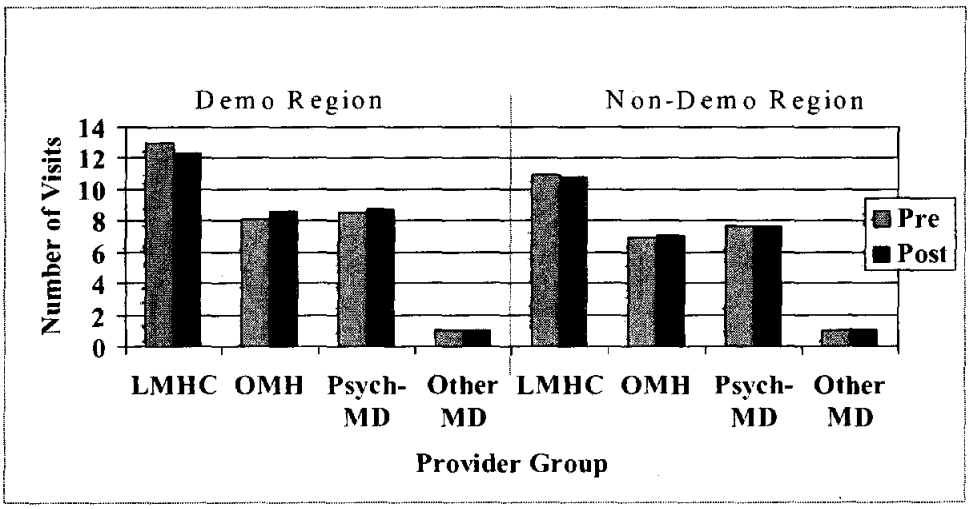
[15] Includes Pastoral Counselors, although visits to pastoral counselors were extremely rare across the sites and years.

the type of care provided to these MH users by provider group in each study year in Table E.5 in Appendix E. We provide data on the overall volume of visits per year and per months of study for both outpatient and inpatient use for MH users in each provider group, as well as the mean number of visits per month and per year in Appendix E, tables E.6 and E.7.

Visits for MH Services

In Table E.6 we display the overall volume of MH related visits for MH users by provider group, year, and region (for a definition of how we defined and counted MH related visits, see Appendix B) In the post demonstration year, the overall number of unique beneficiaries seen and volume of outpatient visits per year increased in both the demonstration and non-demonstration regions for every provider group except those in the OMH provider group within the demonstration region, where the number of unique MH users decreased from 2050 to 1897. Figure 5.1 displays the mean number of MH visits per year by MH users in each provider group. As noted, the mean number of MH visits by people seeing LMHCs decreased during the demonstration period in the demonstration region as well as the non-demonstration region, though neither change was statistically significant. The average number of MH visits remained the same or increased slightly during the demonstration period for all other provider groups, with the only significant increase in the Other physician group in the non-demonstration regions (t=3.91, p=0.0001).

Figure 5.1 Mean Number of MH Visits per year by MH users



Type of Outpatient MH Care Provided

We also examined the types of MH care provided to MH users in each provider group by region and by year. Table E.5 provides a description of the characteristics of the treatments provided to MH user, including whether they received psychotherapy alone, psychotherapy in combination with medication, or medication alone. We also present the distribution of MH users who filled a prescription for a psychotropic medication and the mean number of psychotropics per year for MH users in each provider group, region, and year. As noted, the mean number of psychotropics per year for MH users who saw LMHCs in the demonstration region decreased from 2.01 to 1.53 ($t=4.71$, $p<.0001$), with the percent taking any psychotropic drug falling from 73.3 to 65.2 percent ($t=4.22$, $p<.0001$). There was no corresponding significant decrease in any of the other provider type groups or in the non-demonstration group, suggesting that the decrease may be due to the removal of the requirement that LMHCs have oversight by a physician (who could prescribe a psychotropic drug). (See "Effects pf the Demonstration," below, for a difference-in-difference analysis of the significance of this outcome.) The most common type of medication used by MH users in these regions was antidepressants (percent of MH users taking antidepressants ranged from 75 percent to 95 percent depending on the region and provider group), followed by benziodiazepines (ranging from 35 percent to 45 percent). Use of antipsychotic medications was more common among MH users who saw psychiatrists (28.3 percent in the demonstration region and 21.3 percent in the non-demonstration region at the pre-period) than among those in other provider groups.

Inpatient MH Care Among MH Outpatient Users

While our sample of MH users is grouped based on a use of providers seen for mental health care in an outpatient setting, we also examined the pattern of inpatient MH care (for an explanation of how we defined and counted inpatient episodes, please see Appendix B). Table E.5 provides a description of the number of MH users who received inpatient MH services, the mean number of episodes per user per year, and the mean length of stay for these in patient episodes per user per year.

In the pre-demonstration period, beneficiaries who saw LMHCs had an average of 0.13 inpatient episodes per user per year. This decreased slightly to 0.11 inpatient episodes per user per year in the post-demonstration period ($t=0.84$, $p=0.40$); whereas beneficiaries who saw LMHCs in the non-demonstration region during the same time frame saw a slight non-significant increase in the mean number of inpatient episodes per user per year, from 0.13 to 0.17 ($t=1.61$, $p=0.11$). In the demonstration region, the mean number of episodes increased significantly from 0.06 to 0.09 visits per MH user per year for the OMH provider group ($t=2.20$, $p=0.03$), and from

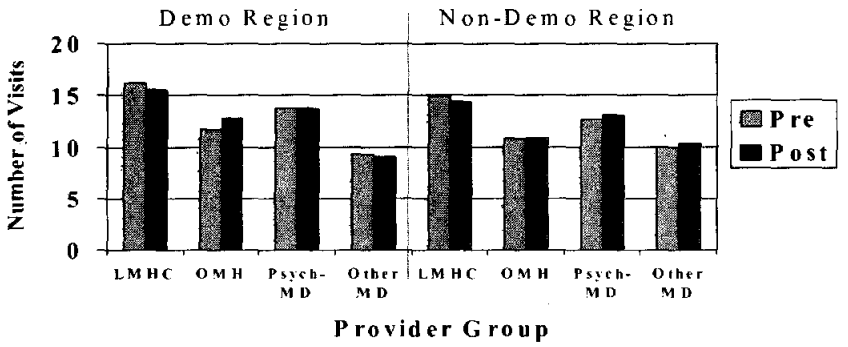
0.13 to 0.18 visits per MH user per year for the psychiatrist group (t=2.10, p=0.04). Changes in the other physician provider group and in the groups in the non-demonstration region were not statistically significant.

The mean length of stay for inpatient care users in the LMHC group increased in both the demonstration and non-demonstration regions, however, the changes were not statistically significant. For these groups, the mean length of stay rose from 5.68 days per user per inpatient stay to 6.68 days per user per inpatient stay in the demonstration region (t=0.83, p=0.41) as well as in the non-demonstration region (from 5.16 days per user per stay to 5.58 days per user per stay (t=0.34, p=0.74). The only significant change in the mean length of stay was an increase from 7.6 to 9.8 days among the other physician provider group in the non-demonstration region (t=3.90, p<.0001).

Overall Health Care Use by MH Users

Overall health care use by MH users (outpatient visits as well as inpatient admissions for MH and non-MH care together) also increased in both the demonstration and non-demonstration regions for every provider group (see Table E.6) Figure 5.2 shows the mean number of outpatient visits made by MH users for any health care service by region and provider type. The mean number of hospital admissions per MH user per year is shown in Table 5.6. There were statistically significant increases in mean visits by MH users seeing OMH providers (t=2.87, p=0.004) and MH users seeing psychiatrists (t=2.09, p=0.04) in the demonstration region, and by MH users seeing other physician providers (t=2.74, p=0.006) in the non-demonstration region.

Figure 5.2 Mean Number of General Health Care Outpatient Visits made by MH users



DESCRIPTION OF EXPENDITURES

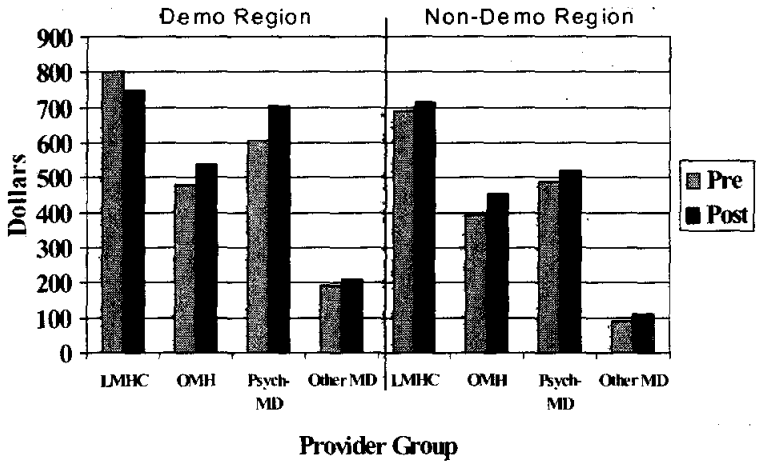
As utilization changes, so can the costs associated with rendered care. As more care is consumed, the overall expenditures for mental health services also rise. To examine the impact of the demonstration on expenditures for MH care, we examined overall expenditures by the government for outpatient MH visits and inpatient MH episodes as well as expenditures for all healthcare (MH and non-MH) paid by TRICARE for MH users in the regions and years of study (see Table E.8).[16] We also provide data on the total and average payments made to providers by the government for care rendered to MH users during the years of study (see Table E.9)

Expenditures for MH Care

As expected, given the increases in the number of beneficiaries who sought MH care in post-demonstration period (as compared to the number in the pre-demonstration period) in both the demonstration and non-demonstration regions, there was an increase in the overall total expenditures related to MH care (outpatient and inpatient) for MH users within each provider group. Mean expenditures on MH care per user also increased for all provider groups in the demonstration and non-demonstration groups, with one exception. For those MH users in the LMHCs group in the demonstration region, the mean expenditure for outpatient MH visits per user decreased non-significantly from $802 per user per year to $749 per user per year ($t=0.81$, $p=0.42$) in the post-demonstration period (see Table E.5). The increase in mean costs in the OMH provider group was statistically significant at the 95 percent confidence level or greater in both regions, as was the increase in the other physician group in the non-demonstration region.

Figure 5.3 Mean Expenditures Per MH User for Outpatient MH Care

[16] Expenditures were not adjusted for inflation since no significant differences were observed.



Similarly, overall total expenditures for all health care (outpatient and inpatient, MH and non-MH) received by MH users in both regions within all provider groups increased as overall health care use increased (utilization patterns are reported in Table E.5).

Payments to Providers

We also examined whether the payments made to each provider group were affected. To do so, we examined the payments for visits made by MH users to each provider group by region and year. Unlike the analysis above, which summarized visits and payments by a hierarchical grouping of providers that each patient saw over the course of the year, the data presented in Table E.9 groups visits and payments by provider type for services provided to beneficiaries who saw each of the MH provider types. A person's visits and costs are therefore distributed across the table into the columns corresponding to the types of providers from whom the beneficiary received care. As noted in this table, the overall number of visits to each provider group increased in each region and year, resulting in an increase in the overall total payments made to these provider groups. In the demonstration region, changes in mean visits and payments to most provider types were not significant at the 95 percent confidence level. The only exception was for payments to other physician providers, which increased from $168 to $198 per year per mental health user (t=2.18 p=0.03). In the non-demonstration region, visits to psychiatrists decreased from 0.56 to 0.51 visits per year per mental health user (t= 2.98, p=0.003), while mean payments to other mental health providers rose from $62 to $69 (t=2.46, p=0.01). As in the demonstration region, use of other physicians for MH care increased, with mean visits rising from 0.96 to 1.02 visits per year per MH user (t=2.78, p=0.005) and mean payments rising from $92 to

$108 per year per user (t=3.84, p=0.0001). A comparison of the mean visits and payments to providers across regions reinforces the trend seen in the provider group comparisons above, that those receiving care in the non-demonstration region were less likely to see any mental health provider, and more likely to see a non-mental health physician, than their counterparts in the demonstration region.

EFFECT OF THE DEMONSTRATION

The pre versus post demonstration versus control study design is intended to isolate the effect of the demonstration on mental health care utilization and expenditures by allowing us to compare pre versus post differences across the demonstration and non-demonstration regions. However, while the non-demonstration catchment areas were chosen to be as comparable to the demonstration regions as possible, they differ significantly from the demonstration regions in the pre-period in several important ways. For example, compared with those in the non-demonstration, eligible beneficiaries in the demonstration area were more likely to be male, younger than 65, and dependents of retirees. As noted in table 5.3, eligible beneficiaries in the demonstration region (at the pre-period) were also more likely to have seen a counselor, psychiatrist, or other mental health provider, and less likely to have seen only a primary care physician for their mental health care.

To control for these population differences, we used propensity score weighting to adjust the non-demonstration group population for differences in age, sex, member category, and interactions between these characteristics. We used these propensity score weights to control for variation in the only personal information we had available between the populations and then compared weighted means across the two groups to test for statistically significant differences between the demonstration and non-demonstration areas. We first compare utilization across the two eligible populations, including the rate of any mental health care use and of counselor use. We then compare rates of use among those seeing a LMHC. To determine if the demonstration had a significant impact on the variables of interest, we used a difference-in-difference approach to determine whether the differences between pre and post in the demonstration area are significantly different than the differences between pre and post in the non-demonstration area.

Table 5.4 presents the difference-in-difference analysis comparing means of the major analytic outcomes of interest (e.g., mean number of MH visits, mean expenditures for MH care) from this weighted sample with means from the demonstration region eligible beneficiary population.

As this table shows, differences in the major utilization outcomes (including total dollars spent on mental health care, number of visits, days of inpatient hospitalization, total dollars spent

on outpatient care, and total dollars spent out inpatient care) were not significant at the 95 percent confidence level between the demonstration and non-demonstration regions. Only a few changes in outcome measures were significant at the 95 percent confidence level. Beneficiaries in the demonstration region were significantly less likely, in the post period, to see a mental health provider other than an LMHC or psychiatrist, and were also less likely to see a non-psychiatrist physician for mental health care. The percent of people seeing an LMHC in the demonstration region also increased, and although the change was not quite significant at the 95 percent confidence level, the combination of these three outcomes suggests that the demonstration may have resulted in a shift in people accessing LMHCs rather than other providers of mental health care (i.e., a substitution effect). Finally, although mean days in the hospital and mean costs for inpatient MH care did not change significantly, MH users in the demonstration region were slightly more likely to be hospitalized in the post-demonstration period than MH users in the non-demonstration region. The slight increased likelihood of inpatient MH care in the purchased care setting among the MH users in the demonstration region was not off-set by an increased use of inpatient MH care in the direct care system among the non-demonstration participants. When examining direct care system use to investigate a potential offset, we found a decrease in inpatient MH use in the direct care system for both the demonstration and non-demonstration group.

Because the demonstration only changed the rules for accessing a LMHC, we expect that any demonstration effect would be concentrated in the population most likely to see an LMHC. We therefore created a second set of weights for mental health users in the non-demonstration group to reflect each individual's similarity to those who saw an LMHC in the demonstration region. Ideally, in creating these weights, we would have adjusted for the clinical characteristics of mental health care users, including diagnoses and possibly the use of psychotropic medications. However, we expect that the recording of diagnoses on claim records, as well as the prevalence of the number and types of medications prescribed, might vary based on the type of provider an individual saw (based on the traditional treatment orientations of the various provider groups, even given the same reasons for visits or underlying needs for mental health care). For example, we expect that mental health diagnoses are less likely to be recorded on a primary care physician's records than they would be on a psychiatrist's. We therefore matched only on main demographic characteristics: age, sex, and member category. The small sample size also prevented us from using interaction terms to create this set of weights.

Table 5.5 compares this weighted non-demonstration population with the group of those who saw an LMHC in the demonstration region. Comparing this table to Table 5.3, we note that while the weighted non-demonstration population has almost twice the rate of LMHC use as the

unweighted control group population, it still has a low rate of LMHC use (weighted: 5.64% at pre and 6.19% at post, versus unweighted: 3.0% at pre and 3.1% at post). This table shows that the only outcome change that is significantly greater at the 95 percent confidence level in the demonstration region is the probability of seeing a psychiatrist—that is, those seeing a LMHC were less likely to also be seeing a psychiatrist in the post-period demonstration region. This reduction could potentially be a result of the removal of the physician oversight requirement *if* LMHCs had previously been co-treating beneficiaries with psychiatrists as a means of fulfilling the supervision requirement and then stopped doing so when the supervision requirement was removed. While the changes are not significant at the 95 percent confidence level, the drop in the likelihood of seeing a non-mental health physician and the drop in the mean number of mental health visits per user also support the hypothesis that those seeing an LMHC were less likely to also get care from a physician as a result of the demonstration. Furthermore, the decreases in the likelihood of using psychotropic medication and the mean number of prescriptions for a psychotropic drugs per person seen in Table E.7 are significant in this weighted difference-in-difference comparison, indicating that the demonstration may have decreased the prevalence of psychotropic drug use among people seeing a counselor.

We were concerned about the low levels of counselor use in the comparison sample in table 5.5. We therefore repeated the propensity score weighting, this time including only control group users who saw an LMHC, as a sensitivity analysis. We once again matched on age, sex, and member category. This difference-in-difference comparison of counselor users is presented in table 5.6. As expected, the mean number of visits per user is much higher than in the previous analysis. As in the previous analysis, demonstration region MH users were significantly less likely to see a psychiatrist and had fewer psychotropic drug claims in the post-period. The likelihood of having any psychotropic drug claim also fell, although the effect was not significant at the 95 percent confidence level.

In summary, the demonstration appeared to impact utilization in the following ways. Among the entire eligible beneficiary population in the demonstration region, there was an increase in the likelihood of having an inpatient hospitalization, a decrease in the likelihood of seeing an OMH provider, and a decrease in the likelihood of seeing a non-MH provider ('other physician') for MH care. Changes in inpatient and outpatient costs were small and not statistically significant. Further refinement of the difference-in-difference analyses to control for differences in the characteristics of those who see LMHCs revealed a significant decrease in the likelihood of seeing a psychiatrist as well as a decrease in the likelihood of receiving a psychotropic drug.

Unfortunately, based on administrative data alone, it is not possible to determine whether these changes had a clinically significant impact on beneficiaries. While the increase in the likelihood of inpatient hospitalization over the entire eligible beneficiary population is of some concern as a potential measure of quality of care, the fact that the rate of hospitalization did not increase in the LMHC group suggests that the increase may have had some cause other than the demonstration. Also, while the demonstration did appear to impact the type and source of care beneficiaries received, we can not ascertain whether being less likely to see a physician and receive a psychotropic medication had any impact on the clinical outcomes for these individuals. While we did seek to examine whether a clinically relevant change could be observed in adverse events, such as suicide attempts, the type of data available for this study are not ideal for such analyses. For example, we found zero occurrences of visits to emergency departments in the purchased care sector for injuries sustained as a result of a suicide attempt. This result does not necessarily mean there were no such attempts, rather that they are not necessarily coded in the claims data. We also looked at the direct care system data to evaluate the occurrence of suicide attempts. Codes for such injuries in this data were in fact very rare, and the very low percentage (less than 0.01%) in the demonstration group and the non-demonstration groups were not significantly different.

Table 5.6 Difference in Differences: LMHC Demonstration versus Weighted LMHC Non-Demonstration Group

Outcome Measure	Mean per Eligible Beneficiary				Difference in Difference	SE	95% Confidence Interval	
	Demo		Weighted Control					
	Pre	Post	Pre	Post				
Total MH Dollars	$1,504.33	$1,349.49	$ 1,085.37	$1,465.83	$ (535.30)	$350.34	$(1,221.95)	$ 151.36
Total Outpatient MH Dollars	$ 802.16	$ 749.46	$ 668.86	$ 700.88	$ (84.73)	$ 83.48	$ (248.34)	$ 78.89
Total MH Outpatient Visits	12.96	12.25	10.85	10.74	(0.60)	0.94	(2.43)	1.24
Total LMHC Visits	9.24	8.54	7.55	7.44	(-0.59)	0.75	(2.06)	0.89
Total Inpatient MH Dollars	$ 702.16	$ 600.03	$ 416.52	$ 764.95	$ (450.57)	$331.15	$(1,099.63)	$ 198.49
Total Inpatient MH Days	0.71	0.70	0.64	0.96	(0.32)	0.31	(0.93)	0.28
Percent with Any Inpatient Stays	9.45%	7.47%	10.84%	11.42%	(2.56%)	2.36%	(7.18%)	2.07%
Percent with Any LMHC Visits	100.00%	100.00%	100.00%	100.00%	0.00%	0.00%	0.00%	0.00%
Percent with Any Psychiatrist Visits	41.63%	32.13%	40.94%	40.71%	(9.27%) *	3.86%	(16.83%)	(1.70%)
Percent with Any OMH Visits	21.72%	22.80%	15.26%	15.37%	0.97%	3.07%	(5.04%)	6.98%
Percent with Any MH Visits to non-MH providers ("Other Physician")	24.54%	25.20%	25.97%	27.56%	(0.93%)	3.47%	(7.74%)	5.88%
Total Psychotropic Drugs	2.01	1.53	1.73	1.64	(0.40) *	0.15	(0.69)	(0.11)
Percent taking Any Psychotropic Drug	73.30%	62.53%	70.55%	66.79%	(7.01%)	3.67%	(14.19%)	0.18%

* Standard errors were calculated using pooled variance.

*Significant at the p<.05 level.

( ) denotes a negative number.

IMPACT ON ADMINISTRATIVE COSTS ASSOCIATED WITH REFERRAL AND SUPERVISION

The legislation requested a description of the administrative costs associated with referral and supervision requirements under TRICARE. At the outset, however, it is worth noting that a full description of the administrative costs of LMHC referral and supervision requirements necessitates identifying the bearers of such costs. Costs may accrue for several reasons. The completion of paperwork related to those requirements, that would undoubtedly create some administrative costs for LMHCs, but the requirements could also create administrative costs for other clinical providers (in their roles as supervisors), for TRICARE managed care contractors, or for TRICARE itself (e.g., in auditing compliance by contractors with the requirements). It is reasonable to expect that there is a cost associated with the time required for LMHCs and those supervising them to fulfill these requirements. Note however, that referral and supervision are not billable services, and as such neither LMHCs nor the physicians who might refer to and supervise them (not necessarily the same individual) can bill TRICARE for the time associated with meeting these requirements. Consequently, the administrative costs associated with meeting and documenting these requirements are not easily be quantified.

Note also that some of the potential costs of referral and supervision requirements for LMHCs may be subtle. In particular, to the extent that the requirements create disincentives for beneficiaries to seek care from LMHCs, the result might be to reduce the demand for LMHCs' services. In a sense, lost patronage for LMHCs could be viewed as an administrative cost associated with the referral and supervision requirements. Substitution of demand for mental health services toward higher-cost providers might also be construed as a related administrative cost. We do not address these forms of administrative costs here.

To investigate the administrative costs to TRICARE's MCSCs associated with the referral and supervision requirements for LMHCs, we interviewed MCSC officials in both the demonstration area and in the non-demonstration comparison areas. Moreover, for the MCSC that actually participated in the demonstration, we engaged in two sets of interviews, both at the beginning and at the end of the demonstration period. In each of these interviews, we asked respondents a series of questions concerning the administrative requirements for LMHCs under TRICARE, the administrative costs to the MCSCs in enforcing those requirements, and any advantages or disadvantages accruing to independent practice by counselors (i.e., from the MCSC perspective).

In general, the representatives from all three of the MCSCs included in our study (one MCSC for the demonstration area and two that covered the non-demonstration sites) agreed that the pre-demonstration administrative requirements for LMHCs under TRICARE included

physician referral and supervision. All agreed that the referral requirement is burdensome primarily to the LMHCs themselves and to beneficiaries, by imposing a barrier to patients seeing LMHCs for care, and an incentive for patients to seek therapy from other types of providers.

The MCSC respondents actually differed in their description of what the baseline supervision requirement entails, likely the result of differences in how each of the MCSCs implements and enforces the supervision policy. For example, one of the respondents from a non-demonstration MCSC said that LMHCs in that region were required simply to provide the name of a supervising physician on a periodic "Treatment Authorization Request" form,[17] that no signature was ever required from the supervisor, and that no major administrative costs to the MCSC were associated with supervision (hence, no savings likely from removal of the requirement). By contrast, a respondent from the other non-demonstration MCSC said that LMHCs must show a "documented ongoing relationship" with a supervising physician, that clinical proof of supervision is required for every eight therapy visits, and that these requirements are extremely burdensome for LMHCs to meet. Moreover, this respondent also said that these requirements were burdensome for the MCSC, and that associated paperwork and time costs resulted in LMHCs being about 25 percent more expensive for them to manage than other types of providers.

Respondents from the demonstration MCSC offered still another perspective on the supervision requirement. They reported that LMHCs were required to have their treatment notes signed by their supervisors, but that actual enforcement of supervision mostly occurred through the filing of claims forms (on which a supervisor's name had to be included). With regard to associated administrative costs, the respondents suggested that removal of the supervision and referral requirements would eliminate some paperwork for the MCSC, and could result in a slight improvement in administrative efficiency. However, following the demonstration, the same respondents indicated that there was little or no change in their own administrative costs as a result of removing the supervision and referral requirements. The demonstration MCSC respondents also said that to the best of their knowledge, there was no indication of any change in the nature or quality of care delivered by counselors during the demonstration (e.g., there had been no adverse events or complaints made against participating LMHCs during the course of the demonstration period).

The consistent theme that emerged from our interviews with MCSC officials was that the perceived advantage to the Demonstration (i.e., of independent practice for LMHCs) was

[17] Note that a therapist is reportedly required to submit a Treatment Authorization Request for every eight therapy visits, in order to obtain continuing reimbursement for that patient under TRICARE.

manifest not in reducing the administrative costs to MCSCs, but rather in increasing access to therapy services for TRICARE beneficiaries. Several of the interview respondents acknowledged that the referral and supervision requirements for LMHCs under TRICARE may make it harder for beneficiaries to see these providers, while creating an incentive for beneficiaries to seek out other types of mental health treatment providers (social workers, psychologists, psychiatric nurse specialists, etc). Our MCSC respondents were divided about whether independent practice for LMHCs might result in quality control problems, in part due to the existence of heterogeneous licensing standards for mental health counselors across different states within the US. Even those respondents who expressed this concern, however, suggested that improved credentialing standards for counselors would be a more effective way to safeguard beneficiaries and to promote the quality of care overall for those who seek care from mental health counselors.

6. IMPLICATION OF FINDINGS AND CONCLUSIONS

IMPLICATIONS

The findings of the study presented in this report have several important implications for TRICARE. The data presented in this report provide a unique picture of mental health service use within the TRICARE beneficiary population. Although the study was limited to only six catchment areas, the results provide a glimpse of the characteristics of TRICARE beneficiaries who use mental health services, and describe the utilization patterns and costs associated with the delivery of mental health services to this special population. The results also provide interesting insight into beneficiaries' need for, perceptions of, and satisfaction with mental health service use. More specifically, our survey data contributes significantly to the field, given that no other survey has looked at a TRICARE beneficiary group that consists exclusively of documented consumers of mental health services. Other surveys have examined the perceived impact of military life on active duty personnel (Bray et al., 2003), however, this is the only independent study that we know of to examine mental health symptoms and other factors related to mental health service use among family members of active duty personnel, as well as among retirees and their family members. Based on our survey, we found little impact by demonstration region on utilization of mental health care services. However, consistent with our hypotheses, we did find that perceived stigma associated with military life was associated with lower utilization and higher rates of medication use over and above the effect of the demonstration.

Recent publicity—a 2004 article in the New England Journal of Medicine (Hoge et al., 2004) and articles in the lay press—has focused attention on mental health problems and the potential need for more mental health services within the military population. Use of mental health services may be high among military family members and retirees, particularly during the present wartime situation. Because a significant proportion of TRICARE mental health users are spouses of active duty military members or retirees with adult children serving in active duty status, greater attention to family needs during deployments may aid coping with mental health symptoms. These factors provide a compelling reason to learn about the mechanisms that impede use of services. Although the current study was structured as an evaluation of independent practice for LMHCs under TRICARE, our findings offer insights into broader issues concerning access and service-use during wartime and can help guide policy makers toward strategies to improve access to TRICARE mental health services.

STUDY LIMITATIONS AND CAVEATS

Several limitations and caveats should be noted in interpreting our findings. These include the initial selection of the demonstration site, constraints associated with the type of data required and available, and the restriction of some eligible beneficiaries for demonstration participation.

In choosing the demonstration areas, TMA first selected the health care region with the highest absolute number of visits to mental health counselors in FY00, the Central Region (at the time identified as region 7/8 and managed by TRIWest). Then TMA selected the catchment areas that had the greatest number of mental health counselors relative to the other catchment areas in the Central region. It is our understanding that TMA made this selection to guarantee that enough beneficiaries would be included under the demonstration to provide ample statistical power for analyses of claims data as well as a potential survey. However, to better test whether this demonstration expanded or improved access to mental health counselors, perhaps a region where mental health counselors were not already heavily utilized would have been more informative. In turn, the demonstration site selection methodology restricted the selection of a suitable comparison site to those areas where counselors were already being utilized at similar rates. This ruled out consideration of in the upper Northwest where visits to counselors accounted for less than one percent of all mental health visits for that same fiscal year (FY00).

Second, we were limited by the type of data available to us to perform the study. Since we had to rely on the use of pre-existing claims data, our analyses were based primarily on currently available variables. In most cases, these variables are recorded for purposes other than assessment of mental health service utilization and treatment process outcomes. As such, the validity of our measures depended upon the validity of the information recorded in the claims. The analyses were also limited to mental health users in the purchased care sector (contracted care). Beneficiaries who use only direct care services (i.e., care received in a military owned treatment facility) for mental health treatment were not included in our analyses.

Limitations for the survey of beneficiary survey should also be noted. First, a cross-sectional survey does not allow for fully adjusting for pre-existing differences between groups prior to the demonstration. Though the claims data were available to adjust at the aggregate level, we were unable to match individual level data because of concerns regarding HIPAA. While this could have affected our findings, we minimized potential bias by weighting the sample for non-response. Only age was a significant predictor of non-response in this sample and weighted analyses account for this bias. Second, the survey responses relied upon self-report. As with any self-reported data, responses may be subject to recall bias and selection of socially desirable responses. However, we employed mostly established measures that have been widely used and validated in previous studies, which minimizes any bias. Moreover, the use of

self-reports for understanding the patient or beneficiary perspective about health circumstances is believed to be the most appropriate method because it's the subjective report that matters.

Finally, the generalizability of our findings is limited based on the restriction of demonstration involvement to LMHCs who practice in the purchased care system and only for the care they render to MHS beneficiaries over the age of 18 years. Since these civilian based providers treat primarily those non-active duty beneficiaries who receive care in the purchased care system, those individuals (e.g., much of the active duty population) who receive all of their health care in the direct care system were likewise not exposed to the demonstration. As such, we cannot assess whether or not independent practice authority provided expanded access to mental health services or LMHCs more specifically for beneficiaries under the age of 18 years or among the active duty population, two groups for whom there may be concerns about adequate mental health services support within the military health system (Hoge et. al, 2004; Bray et al., 2003).

CONCLUSIONS

In summary, we found that the evaluation of the DoD Mental Health Counselor Demonstration for expanded access to mental health counselors under TRICARE had minimal impact on the variety of outcomes studied here. Access to mental health care, as measured by the percentage of eligible beneficiaries who used mental health services, increased in both demonstration and non-demonstration areas. Most of the increase is probably due to the fact that demonstration coincided with the beginning of the Iraq War, rather than any increased perception among the potential beneficiaries of expanded access to mental health care. In addition, there were no key effects on expenditures, reimbursement, administrative costs, or patient confidentiality. While we did see increases in utilization and costs for mental health care over the demonstration period, these increases could not be attributed to allowing independent practice authority. In fact, according to the Annual Evaluation of the TRICARE Program Report (IDA et al., 2004), both utilization and costs of health care services increased for the overall TRICARE population as well during the same time frame.

Using the administrative data, we found that the demonstration did likely impact the type of providers from whom beneficiaries sought MH care as well as the likelihood of receiving a psychotropic medication. Specifically, among the eligible population, there was a decrease in the likelihood of seeing an OMH provider, a decrease in the likelihood of seeing a non-MH provider ('other physician') for MH care, and an increase in the likelihood of having an MH inpatient hospitalization (that was not offset by utilization of inpatient MH services in the direct care system). Changes in inpatient and outpatient costs were small and not statistically

significant. Further refinement of the difference in difference analyses to control for differences in the characteristics of those who see LMHCs revealed a significant decrease in the likelihood of seeing a psychiatrist as well as a decrease in the likelihood of receiving an psychotropic drug. However, based on administrative data alone, it is not possible to determine whether these changes had a clinically significant impact on beneficiaries.

Where we did observe effects in ratings of satisfaction related to the demonstration, the result was mostly positive. According to self-report survey data from beneficiaries, the demonstration resulted in improved ratings of mental health services. The effect on administrative costs associated with the requirements for LMHCs were also unclear. From the interviews with LMHCs and other MH providers, it has been apparent that supervision and referral has not been that onerous to begin with and that any administrative costs associated with the requirements were in fact minimal at the outset.

Table 6.1 summarizes the key findings and implications for each of the nine legislation objectives for this evaluation that were mandated by Congress. Taken as a whole, our findings suggest that the impact of expanding access to LMHCs for providers and beneficiaries was minimal on beneficiaries, providers, and the TRICARE program.

Lastly, the effectiveness of mental health care provided by LMHCs versus other MH providers could not be estimated due to the lack of clinically relevant data on MH users. Such analyses are only possible when patients can be tracked over time in order to measure the impact and adequacy of the treatments received. Since the current TMA privacy requirements did not allow us to collect data in this manner, it was not been possible to estimate the effects of the demonstration on the quality of care provided to beneficiaries.

The findings are important in the sense that merely lifting administrative requirements for the provision of mental health care by itself is unlikely to result in expanded access and utilization, especially when beneficiaries already have access to other types of mental health providers who do not have the same administrative requirements as the LMHCs but can provide many similar services. These findings suggest that reducing the stigma attached to mental health care and expanding access to mental health care needs to go beyond merely lifting the administrative requirements on LMHCs.

STAKEHOLDER REQUESTS FOR CHANGES TO TRICARE POLICIES

During our qualitative interviews with stakeholders, including representatives from the Counselor associations, TRICARE MCSC, and with staff members from the Senate and House Armed Services Committee, we inquired about requests for policy changes with respect to the practice authority of LMHCs.

Removal of the referral and supervision requirements for LMHCs remains a top legislative agenda item for both of the Counseling associations we spoke to (AMHCA and ACA). This issue has continuously appeared on their website listings [http://www.amhca.org/policy/ and http://www.counseling.org/AM/Template.cfm?Section=PUBLIC_POLICY] of priorities and was repeatedly mentioned during our qualitative interviews and subsequent inquiries from them to us with respect to the status of our study. It should be noted that the Counseling associations were able to garner the support of some beneficiary advocacy groups, such as the National Military Family Association, in their original request to seek legislative change in practice authority under TRICARE. However, when we spoke with staff members of the Armed Services Committees in the House and Senate, they indicated no other official requests for policy changes to implement independent practice authority for LMHCs or to expand access to mental health care services within TRICARE more generally, had been submitted by beneficiary groups during the most recent session of Congress.

It should be also noted that several of the MCSC officials with whom we spoke acknowledged the potential unfairness of current referral and supervision requirements for counselors, and the perception that these requirements may tend to press beneficiaries toward other types of providers for their mental health care. The consensus view among the MCSC representatives we spoke to was that these requirements are not particularly effective as a way to promote the quality of care. Instead, MCSC representatives suggested quality concerns might more readily be addressed through appropriate credentialing mechanisms for counselors, as perhaps by national standards for licensure that TMA could endorse. Adoption by TMA of formal credentialing standards could facilitate independent practice for counselors in states with rigorous licensing, while helping to promote the implementation of similar licensing standards in other parts of the country.

Table 6.1 Summary of Evaluation Findings and Implications Cross-Walked with Legislation Objectives

Legislation Objective*	Key Findings	Implications
(1) Describe effect on changes in expenditures	▪ Controlling for beneficiary characteristics, there was not a significant change in expenditures for inpatient and outpatient care among the eligible population or among those seeing LMHCs.	Allowing for increased access to MH counselors has no measurable impact on expenditures for mental health services for those that received care from LMHCs.
(2) Provide data on utilization and reimbursement for non-physician MH professionals	▪ Among those MH users in the OMH provider group, the mean number of visits increased in both the demonstration and non-demonstration regions. ▪ For those in the OMH group, total expenditures for MH care increased in both the demonstration and non-demonstration regions. ▪ Comparing the changes pre-post and demo v non- demo, we found a decrease in the likelihood of seeing an OMH provider in the demonstration region.	Opening up access to LMHCs may have created a substitution effect, that is, beneficiaries were less likely to see other non-physician mental health providers such as psychologists, social workers, and psychiatric nurse practitioners.
(3) Provide data on utilization and reimbursement for physicians who collaborate with MH counselors	▪ Among those MH users in the psychiatrist group, there were no significant changes in the mean number of outpatient MH visits in the demonstration region or the non-demonstration region. ▪ For those MH users in the Other Physician group, there was a statistically significant increase in the mean number of outpatient visits in the non-demonstration region, but not the demonstration region. ▪ Mean expenditures for MH care among MH users in the psychiatrist and other physician groups increased pre v post in both the demonstration and non-demonstration regions, but only the increase in the other non-demonstration	Removing the referral and supervision requirements significantly decreased the likelihood that beneficiaries would get MH care from a physician (psychiatrist or other physician) and as such decreased the likelihood that they would also get a psychotropic medication to treat their mental illness.

	physician group was statistically significant. Comparing the changes pre-post and demo v non demonstration, we found a significant decrease in the likelihood of seeing a physician for MH care in the demonstration regions (psychiatrist or other physician).	
(4) Describe administrative costs incurred	▪ According to the LMHCs in our interviews, eliminating physician referral requirement saves time previously spent in telephone consultation to obtain, confirm referrals, and authorize therapy.	Demonstration probably resulted in modest costs savings to LMHCs (in terms of time and administrative burden). Any savings to MCSCs depended on their baseline enforcement procedures regarding supervision and referral (which was minimal in some cases).
(5) Compare effect for items outlined in items one through four, over a one year (pre-post) in the demonstration region as compared to a non-demonstration regions	▪ All results outlined above are based on analyses that compared data gathered from one year prior to the demonstration with one year following the demonstration in both the demonstration region as well as the selected non-demonstration regions.	Not applicable
(6) Describe impact on confidentiality of MH and substance abuse services for TRICARE beneficiaries	▪ No evidence that eliminating the supervision requirement would change standards for confidentiality	Independent reimbursement of LMHCs would have no impact on confidentiality.
(7) Describe effect on health and treatment of TRICARE beneficiaries	▪ No effect on perceived access to MH services ▪ No effect on self-reported adherence to MH treatment ▪ No effect on self-reported MH status ▪ Potential positive effect on HEDIS ratings of mental health services, however, positive ratings may have also been evident prior to the demonstration.	Increased access to LMHC had no adverse effect on TRICARE beneficiaries' perceived access to care, self-reported mental health status, or self-reported adherence with treatment, and may be associated with greater satisfaction with MH services.
(8) Explain the impact on the willingness of LMHCs to participate in TRICARE	▪ Lack of independent practice authority for LMHCs was viewed as a disincentive or barrier to participation prior to demonstration. ▪ Demonstration participation increased initially and leveled around the middle of the demonstration period. ▪ Enrollment of LMHCs as TRICARE	Suggests that demonstration may have been a motivator to network participation (though we have no data on network enrollment for the non-demonstration catchment areas during the same time period to use for comparison).

	networked provider increased during the demonstration period, but is likely not the result of the changing practice authority since this was a temporary demonstration.	
(9) Identify any policy requests or recommendations for MH counselors made by TRICARE plans or MCOs	▪ Removal of the referral and supervision requirements for LMHCs remains a top legislative priority for AMHCA and ACA. ▪ According to MCSC representatives, quality concerns could be addressed by development of appropriate and standardized credentialing mechanisms.	Adoption of formal credentialing standards could help to facilitate independent practice for counselors in states with rigorous licensing, while helping to promote the implementation of similar standards elsewhere.

Appendix

A. DEMONSTRATION MATERIALS

Participation Agreement

TRICARE Expanded Access to Mental Health Counselors Demonstration Project

This Participation Agreement ("Agreement") is between the United States of America through the Department of Defense, TRICARE Management Activity ("TMA"), a field activity of the Office of the Secretary of Defense, the administering activity for the TMA and _____ ("Provider").

The purpose of this participation agreement is to:

a. Establish the Provider's participation in the TRICARE Expanded Access to Mental Health Counselors Demonstration Project ("Demonstration").

b. Establish the terms and conditions of the Provider's participation in the Demonstration.

SECTION 1

General Agreement

1.1 TMA agrees to waive the TRICARE requirements for the Provider to have physician referral and supervision during the demonstration period. TRICARE contractors will be instructed to pay claims of participating Providers accordingly.

1.2 The demonstration period will begin on January 1, 2003 or the execution date of this Agreement, whichever is later. The demonstration period will end December 31, 2004.

1.3 TMA, or its designee, will analyze aggregated data collected from claims and other available sources to evaluate the impact of independent reimbursement of mental health services provided by selected mental health counselors.

SECTION 2

Provider Requirements

2.1 Provider agrees to collect the TRICARE Mental Health Counselors Demonstration Project Informed Consent Form from all TRICARE patients during the demonstration period. The form informs the TRICARE member that the Provider is participating in the TRICARE Mental Health Counselor Demonstration, which allows the Provider to provide services to the TRICARE member without physician referral or supervision.

2.2 Provider agrees to keep Merit Behavioral Care's TRICARE Central Region Office ("MBC TRICARE") notified of any address, telephone, or tax identification number changes. Changes can be sent to the MBC TRICARE fax line at 1-602-564-2336.

2.3 Providers should send Demonstration-related documents and correspondence to the fax line cited above or to MBC TRICARE, P.O. Box 42150, Phoenix, AZ 85080-2150. Providers may also call the MBC TRICARE Provider Relations line at 1-888-910-9378 for assistance.

2.4 Provider agrees that there will be no additional compensation for participating in the Demonstration.

SECTION 3

Termination and Amendment

3.1 TMA may terminate this Agreement with 30 days written notice if the Demonstration is cancelled.

3.2 This Agreement will terminate immediately if a provider relocates outside of the Offutt AFB catchment area, Ft. Carson catchment area, or USAF Academy catchment area.

3.3 The Executive Director, TMA, or designee, may amend the terms of this Agreement by giving 30 days notice in writing of the proposed amendment(s).

3.4 Either party may terminate this Agreement without cause upon 30 days written notice of termination to the other party.

SECTION 4

Effective Date

This Agreement is effective on the date signed by the Executive Director, TMA, or designee.

TMA	**PROVIDER**
Signature: _____	Signature: _____
Printed Name: _____	Printed Name: _____
Executed on _____, 20__	

INFORMED CONSENT FORM

Research Study

TRICARE Mental Health Counselors Demonstration Project

INTRODUCTION

You are being asked to take part in a research study. Before you decide to be a part of this research study, you should read the information below and need to understand it so that you can make an informed decision. This is known as informed consent.

PURPOSE AND PROCEDURES

The TRICARE Management Activity, through the Department of Medical and Clinical Psychology of the Uniformed Services University of the Health Sciences, is carrying out a congressionally mandated demonstration project to study the effects of waiving the requirements for mental health counselors to receive their referrals from a physician and to receive ongoing supervision from a physician. Under current TRICARE regulations, licensed or certified mental health counselors are required to document that a physician has referred TRICARE beneficiaries whom they treat. They are also required to receive ongoing supervision of their services by a physician. For the purposes of this demonstration project, counselors have independent practice authority. This means that your provider will not be receiving ongoing case supervision by a physician. At the end of the project, TRICARE will make comparisons between beneficiaries who received services from counselors with other types of providers. You might be asked to voluntarily participate in an optional survey concerning the quality of your care. However, your responses would be kept completely confidential, and no one, not even your counselor would have access to any feedback you provide.

POSSIBLE BENEFITS

By participating in this study, you may be expanding the range of mental health providers available to you. Possibly, counselors who would not otherwise consider becoming TRICARE providers would now do so.

POSSIBLE RISKS

Mental health counselors are ordinarily required to be medically supervised under TRICARE. Your provider, as a participant in this demonstration project, is granted independent practice authority and will not be medically supervised. However, he/she will promptly refer any medical concerns or referrals for medication evaluation to a physician should circumstances require it.

ALTERNATIVES

If you do not wish to receive services from a Mental Health Counselor Demonstration provider, you may call 1-888-910-9378 for a referral to another mental health provider.

COSTS

There are no additional costs associated with participating in this demonstration project.

RIGHT TO WITHDRAW FROM THE STUDY

Your participation in this research study is completely voluntary. You may decide to stop taking part in this study at any time by terminating your professional relationship with this provider. You may then seek an alternative provider by calling the telephone number cited above.

PRIVACY

As always, your medical records are kept by your provider and are never shared with anyone else. If you are asked to complete a survey, any information you provide will have any

identifying information removed, and all responses will be combined with all other program participants, so that your privacy will be guaranteed. Again, **your individual identifying information will never be made available to anyone.**

QUESTIONS

If you have any questions about this project, you should contact CAPT Mark Paris at (703) 681-0064. If you have any questions about your rights as a research subject, you should call the Director of Research Programs in the Office of Research at the Uniformed Services University of the Health Sciences at (301) 295-3303. This person is your representative and has no connection to anyone conducting the study.

SIGNATURES

By signing this consent form you are agreeing that the study has been explained to you and that you understand the study. You are signing that you agree to take part in this study. You will be given a copy of the consent form.

Signature: _____ Witness Signature: _____
Date: _____ Date: _____

COUNSELOR STATEMENT

I certify that this project has been explained to the above individual, by me or my staff, and that the individual understands the nature and purpose, the possible risks and benefits associated with taking part. Any questions that have been raised have been answered.

_____ _____
Mental Health Counselor/staff member Date

B. EVALUATION TASKS AND METHODS

The study was organized into four tasks, three of which were designed based on the source of data. The following appendix details the methodology and analyses employed for each task.

Task 1: Review and provide feedback on demonstration plans to determine suitability for evaluation purposes

Objectives. To provide feedback to DoD on the suitability of the implementation plans for evaluation purposes. To ensure the proper design and selection of methods for evaluating the impact of the mental health counselor demonstration.

Design and Procedures:

(1) Provide comments on the demonstration plans, including the informed consent forms and procedures for participants and beneficiaries, as well as the Institutional Review Board materials.

As requested, RAND reviewed plans, generated by the TRICARE Management Activity, for implementing the demonstration. This included participating in conference calls with TMA, Merit/Magellan Behavioral Health, and TRIWest. In addition, and as requested, we provided information with regard to our evaluation plan/protocol to TMA so that they could submit necessary IRB forms for the demonstration itself. Throughout the task, RAND took great care to ensure that all feedback specifically focused on our own ability to evaluate the impact of the demonstration given the implementation protocol. As such, we did not give any formal guidance or suggestions on how the implementation protocol should be designed or launched.

(2) Obtain preliminary estimates on the number of providers and beneficiaries in the demonstration area for purposes of creating a sampling plan.

To inform the process of creating sampling plans and budget estimates for the beneficiary survey (described in Task 3), RAND requested and received rough analyses of the total number of visits (and unique number of beneficiaries making up those visits) to different mental health providers (mental health counselors, psychologists, social workers, psychiatrists, psychiatric nurses, pastoral counselors) in each of the selected demonstration catchment areas. In addition, we requested and received counts of the number of counselors in each catchment area (to estimate the number of beneficiaries per counselor). The visit data were collected from the Health Care Service Record, TMA and the initial provider data from TRIWest records. These

reports were used to assess whether there would be sufficient number of eligible beneficiaries for sampling purposes (assuming a 50% response rate) to ensure statistical power (see Task 3) for the main evaluation analyses.

(3) Advise DoD on the selection of a non-demonstration comparison site(s) for purposes of pre- and post-demonstration analytic comparisons.

To facilitate TMA's review and selection of comparison site(s), RAND met with the project sponsor to discuss and prioritize possible selection criteria. At this meeting, RAND proposed consideration of several possible criteria to be used to make selections of comparison sites. RAND advised on selection of catchment areas to serve as comparison sites that matched demonstration sites along the following characteristics:

- MTF Size (based on number of providers, which potentially serves as a proxy for the availability of services on base).
- Branch of Service (for MTF in catchment area, the demo areas included one Army and two Air Force catchment areas).
- Geographic Region (TMA requested that we not consider catchment areas on the east coast, due to possible contamination in mental health service utilization surges following September 11, 2001 attacks).
- Managed Care Support Contractor (either same or different as demo area).
- Percentage of eligible beneficiaries in the catchment area who used an outpatient, purchased care mental health services during the past fiscal year.
- Frequency distribution of total outpatient, purchased care visits (for eligible beneficiaries 18 and over) by mental health providers.
- Frequency distribution of mental health users (eligible beneficiaries 18 and over) by mental health provider.
- Number and proportion of network enrolled providers in each mental health provider group.

TMA agreed that among the various characteristics, utilization patterns of visits to the various mental health provider groups was the primary criteria by which they wanted to match the demo and comparison areas. Other criteria of importance were agreed to be the number of beneficiaries who sought services from each of the provider groups and the proportional distribution of each of the mental health provider groups. Upon request, RAND agreed to review potential data available on the TMA website on outpatient mental health service utilization and receive some rough data analyses conducted by TMA and provide feedback to TMA for their selection process.

Data Sources. Three primary sources of data and or information were relied upon:

- TRICARE Website: For information on the branch of service and managed care support contractor, behavioral health contractor, as well as the Health Care Summary by Primary Diagnosis statistical report for FY01 for each of the catchment areas of interest (http://199.211.83.250/Reports/HR/2001/default.htm)
- Health Care Service Records (summary reports provided by TMA): To generate reports of the total number of visits for beneficiaries 18 and over who sought services from mental health providers (sorted by provider type) and the corresponding number of unique beneficiaries 18 and over who used such services during FY01
- Health Care Provider Records (summary reports provided by TMA): To generate reports of the total number of network enrolled providers in each of the provider type categories of interest for each catchment area of interest

Procedure. To begin the extraction of information on potential catchment areas for use as a comparison site, RAND conducted a preliminary, on-line review of statistical reports to narrow down the number of catchment areas to be considered. We concentrated attention on catchment areas that seemed to be similar in size and geography to the control sites. More specifically, we focused on potential areas that:

- Were within a health care service region that had similar percentages of mental health counselor utilization. Visits to mental health counselors accounted for roughly 16% of the visits to all mental health providers in region 7/8 during FY00. The only other regions with similar proportions were regions 2, 3, 4, 5, 6. However, due to TMA's concerns about the surge in mental health service use in regions 1 and 2 following the September 11, 2001 attacks, we excluded those regions from consideration
- Were *a priori* believed to be of similar MTF size (all control sites had between 100-500 providers on staff)
- Were *a priori* believed to be close to a mid to large metropolitan area
- Were either an Army or Air Force managed catchment area, since there is not a Navy catchment area in the demonstration and the delivery of health care service can vary depending on branch of service.

Using this criteria, we selected the following catchment areas for closer evaluation: Ft. Gordon, GA (Army, region 3); Ft. Bliss, TX (Army, region 7/8); Ft. Hood, TX (Army, region 6); Luke AFB (AF, region 7/8); Wright-Patterson AFB, OH (Army, region 5); and MacDill AFB (Army, region 3). We requested data on these catchment areas as well as the demonstration sites: Ft. Carson (Army, region 7/8); USAF Academy (AF, region 7/8); and Offutt AFB (AF, region 7/8).

Once data were extracted and tabulated, RAND collated all available estimates in an Excel spreadsheet, lining the demonstration areas and potential control sites in columns. We generated

frequency distributions as possible within categories for purposes of comparison. No statistical analyses were conducted, however, we reviewed the results with our statistician and other project team members for review. The data were presented to TMA for consideration with RAND's recommendation. Based on the criteria determined to be of primary importance, TMA selected the following catchment areas as non-demonstration comparison sites.

Ft. Hood as a comparison area for Ft. Carson: As compared to the other Army catchment areas examined, Ft. Hood had the closest percentage of visits to counselors, had a sufficient number beneficiaries who sought mental health service (for survey sampling), and has a similar sized MTF, and the greatest number of counselors enrolled in the network.

Wright-Patterson as a comparison area for Offutt AFB: As compared to the other AF catchment areas examined, Wright-Patterson had the closest percentage of visits to counselors, had a sufficient number of beneficiaries who sought mental health services (for survey sampling), and has a similar sized MTF.

Luke AFB as a comparison area for USAF Academy: As compared to the other AF catchment areas examined, Luke AFB had the closest percentage of visits to counselors, had a sufficient number of beneficiaries who sought mental health services (for survey sampling), and has a similar sized MTF. Luke AFB also is within region 7/8, allowing for a within health care service region/managed care support contractor comparison.

Task 2: Obtain and analyze administrative claims (e.g., HCSR and PDTS) data on utilization and reimbursement for mental health services provided to covered beneficiaries within the demonstration site, compared to utilization and reimbursement rates for similar services in a non-demonstration region (comparison site).

Objectives. To evaluate the impact of independent reimbursement of mental health services provided by licensed or certified mental health counselors on the utilization and reimbursement of such services for covered beneficiaries under the TRICARE program. Specifically, Task 2 was to provide (from the legislation):

1. A description of the extent to which expenditures for reimbursement of licensed or certified professional mental health counselors change as a result of allowing the independent practice of such counselors
2. Data on utilization and reimbursement regarding non-physician mental health professionals other than licensed or certified professional mental health counselors under the TRICARE program

3. Data on utilization and reimbursement regarding physicians who make referrals to, and supervise, mental health counselors
4. For each of the categories described in paragraphs (1) through (3), a comparison of data for a 1-year period for the area in which the demonstration project is being implemented with corresponding data for a similar area in which the demonstration project is not being implemented.

Design and Procedures. To assess the extent to which independent reimbursement of licensed and certified mental health counselors impacts service utilization, expenditures, and treatment process outcomes, RAND conducted analyses of service claims for covered beneficiaries receiving services from mental health providers. RAND compared data on claims for care provided within the demonstration region to data from a non-demonstration region (the control site) using both one year of data pre- and one year of data post- implementation of the demonstration. RAND also examined and compared treatment process outcomes for beneficiaries receiving mental health services from licensed or certified mental health counselors and compared such outcomes to beneficiaries seeking services from other mental health providers (including physicians, clinical psychologists, clinical social workers, etc.). For the majority of these analyses, RAND employed a pre-post intervention evaluation methodology.

Data Sources. To examine utilization, expenditures, and treatment process outcomes, our study relied upon several DoD health data sets. We requested calendar years 2002 and 2003 Health Care Service Records and pharmacy records from the Pharmacy Data Transaction Service for TRICARE beneficiaries who received mental health services (broadly defined, see below) in the specified catchment areas (demo and comparison). We also requested data from the Defense Eligibility Enrollment System (DEERS, e.g., the most recent available MDR PITE) so that we could estimate mental health service utilization rates among eligible beneficiaries for each catchment area of interest. For mental health service users (based on the HCSR and PDTS), we also requested data from the Standard Ambulatory Data Record and the Standard Inpatient Data Record to capture any information on use of mental health services within the direct care system.

Analytic Plan

Initial data extraction, processing and management. We worked closely with DoD to specify the data sources, define the records and variables to be extracted, and to ensure the best extraction of data for the purposes of this study. We submitted detailed data requests and a formal data use agreement to DoD to request all health care service records/claims for mental health service users during the one year pre-demonstration and one-year post-demonstration periods (restricted to users of mental health services provided in the specified catchment areas). To the extent

possible, these periods were defined using the same months both pre and post (to control for any seasonal variations in mental health service utilization). To ensure comprehensiveness in our sample, we employed a broad definition of mental health service use to include beneficiaries who received TRICARE covered care, during the one year period before the implementation of the demonstration or during the one year period following the implementation of the demonstration, that met one or more of the following criteria:

- Was to a mental health specialty provider (defined by the provider codes for licensed/certified mental health counselor, clinical social worker; psychologist, family/marital therapist, or psychiatrist)
- For a mental health service (defined by the CPT code or ICD-procedural codes for psychotherapy, psychoanalysis, psychiatric management, counseling, or group/family therapy, etc.)
- For a psychotropic medication (defined by National Drug Codes for psychotropic medication: antidepressants, stimulants, antipsychotics, anxiolytics, etc); or
- Where a mental health diagnosis (ICD 9-CM codes: 292-312, 314) appeared in one of the diagnosis fields. For those beneficiaries with a secondary or tertiary mental health diagnosis, they were only considered mental health service users if one of the other criteria were met.

Main evaluation analyses. Once the data were formatted and prepared for analyses, using the pre-post intervention design, we examined utilization patterns and reimbursement data for a one-year period prior to the demonstration (i.e., baseline) and a one-year period of data following full implementation of the demonstration. The main evaluation analyses measured changes pre and post demonstration in the amount, type, and cost of mental health services provided to TRICARE beneficiaries. All analyses examined group differences between beneficiaries in the demonstration site and those receiving care in the non-demonstration (comparison) site as well as differences by type of provider (see Table 2.1).

Table B.1 Analytic Groups

Beneficiaries who receive care from	Demonstration		Non-Demonstration	
	Pre	Post	Pre	Post
Mental Health Counselors				
Other non-physician mental health providers				
Psychologists				
Licensed Social Workers				
Psychiatric Nurse Practitioners				
Marital/Family Therapists				
Pastoral Counselors				
Physicians				
Psychiatrists				
Primary Care Physicians				
TOTAL				

Analytic Questions. Our analyses were aimed to assess the following research questions. (1) What is the impact of independent practice authority for licensed or certified mental health counselors on the expenditures for mental health services? For each question, we assessed changes pre and post demonstration in:

- Aggregate overall expenditures (DoD and patient) expenditures
- Aggregate expenditures per provider group
- Expenditures per user

(2) What is the impact of independent practice authority for licensed or certified mental health counselors on the utilization of mental health services? For each of the following questions, we assessed changes by provider group, pre and post demonstration in (also see table 1)

- Aggregate volume of use of outpatient mental health services (number of users and number of visits)
- The type of mental health service use (use and rate of outpatient service; use and rate of inpatient psychiatric hospitalizations)
- The intensity of mental health service use (visits per user; combinations of services—psychotherapy alone, medication alone, psychotherapy & medication);
- The clinical characteristics of mental health users (distribution of patients by major diagnostic category)

(3) What is the impact of independent practice authority for licensed or certified mental health counselors on the utilization of health care services in general for mental health users? For each question, we assessed changes pre and post demonstration in:

- Aggregate volume of use of outpatient and inpatient health care services among mental health users (Number of visits, number of admissions, total expenditures, and rate of visits, rate of admissions, etc)
- Mix of general health care service use among mental health users

(4) What is the impact of independent practice authority for licensed or certified mental health counselors on payments for mental health services provided by mental health providers? For each area, we will assess change pre and post demonstration in:

- Aggregate overall payments for mental health services
- Aggregate payment per provider group
- Payments per user

Definition of Measures. Using the variables available in the administrative claim records provided by TMA, we constructed several measures of interest: outpatient visit counts, inpatient episodes, expenditures for outpatient visits and inpatient episodes, and payments to providers.

Outpatient Visit Counts: We defined an outpatient visit as a 'mental health' visit if it was to a mental health provider, had a mental health procedure listed on the record, or had a mental health diagnosis listed on the record. To count outpatient visits to each provider type for each user, we summed the 'visits' variable across all records with the provider type (e.g., LMHC, OMH Provider, psychiatrist). We did not allow for more than one visit to a given provider type per day, so if a record had the same 'begin' and 'end' date we capped the number of visits for that record at 1. We also did not count any outpatient records that occurred during an inpatient hospitalization.

Inpatient Episodes: To identify and count inpatient episodes, we considered any HCSR non-institutional record with an 'inpatient' type of service as part of an inpatient episode. Since many records labeled 'inpatient' type had the same 'begin' and 'end' dates, we strung all inpatient events within three days of eachother together into the same episode. We then rolled HCSR institutional records with an overlapping date range into the same episode. Finally, we defined an inpatient episode as a 'mental health' if there were any mental health procedures, provider types, or diagnoses for any of the records that made up an inpatient episode.

Expenditures for Outpatient Visits: Because multiple procedures and visits were often recorded on a single record with a single 'amount' paid variable, we could not assign outpatient costs to a specific outpatient event. Instead, we summed costs for each individual across all mental health records and used this sum to calculate the mean outpatient expenditures per MH user. Likewise, to calculate total outpatient spending, we summed costs across all of a person's outpatient visits.

Expenditures for Inpatient Episodes: We calculated expenditures for an inpatient episode by summing the 'amount paid' variable across all the records that made up that episode. The mean per user was calculated by dividing this sum by the total number of MH users or dividing by the total number of MH users who had at least one inpatient MH episode (since not all MH users had an inpatient episode).

Payments to Providers: To calculate payments made to the various MH provider groups, we totaled the 'amount paid' variable, by provider type, across all outpatient visit records. We did not include records with an 'outpatient' type of service that occurred during an inpatient stay.

Statistical Tests. All analyses were conducted using SAS version 8.02. To measure differences pre and post demo, where appropriate to the variable we used chi-square for frequency distributions and test differences in means with t-tests. To control for these population differences, we used propensity score weighting to adjust the non-demonstration group population for differences in age, sex, member category, and interactions between these characteristics. Ideally we would have liked to conduct a multivariable analysis, using these propensity score weights, to determine the effect of the demonstration on utilization and costs. However, the data available did not provide additional variables that would be useful in predicting

health care costs. In particular, we would have preferred to control for diagnoses, but diagnoses are only available on the claims data from which we determine utilization, and are therefore endogenous. Therefore, having used propensity score weights to control for variation in the only personal information we had available between the populations, we were advised by our statistical consultant to compare weighted means across the two groups. We first compared utilization across the two eligible populations, including the rate of any mental health care use and of counselor use. We then compared rates of use among those seeing a LMHC. To determine if the demonstration had a significant impact on the variables of interest, we used a difference-in-difference approach to determine whether the differences (e.g., in utilization or costs) between pre and post in the demonstration area are significantly different than the differences between pre and post in the non-demonstration area.

Table B.2 Summary of proposed measures for evaluating the impact on utilization and costs of such services

Measures	Description
Utilization	Visits to Mental Health Providers (overall volume, mean number of visits, and rates) Number of Mental Health Users (overall number and as percentage of eligible beneficiaries) Health Care Service visits for Mental Health Users (volume and mean) Type and Frequency of MH Service Use among MH users; Rate Inpatient Psychiatric Hospitalization among MH users
Payments to providers	Payments (by government) made for health care services for beneficiaries receiving mental health service (total and per user estimates) Payments (by government) made to providers of mental health services (total and per user estimates)
Total Expenditures	Total expenditures (amount paid by government) for health care services for beneficiaries receiving mental health services (total cost and per user cost to government, total cost and per user cost to patients) Total expenditures (amount paid by government) for services provided by mental health providers (total and per user estimates)

Task 3: Collect and analyze data on the clinical and treatment characteristics and treatment outcomes of covered beneficiaries who receive mental health services under the TRICARE program to assess the impact of independent reimbursement on health outcomes of covered beneficiaries.

Objective. Evaluate the effects of the DoD Demonstration for expanded access to mental health counselors under TRICARE on beneficiaries' mental health processes and outcomes. Analyses examined differences among beneficiaries receiving mental health services in demonstration vs. comparison sites and from different types of providers approximately six months post-implementation of the demonstration. Specifically, we aimed to:

(1) Describe the demographic and health characteristics of respondents compared with non-respondents (using administrative data).

(2) Identify factors associated with access to care for mental health problems e.g., reasons for seeking, intentions to receive, and barriers to obtaining needed care (including perceived mental health stigma).

(3) Understand, among those receiving mental health care services, factors associated with adherence (and non-adherence) to treatment (e.g., taking psychotropic medications as recommended and completing an adequate number of psychotherapy visits).

(4) Assess reported satisfaction with mental health care received from the specific provider (including communication with clinicians, information about treatment options, and patient involvement in treatment decision making).

(5) Evaluate mental health outcomes (diagnosis, symptom severity, and mental health functioning).

Design and Procedure. We used a post-demonstration mail survey of TRICARE beneficiaries to evaluate the effects on outcomes of the demonstration project. The survey contained approximately 75 items (4-5 per minute) for a 15-20 minute completion time. We collected cross-sectional survey data approximately six to nine months after the full implementation of the demonstration. This allowed for group comparisons to determine whether beneficiaries receive better care as a function of being in the demonstration and by provider type. To adjust for any pre-existing differences between groups prior to the demonstration, we used administrative data to determine the impact of the demonstration on a limited set of outcomes beyond what will be included in Task 2 (Secondary Data Analysis). Using a pre- and post-demonstration design, as well as a comparison of demonstration and non-demonstration sites, we analyzed data from the Health Care Service Record and the Pharmacy Data Transaction Service. For example, using available DoD data, we examined, described, and compared characteristics of health care services use across the four beneficiary groups of interest. Beneficiary groups are those receiving services from:

(1) Licensed or certified counselors under the demonstration;

(2) Licensed or certified counselors in a non-demonstration regions;

(3) Physicians (including psychiatrists as well as primary care physicians rendering either a defined mental health service or to a beneficiary with a mental health diagnosis); and

(4) Other non-physician mental health providers.

To the extent possible, procedural outcome variables were defined and assessed; these included rates of mental health service use, rates of overall health care service use, frequency/intensity of mental health service use, frequency/intensity of overall health care service use; and rates of

inpatient psychiatric services. We examined and compared the clinical and treatment complexity across the four beneficiary groups. For example, we assessed the incidence and prevalence of mental health diagnoses and the use of services by different provider types relative to psychotropic medication use based on the pharmacy data.

Sample Selection. Based on TRICARE assumptions on the number of beneficiaries who used mental health services during the prior month, we estimated that at least 1,200 target beneficiaries would be needed to ensure a final sample of 600 completed surveys (assuming a 50% response rate) for a cross-sectional survey. Because our goal was to evaluate the effect of increased access to mental health services in demonstration and non-demonstration sites and for different types of providers, we were interested in knowing whether those needing services were actually seeking care for their personal or emotional problems at the time the demonstration began. As noted earlier in this report, we defined mental health service utilization broadly as including those TRICARE beneficiaries with either a diagnosis of mental disorder, a visit for a mental health service from either a specialist or a generalist, or a pharmacy claim for a psychotropic medication during the past year.

We used administrative data on mental health visits and diagnoses (at the person level) to draw the sample of beneficiaries. To allow for adequate power in making comparisons across the four key comparison groups: 1) mental health counselors in the demonstration, 2) mental health counselors in the non-demonstration region, 3) other mental health specialists balanced across demonstration condition, and 4) physicians balanced across demonstration conditions, we sampled equal numbers of beneficiaries from each of these groups. Table B3 shows the estimated *final* sample sizes and accompanying sampling probabilities.

Table B.3 Estimated Sample Sizes based on Sampling Probabilities (in parentheses)

Provider Type	Demonstration Condition		Total
	Demonstration	Non-Demonstration	
Mental Health Counselors	***150 (.25)***	***150 (.25)***	***300 (.50)***
Other Mental Health Specialists	***75 (.125)***	***75 (.125)***	***150 (.25)***
Physicians	***75 (.125)***	***75 (.125)***	***150 (.25)***
Psychiatrists	38 (.0625)	37 (.0625)	75 (.125)
General Medical Physicians	38 (.0625)	37 (.0625)	75 (.125)
Total	***300 (.50)***	***300 (.50)***	***600 (1.00)***

Analytic Precision. Preliminary sample size calculations suggested that with this design we would achieve more than adequate power (above 80%) to detect a 20% difference in groups (demonstration vs. control) with the proposed sample size. Power would be lower if beneficiary scores were more dispersed. However, even if the effect size was much smaller than 20%, there would be adequate power for looking at demonstration differences but would be low for differences by provider type.

Survey Content. On overview of the survey content is shown in Table B3.2. Much of the content is drawn from established and validated instruments used in both research and managed care. For example, we included key portions of the Experience of Care and Health Outcomes (ECHO) Survey that was developed by the Consumer Assessment of Health Plans measurement team (Eisen et al., 1999; 2000). We also asked some new and unique items to assess knowledge about the demonstration and exposure to the war in Iraq, which was ongoing during the field period to understand their impact on mental health service use and outcomes.

Table B.4 Summary of Survey Content and Flow

Domain/Concept	Source
Treatment for Personal or Emotional Problems	ECHO
Counseling or Treatment	PIC
Medication and Other Health Remedies	PIC
Health Plan and Mental Health Benefits	ECHO
Health Status	PHQ, ECHO
Attitudes about Health and Health Care	MOS, PIC, DiMatteo, Link
Knowledge of the TRICARE Demonstration	New items
Demographics and Exposure to War in Iraq	Standard

Analysis. We created sample weights to adjust for age of survey beneficiaries. To derive the weights, we first examined results from a logistic regression model that predicted response from a key set of variables we thought would affect findings (age, provider type, gender, age, and demonstration region). In this model, only age was significant predictors of response/non-response. To adjust for this potential bias, we used that logistic regression model to predict the probability of response for all of the responders, computed the non-response weight as 1/(predicted probability of response. All survey analyses are presented for the weighted runs e.g., with the sample size inflated to represent the age distribution of the entire sampling frame.

Our first set of analyses examined the bivariate differences for beneficiaries who received mental health care services from a provider in the demonstration sites compared with those

receiving services in the matched non-demonstration comparison sites. We used Chi-square statistics to analyze differences for binary indicators and categorical measures and we used t-tests for continuous measures. We then included key variables (e.g., sample selection characteristics, indicator of demonstration status, demographics) along with clinical, service/treatment use, and attitude/perception variables in multivariable models if they were significant in the bivariate analysis. In addition to examining the impact of the demonstration, we also identified key factors associated with those outcomes. We also tested the impact of the Iraq war on TRICARE beneficiaries. We asked respondents whether any of their family members or close friends were deployed for the recent war in Iraq and also among those who had, whether any of them were back from their tour of duty. These measures were included in multivariable analyses to evaluate the impact of war factors on service use above and beyond adjustment for other types of variation in the sample. All analyses were weighted to reflect the entire study sample of 1,200. Thus our multivariable models adjusted for demographics, barriers to care, stigma, and impact of the Iraq war.

For multivariable analyses, we selected a subset of outcome measures that we believed could have been affected by the demonstration that allowed for expanded access to mental health services for this sample. We included measures of access to mental health care (receipt of mental health care in the last 6 months, receipt of counseling from a mental health care provider in the past 4 weeks, taking any medication for a mental health problem in the past 6 months, and taking a prescription medication for a mental health problem in the past 6 months), adherence to mental health treatment (general adherence, adherence with medications, and adherence with counseling), indicators of mental health status (whether emotional or personal problems affected functioning, probability of having major depression, probability of having panic disorder, and probability of having somatic disorder), and selected HEDIS indicators of mental health care services (overall rating of counseling/treatment, whether they got urgent treatment as soon as needed, whether they got an appointment as soon as wanted, whether they got help by telephone, and whether they waited more than 15 minutes to see a clinician).

Task 4: Conduct Relevant Policy and Qualitative Analyses

Objectives. This task was devoted to producing relevant policy and qualitative analyses in order to: (1) describe administrative costs incurred as a requirement of documentation of referral and supervision of licensed or certified mental health counselors ("LMHCs"); (2) assess the impact of independent reimbursement on patient confidentiality and on the willingness of LMHCs to participate in TRICARE; and (3) summarize policy requests and recommendations regarding LMHCs from plans within TRICARE.

Design and Procedures. Most of the actual work related to these tasks involved semi-structured interviewing. The first wave of interviews was conducted shortly following implementation of the demonstration (i.e., January 2003 – February 2003), and a reduced set of follow-up interviews were conducted approximately nine months after the demonstration is in place (July 2003 – September 2003). Our target interviewees included the following:

(a) LMHCs, psychologists, and physicians (psychiatrists and primary care providers) in the demonstration and control regions;
(b) representatives from the four MCOs that provide behavioral health services under;
(c) a military representative(s) from the Department of Defense Mental Health Policy Group;
(d) congressional staffers on the Hill responsible for TRICARE-related legislation; and
(e) representatives from the professional organization(s) that represent mental health counselors.

Plans were modified to include some supplemental interviewing, depending on our results in progress. Most of the interviews were conducted by telephone and all participants were informed of the purposes of the discussion.

Prior to conducting interviews, we developed interview protocols for each of these groups of people (i.e., listings of the specific questions that we intend to ask). As a product of the interviews, we produced a (typed) listing of the questions and answers from each interview. In addition, for each category of interviews (e.g., MCOs, counselors, psychiatrists, etc.), we produced a short, synthetic document that described the trends in responses across individual interview subjects.

In addition to the interviewing, there were three other (smaller) non-interview tasks that we undertook for the qualitative analyses. First, in assessing the impact of the intervention on confidentiality, we searched the literature to identify relevant regulatory authorities, guidance documents, and empirical articles that might ground our discussion and analysis of confidentiality issues. Second, to the extent that our interviews point us toward any recent legislative proposals regarding TRICARE coverage policies (for LMHCs), we aimed to briefly examine those proposals. Finally, we compared the number of LMHCs contracted with TRICARE pre- and one-year post- demonstration, to assess the impact of the intervention on LMHC willingness to participate in TRICARE.

Documentation and Analysis of Qualitative Data. Interviewers inputted the interview responses into standard word processing programs within 24 hours of the interview to insure accurate recall. The study research assistant assisted the interview team in entering this data into (tabular) files that can be subjected to text searches, this to identify themes in responses across interviews. The data were organized into tables by interview type (e.g., LMHCs, MCOs, etc.), with questions listed in rows, and the individual respondents listed in columns. This

technique, supplemented by computer-based text searching, supported the identification of response trends in the qualitative data. Additionally, we created a second-order table of trends, with key themes from the interviews listed in rows, and the provider type or site listed in columns. Tabular summary of the qualitative data facilitated the analysis of themes across the different types of interviews (Berelson, 1952; Krippendorf, 1980; Weber, 1990). Ultimately, the results of the qualitative analysis (including data tables) were incorporated into a narrative discussion in the final project report.

Protection of Human Subjects

This evaluation project involved the collection and analyses of primary survey data and secondary administrative data of individual level information on the use of mental health services as well as the collection and analyses of data obtained through qualitative interviews with individuals in official capacities related to TRICARE. All analyses were performed using de-identified data. All study procedures and protocol were reviewed and approved by the RAND Human Subjects Protection Committee to ensure efforts were taken to minimize risk associated with study participation (reference file number s0152-02-03). In addition, the Department of Defense sought review and approval of the Demonstration implementation methods as an exempt human subject use study under the provisions of 45 CFR 46.101 (b) (5) from the Institutional Review Board of the Uniformed Services University for the Health Sciences (reference file number HU72FE).

The methods and instrument used to gather data directly from beneficiaries, entitled "Survey of Mental Health Care Experiences," were reviewed and approved by the Defense Manpower Data Center (reference RCS DD-HA (OT) 2165, expiration date August 28, 2006).

Access and use of the administrative claims data were granted under a Data Use Agreement with the TRICARE Management Activity Privacy Office (reference file number DUA # 0098).

RAND created and implemented an appropriate data safeguarding and monitoring plan to protect and monitor data safety throughout the course of the project. A copy of this plan was provided to the TRICARE Management Activity and is kept on file with the RAND Data Safeguarding Office within the Human Subjects Protection Committee.

C. BENEFICIARY SURVEY DOCUMENTATION

Questionnaire Development

Questionnaire development began in March 2003 with the identification of domains that would be examined in the survey. Questionnaire items were drafted from several sources. Most of the items focused on treatment and health status. These were adapted from the following existing instruments: *Experience of Care and Health Outcomes Survey – Managed Behavioral Healthcare Organization v3.0* (ECHO), *Brief Patient Health Questionnaire* (PHQ) and *Partners in Care Brief Health Questionnaire* (PIC).

The title of the questionnaire is *Survey of Mental Health Care Experiences*. The questionnaire was designed to elicit information from the respondent regarding his/her experiences utilizing mental health care services and coverage, recent and current health status including mental health symptoms, and attitudes about mental illness and mental health care. Demographic and other personal information (e.g. family situation, exposure to Iraq war, etc.) was also collected. The questionnaire was divided into 8 sections as described in Table 1.

Table C.1 Questionnaire Sections

Section	Description
Treatment for Personal or Emotional Problems	Lists examples of circumstances that might lead a person to receive mental health care services and asks respondents to indicate whether they have received these services in the past 6 months
Your Counseling or Treatment	The first set of questions captures information regarding the mode and from whom the respondent sought care; the second set of questions asks about the respondents experience receiving that care
Your Medication and Other Health Remedies	These items capture information about medications used by the respondent for mental health related ailments
Your Health Plan and Your Mental Health Benefits	Questions regarding the respondents experience with mental health care coverage
Your Health Status	Includes some general health items but is mostly aimed at capturing information about the respondents mental health status
Attitudes about Health and Health Care	Designed to measure the respondent's perception regarding the impact of having a mental health problem and concerns regarding receiving mental health care treatment
TRICARE Demonstration Project for Expanded Access to Mental Health Counselors	Two items meant to assess the respondent's knowledge of the demonstration program
About You	Items include age, gender, education level, race/ethnicity, family situation, work status, and exposure to war in Iraq

The first section ("Treatment for Personal or Emotional Problems") was designed to identify those individuals who didn't consider themselves as having received mental health care services during the study period. Those who indicated not having received such services (which were described as including medication or other types of treatment) were instructed to skip all items related to the mental health treatment.

A pilot test of the questionnaire was conducted in late May and early June 2003. The pilot test consisted of completing the self-administered questionnaire and participating in a 1-on-1 phone interview to discuss responses given, get feedback from respondents as to the clarity of some of the phrases and terminology used in the questionnaire, and explore how the respondents thought through their answers to some key questions.

Given the maximum number who would be allowed to participate without OMB approval, the target number of pilot testers was 9

On average, it took pilot testers 20 minutes to complete the questionnaire with only one person indicating that it took longer than expected. Overall, pilot testers found the questionnaire easy to complete. Regarding the format and appearance of the questionnaire, various changes were made in response to the pilot testers comments. For example, one pilot test respondent indicated that the color of the cover should be a soft green or blue (not bright yellow as in the pilot) since these would be more calming and soothing colors, which the respondent thought would be important for a survey on mental health.

Based on input from pilot testers on specific items, wording changes were made to the introductory statements, questions stems and response categories of various items. For example, regarding the list of examples of reasons for obtaining mental health care, pilot testers pointed out that there was overlap between personal and family problems as described. Instead, it was suggested that the distinction be made between family, work and other types of personal problems.

Other refinements to the instrument's language and skip patterns, as well as to the order of some items within sections, were made prior to the main data collection. Some of these revisions were also based on input received from DMDC review including the wording of the ethnicity/race items and their concern with the drug/alcohol items. See this Appendix for a copy of the final version of the questionnaire and a table summarizing the source of each item in the questionnaire.

Sample Description

Table D2 summarizes the make-up of the study sample by provider type and catchment area. Three of the catchment areas were participating in the TRICARE demonstration project being evaluated (#32, #33 and #78) and while the other 3 were not (#9, #95 and #110).

Table C.2 Study Sample by Original Catchment Area and Provider Type

	Provider-type Group[1]				
Catchment Area	**LMHC**	**OMH**	**PYSCH**	**PCP**	**TOTAL**
DEMO	307	150	75	75	607
Catchment 32	103	51	25	25	204
Catchment 33	99	51	25	25	200
Catchment 78	105	48	25	25	203
NON-DEMO	293	150	75	75	593
Catchment 9	80	51	25	25	181
Catchment 95	84	51	25	25	185
Catchment 110	129	48	25	25	227
TOTAL	**600**	**300**	**150**	**150**	**1200**

[1]LMHC = received services from a licensed or certified mental health counselor; OMH = received services from a psychologist and/or social worker, but not from a mental health counselor; PSYCH = received services from a psychiatrist only; PCP = received services from a primary care provider only

A comparison of mailing addresses found duplicate households among 47 individuals with 22 pairs of individuals in the same household and one set of 3 individuals in the same household. All these individuals were kept in the study sample.

Fielding Activities

Data collection began on September 16, 2003 and ended on February 27, 2004. Fielding procedures included 3 mailings of the questionnaire study packet, one reminder letter mailing, and reminder phone prompts. Table C.3 outlines the fielding activities and dates, and includes estimates of completes per mailing and as a percentage of total completes. The study packet included a cover letter on RAND letterhead, a hard copy of the questionnaire and a postage paid return envelope. The 1st mailing also included an endorsement letter on TRICARE Management Activity letterhead and signed by the Director of Health Program Analysis and Evaluation, the study sponsor. Copies of the study packet letter and the reminder letter can be found in this Appendix.

Table C.3 Survey Mailings

Fielding Task	Sample Size	Dates	Estimated Response per Mailing (% of Sample Size)	% of Total Response (n=553)
1st mailing	1200	9/16/03 – 9/17/03	176 (15%)	32%
reminder letter	1024[1]	9/22/03 – 9/24/03	148 (14%)	27%
2nd mailing/phone prompts	764	10/23/03 – 11/12/03	182 (24%)	33%
3rd mailing	577	1/6/04	47 (8%)	8%

[1]A reminder letter was sent to all individuals in the original sample; this number excludes individuals for whom a completed survey was received prior to the date when the reminder letter was mailed or would be expected to have had an impact (n=176).

Phone prompts to non-respondents (approximately 844 cases) were conducted from mid October through early November 2003. On average, cases received two calls during this time period. For the majority of the cases, SRG callers were able to leave a message for the potential respondent or talk to the potential respondent directly. Cases without phone numbers or with wrong phone numbers were tracked through directory assistance.

A protocol was developed to address situations in which a case may express a desire to hurt him/herself or somebody else. This could occur either in writing on the questionnaire (all questionnaires were reviewed within 24 hours of having been received by SRG) or during a phone conversation with an SRG caller. In either case, the case would be immediately referred to the appropriate TRICARE emergency assistance number in the case's catchment area. No incidents of a life-threatening situation occurred during the phone prompts or via returned questionnaires.

Table C.4 provides a breakdown of survey participation by originally sampled catchment area and provider type.

Table C.4 Final Fielding Status and Response Rate

Catchment Area & Provider Type	N	Survey Returned Completed	Deceased	Out of Area[1]	Refused[2]	Survey Packet Undelivered	Response Rate[3]
DEMO	607	271	2	0	37	40	45%
LMHC	307	137	0	0	17	21	45%
OMH	150	65	0	0	13	7	43%
PSYCH	75	41	1	0	2	6	55%
PCP	75	28	1	0	5	6	38%
NON-DEMO	593	282	6	2	11	38	48%
LMHC	293	125	0	2	4	21	43%
OMH	150	80	1	0	6	8	54%
PSYCH	75	40	2	0	0	6	55%
PCP	75	37	3	0	1	3	51%
TOTAL	**1200**	**553**	**8**	**2**	**48**	**78**	**46%**

[1] Cases not currently living in the US (i.e. new address provided by USPS was an APO address).

[2] Includes cases that were too sick to participate, too busy, not interested or concerned about privacy.

[3] # of completes divided by eligible sample where eligible sample excludes "Deceased" and "Out of Area".

RCS DD-HA (OT) 2165
Expiration Date: August 28, 2006

Survey of Mental Health Care Experiences

YOUR PARTICIPATION IN THIS SURVEY IS COMPLETELY VOLUNTARY AND RAND WILL NOT INFORM ANYONE OF YOUR PARTICIPATION. RAND WILL NOT GIVE THE DEPARTMENT OF DEFENSE OR TRICARE, OR OTHERWISE MAKE PUBLIC, ANY INFORMATION THAT WOULD LINK YOU OR YOUR FAMILY TO YOUR RESPONSES TO THIS SURVEY. RAND WILL KEEP ALL OF YOUR RESPONSES CONFIDENTIAL, UNLESS RAND IS REQUIRED BY LAW TO RELEASE THEM. RAND WILL USE THE INFORMATION YOU PROVIDE FOR RESEARCH PURPOSES ONLY.

YOU MAY NOTICE A NUMBER ON THE COVER OF THIS SURVEY. RAND WILL USE THIS NUMBER TO KEEP TRACK OF WHO RETURNED A SURVEY SO THAT WE DON'T SEND YOU REMINDERS UNNECESSARILY. RAND WILL ALSO USE THIS NUMBER TO DETERMINE HOW MANY RESPONSES WE HAVE RECEIVED FROM A CATCHMENT AREA. RAND WILL NOT USE THIS NUMBER TO LINK YOUR CONTACT INFORMATION TO YOUR INDIVIDUAL RESPONSES. AT THE END OF THE STUDY RAND WILL DESTROY ALL INFORMATION THAT IDENTIFIES YOU.

Center for Military Health Policy Research
and
National Defense Research Institute

RAND
1200 South Hayes Street
Arlington, Virginia 22202-5050

INSTRUCTIONS FOR COMPLETING THIS QUESTIONNAIRE

About this questionnaire

This questionnaire was designed as part of a larger study being conducted by RAND on behalf of the Department of Defense. The information being collected in this questionnaire will help the Department of Defense and TRICARE better understand how to improve mental health care coverage for all military health beneficiaries.

How to fill out this questionnaire

- Answer all the questions by checking the box to the left of your answer, unless otherwise indicated.
- If after checking an answer you then decide you want to change it, simply cross out the answer you want to change and check your new answer.
- You are sometimes told to skip over some questions in this survey. When this happens you will see an arrow with a note that tells you what question to answer next, like this:

  1☑ Yes ➡ **If Yes, Go to Question 3**
  2☐ No

- If your response is other than those specifically listed, you are asked to include more information in the line provided as follows:

  ❑ Other *(please specify):* _____

- In one question, you are asked to write your response in the blank space provided.

Returning the questionnaire

We have included a pre-addressed, postage-paid envelope for you to return the completed questionnaire directly to RAND. If you have any questions, please call Ana Suárez, RAND Survey Coordinator, toll free at 888-345-6377.

TREATMENT FOR PERSONAL OR EMOTIONAL PROBLEMS

PEOPLE CAN GET COUNSELING, TREATMENT OR MEDICATION FOR MANY DIFFERENT REASONS, SUCH AS FOR:

- FEELING DEPRESSED, ANXIOUS, OR "STRESSED OUT"
- WORK PROBLEMS (LIKE WHEN ONE IS HAVING DIFFICULTIES GETTING ALONG WITH PEOPLE AT WORK)
- FAMILY PROBLEMS (LIKE MARRIAGE PROBLEMS OR WHEN PARENTS AND CHILDREN HAVE TROUBLE GETTING ALONG)
- OTHER PERSONAL PROBLEMS (LIKE WHEN A LOVED ONE DIES OR WHEN ONE IS HAVING DIFFICULTIES GETTING ALONG WITH FRIENDS)
- NEEDING HELP WITH DRUG OR ALCOHOL USE
- FOR MENTAL OR EMOTIONAL ILLNESS

1. In the last 6 months, did you personally get counseling, treatment or medication for any of these reasons?

1☐ Yes ➡ *If Yes, Go to Question 2*
2☐ No ➡ *If No, Go to Question 50 on Page 10*

YOUR COUNSELING OR TREATMENT

THIS SECTION ASKS ABOUT YOUR EXPERIENCES WITH COUNSELING OR TREATMENT IN THE LAST 6 MONTHS. WHEN ANSWERING THESE QUESTIONS, INCLUDE ALL COUNSELING AND TREATMENT RECEIVED DURING OUTPATIENT VISITS WITH ANY MENTAL HEALTH CARE PROVIDER OR FOR ANY MENTAL HEALTH REASON. DO NOT INCLUDE COUNSELING OR TREATMENT RECEIVED DURING AN OVERNIGHT STAY IN A HOSPITAL OR FROM A SELF-HELP GROUP.

2. In the last 6 months, did you try to get professional counseling on the phone for yourself?

1☐ Yes
2☐ No ➡ *If No, Go to Question 4*

3. In the last 6 months, how often did you get the professional counseling you needed on the phone?

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

4. At any time in the last 6 months, did you need counseling or treatment immediately because of an emergency or crisis?

1☐ Yes
2☐ No ➡ *If No, Go to Question 6*

5. In the last 6 months, when you needed counseling or treatment immediately for an emergency or crisis, how often did you see someone as soon as you wanted?

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

6. **In the last 6 months (not counting times you needed counseling or treatment immediately for an emergency or crisis), did you make any appointments for counseling or treatment?**

   1☐ Yes
   2☐ No ➡ *If No, Go to Question 8*

7. **In the last 6 months (not counting times you needed counseling or treatment immediately for an emergency or crisis), how often did you get an appointment for counseling or treatment as soon as you wanted?**

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

8. **In the last 6 months (not counting times you needed counseling or treatment immediately for an emergency or crisis), what kinds of mental health care providers did you talk to or see for counseling or treatment?** *You can check more than one.*

   1☐ Psychiatrist
   2☐ Psychologist
   3☐ Social worker
   4☐ Psychiatric nurse
   5☐ Mental health counselor
   6☐ Family physician or other primary health care provider
   7☐ Other – please specify:

   _____

   8☐ Don't know/Can't remember

9. **Of the mental health providers you saw for counseling or treatment during the past 6 months (not counting times you needed counseling or treatment immediately for an emergency or crisis):**

   a. Who did you see most recently?
   Please check one only.

   1☐ Psychiatrist
   2☐ Psychologist
   3☐ Social worker
   4☐ Psychiatric nurse
   5☐ Mental health counselor
   6☐ Family physician or other primary health care provider
   7☐ Other – please specify:

   _____

   8☐ Don't know/Can't remember

   b. How did you first find out about the provider you saw most recently?
   Please check one only.

   1☐ Through your health plan's toll free telephone line
   2☐ From your health plan's provider directory
   3☐ Recommended by another provider
   4☐ Recommended by a friend
   5☐ Other – please specify:

   _____

   _____

10. **In the last 6 months (not counting emergency rooms or crisis centers), how many times did you go to an office, clinic, or other treatment program to get counseling, treatment, or medication for yourself?**

    0☐ None ➡ *If None, Go to Question 12*
    1☐ 1 time only
    2☐ 2 to 10 times
    3☐ 11 to 20 times
    4☐ 21 times or more

11. In the last 6 months, how often were you seen within 15 minutes of your appointment time?

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

THE REMAINING QUESTIONS IN THIS SECTION ARE ABOUT ALL THE COUNSELING OR TREATMENT YOU GOT IN THE LAST 6 MONTHS DURING OFFICE, CLINIC, EMERGENCY ROOM, AND CRISIS CENTER VISITS AS WELL AS OVER THE PHONE. *PLEASE DO THE BEST YOU CAN TO INCLUDE ALL THE DIFFERENT PEOPLE YOU WENT TO FOR COUNSELING OR TREATMENT IN YOUR ANSWERS.*

12. In the last 6 months, how often did the people you went to for counseling or treatment listen carefully to you?

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

13. In the last 6 months, how often did the people you went to for counseling or treatment explain things in a way you could understand?

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

14. In the last 6 months, how often did the people you went to for counseling or treatment show respect for what you had to say?

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

15. In the last 6 months, how often did the people you went to for counseling or treatment spend enough time with you?

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

16. In the last 6 months, how often did you feel safe when you were with the people you went to for counseling or treatment?

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

17. In the last 6 months, how often were you involved as much as you wanted in your counseling or treatment?

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

18. In the last 6 months, did anyone talk to you about whether to include your family or friends in your counseling or treatment?

1☐ Yes
2☐ No

19. In the last 6 months, were you given information about different kinds of counseling or treatment that are available?

1☐ Yes
2☐ No

20. **In the last 6 months, did you take any prescription medications as part of your treatment for personal or emotional problems?**

    1☐ Yes
    2☐ No ➡ *If No, Go to Question 22*

21. **In the last 6 months, were you told what side effects of those medications to watch for?**

    1☐ Yes
    2☐ No

22. **In the last 6 months, were you told about self-help or support groups, such as consumer-run groups or 12-step programs?**

    1☐ Yes
    2☐ No

23. **In the last 6 months, were you given as much information as you wanted about what you could do to manage your condition?**

    1☐ Yes
    2☐ No

24. **In the last 6 months, were you given information about your rights as a patient?**

    1☐ Yes
    2☐ No

25. **In the last 6 months, did you feel you could refuse a specific type of medication or treatment?**

    1☐ Yes
    2☐ No

26. **In the last 6 months, as far as you know did anyone you went to for counseling or treatment share information with others that should have been kept private?**

    1☐ Yes
    2☐ No

27. **Does your language, race, religion, ethnic background, or culture make any difference in the kind of counseling or treatment you need?**

    1☐ Yes
    2☐ No ➡ *If No, Go to Question 29*

28. **In the last 6 months, was the care you received responsive to those needs listed in Question 27 above?**

    1☐ Yes
    2☐ No

29. **Using any number from 0 to 10, where 0 is the worst counseling or treatment possible and 10 is the best counseling or treatment possible, what number would you use to rate all your counseling or treatment in the last 6 months?**

    ☐ 0 Worst counseling or treatment possible
    ☐ 1
    ☐ 2
    ☐ 3
    ☐ 4
    ☐ 5
    ☐ 6
    ☐ 7
    ☐ 8
    ☐ 9
    ☐ 10 Best counseling or treatment possible

30. In the last 6 months, how much were you helped by the counseling or treatment you got?

- 1☐ Not at all
- 2☐ A little
- 3☐ Somewhat
- 4☐ A lot

31. Overall, how dissatisfied or satisfied were you with the health care available to you for personal or emotional problems in the last 6 months?

- 1☐ Very dissatisfied
- 2☐ Somewhat dissatisfied
- 3☐ Neither satisfied nor dissatisfied
- 4☐ Somewhat satisfied
- 5☐ Very satisfied

32. In the last 6 months, was there any time when you didn't get as much mental health care for emotional or personal problems as you needed, or had delays in getting care?

- 1☐ Yes
- 2☐ No ➡ *If No, Go to Question 34*

33. What was <u>the main reason</u> you didn't get as much help as you needed or had delays in getting care in the last 6 months? *Please check one only.*

- 1☐ I was worried about how much it would cost
- 2☐ I was worried about what others might think
- 3☐ I had difficulties getting a referral from my Military Treatment Facility provider
- 4☐ I had difficulties finding a provider or making an appointment
- 5☐ I had scheduling problems because of other personal responsibilities such as home, family or work
- 6☐ Other reason – please specify:

_____

_____

_____

_____

Continue ➡

34. How often was *each* of the following statements true for you during the past 4 weeks?	**None of the time**	**A little of the time**	**Some of the time**	**A good bit of the time**	**Most of the time**	**All of the time**
a. I had a hard time doing what my mental health care provider(s) suggested I do.....	1☐	2☐	3☐	4☐	5☐	6☐
b. I followed the suggestions of my mental health care provider(s) exactly.....	1☐	2☐	3☐	4☐	5☐	6☐
c. I was unable to do what was necessary to follow the treatment plans proposed by my mental health care provider(s).....	1☐	2☐	3☐	4☐	5☐	6☐
d. I found it easy to do the things my mental health care provider(s) suggested I do.....	1☐	2☐	3☐	4☐	5☐	6☐
e. Overall, I was able to do what my mental health care provider(s) told me.....	1☐	2☐	3☐	4☐	5☐	6☐

35. During the past 4 weeks, did you receive counseling (for example, talk therapy) from a mental health care provider?

1☐ Yes
2☐ No ➡ *If No, Go to Question 37*

36. How often was *each* of the following statements true for you during the past 4 weeks?	**None of the time**	**A little of the time**	**Some of the time**	**A good bit of the time**	**Most of the time**	**All of the time**
a. I showed up to all my therapy or counseling sessions.....	1☐	2☐	3☐	4☐	5☐	6☐
b. I avoided situations that trigger my symptoms.....	1☐	2☐	3☐	4☐	5☐	6☐
c. I tried to play an active role in my therapy or counseling.....	1☐	2☐	3☐	4☐	5☐	6☐

YOUR MEDICATIONS AND OTHER HEALTH REMEDIES

37. At any time during the past 6 months, did you take any prescription, nonprescription or over-the-counter medications because you were feeling depressed, stressed out or anxious, or because you were experiencing difficulty sleeping, low energy or pain?

1☐ Yes
2☐ No ➡ *If No, Go to Question 42*

38. In the spaces below, please list up to 4 prescription, nonprescription or over-the-counter medications you took in the last 6 months because you were feeling depressed, stressed out or anxious, or because you were experiencing difficulty sleeping, low energy or pain. Also, please indicate how many days in total you took each medication and whether you are still taking the medication:

a. Name of medication (enter one name in each space below)	b. Total # of days you took this medication in the last 6 months:	c. Are you still taking this medication?	d. Why did you stop taking this medication? *You can check more than one*
1.	1☐ 2 weeks or less 2☐ 3 to 4 weeks 3☐ more than 1 month but less than 3 months 4☐ 3 months or more	1☐ Yes 2☐ No ➡	1☐ You were having side effects 2☐ You felt worse or NO better 3☐ You felt better 4☐ You feared becoming addicted 5☐ It cost too much 6☐ It was too hard to take 7☐ You didn't need it 8☐ Some other reason – please specify:
2.	1☐ 2 weeks or less 2☐ 3 to 4 weeks 3☐ more than 1 month but less than 3 months 4☐ 3 months or more	1☐ Yes 2☐ No ➡	1☐ You were having side effects 2☐ You felt worse or NO better 3☐ You felt better 4☐ You feared becoming addicted 5☐ It cost too much 6☐ It was too hard to take 7☐ You didn't need it 8☐ Some other reason – please specify:
3.	1☐ 2 weeks or less 2☐ 3 to 4 weeks 3☐ more than 1 month but less than 3 months 4☐ 3 months or more	1☐ Yes 2☐ No ➡	1☐ You were having side effects 2☐ You felt worse or NO better 3☐ You felt better 4☐ You feared becoming addicted 5☐ It cost too much 6☐ It was too hard to take 7☐ You didn't need it 8☐ Some other reason – please specify:
4.	1☐ 2 weeks or less 2☐ 3 to 4 weeks 3☐ more than 1 month but less than 3 months 4☐ 3 months or more	1☐ Yes 2☐ No ➡	1☐ You were having side effects 2☐ You felt worse or NO better 3☐ You felt better 4☐ You feared becoming addicted 5☐ It cost too much 6☐ It was too hard to take 7☐ You didn't need it 8☐ Some other reason – please specify:

39. How often was *each* of the following statements true for you during the past 6 months?	None of the time	A little of the time	Some of the time	A good bit of the time	Most of the time	All of the time
a. I took my medications for the recommended length of time.....	1☐	2☐	3☐	4☐	5☐	6☐
b. I took the correct dosage for my medications.....	1☐	2☐	3☐	4☐	5☐	6☐
c. I skipped taking my medications.....	1☐	2☐	3☐	4☐	5☐	6☐
d. I delayed getting refills for my medications.....	1☐	2☐	3☐	4☐	5☐	6☐

40. Hypericum, also known as St. Johns' Wort, is an herbal substance that can be purchased without a prescription. Have you used hypericum in the last 6 months because you were feeling depressed, stressed out or anxious, or because you were experiencing difficulty sleeping or low energy?

1☐ Yes
2☐ No ➡ *If No, Go to Question 42*

41. How often have you used hypericum in the last 6 months?

1☐ 2 weeks or less
2☐ 3 to 4 weeks
3☐ more than 1 month but less than 3 months
4☐ 3 months or more

YOUR HEALTH PLAN AND YOUR MENTAL HEALTH BENEFITS

42. Which health plan did you use for <u>all or most</u> of your mental health counseling or treatment in the <u>last 6 months</u>?
Please check one only

- 1☐ TRICARE Prime
- 2☐ TRICARE Senior Prime or TRICARE Plus
- 3☐ TRICARE Extra or Standard (CHAMPUS)
- 4☐ TRICARE for Life (Medicare plus TRICARE)
- 5☐ Other health insurance (please specify: _____
- 6☐ I didn't use any health plan; I paid for it out of pocket most of the time

43. In the last 6 months, did <u>you use up all your benefits</u> for counseling or treatment?

- 1☐ Yes
- 2☐ No ➡ *If No, Go to Question 46*

44. At the time benefits were used up, did you think you <u>still needed</u> counseling or treatment?

- 1☐ Yes
- 2☐ No ➡ *If No, Go to Question 46*

45. Were you told about <u>other ways</u> to get counseling, treatment or medicine?

- 1☐ Yes
- 2☐ No

46. In the last 6 months, did you call <u>customer service</u> to get information or help about counseling or treatment?

- 1☐ Yes
- 2☐ No ➡ *If No, Go to Question 48*

47. In the last 6 months, how much of a problem, if any, was it to <u>get the help you needed</u> when you called customer service?

- 1☐ A big problem
- 2☐ A small problem
- 3☐ Not a problem

48. In the last 6 months, did you need to get approval to receive any counseling or treatment?

- 1☐ Yes
- 2☐ No ➡ *If No, Go to Question 50*

49. In the last 6 months, how much of a problem, if any, were <u>delays</u> in counseling or treatment while you waited for approval?

- 1☐ A big problem
- 2☐ A small problem
- 3☐ Not a problem

Continue ➡

YOUR HEALTH STATUS

50. During the last 4 weeks, how much have you been bothered by any of the following problems?	Not bothered	Bothered a little	Bothered a lot
a. Stomach pain	1☐	2☐	3☐
b. Back pain	1☐	2☐	3☐
c. Pain in your arms, legs, or joints (knees, hips, etc.)	1☐	2☐	3☐
d. Menstrual cramps or other problems with your periods	1☐	2☐	3☐
e. Pain or problems during sexual intercourse	1☐	2☐	3☐
f. Headaches	1☐	2☐	3☐
g. Chest pain	1☐	2☐	3☐
h. Dizziness	1☐	2☐	3☐
i. Fainting spells	1☐	2☐	3☐
j. Feeling your heart pound or race	1☐	2☐	3☐
k. Shortness of breath	1☐	2☐	3☐
l. Constipation, loose bowels, or diarrhea	1☐	2☐	3☐
m. Nausea, gas, or indigestion	1☐	2☐	3☐

51. In general, how would you rate your overall health now?

1☐ Excellent
2☐ Very good
3☐ Good
4☐ Fair
5☐ Poor

52. During the last 2 weeks, how often have you been bothered by any of the following problems?	Not at all	Several days	More than half the days	Nearly every day
a. Little interest or pleasure in doing things	1☐	2☐	3☐	4☐
b. Feeling down, depressed, or hopeless	1☐	2☐	3☐	4☐
c. Trouble falling or staying asleep, or sleeping too much	1☐	2☐	3☐	4☐
d. Feeling tired or having little energy	1☐	2☐	3☐	4☐
e. Poor appetite or overeating	1☐	2☐	3☐	4☐
f. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	1☐	2☐	3☐	4☐
g. Trouble concentrating on things, such as reading the newspaper or watching television	1☐	2☐	3☐	4☐
h. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	1☐	2☐	3☐	4☐
i. Thoughts that you would be better off dead or of hurting yourself in some way	1☐	2☐	3☐	4☐

53. Have you ever had an anxiety attack – suddenly feeling fear or panic?

1☐ Yes
2☐ No ➡ *If No, Go to Question 58*

54. Have some of these attacks come suddenly out of the blue — that is, in situations where you don't expect to be nervous or uncomfortable?

1☐ Yes
2☐ No

55. Do these attacks bother you a lot or are you worried about having another attack?

1☐ Yes
2☐ No

56. In the last 4 weeks, have you had an anxiety attack?

1☐ Yes
2☐ No

57. Think about the last time you had a bad anxiety attack:	YES	NO	Not Sure
a. Were you short of breath?	1☐	2☐	3☐
b. Did your heart race, pound, or skip?	1☐	2☐	3☐
c. Did you have chest pain or pressure?	1☐	2☐	3☐
d. Did you sweat?	1☐	2☐	3☐
e. Did you feel as if you were choking?	1☐	2☐	3☐
f. Did you have hot flashes or chills?	1☐	2☐	3☐
g. Did you have nausea or an upset stomach, or the feeling that you were going to have diarrhea?	1☐	2☐	3☐
h. Did you feel dizzy, unsteady, or faint?	1☐	2☐	3☐
i. Did you have tingling or numbness in parts of your body?	1☐	2☐	3☐
j. Did you tremble or shake?	1☐	2☐	3☐
k. Were you afraid you were dying?	1☐	2☐	3☐

58. Over the <u>last 4 weeks</u>, how often have you been bothered by any of the following problems?	Not at all	Several days	More than half the days
a. Feeling nervous, anxious, on edge, or worrying a lot about different things	1☐	2☐	3☐
If you checked "Not at all" to Question 58a, go to Question 59.			
b. Feeling restless so that it is hard to sit still	1☐	2☐	3☐
c. Getting tired very easily	1☐	2☐	3☐
d. Muscle tension, aches, or soreness	1☐	2☐	3☐
e. Trouble falling asleep or staying asleep	1☐	2☐	3☐
f. Trouble concentrating on things, such as reading a book or watching TV	1☐	2☐	3☐
g. Becoming easily annoyed or irritable	1☐	2☐	3☐

59. In the last 6 months, have you had any emotional or personal problems that have made it difficult for you to do your work, take care of things at home, or get along with other people?

1☐ None
2☐ Yes, somewhat difficult
3☐ Yes, very difficult
4☐ Yes, extremely difficult

60. In general, how would you rate your overall mental health now?

1☐ Excellent
2☐ Very good
3☐ Good
4☐ Fair
5☐ Poor

61. Compared to 6 months ago, how would you rate your ability to deal with daily problems now?

1☐ Much better
2☐ A little better
3☐ About the same
4☐ A little worse
5☐ Much worse

62. Compared to 6 months ago, how would you rate your ability to deal with social situations now?

1☐ Much better
2☐ A little better
3☐ About the same
4☐ A little worse
5☐ Much worse

63. Compared to 6 months ago, how would you rate your ability to accomplish the things you want to do now?

1☐ Much better
2☐ A little better
3☐ About the same
4☐ A little worse
5☐ Much worse

64. Compared to 6 months ago, how would you rate your problems or symptoms now?

1☐ Much better
2☐ A little better
3☐ About the same
4☐ A little worse
5☐ Much worse

Continue ➡

ATTITUDES ABOUT HEALTH AND HEALTH CARE

65. If you were applying for a job, how much difficulty do you think you would have getting the job if the employer thought you had a recent history of the following:	**A lot of difficulty**	**Some difficulty**	**A little difficulty**	**No difficulty**	**Not sure**
a. Diabetes	1☐	2☐	3☐	4☐	5☐
b. High blood pressure	1☐	2☐	3☐	4☐	5☐
c. HIV or AIDS	1☐	2☐	3☐	4☐	5☐
d. Mental health problems e.g. depression or anxiety	1☐	2☐	3☐	4☐	5☐
e. Visiting a mental health provider	1☐	2☐	3☐	4☐	5☐

66. Please indicate how strongly you agree or disagree with the following statements:	**Strongly Agree**	**Somewhat Agree**	**Neither Agree nor Disagree**	**Somewhat Disagree**	**Strongly Disagree**
a. In order to get a job a person with mental health problems will have to hide his or her mental health history	1☐	2☐	3☐	4☐	5☐
b. There is no reason for a person to hide the fact that he or she has a history of mental health problems	1☐	2☐	3☐	4☐	5☐
c. If a person has a serious mental illness, the best thing to do is keep it a secret	1☐	2☐	3☐	4☐	5☐
d. If I had a close relative who had been treated for a serious mental illness, I would advise him or her not to tell anyone about it	1☐	2☐	3☐	4☐	5☐
e. I rarely feel the need to hide the fact that I received mental health treatment	1☐	2☐	3☐	4☐	5☐

67. Think about a future time when you might need or want care for emotional or personal problems. Please indicate how likely or unlikely it is that you <u>might not</u> get the care you need or want because of the following <u>reasons</u>:	**Very likely**	**Somewhat likely**	**Neither likely nor unlikely**	**Somewhat unlikely**	**Very unlikely**
a. I would worry about the cost.....	1☐	2☐	3☐	4☐	5☐
b. I would worry about the effect on my own or a family member's military career.....	1☐	2☐	3☐	4☐	5☐
c. I would not be able to get a referral from my Military Treatment Facility provider.....	1☐	2☐	3☐	4☐	5☐
d. The mental health provider does not accept my health insurance.....	1☐	2☐	3☐	4☐	5☐
e. My health plan does not pay for the type of treatment I would need.....	1☐	2☐	3☐	4☐	5☐
f. I would not be able to find out where to go for help.....	1☐	2☐	3☐	4☐	5☐
g. I would not be able to get to the mental health provider's office when it is open.....	1☐	2☐	3☐	4☐	5☐
h. The mental health provider's office is too far from my house or work.....	1☐	2☐	3☐	4☐	5☐
i. I have difficulties getting through to the mental health provider's office on the telephone to make an appointment.....	1☐	2☐	3☐	4☐	5☐
j. I do not think I could be helped.....	1☐	2☐	3☐	4☐	5☐
k. I would be embarrassed to discuss my problem with anyone.....	1☐	2☐	3☐	4☐	5☐
l. I would be afraid of what others would think	1☐	2☐	3☐	4☐	5☐
m. I would be afraid of losing pay from work	1☐	2☐	3☐	4☐	5☐
n. I would need someone to take care of my children, elderly parents or disabled spouse.....	1☐	2☐	3☐	4☐	5☐

TRICARE Demonstration Project for Expanded Access to Mental Health Counselors

Under the TRICARE Demonstration Project for Expanded Access to Mental Health Counselors, licensed and certified mental health counselors can now provide services to covered TRICARE beneficiaries without a referral from a physician and without having to be supervised by a physician.

68. Before receiving this questionnaire, did you know about this TRICARE demonstration project?

- 1☐ Yes
- 2☐ No ➡ *If No, Go to Question 70*

69. How did you learn about this TRICARE demonstration project? *You can check more than one.*

- 1☐ Discussed it with a mental health provider
- 2☐ Read an article about the demonstration in a DOD/TRICARE newsletter
- 3☐ Heard about the demonstration from family or friends
- 4☐ Other (please specify):

_____

About You

70. What is your age now?

- 1☐ 18 to 24
- 2☐ 25 to 34
- 3☐ 35 to 44
- 4☐ 45 to 54
- 5☐ 55 to 64
- 6☐ 65 to 74
- 7☐ 75 or Older

71. Are you male or female?

- 1☐ Male
- 2☐ Female

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

- 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☐ Post-graduate degree

73. Are you Spanish/Hispanic/Latino?

- 1☐ No, not Spanish/Hispanic/Latino
- 2☐ Yes, Mexican, Mexican-American, Chicano, Puerto Rican, Cuban or other Spanish/Hispanic/Latino

74. What is your race?
You can check more than one to indicate what you consider yourself.

- 1☐ White
- 2☐ Black or African-American
- 3☐ American Indian or Alaska Native
- 4☐ Asian (e.g. Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese)
- 5☐ Native Hawaiian or other Pacific Islander (e.g. Samoan, Guamanian or Chamorro)

75. Were you born in the United States?

- 1☐ Yes ➡ *If Yes, Go to Question 78*
- 2☐ No

76. About how many years have you lived in the United States? *Your best guess is fine. If less than a year, please enter "1".*

_____ year(s)

77. How well do you speak English?

- 1☐ Very well
- 2☐ Well
- 3☐ Not well
- 4☐ Not at all

78. Do you have any children or stepchildren?

1☐ Yes
2☐ No ➡ *If No, Go to Question 81*

79. In the last 6 months, have any of your children or stepchildren received counseling, treatment or medicine for emotional or behavioral problems?

1☐ Yes
2☐ No ➡ *If No, Go to Question 81*

80. In the last 6 months, have any of your children or stepchildren been placed in a detention center or a residential treatment center?

1☐ Yes
2☐ No

81. Are you currently living alone?

1☐ Yes ➡ *If Yes, Go to Question 84*
2☐ No

82. Which of the following living arrangements describe your situation at this time?
You can check more than one.

1☐ Currently living with a spouse or partner
2☐ Currently living with your children or others who are related to you
3☐ Currently living with other people (other than a partner) who are not related to you

83. Please indicate how strongly you agree or disagree with the following statement:

During the past 6 months I have felt very close to the people I live with.

1☐ Strongly agree
2☐ Somewhat agree
3☐ Neither agree nor disagree
4☐ Somewhat disagree
5☐ Strongly disagree

84. Please select the item that best describes your current employment status. By full-time we mean 35 or more hours per week. *Check only one.*

1☐ Working full-time ➡ *Go to Question 86* for pay
2☐ Working part-time for pay
3☐ Not working for pay

85. Are you currently not working full-time because of your health?

1☐ Yes
2☐ No

86. Are you or any member of your family enrolled in the Exceptional Family Member Program?

1☐ Yes
2☐ No
3☐ Don't know/Not sure

87. Were any of your family members or close friends deployed for the recent war in Iraq?

1☐ None ➡ *If None, Go to Question 89*
2☐ Spouse
3☐ Other family member (please specify): _____
4☐ Close friend

88. Are any of them back from their tour of duty?

1☐ None
2☐ Spouse
3☐ Other immediate family
4☐ Close friend

Continue ➡

89. In the last 6 months, have you received any counseling or treatment from a mental health care provider because of personal or emotional problems related to the recent war in Iraq?

1☐ Yes
2☐ No

90. Did someone help you complete this survey?

1☐ Yes ➡ *If Yes, Go to Question 91*
2☐ No ➡ *If No, Please return the survey in the postage-paid envelope*

91. Who helped you to complete this form?

1☐ A family member
2☐ A friend
3☐ Someone else

****

Is there anything else you would like to share with us? Your comments are greatly appreciated.

THANK YOU!

Please return the questionnaire in the envelope provided to:

RAND
1200 South Hayes Street
Arlington, VA 22202-5050
Attn: Ana Suárez

If you have any questions, please call Ana Suárez, RAND Survey Coordinator, toll free at 888-345-6377.

D. SUPPLEMENTAL DATA TABLES: BENEFICIARY SURVEY

Table D.1 shows the scoring rules and provides weighted descriptive statistics for each variable derived from the beneficiary survey with the exception of the design characteristics that were obtained from the administrative data to determine eligibility for the survey sample. The table displays the variables by type of measure as indicated by the bolded and underlined subheadings. For specific item content, please see the survey provided in Appendix C.

Table D.1 Description of Derived Variables

Variable Description	Scoring	Mean/% (SD)
Design Characteristics		
Demonstration catchment area	1 if demonstration catchment area, 0 otherwise	50.2
Saw a MH provider	1 if sampled because respondent saw a mental health provider in the past 6 months, 0 otherwise	90.0
Received a MH procedure	1 if sampled because respondent received a mental health procedure (e.g., a CPT procedure code for psychotherapy, medication management, psychoanalysis, etc: 90805, 90811, 90807, 90812, etc.)____ in the past 6 months, 0 otherwise	23.2
Had a psychiatric diagnosis	1 if sampled because respondent had a psychiatric diagnosis in the past 6 months, 0 otherwise	99.2
Study/Survey Characteristics		
Proxy responder	1 if a designated person completed the survey on the respondent's behalf, 0 otherwise	6.7
Exposure to demonstration	1 if beneficiary reported knowing about the TRICARE MH Counselors demonstration project before receiving this questionnaire	4.8
Demographic Characteristics		
Age Group		
18-24	1 if age 18-24, 0 otherwise	16.0
25-34	1 if age 25-34, 0 otherwise	19.1
35-44	1 if age 35-44, 0 otherwise	21.3
45-54	1 if age 45-54, 0 otherwise	20.1
55-64	1 if age 55-64, 0 otherwise	13.9
65+	1 if age 65+, 0 otherwise	9.6
Male	1 if male, 0 otherwise	17.8
Education		
High school or less	1 if high school or less, 0 otherwise	24.9
Some college	1 if some college, 0 otherwise	47.9
College graduate	1 if college graduate, 0 otherwise	27.2
Latino Ethnicity	1 if Latino, 0 otherwise	6.0
Race		
White	1 if White, 0 otherwise	84.7
Black	1 if Black, 0 otherwise	8.7

Other	1 if other race/ethnicity, 0 otherwise	6.6
US Born	1 if born in the US, 0 otherwise	88.8
Have children	1 if have child(ren), 0 otherwise	79.9
Child(ren) received MH care	1 if child(ren) received MH care, 0 otherwise	24.1
Live alone	1 if live alone, 0 otherwise	12.4
Working	1 if currently working, 0 otherwise	44.9
Not working due to health	1 if not currently working due to health problems, 0 otherwise	20.4
Health Characteristics		
Mental Health Symptoms and Disorder		
Somatic symptoms	1 if beneficiary meets criteria for probable somatic disorder based on the PHQ, 0 otherwise	25.9
Major depression	1 if beneficiary meets criteria for probable major depression based on the PHQ, 0 otherwise	19.7
Depression score	Count of reported frequency of PHQ depression symptoms experienced in the last 2 weeks re-scored as: 0=not at all, 1=several days, 3=more than half the days, 3=nearly every day	7.78 (910.0)
Other depression	1 if beneficiary meets criteria for probable depression other than major depressive disorder based on the PHQ, 0 otherwise	8.4
Panic disorder	1 if beneficiary meets criteria for probable panic depression based on the PHQ, 0 otherwise	45.2
Other anxiety	1 if beneficiary meets criteria for probable anxiety disorder other than panic based on the PHQ, 0 otherwise	13.9
Emotional problems affect functioning	Beneficiary reports having experienced emotional or personal problems made it difficult to function in the past 6 months; rescored as 1 if difficulties, 0 otherwise	68.6
Overall mental health	Rating of current overall mental health: =excellent, 2=very good, 3=good, 4=fair, 5=poor (reversed so that a higher score indicates better health)	3.0 (1.5)
General Health		
Overall health	Rating of current overall health: 1=excellent, 2=very good, 3=good, 4=fair, 5=poor (reversed so that a higher score indicates better health)	3.2 (1.5)
Use of Services and Treatments		
Received MH care	1 if received MH care in the past 6 months, 0 otherwise	85.3
Received counseling from a MH provider	1 if received counseling from a mental health provider in the past 4 weeks, 0 otherwise	50.8
Took any medication for a MH problem	1 if took any type of medication (Rx, non-Rx, or over counter) for a mental health problem in the past 6 months, 0 otherwise	75.5
Took a prescription medication for a MH problem	1 if took a prescription medication as part of treatment for personal or emotional problems in the past 6 months, 0 otherwise	76.7
Took Hypericum (St. John's Wort) for a MH problem	1 if took Hypericum for a mental health problem in the past 6 months, 0 otherwise	1.8
Used an antidepressants	Used an antidepressant for a mental health problem in the past 6 months, 0 otherwise	52.7

Used antianxiety medication	Used an antianxiety medication for a mental health problem in the past 6 months, 0 otherwise	9.1
Used antipsychotics	Used an antipspychychotic medication for a mental health problem in the past 6 months, 0 otherwise	9.8
Used benzodiazapenes	Used a benzodiazapene for a mental health problem in the past 6 months, 0 otherwise	15.3
Used mood stabilizers	Used a mood stabilizer for a mental health problem in the past 6 months, 0 otherwise	7.2
Used stimulants	Used a stimulant for a mental health problem in the past 6 months, 0 otherwise	2.6
Used substance abuse	Used a substance abuse medication for a mental health problem in the past 6 months, 0 otherwise	8.7
Used other non-MH medication,	Used another medication for a mental health problem in the past 6 months, 0 otherwise	21.4
Access to Mental Health Care		
Any experienced barrier to MH care	1 if any of 6 barriers to care (Q33) was reported, 0 otherwise (among beneficiaries reporting that they did not get as much mental health care as needed in the past 6 months)	28.0
Perceived barriers to MH care (0-14)#	Count of 14 potential barriers to mental health care (Q67) if beneficiary reported it as being "very likely" or "somewhat likely"	3.5 (4.8)
By type (%):		
Cost	1 if perceived barriers due to cost, 0 otherwise	56.8
Career	1 if perceived barriers due to professional concerns, 0 otherwise	38.6
Help	1 if perceived barriers due to not thinking they could be helped, 0 otherwise	12.5
Stigma	1 if perceived barriers due to stigma, 0 otherwise	30.2
Access	1 if perceived barriers due to access, 0 otherwise	54.0
Family	1 if perceived family-related barriers, 0 otherwise	23.2
Job Stigma (1-5) (jbstigma)	Minimum of Q65a-e	1.8 (1.8)
Need for Secrecy (1-5) (secrecy)	Average of Q66a-e (after reversing a, c, d, & e)	3.0 (1.5) Alpha=.80
Adherence		
General Adherence (0-100)	Average of Q34a-e (after reversing a and c) and then transformed to a linear 0-100 distribution.	73.8 (20.9) Alpha=.84
Medication Adherence (0-100)	Average of Q39a-d (after reversing c and d) and then transformed to a linear 0-100 distribution.	92.3 (13.0) Alpha=.68
Counseling Adherence (0-100)	Average of Q36a-c and then transformed to a linear 0-100 distribution.	81.1 (13.6 Alpha=.54
HEDIS Indicators*		
Rated counseling and treatment 9 or 10 on 0-10 scale	0-10 scale rescored as 1 if rated treatment at high end of scale (9 or 10), 0 otherwise	47.1 / 69.8
Reported "always" got urgent treatment as soon as needed	1 if always / usually or always got urgent treatment as soon as needed, 0 otherwise	47.0 / 57.6
Reported "always" got	1 if always/ usually or always got	54.1 / 85.2

appointment as soon as wanted	appointment as soon as wanted, 0 otherwise	
Got help by telephone	1 if always / usually or always got help by telephone, 0 otherwise	19.9 /26.6
Never waited more than 15 minutes for appointment	1 if never waited more than 15 minutes, 0 otherwise	57.1 / 86.8
Helped "a lot" by treatment	1 if a lot / somewhat or a lot of help from treatment, 0 otherwise	56.7 / 84.5
Clinicians listen carefully	1 if clinicians always / usually or always listen carefully, 0 otherwise	67.8 / 91.3
Clinicians explain things	1 if clinicians always / usually or always explain things, 0 otherwise	67.7 / 91.9
Clinicians show respect	1 if clinicians always / usually or always show respect0 otherwise	75.3 / 91.9
Clinicians spend enough time	1 if clinicians always / usually or always spend enough time, 0 otherwise	61.1 / 85.7
Feel Safe with Clinicians	1 if always / usually or always feel save with clinicians, 0 otherwise	76.1 / 92.1
Involved as much as you wanted in treatment	1 if always / usually or always involved as much as you wanted in treatment, 0 otherwise	63.6 / 86.3
Deal with symptoms or problems	1 if patient rates her/his ability to deal with symptoms or problems much better /a little better or much better compared to 6 months ago	31.9 / 62.8
Accomplish things	1 if patient rates her/his ability to accomplish things much better /a little better or much better compared to 6 months ago	27.9 /57.8
Deal with Social Situations	1 if patient rates her/his ability to deal with social situations much better /a little better or much better compared to 6 months ago	33.0 / 59.6
Deal with Daily Problems	1 if patient rates her/his ability to deal with daily problems much better /a little better or much better compared to 6 months ago	39.5 / 69.1
No problems with customer service	1 if no problem with helpfulness of customer service, 0 otherwise	62.9
Told about self-help/consumer-run programs	1 if told about self-help or consumer run programs, 0 otherwise	28.4
Told about treatment options	1 if told about different treatments that are available for condition, 0 otherwise	53.6
Told about side effects of medications	1 if told about the side effects of medications, 0 otherwise	81.4
Talk about including family & friends in treatment	1 if talk about including family and friends in treatment, 0 otherwise	57.5
Given as much information as wanted to manage condition	1 if given as much information as wanted to manage condition, 0 otherwise	75.1
Given information about rights as a patient	1 if given information about rights as a patient, 0 otherwise	82.3
Patient feels that he or she could refuse a specific type of treatment	1 if patient feels that he or she could refuse a specific type of treatment, 0 otherwise	89.2
Confident about privacy of treatment Information	1 if confident about privacy of treatment information, 0 otherwise	97.4
Care responsive to cultural needs	1 if care responsive to cultural needs, 0 otherwise	77.4
No delays in treatment from problems with approval	1 if no problem with delays in treatment while waiting for plan approval, 0 otherwise	71.3
Iraq War Exposure		

Anyone close deployed	1 if a close friend or family member was deployed to the war in Iraq 0 otherwise	31.5
Not yet back from duty	1 if close friend or family member deployed to the war in Iraq has not returned to duty, 0 otherwise	17.1
Received MH Care due to war	1 if reported receiving mental health care due to the war in Iraq, 0 otherwise	12.5

*Indicators with multiple versions separated by a slash represent different cut-offs for dichotomizing the measures. The first uses only the highest response category relative to all other categories and the second, more liberal definition, includes the top two response categories.

Tables D.2-D.14 display, for each variable in Table D.1, the weighted bivariate means (for continuous measures) or percentage (for binary indicators) comparing TRICARE beneficiaries in the demonstration (demo) catchment areas with beneficiaries in the non-demo catchment areas. Statistical significance for these 2-group comparisons is shown in the form of t-tests for continuous measures or Chi-square statistics for categorical or binary measures. Tables are organized by type of measure (e.g., sample characteristics, symptoms and disorder, perceived improvement, use of services, etc.).

Table D.2 Sample Selection Characteristics

Characteristic (%)	Non-Demo (N=282)	Demo (N=271)	X^2
Saw a MH provider	88.9	91.0	1.44
Received a MH procedure	18.6	27.9	14.40***
Had a psychiatric diagnosis	98.9	99.4	1.15
Had a mental health prescription	63.0	61.8	.20

* p<.05, ** p<.01, ***p<.001

Percentages may not add to 100% due to rounding.

Table D.3 MH Symptoms and Probable Disorder

Characteristic (%)	Non-Demo (N=282)	Demo (N=271)	X^2
Somatic Symptoms	28.0	25.8	0.69
Major Depression	19.7	20.1	0.03
Other Depression	8.9	8.1	0.28
Panic Disorder	43.0	47.4	2.30
Other Anxiety	18.0	18.8	0.09
Emotional Problems Affect Functioning	66.3	72.6	5.55*

* p<.05, ** p<.01, ***p<.001

Percentages may not add to 100% due to rounding.

Table D.4 Perceived Improvement from 6 Months Ago

Characteristic (%)	Non-Demo R1 (R2) (N=282)	Demo R1 (R2) (N=271)	X^2
Deal with Symptoms or Problems	31.0 (62.4)	32.7 (63.3)	0.41 (0.10)
Accomplish Things	27.4 (55.7)	28.4 (59.8)	0.16 (2.06)
Deal with Social Situations	32.8 (61.2)	33.3 (58.0)	0.05 (1.22)
Deal with Daily Problems	36.6 (69.0)	42.4 (69.1)	4.19 (0.00)

* p<.05, ** p<.01, ***p<.001; R1 = highest response category only, R2 = top two response categories Percentages may not add to 100% due to rounding.

Table D.5 Use of MH Services and Treatments

Measure	Non-Demo (N=282)	Demo (N=271)	t or X^2
Received MH Care, Past Six Months	83.2	87.5	4.32*
Received Counseling from a MH Provider, Past 4 Weeks	54.9	46.8	6.51*
Took Any Medication (Rx, non-Rx, or over counter) for a MH Problem, Past 6 Months	76.1	77.4	0.324
Took a Rx Medication as Part of Treatment for Personal or Emotional Problems, Past 6 Months	75.4	75.6	0.01
Took Hypericum (St. John's Wort) for a MH Problem, Past 6 Months	.88	2.7	3.83

* p<.05, ** p<.01, ***p<.001

Table D.6 Factors Associated with Access to MH Care

Attitude	Non-Demo (N=282)	Demo (N=271)	t or X^2
Number of barriers to MH Care (0-14)#	3.4	3.7	-1.04
By type (%):			
Cost	56.3	59.5	1.26
Career	37.8	41.2	1.43
Help	11.1	14.7	3.23

Stigma	29.8	32.2	0.81
Access	54.3	56.8	0.77
Family	19.4	28.6	13.23**
General Adherence (0-100)	72.7	73.8	-0.54
Medication Adherence (0-100)	91.3	91.8	-0.31
Counseling Adherence (0-100)	80.9	79.8	0.59
Job Stigma (1-5)	1.8	1.8	0.42
Need for Secrecy (1-5)	3.0	3.0	-0.57

*p<.05, ** p<.01, ***p<.001; #28 percent reported at least one barrier. Percentages may not add to 100% due to rounding.

Table D.7 HEDIS Indicators of Access to MH Care

Characteristic (%)	Non-Demo R1 (R2) (N=282)#	Demo R1 (R2) (N=271)#	X^2
Rated counseling and treatment 9 or 10 on 0-10 scale	49.1 (66.7)	45.2 (72.7)	1.58 (4.45)
Reported "always" got urgent treatment as soon as needed	28.5 (48.2)	44.9 (66.6)	7.77** (9.32)**
Reported "always" got appointment as soon as wanted	52.8 (83.2)	55.4 (87.1)	0.65 (2.76)
Got help by telephone	13.1 (16.4)	25.7 (35.4)	7.38** (13.51)***
No delays in treatment from problems with approval	69.1	73.3	1.12
No problems with customer service	59.6	65.8	1.33
Helped "a lot" by treatment	56.9 (84.9)	56.4 (84.1)	0.02 (0.11)
Told about self-help/consumer-run programs	29.4	27.5	0.47
Told about different treatments available for condition	52.1	54.9	0.82
Never waited more than 15 minutes	58.5 (89.5)	55.7 (84.3)	0.80 (5.88)*

* p<.05, ** p<.01, ***p<.001
R1 = highest response category only, R2 = top two response categories
#Among beneficiaries who reported receiving counseling, treatment, or medication for a personal or emotional problem in the past 12 months.

Percentages may not add to 100% due to rounding.

Table D.8 HEDIS Indicators of Clinician Communication

Characteristic (%)	Non-Demo	Demo	X^2

	R1 (R2) (N=282)#	R1 (R2) (N=271)#	
Clinicians Listen Carefully	70.2 (91.0)	65.7 (91.8)	2.31 (0.23)
Clinicians Explain Things	69.2 (92.7)	66.2 (91.3)	1.06 (0.61)
Clinicians Show Respect	77.5 (91.4)	73.2 (92.3)	2.50 (0.31)
Clinicians Spend Enough Time	60.0 (83.8)	62.1 (87.5)	0.49 (2.85)
Feel Safe with Clinicians	77.3 (90.0)	76.2 (94.0)	0.16 (5.54)*
Involved as Much as You Wanted in Treatment	66.7 (85.1)	60.7 (87.5)	3.94* (1.23)

* p<.05, ** p<.01, ***p<.001
#Among beneficiaries who reported receiving counseling, treatment, or medication for a personal or emotional problem in the past 12 months.

Percentages may not add to 100% due to rounding.

Table D.9 HEDIS Indicators of General Communication

Characteristic (%)	Non-Demo (N=282)#	Demo (N=271)#	X^2
Told About Side Effects of Medications	77.6	85.0	6.89**
Talk About Including Family & Friends in Treatment	51.5	63.2	14.26***
Given as Much Information as Wanted to Manage Condition	75.3	75.0	0.01
Given Information about Rights as a Patient	79.6	84.7	4.47*
Patient Feels That He or She Could Refuse a Specific Type of Treatment	88.5	89.8	0.50
Confident about Privacy of Treatment Information	97.6	97.1	0.26
Care Responsive to Cultural Needs	70.4	84.0	4.70*

* p<.05, ** p<.01, ***p<.001
#Among beneficiaries who reported receiving counseling, treatment, or medication for a personal or emotional problem in the past 12 months.
Percentages may not add to 100% due to rounding.

Table D.10 Percent Taking Psychotropic Medications By Type

Characteristic (%)	Non-Demo (N=282)	Demo (N=271)	X^2
Antidepressants	50.7	54.8	2.0
Antianxiety	10.3	7.8	2.2
Antipsychotic	6.6	13.0	14.1***
Benzodiazapenes	18.2	12.4	7.9**
Mood Stabilizers	5.4	9.1	6.2*

* p<.05, ** p<.01, ***p<.001

#Among those reporting deployment

Percentages may not add to 100% due to rounding.

Tables D.14-D.17 show the multivariable regression results for selected measures of health characteristics, perceived access to care and use of services, adherence to care, and satisfaction with care. For continuous outcomes, we show the betas from the ordinary least squares regression runs and for binary outcomes, we present the odds ratios (ORs) along with the 95 percent confidence intervals. All models are weighted to represent the 1,200 TRICARE beneficiaries sampled and for whom we sent a mail survey. Percentages may not add to 100% due to rounding.

Table D.14 Odds Ratios and 95 Percent Confidence Intervals for the Effects on Access to Mental Health Care

Variable	Received MH Care (N=472)	Received Counseling from MH Provider (N=401)	Took Any Medication for MH Problem (N=406)	Took a Rx Medication for MH Problem (N=412)
Demonstration catchment area	1.17 [.79, 1.73]	.68 [.51, .90]**	1.05 [.75, 1.47]	1.10 [.79, 1.54]
Age 25-34	.64 [.30, 1.35]	1.30 [.81, 2.08]	.74 [.43, 1.29]	1.24 .72, 2.13]
Age 35-44	.83 [.39, 1.79]	1.86 [1.16, 2.99]**	1.22 [.70, 2.16]	1.14 [.66, 1.96]
Age 45-54	1.17[.52, 2.61]	2.04 [1.27, 3.28]**	2.20 [1.19, 4.05]*	2.43 [1.33, 4.42]**
Age 55 or over	.23 [.11, .47]**	1.83 [1.10, 3.04]*	1.97 [1.04, 3.74]*	2.30 [1.21, 4.37]*
Male	.45 [.27, .74]**	.73 [.48, 1.09]	.25 [.16, .40]***	.34 [.21, .55]***
Some college education	1.26 [.77, 2.06]	.83 [.58, 1.19]	1.03 [.66, 1.62]	.60 [.37, .97]*
College graduate	1.46 [.82, 2.59]	.86 [.56, 1.31]	.61 [.37, 1.01]	.27 [.16, .46]***
Latino	1.05 [.39, 2.82]	.88 [.46, 1.66]	.75 [.36, 1.56]	.69 [.33, 1.45]
Black	.76 [.39, 1.54]	.56 [.32, .97]*	.94 [.50, 1.77]	.61 [.34, 1.10]
Other	2.65 [.79, 8.84]	1.25 [.71, 2.21]	2.16 [1.00, 4.70]	2.85 [1.24, 6.55]*
Live alone	.75 [.42, 1.32]	1.18 [.76, 1.83]	.64 [.39, 1.07]	.63 [.39, 1.03]
Working	.59 [.39, .89]*	.73 [.55, 1.00]*	.61 [.43 .87]**	.63 [.44, .89]**
Barriers: Cost	.52 [.32, .85]**	.84 [.60, 1.18]	.70 [.46, 1.06]	.85 [.57, 1.27]
Barriers: Professional	.88 [.55,1.40]	1.24 [.90, 1.72]	1.11 [.76, 1.63]	.94 [.64, 1.38]

Barriers: Help	.90 [.43, 1.86]	.64 [.41, 1.02]	.95 [.54, 1.66]	.90 [.51, 1.58]
Barriers: Stigma	1.09 [.66, 1.82]	1.21 [.85, 1.71]	1.59, [1.03, 2.46]*	2.84 [1.80, 4.47]***
Barriers: Access	2.06 [1.27, 3.35]*	1.22 [.87, 1.71]	1.35 [.90. 2.04]	1.03 [.69, 1.53]
Barriers: Family	1.97 [1.06, 3.65]*	.96 [.68, 1.36]	.90 [.60, 1.36]	.64 [.43, .96]*
Job stigma, 1-5	.81 [.69, .94]**	.91 [.81, 1.04]	.88 [.77, 1.02]	.93 [.81, 1.08]
Need for secrecy, 1-5	1.15 [.92, 1.43]	1.21 [1.04, 1.42]*	1.19 [.99, 1.43]	1.17 [.98, 1.41]
Anyone close deployed	.59 [.37, .94]*	1.74 [1.26, 2.41]***	.74 [.51, 1.08]	.58 [.40, .84]**

All estimates are based on weighted and adjusted logistic regression models.

*p<.05, ** p<.01, ***p<.001

#Among those reporting deployment

Table D.15 Beta Coefficients (Standard Errors in Parentheses) for the Effects on Adherence with Health Care

Variable	General Adherence (N=464)	Adherence with MH Medication (N=393)	Adherence with MH Counseling (N=399)
Intercept	74.09 (5.94)	87.15 (4.43)	90.00 (5.98)
Demonstration catchment area	1.89 (2.14)	0.79 (1.56)	1.09 (2.01)
Age 25-34	3.89 (3.66)	8.89 (2.72)**	-4.71 (3.52)
Age 35-44	-0.13 (3.63)	8.11 (2.62)**	-1.82 (3.49)
Age 45-54	2.23 (2.62)	7.92 (2.60)**	2.96 (3.47)
Age 55 or over	6.07 (3.92)	9.76 (2.87)***	3.47 (3.80)
Male	1.26 (3.13)	2.19 (2.44)	-2.36 (3.03)
Some college education	2.53 (2.70)	-0.64 (1.97)	-1.91 (2.50)
College graduate	5.54 (3.22)	1.32 (2.36)	3.02 (2.97)
Latino	-7.20 (5.00)	4.61 (3.49)	7.87 (4.76)
Black	4.39 (4.12)	-1.79 (3.13)	6.33 (4.14)
Other	2.40 (4.12)	-3.78 (2.95)	2.19 (3.85)
Live alone	-2.25 (3.09)	3.14 (2.55)	4.80 (3.08)
Working	0.07 (2.23)	-1.29 (1.67)	-2.71 (2.21)
Barriers: Cost	-2.12 (2.60)	-0.66 (1.88)	-0.22 (2.47)
Barriers: Professional	-2.50 (2.43)	-0.74 (1.88)	2.28 (2.33)
Barriers: Help	-12.29 (3.63)***	1.33 (2.57)	-1.11 (3.66)
Barriers: Stigma	-0.02 (2.63)	-0.44 (1.91)	-0.19 (2.30)
Barriers: Access	-4.03 (2.64)	3.43 (1.95)	-3.72 (2.42)
Barriers: Family	-4.31 (2.68)	-3.77 (1.95)	-4.61 (2.52)
Job stigma, 1-5	1.34 (0.98)	0.23 (0.74)	-0.40 (0.97)
Need for secrecy, 1-5	-0.96 (1.17)	-1.26 (0.86)	-1.48 (1.13)
Anyone close deployed	1.70 (2.70)	1.86 (1.99)	-0.64 (2.48)
Received MH care due to Iraq war	-1.59 (3.42)	0.40 (2.41)	1.21 (2.81)

All estimates are based on weighted and adjusted logistic regression models.

MH = mental health; Rx=Prescription.

*p<.05, ** p<.01, ***p<.001

#Among those reporting deployment

Percentages may not add to 100% due to rounding.

Table D.16 Odds Ratios and 95 Percent Confidence Intervals for the Effects on Mental Health Status

Variable	Emotional or Personal Problems Affected Functioning (N=474)	Probable Major Depression (N=474)	Probable Panic Disorder (N=475)	Probable Somatic Disorder (N=460)
Demonstration catchment area	1.34 [1.00, 1.81]	.92 [.64, 1.30]	1.04 [.98, 1.37]	.87 [.64, 1.19]
Age 25-34	.83 [.48, 1.41]	1.19 [.64, 2.21]	.83 [.52, 1.34]	.98 [.58, 1.66]
Age 35-44	.78 [.47, 1.29]	2.72 [1.47, 5.03]**	.76 [.48, 1.22]	2.05 [1.23, 3.42]**
Age 45-54	2.19 [1.26, 3.83]**	3.25 [1.77, 5.96]***	.78 [.49, 1.24]	2.15 [1.28, 3.61]**
Age 55 or over	1.00 [.59, 1.69]	2.91 [1.52, 5.58]**	.36 [.22, .60]***	1.41 [.80, 2.48]
Male	.92 [.62, 1.38]	1.19 [.73, 1.94]	.56 [.38, .85]**	.71 [.44, 1.14]
Some college education	.92 [.63, 1.35]	.95 [.62, 1.45]	.89 [.63, 1.25]	.90 [.62, 1.31]
College graduate	.59 [.38, .91]*	.34 [.20, .59]***	.46 [.30, .70]***	.32 [.20, .52]***
Latino	3.00 [1.29, 6.99]*	.79 [.33, 1.93]	1.93 [1.02, 3.67]*	.29 [.10, .80]*
Black	.24 [.14, .42]***	.42 [.21, .84]*	.82 [.49, 1.39]	.90 [.51, 1.57]
Other	1.19 [.64. 2.21]	1.24 [.64, 2.38]	1.39 [.79, 2.42]	1.75 [.99, 3.12]
Live alone	1.19 [.74, 1.91]	1.12 [.65, 1.94]	.96 [.62, 1.50]	1.07 [.66, 1.73]
Working	.84 [.62, 1.15]	.89 [.61, 1.28]	.58 [.43, .77]***	.89 [.64, 1.23]
Barriers: Cost	.71 [.49, 1.03]	1.03 [.67, 1.58]	.78 [.56, 1.11]	1.15 [.77, 1.68]
Barriers: Professional	1.23 [.87, 1.74]	1.25 [.85, 1.84]	1.47 [1.06, 2.02]*	.77 [.54, 1.11]
Barriers: Help	.91 [.54, 1.52]	3.43 [2.11, 5.58]***	.74 [.47, 1.16]	2.04 [1.27, 3.25]**
Barriers: Stigma	1.31 [.89, 1.93]	1.01 [.67, 1.52]	.92 [.65, 1.30]	1.45 [.99, 2.10]
Barriers: Access	1.47 [1.03, 2.11]*	2.00 [1.22, 2.91]**	1.34 [.96, 1.88]	1.60 [1.10, 2.35]*
Barriers: Family	1.99 [1.31, 3.01]**	1.81 [1.19, 2.75]**	1.24 [.88, 1.76]	1.44 [.98, 2.12]

Job stigma, 1-5	1.05 [.92, 1.19]	.75 [.62, .91]**	.90 [.80, 1.02]	.81 [.70, .94]**
Need for secrecy, 1-5	1.49 [1.27, 1.77]***	1.34 [1.10, 1.63]**	1.42 [1.22, 1.66]***	1.04 [.87, 1.24]
Anyone close deployed	1.42 [.97, 2.07]	2.13 [1.38, 3.27]***	1.01 [.71, 1.43]	1.22 [.83, 1.79]
Received MH care due to Iraq war	5.01 [2.46, 10.17]***	1.30 [.76, 2.22]	3.89 [2.36, 6.39]***	2.75 [1.71, 4.42]***

All estimates are based on weighted and adjusted logistic regression models.

MH = mental health; Rx=Prescription.

*p<.05, ** p<.01, ***p<.001

#Among those reporting deploymentPercentages may not add to 100% due to rounding.

Table D.17 Odds Ratios for the Effects on Satisfaction with Mental Health Care Services

Variable	Overall Rating of Counseling/Treatment (N=399)	Got Urgent Treatment as Soon as Needed (N=103)@	Got Appointment as Soon as Wanted (N=361)	Got Help by Telephone (N=109)@	Never waited More Than 15 Minutes to See Clinician (N=392)
Demonstration catchment area	1.95 [1.40, 2.70]***	3.97 [1.76, 8.95]***	1.54 [.96, 2.50]	3.59 [1.59, 8.12]**	0.54 [.34, .86]*
Age 25-34	1.39 [.85, 2.28]	8.41 [2.10, 33.60]**	0.62 [.32, 1.22]	3.92 [.65, 23.85]	1.84 [.94, 3.58]
Age 35-44	1.65 1.00, 2.73]	51.05 [9.41, 276.99]***	2.08 [.95, 4.58]	10.09 [1.95, 52.06]**	1.88 [.92, 3.85]
Age 45-54	3.32 [1.93, 5.72]***	7.99 [2.06, 31.04]**	1.62 [.78, 3.37]	10.95 [2.17 55.35]**	1.91 [.93, 3.94]
Age 55 or over	2.23 [1.25, 3.98]**	18.78 [4.24, 83.12]***	3.12 [1.15, 8.43]*	10.83 [2.07, 56.55]**	1.74 [.72, 4.19]
Male	0.79 [.48, 1.30]	1.66 [.59, 4.71]	0.82 [.40, 1.71]	0.06 [.01, .34]**	1.05 [.50, 2.22]
Some college education	1.01 [.67, 1.52]	0.17 [.06, .49]***	1.66 [.93, 2.96]	0.95 [.37, 2.46]	1.03 [.60, 1.80]
College graduate	1.04 [63, 1.70]	0.13 [.04, .45]**	1.40 [.67, 2.95]	1.51 [.52, 4.38]	0.94 [.46, 1.92]
Latino	0.57 [.28, 1.18]	1.13 [.28, 4.53]	0.89 [.31, 2.57]	1.54 [.32, 7.36]	0.33 [.14, .77]**
Black	1.17 [63, 2.19]	1.44 [.48, 4.31]	0.97 [.37, 2.57]	< 0.00 [<.0, >999]	1.34 [.54, 3.33]
Other	0.39 [.22, .69]**	1.19 [.35, 4.09]	1.43 [.58, 3.55]	1.01 [.27, 3.80]	0.66 [.30, 1.43]
Live alone	0.51 [.32, .83]**	0.22 [.07, .72]*	0.50 [.26, 0.99]*	0.38 [.12, 1.23]	1.03 [.49, 2.15]
Working	0.54 [.39, .76]***	0.74 [.33, 1.65]	0.74 [.45, 1.21]	0.97 [.41, 2.28]	0.92 [.58, 1.48]
Barriers: Cost	0.93 [.63, 1.39]	1.41 [.56, 3.58]	2.23 [1.24, 4.02]**	3.25 [1.28, 8.27]*	1.18 [.69 2.02]
Barriers: Professional	0.84 [.59, 1.20]	3.27 [1.37, 7.82]**	0.60 [.35, 1.02]	1.13 [.47, 2.73]	0.61 [.36, 1.02]
Barriers: Help	0.78 [.48, 1.25]	0.24 [.07, .76]*	0.34 [.19, .61]***	0.79 [.25, 2.51]	0.59 [.31, 1.10]
Barriers: Stigma	1.10 [.75, 1.63]	1.84 [.76, 4.47]	0.53 [.31, .91]*	0.93 [.33, 2.58]	0.85 [.49, 1.47]

Barriers: Access	0.45 [.30, .67]***	0.50 [.19, 1.37]	0.26 [.13, .50]***	0.81 [.33, 2.01]	1.52 [.88, 2.64]
Barriers: Family	0.82 [.56, 1.21]	2.39 [.85, 6.67]	1.60 [.89, 2.89]	1.39 [.53, 3.65]	0.50 [.30, .84]**
Job stigma, 1-5	1.02 [.88, 1.19]	1.53 [.95, 2.45]	0.90 [.71, 1.13]	0.77 [.55, 1.10]	0.63 [.53, .76]***
Need for secrecy, 1-5	0.84 [.70, 1.01]	0.89 [.58, 1.36]	0.94 [.72, 1.24]	0.76 [.49, 1.16]	0.86 [.67, 1.11]
Anyone close deployed	0.65 [.44, .97]*	0.65 .26, 1.62]	0.84 [.46, 1.52]	0.31 [.11, .87]*	0.51 [.29, .88]*
Received MH care due to Iraq war	0.79 [.49, 1.28]	0.82 [.27, 2.52]	1.12 [.57, 2.20]	6.89 [1.70, 27.93]**	0.65 [.35, 1.22]

Satisfaction is represented by 5 selected HEDIS indicators from the ECHO survey items.

*p<.05, ** p<.01, ***p<.001

#Among those reporting deployment

@Among those who received counseling, treatment, or medication in the past 6 months for a MH problem.

Percentages may not add to 100% due to rounding.

E. SUPPLEMENTAL DATA TABLES: ADMINISTRATIVE CLAIMS DATA

Table E.1 Data on Eligible Beneficiaries by Region

	DEMONSTRATION REGIONS							
	Total Demo		Ft. Carson		Offutt		USAF	
	2002	2003	2002	2003	2002	2003	2002	2003
Total Number of Eligible Beneficiaries (18+ years)[1]	134616	137187	46967	48673	34653	35793	52996	52721
Total Number who Meet inclusion Criteria	12462	13876	4457	5178	3309	3633	4696	5065
Total Eligible Beneficiaries (adjusted)[2]	149327	152179	52100	53992	38440	39704	58787	58482
Percent by Inclusion Criteria (adjusted)								
Saw a Mental Health Provider	2.8%	2.9%	2.6%	2.9%	2.8%	2.8%	2.9%	3.0%
Had a Mental Health Diagnosis	6.8%	7.4%	7.2%	8.1%	6.5%	7.0%	6.5%	6.9%
Received a Psychotropic Medication	5.7%	6.1%	5.7%	6.2%	6.1%	6.3%	5.5%	5.9%
Received a Mental Health Procedures (CPT codes)	1.0%	1.2%	1.0%	1.1%	0.8%	1.1%	1.1%	1.3%
One or more criterion	8.4%	9.1%	8.6%	9.6%	8.6%	9.2%	8.0%	8.7%
Total MH Users who saw a MH Provider during the year	4180	4394	1378	1537	1086	1108	1716	1749
Licensed Mental Health Counselor*	14.4%	17.1%	11.5%	15.5%	26.7%	27.5%	9.0%	11.8%
Other Mental Health Providers								
Psychologist	25.9%	24.8%	24.8%	26.5%	23.9%	21.4%	28.1%	25.4%
Clinical Social Worker	26.2%	23.4%	26.0%	23.2%	28.0%	26.3%	25.3%	21.7%
Marriage and Family Therapist	11.7%	11.9%	14.4%	14.8%	1.9%	1.4%	15.7%	16.0%
Psychiatric Nurse Practitioner	5.4%	7.2%	7.5%	10.6%	2.3%	3.2%	5.7%	6.8%
Physician								
Psychiatrist	42.5%	45.2%	39.3%	39.3%	52.8%	56.6%	38.6%	43.3%
Total MH Users who did NOT see a MH provider	8282	9482	3079	3641	2223	2525	2980	3316

[1] Based on DEERS data as of April 30 of study year
[2] Adjusted for missing users in April 30 DEERS data

Table E.1 Continued

	NON DEMONSTRATION REGIONS							
	Total Non-Demo		Ft. Hood		Luke AFB		WP AFB	
	2002	2003	2002	2003	2002	2003	2002	2003
Total Number of Eligible Beneficiaries (18+ years)[1]	208770	215794	100431	101574	68702	72328	39637	41892
Total Number who Meet inclusion Criteria	19965	22154	7635	8525	9296	10343	3034	3286
Total Eligible Beneficiaries (adjusted)[1]	231584	239376	111406	112674	76210	80232	43969	46470
Percent by Inclusion Criteria (adjusted)								
Saw a Mental Health Provider	2.3%	2.4%	2.4%	2.6%	2.3%	2.5%	1.9%	1.7%
Had a Mental Health Diagnosis	6.4%	7.0%	5.7%	6.4%	8.0%	8.7%	5.4%	5.8%
Received a Psychotropic Medication	6.0%	6.3%	4.7%	4.9%	8.8%	9.4%	4.6%	4.7%
Received a Mental Health Procedures (CPT codes)	0.6%	0.7%	0.7%	0.8%	0.5%	0.7%	0.5%	0.5%
One or more criterion	8.7%	9.3%	6.9%	7.6%	12.2%	12.9%	6.9%	7.0%
Total MH Users who saw a MH Provider during the year	5369	5778	2734	2990	1815	1995	820	793
Licensed Mental Health Counselor*	11.1%	12.1%	9.7%	12.0%	8.7%	8.9%	21.1%	20.7%
Other Mental Health Providers								
Psychologist	23.4%	24.5%	21.3%	21.6%	23.7%	25.7%	30.2%	32.0%
Clinical Social Worker	27.4%	25.8%	35.1%	32.1%	21.2%	21.1%	15.5%	13.7%
Marriage and Family Therapist	6.5%	5.8%	9.6%	8.2%	4.3%	4.1%	0.7%	0.9%
Psychiatric Nurse Practitioner	2.5%	3.5%	2.8%	4.8%	2.5%	2.7%	1.5%	1.0%
Physician								
Psychiatrist	56.9%	55.5%	54.7%	55.8%	62.5%	57.1%	52.0%	50.1%
Total MH Users who did NOT see a MH provider during the year	14596	16376	4901	5535	7481	8348	2214	2493

Percentages may not add to 100% due to rounding.

Table E.2 Demographic Characteristics of MH Users and Non-MH Users by Region and by Year

	Demonstration Regions								Non-Demonstration Regions							
	Users				Non-Users				Users				Non Users			
	Pre (2002)		Post (2003)		Pre (2002)		Post (2003)		Pre (2002)		Post (2003)		Pre		Post	
Number of Beneficiaries	12462		13876		135503		136786		19965		22154		209438		214801	
Gender	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Female	8472	68.0%	9453	68.1%	56527	46.3%	57075	46.3%	13917	69.7%	15469	69.8%	87744	46.5%	89605	46.3%
Male	3988	32.0%	4423	31.9%	65609	53.7%	66219	53.7%	6046	30.3%	6683	30.2%	101023	53.5%	103976	53.7%
Missing/Unknown	2	0.0%	0	0.0%	18	0.0%	17	0.0%	2	0.0%	2	0.0%	38	0.0%	59	0.0%
Race																
White	1956	15.7%	2316	16.7%	45935	37.6%	47095	38.2%	2263	11.3%	2815	12.7%	56656	30.0%	61188	31.6%
Black	244	2.0%	312	2.2%	7463	6.1%	7672	6.2%	438	2.2%	495	2.2%	20682	11.0%	21172	10.9%
Other	122	1.0%	141	1.0%	4513	3.7%	4535	3.7%	207	1.0%	220	1.0%	8302	4.4%	8737	4.5%
Missing/Unknown	10140	81.4%	11107	80.0%	64243	52.6%	64009	51.9%	17057	85.4%	18624	84.1%	103165	54.6%	102543	53.0%
Marital Status																
Married	3074	24.7%	3535	25.5%	49363	40.4%	50455	40.9%	4861	24.3%	5492	24.8%	77168	40.9%	79925	41.3%
Divorced	206	1.7%	253	1.8%	3289	2.7%	3520	2.9%	305	1.5%	363	1.6%	5730	3.0%	6349	3.3%
Separated/Annulled	4	0.0%	2	0.0%	38	0.0%	66	0.1%	7	0.0%	4	0.0%	84	0.0%	81	0.0%
Never Married	340	2.7%	349	2.5%	14836	12.1%	14899	12.1%	377	1.9%	421	1.9%	21951	11.6%	22624	11.7%
Widow/Widower	66	0.5%	80	0.6%	379	0.3%	457	0.4%	118	0.6%	109	0.5%	646	0.3%	784	0.4%
Missing/Unknown	8772	70.4%	9657	69.6%	54249	44.4%	53914	43.7%	14297	71.6%	15765	71.2%	83226	44.1%	83877	43.3%
Member Category																
Active Duty	594	4.8%	585	4.2%	29652	24.3%	29764	24.1%	540	2.7%	573	2.6%	51949	27.5%	52499	27.1%
Active Duty Dependent	2326	18.7%	2663	19.2%	18018	14.8%	18089	14.7%	3360	16.8%	3695	16.7%	29009	15.4%	29174	15.1%
Retired	2897	23.2%	3274	23.6%	30388	24.9%	30510	24.7%	4786	24.0%	5387	24.3%	48835	25.9%	48913	25.3%
Retiree Dependent	5162	41.4%	5727	41.3%	35593	29.1%	35822	29.1%	8889	44.5%	9891	44.6%	53671	28.4%	54022	27.9%
Academy Student	22	0.2%	22	0.2%	4495	3.7%	4280	3.5%	0	0.0%	0	0.0%	44	0.0%	44	0.0%
Other	213	1.7%	327	2.4%	3993	3.3%	4809	3.9%	316	1.6%	464	2.1%	5271	2.8%	8927	4.6%
Missing	1248	10.0%	1278	9.2%	15	0.0%	37	0.0%	2074	10.4%	2144	9.7%	26	0.0%	61	0.0%
Sponsor's Branch of Service																
Army	4516	36.2%	5295	38.2%	47179	38.6%	49491	40.1%	8659	43.4%	9757	44.0%	107096	56.7%	109295	56.4%
Air Force	5701	45.7%	6172	44.5%	66916	54.8%	65553	53.2%	6650	33.3%	7357	33.2%	64719	34.3%	66374	34.3%
Navy (include Navy afloat)	755	6.1%	865	6.2%	6328	5.2%	6407	5.2%	1886	9.4%	2073	9.4%	11930	6.3%	12214	6.3%
Marine Corps	191	1.5%	212	1.5%	1365	1.1%	1431	1.2%	513	2.6%	588	2.7%	3667	1.9%	4309	2.2%
Other	1299	10.4%	1332	9.6%	366	0.3%	429	0.3%	2257	11.3%	2379	10.7%	1393	0.7%	1448	0.7%

Age															
18-24	1598	12.8%	1774	12.8%	26218	21.5%	26799	21.7%	2089	10.5%	2258	10.2%	40597	21.5%	41794	21.6%
25-34	1467	11.8%	1778	12.8%	19540	16.0%	19692	16.0%	2228	11.2%	2469	11.1%	32825	17.4%	34273	17.7%
35-44	1948	15.6%	2064	14.9%	22029	18.0%	21392	17.3%	2508	12.6%	2696	12.2%	29225	15.5%	29546	15.3%
45-54	2108	16.9%	2306	16.6%	20339	16.7%	20421	16.6%	2972	14.9%	3301	14.9%	27817	14.7%	27960	14.4%
55-64	1724	13.8%	1954	14.1%	15783	12.9%	16047	13.0%	3020	15.1%	3433	15.5%	24641	13.1%	25225	13.0%
65 and over	3617	29.0%	4000	28.8%	18245	14.9%	18960	15.4%	7148	35.8%	7997	36.1%	33700	17.8%	34842	18.0%

Percentages may not add to 100% due to rounding.

Table E.3 Characteristics of MH Users by Provider Group, Year, and Demonstration Region

	Demonstration Regions								Non Demonstration Regions							
	LMHCs		OMH Providers		Psychiatrists		Other Physicians		LMHCs		OMH Providers		Psychiatrists		Other Physicians	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Number of MH Users	603	750	2050	1897	1527	1747	8282	9482	595	700	1959	2160	2815	2918	14596	16376
Percent by Gender																
Female	83.3	80.3	77.3	76.5	74.0	74.1	63.5	64.4	80.8	82.7	80.7	78.5	79.4	78.9	65.9	66.5
Male	16.8	19.7	22.7	23.5	26.0	25.9	36.5	35.6	19.2	17.3	19.3	21.5	20.6	21.1	34.1	33.5
Percent by Race																
White	16.1	18.4	18.7	20.5	15.8	16.4	14.9	15.9	17.6	18.7	15.6	17.5	12.0	14.1	10.4	11.6
Black	2.2	2.5	2.1	2.6	1.4	1.4	2.0	2.3	3.0	3.7	4.2	3.8	2.0	2.1	1.9	2.0
Other	1.0	0.9	1.5	1.3	0.7	0.9	0.9	1.0	1.5	2.9	2.2	2.1	1.3	1.3	0.8	0.7
Missing	80.8	78.1	77.6	75.7	82.1	81.3	82.2	80.8	77.8	74.7	78.0	76.7	84.8	82.6	86.9	85.7
Percent by Member Category																
Active Duty	3.2	3.1	2.2	1.7	3.1	1.5	5.8	5.3	4.2	5.0	3.2	3.4	1.9	1.6	2.7	2.5
Active Duty Dependent	41.3	40.5	41.1	39.7	27.0	28.7	9.9	11.7	45.2	43.3	44.3	42.5	31.8	33.5	9.1	9.1
Retired	11.3	11.3	15.3	16.3	15.9	16.9	27.4	27.3	10.1	9.3	12.8	12.9	13.4	14.7	28.1	28.2
Retiree Dependent	30.8	30.3	28.6	29.9	40.1	39.8	45.6	44.7	27.4	25.1	24.8	25.0	38.3	37.7	49.1	49.3
Academy Student	0.0	0.0	0.1	0.2	0.1	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other	1.5	3.3	2.0	2.7	1.8	1.7	1.6	2.3	3.0	3.0	1.8	3.1	1.7	2.1	1.5	1.9
Missing	11.9	11.5	10.6	9.5	11.9	11.3	9.4	8.6	10.1	14.3	13.1	13.2	13.0	10.4	9.5	8.9
Percent by Age Category																
18-24	22.4	22.0	18.1	18.2	16.6	16.5	10.1	10.3	23.2	21.3	21.4	20.6	16.1	16.2	7.4	7.3
25-34	24.2	23.7	23.0	22.8	15.3	17.2	7.4	9.1	26.1	31.9	27.9	26.6	20.1	19.6	6.6	6.7
35-44	26.2	27.3	26.1	24.5	22.1	20.1	11.1	11.0	24.7	24.7	21.8	21.9	18.1	17.8	9.8	9.4
45-54	19.2	19.1	17.8	18.2	21.5	21.0	15.7	15.3	14.8	15.0	14.7	14.2	20.7	19.3	13.8	14.2
55-64	7.1	6.9	8.0	9.3	15.5	15.7	15.5	15.3	9.2	6.3	8.5	10.5	13.1	14.3	16.6	16.8
65 and over	0.8	0.9	7.0	6.9	9.0	9.5	40.2	39.0	2.0	0.9	5.6	6.2	11.9	12.9	45.8	45.7
Percent by Marital Status																
Married	13.4	14.9	18.8	19.2	17.4	19.4	28.3	28.7	16.3	15.3	16.8	18.5	14.8	16.2	27.5	27.5
Divorced	0.8	1.9	1.8	1.7	2.0	1.4	1.6	1.9	1.8	2.1	2.1	1.7	1.4	1.3	1.5	1.7
Separated/Annulled	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Never Married	2.5	2.0	1.2	1.8	2.0	1.7	3.2	2.8	2.5	4.1	2.5	2.5	1.8	2.2	1.8	1.7
Widow/Widower	0.2	0.1	0.0	0.1	0.3	0.2	0.7	0.8	0.2	0.0	0.2	0.1	0.3	0.2	0.7	0.6
Missing/Unknown	83.1	81.1	78.1	77.1	78.3	77.2	66.1	65.8	79.2	78.4	78.4	77.1	81.6	80.1	68.5	68.5
Percent by Sponsor's Branch of Service																
Army	27.5	31.2	36.7	42.1	32.1	33.5	37.5	38.8	46.4	47.0	53.7	52.0	47.2	52.0	41.1	41.4
Air Force	51.1	50.3	47.1	42.3	49.6	48.8	44.3	43.7	36.3	31.9	26.6	26.3	30.6	27.9	34.6	35.1
Navy (includes Navy Afloat)	7.1	5.7	4.2	4.5	5.0	4.9	6.6	6.9	4.5	4.9	4.4	5.0	6.3	6.2	10.9	10.7
Marine Corps	2.0	1.1	1.1	1.2	1.0	1.0	1.7	1.7	2.4	1.4	1.8	2.2	1.8	2.2	2.8	2.9
Other	12.3	11.7	10.9	9.9	12.3	11.8	9.8	9.0	10.4	14.9	13.6	14.5	14.1	11.7	10.5	9.9
Percent by Study Inclusion Criteria																
Saw a Mental Health Provider	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0
Had a Primary Mental Health Diagnosis	99.7	99.7	99.5	99.5	95.9	96.2	71.9	72.5	100.0	100.0	99.3	99.0	93.9	94.9	66.4	68.9
Received a Psychotropic	73.3	62.5	54.3	54.1	86.0	83.1	68.5	67.2	70.1	67.0	46.4	46.1	84.8	83.0	70.5	68.9
Received a MH Procedure	36.2	36.3	29.4	31.3	38.4	46.8	1.1	1.0	23.5	30.9	21.3	21.9	25.1	27.9	1.2	1.2

Percentages may not add to 100% due to rounding.

Table E.4 Clinical Characteristics of MH Users by Provider Group, Year and Demonstration Region

	Demonstration Regions								Non Demonstration Regions							
	LMHCs		OMH Providers		Psychiatrists		Other Physicians		LMHCs		OMH Providers		Psychiatrists		Other Physicians	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Number of MH Users	603	750	2050	1897	1527	1747	8282	9482	595	700	1959	2160	2815	2918	14596	16376
Percent by Any Mental Disorder Diagnoses (Percentage of MH Users)																
Mood Disorders	64.3%	58.9%	38.4%	42.9%	71.3%	73.6%	24.5%	24.9%	58.7%	61.7%	37.7%	39.9%	74.4%	75.6%	24.6%	25.8%
Anxiety Disorders	35.2%	30.7%	30.6%	27.9%	38.4%	35.5%	16.5%	16.9%	44.9%	45.6%	27.4%	27.8%	42.0%	42.8%	18.4%	19.1%
Schizophrenia and other psychotic Disorders	3.8%	4.9%	1.5%	2.0%	6.2%	7.0%	3.8%	3.0%	2.5%	3.9%	1.4%	1.7%	6.9%	6.7%	3.5%	3.2%
Adjustment Disorders	40.5%	44.0%	48.0%	49.3%	18.0%	16.7%	6.1%	5.7%	44.0%	42.4%	56.7%	55.2%	20.5%	19.8%	5.9%	5.6%
Substance Use Disorders	12.9%	10.4%	6.1%	6.4%	10.7%	12.9%	26.7%	25.9%	8.9%	8.7%	4.5%	6.8%	8.5%	9.4%	16.8%	18.6%
Conduct/Attention Disorders	3.2%	3.7%	2.5%	2.4%	4.9%	6.8%	0.8%	0.7%	2.7%	3.7%	1.7%	2.0%	5.9%	6.8%	0.6%	0.7%
Personality Disorders	7.0%	4.5%	2.2%	2.2%	4.1%	3.1%	0.6%	0.4%	3.2%	4.1%	2.6%	2.7%	4.8%	4.6%	0.8%	0.6%
Other Mental Disorders	8.3%	8.1%	9.1%	9.6%	7.0%	8.5%	13.5%	15.1%	6.1%	5.4%	6.4%	5.4%	8.6%	8.5%	15.5%	15.2%
Percent by Primary Mental Disorder Diagnoses																
Mood Disorders	60.2%	54.4%	33.7%	38.3%	68.2%	69.8%	9.7%	9.5%	53.8%	57.1%	32.2%	34.6%	68.6%	69.9%	9.8%	9.1%
Anxiety Disorders	23.7%	22.9%	25.4%	22.4%	26.8%	25.5%	6.3%	6.5%	36.1%	35.6%	21.4%	20.2%	26.9%	27.1%	6.0%	6.3%
Schizophrenia and other Psychotic	3.2%	4.3%	1.0%	1.3%	5.4%	5.7%	2.1%	1.7%	2.2%	2.6%	1.1%	1.2%	5.5%	5.1%	1.8%	1.8%
Adjustment Disorders	33.5%	38.8%	44.4%	46.0%	13.0%	12.7%	2.7%	2.6%	39.0%	36.9%	52.8%	51.7%	14.0%	13.3%	2.7%	2.5%
Substance Use Disorders	6.0%	5.1%	1.5%	1.7%	4.7%	5.2%	3.8%	3.7%	3.5%	4.3%	1.6%	2.8%	3.2%	3.2%	2.6%	3.5%
Conduct/Attention Disorders	2.2%	2.8%	1.9%	2.0%	2.9%	4.2%	0.4%	0.3%	1.5%	2.1%	1.1%	1.3%	3.5%	4.0%	0.3%	0.3%
Personality Disorders	1.5%	1.5%	0.9%	1.1%	0.9%	1.0%	0.1%	0.1%	0.7%	1.4%	1.1%	1.0%	1.2%	1.2%	0.1%	0.1%
Other Mental Disorders	4.5%	5.1%	6.2%	6.5%	4.5%	5.6%	6.4%	8.4%	4.4%	3.4%	4.5%	3.4%	5.4%	5.4%	7.1%	7.2%
Percent by Presence of DSM-IV Comorbidities (Percentage of MH Users)																
Presence of Axis I comorbidity	44.3%	38.7%	24.5%	27.0%	38.7%	40.7%	12.2%	11.9%	43.4%	45.1%	25.6%	28.2%	46.5%	48.8%	11.6%	11.7%
Presence of Axis II comorbidity	6.6%	4.3%	1.7%	1.9%	3.8%	3.1%	0.5%	0.3%	3.2%	3.7%	2.0%	2.3%	4.7%	4.5%	0.6%	0.5%
Presence of Axis III comorbidity	44.9%	39.9%	25.2%	27.9%	39.4%	41.5%	12.4%	12.0%	45.0%	46.0%	26.3%	29.2%	47.4%	49.7%	11.8%	11.8%
Presence of Psychosocial Problems	1.3%	2.7%	2.3%	2.4%	1.4%	1.7%	0.5%	0.5%	3.0%	4.0%	1.7%	2.7%	1.3%	1.7%	0.9%	0.5%

Table E.5 Distribution of Treatment Characteristics among MH Users by Provider Group, Demonstration Region and Year

	Demonstration Regions								Non Demonstration Regions							
	LMHCs		OMH Providers		Psychiatrists		Other Physicians		LMHCs		OMH Providers		Psychiatrists		Other Physicians	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Number of MH Users	603	750	2050	1897	1527	1747	8282	9482	595	700	1959	2160	2815	2918	14596	16376
Treatment Characteristics (percentage of MH Users)* (does not add to 100% due to missing data)																
Receiving Psycho-therapy, no meds	9.3%	11.5%	13.9%	13.8%	3.5%	4.9%	0.2%	0.1%	6.6%	9.9%	11.8%	12.3%	2.3%	2.6%	0.2%	0.4%
Receiving therapy and meds	27.6%	25.0%	15.5%	17.7%	35.5%	42.5%	0.8%	0.9%	17.3%	22.2%	9.7%	9.6%	23.5%	25.8%	1.0%	0.8%
Medication Only	46.4%	37.9%	38.9%	36.6%	51.3%	41.3%	67.7%	66.4%	53.1%	46.0%	36.9%	36.7%	62.1%	57.7%	69.6%	68.1%
Medication Use (percentage of MH users or mean per user as relevant)																
Receiving Any Psychotropic	73.3%	62.5%	54.3%	54.1%	86.0%	83.1%	68.5%	67.2%	70.1%	67.0%	46.4%	46.1%	84.8%	83.0%	70.5%	68.9%
1 psychotropic/year	23.1%	23.2%	26.6%	26.3%	24.2%	23.7%	38.2%	38.0%	25.9%	25.4%	24.9%	25.3%	22.0%	24.9%	41.5%	41.8%
2 psychotropics/year	17.6%	16.7%	15.7%	14.2%	22.6%	22.4%	18.1%	17.6%	19.3%	16.9%	12.5%	11.8%	24.9%	22.4%	17.8%	17.7%
3 or more psychotropics/year	32.7%	22.7%	12.1%	13.7%	39.2%	37.0%	12.1%	11.5%	24.9%	24.7%	8.9%	9.1%	37.9%	35.6%	11.2%	9.5%
Mean number of psychotropics/year	2.01	1.53	1.05	1.05	2.33	2.20	1.19	1.15	1.69	1.65	0.85	0.84	2.29	2.12	1.17	1.10
Median number of psychotropics/per	2.0	1.0	1.0	1.0	2.0	2.0	1.0	1.0	1.0	1.0	0	0	2.0	2.0	1.0	1.0
Type of Medication Use by Drug Class (percentage of MH users with at least one psychotropic per year)																
Antidepressants	95.0%	87.4%	91.7%	90.1%	86.9%	84.2%	76.4%	75.1%	92.3%	91.7%	87.9%	88.9%	89.2%	87.9%	72.4%	73.4%
Antipsychotics	18.8%	20.7%	6.5%	9.6%	28.3%	30.7%	7.3%	7.9%	15.3%	18.6%	5.9%	6.6%	21.3%	23.3%	5.6%	6.4%
Benzodiazepines	37.1%	35.0%	27.0%	32.1%	36.3%	39.2%	41.7%	43.3%	35.0%	34.1%	29.1%	30.9%	43.9%	41.1%	45.3%	42.9%
Other Anxiolytics	6.3%	3.2%	3.4%	0.8%	5.1%	2.0%	2.8%	1.2%	4.1%	2.6%	3.1%	2.7%	4.7%	3.9%	2.7%	1.8%
Mood Stabilizers	15.6%	17.9%	7.8%	9.1%	22.3%	22.4%	8.1%	7.9%	11.3%	12.4%	6.2%	6.5%	18.3%	18.5%	7.9%	7.2%
Stimulants	3.6%	4.3%	3.0%	1.9%	4.5%	5.2%	1.3%	1.1%	1.9%	4.3%	0.8%	1.7%	5.2%	5.4%	1.0%	0.8%
Ant-substance use medications	0.7%	0.9%	0.2%	0.8%	0.5%	1.0%	0.4%	0.4%	0.5%	0.9%	0.6%	0.3%	0.5%	0.3%	0.3%	0.2%
Other psychotropic	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
By Psychotropic Medication by Drug Class (percent and mean)																
1 Psychotropic Drug Class per Year	36.3%	32.8%	36.9%	34.6%	38.8%	35.1%	46.8%	46.2%	40.0%	37.7%	34.2%	32.1%	37.2%	37.0%	49.6%	49.6%
2 Psychotropic Drug Class per Year	21.4%	19.3%	14.2%	15.7%	28.0%	29.8%	18.1%	17.7%	20.2%	18.9%	9.4%	11.4%	30.2%	29.5%	17.4%	16.6%
3 or more Psychotropic Drug Class per Year	15.6%	10.4%	3.3%	3.8%	19.3%	18.1%	3.7%	3.3%	9.9%	10.4%	2.8%	2.6%	17.5%	16.4%	3.5%	2.8%
Mean Number of Psychotropic Classes per Year	1.77	1.69	1.40	1.44	1.84	1.85	1.38	1.37	1.60	1.64	1.34	1.38	1.83	1.80	1.35	1.33
Median Number of Psych. Classes	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	1.0	1.0	1.0	1.0

Table E.6 Description of Service Utilization among MH Users by Provider Group, Demonstration Region and Year

	Demonstration Regions								Non Demonstration Regions							
	LMHCs		OMH Providers		Psychiatrists		Other Physicians		LMHCs		OMH Providers		Psychiatrists		Other Physicians	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Number of MH Users	603	750	2050	1897	1527	1747	8282	9482	595	700	1959	2160	2815	2918	14596	16376
Outpatient Visits by MH Users																
Volume per year (total number of MH visits by MH users)	7847	9232	16601	16324	13034	15298	8405	9391	6505	7564	13563	15292	21556	22330	14480	17712
Mean number of MH visits per year by MH users	13.01	12.31	8.10	8.61	8.54	8.76	1.01	0.99	10.93	10.81	6.92	7.08	7.66	7.65	0.99	1.08
Mean number of MH visits per month by MH users, for months with any visits	2.44	2.44	2.18	2.21	1.94	1.99	1.10	1.06	2.21	2.26	2.01	2.01	1.77	1.78	1.08	1.11
Inpatient MH use by MH users																
Number of MH users who had inpatient service use	57	56	96	123	141	186	1422	1684	65	82	108	164	400	401	2467	2642
Total number of inpatient episodes among MH users	76	79	130	175	194	311	1765	2128	77	122	189	219	663	675	3883	3988
Mean number of inpatient MH episodes per inpatient users	1.33	1.41	1.35	1.42	1.38	1.67	1.24	1.26	1.18	1.49	1.75	1.34	1.66	1.68	1.57	1.51
Mean number of inpatient MH episodes per all MH users	0.13	0.11	0.06	0.09	0.13	0.18	0.21	0.22	0.13	0.17	0.10	0.10	0.24	0.23	0.27	0.24
Total number of inpatient days	429	528	1053	1501	1377	2110	18065	21684	397	681	1169	1465	4450	4481	29319	38895
Mean number of inpatient days among inpatient MH users	7.53	9.43	10.97	12.20	9.77	11.34	12.70	12.88	6.11	8.30	10.82	8.93	11.13	11.17	11.88	14.72
Mean number of inpatient days among all MH users	0.71	0.70	0.51	0.79	0.90	1.21	2.18	2.29	0.67	0.97	0.60	0.68	1.58	1.54	2.01	2.38
Mean length of stay for inpatient episodes (in days)	5.64	6.68	8.10	8.58	7.10	6.78	10.24	10.19	5.16	5.58	6.19	6.69	6.71	6.64	7.55	9.75
General Health Care Use-Outpatient Visits to Providers																
Volume of health care visits made by MH users	9719	11654	23906	24231	19376	23956	77261	86382	8870	10035	21259	23527	35454	38199	145971	169985
Mean number of health care visits made by MH users	16.12	15.54	11.66	12.77	12.69	13.71	9.33	9.11	14.91	14.34	10.85	10.89	12.59	13.09	10.00	10.38
General Health Care Use—Inpatient Admissions																
Volume of hospital admissions by MH users	117	139	377	461	322	486	4400	5017	129	180	413	451	1117	1099	9639	9959
Mean number of hospital admissions by MH uers	0.19	0.19	0.18	0.24	0.21	0.28	0.53	0.53	0.22	0.26	0.21	0.21	0.40	0.38	0.66	0.61

Percentages may not add to 100% due to rounding.

Table E.7 Additional Utilization Data for MH Users by Provider Group, Year, and Demonstration Region

	Demonstration Regions								Non-Demonstration Regions							
	Counselor		OMH Providers		Psychiatrist		Other Physicians		Counselor		OMH Providers		Psychiatrist		Other Physicians	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Total Number of MH Users	603	750	2050	1897	1527	1747	8282	9482	595	700	1959	2160	2815	2918	14596	16376
Rate per eligible beneficiary population	0.4%	0.5%	1.4%	1.3%	1.0%	1.2%	5.6%	6.3%	0.3%	0.3%	0.9%	0.9%	1.2%	1.2%	6.4%	6.9%
Outpatient MH Visits by MH Users																
Volume (total number) of MH visits by MH users for Year	7847	9232	16601	16324	13034	15298	8405	9391	6505	7564	13563	15292	21556	22330	14480	17712
Volume (total number) of MH visits/month																
January (total visits)	663	727	1574	1422	1192	1348	809	777	576	563	1248	1249	1905	2026	1165	1349
February	623	765	1399	1300	1031	1302	739	749	556	507	1138	1147	1702	1766	1067	1109
March	638	848	1356	1298	1040	1294	665	839	563	589	1101	1185	1870	1940	1154	1335
April	736	878	1480	1504	1263	1443	663	829	622	630	1201	1328	1850	2153	1318	1506
May	664	810	1373	1382	1189	1280	669	849	609	593	1160	1314	1916	2049	1240	1510
June	631	866	1270	1268	916	1280	629	851	530	623	1081	1261	1637	1931	1180	1574
July	626	799	1453	1390	1108	1348	732	834	541	682	1089	1277	1702	1915	1229	1571
August	663	706	1372	1322	1042	1228	730	786	546	632	1161	1296	1837	1655	1264	1528
September	660	809	1369	1483	1033	1367	693	826	481	706	1145	1412	1838	1933	1213	1672
October	742	768	1472	1528	1197	1345	712	808	579	752	1229	1484	2022	1870	1372	1713
November	645	645	1215	1249	1050	1035	695	653	487	635	1033	1177	1647	1499	1120	1408
December	556	611	1268	1178	973	1028	669	590	415	652	977	1162	1630	1593	1158	1437
Mean number of MH visits per year by MH users	13.01	12.31	8.10	8.61	8.54	8.76	1.01	0.99	10.93	10.81	6.92	7.08	7.66	7.65	0.99	1.08
Mean number of MH visits per month (MH users; total months)	1.08	1.03	0.67	0.72	0.71	0.73	0.08	0.08	0.91	0.90	0.58	0.59	0.64	0.64	0.08	0.09
Mean number of MH visits per calendar month with any visits (MH users)	2.444	2.435	2.182	2.207	1.938	1.986	1.096	1.056	2.206	2.259	2.006	2.014	1.773	1.775	1.082	1.11

Percentages may not add to 100% due to rounding.

Table E.8 Description of Government Expenditures for Care Received by MH Users by Provider Group, Demonstration Region and Year

(total expenditure dollars shown in thousands)

	Demonstration Regions								Non Demonstration Regions							
	LMHCs		OMH Providers		Psychiatrists		Other Physicians		LMHCs		OMH Providers		Psychiatrists		Other Physicians	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Number of MH Users	603	750	2050	1897	1527	1747	8282	9482	595	700	1959	2160	2815	2918	14596	16376
Expenditures for Outpatient MH Visits by MH users																
Total Expenditures (in thousands)	$484	$562	$982	$1020	$923	$1231	$1,574	$1995	$409	$501	$770	$980	$1,373	$1,515	$1309	$1,832
Mean Expenditure per MH user	$802	$749	$479	$538	$605	$705	$190	$210	$688	$716	$393	$454	$488	$519	$090	$112
Expenditures for Inpatient MH Admissions by MH users																
Total Expenditures (in thousands)	$423	$450	$571	$1238	$685	$1539	$9203	$10645	$258	$533	$568	$996	$2034	$2236	$10577	$14414
Mean Expenditure per MH user	$702	$600	$279	$653	$448	$881	$1111	$1123	$433	$762	$290	$461	$723	$766	$725	$880
Expenditures for MH Care Received by MH users																
Total Expenditures (in thousands)	$907	$1,012	$1,553	$2258	$1608	$2770	$10777	$12639	$667	$1,034	$1337	$1976	$3407	$3751	$11886	$16245
Mean Expenditure per MH user	$1504	$1349	$758	$1190	$1053	$1586	$1301	$1333	$1121	$1478	$683	$915	$1210	$1285	$814	$992
Expenditures for ALL Outpatient Health Care Received by MH Users																
Total Expenditures (in thousands)	$900	$1,193	$2,560	$3409	$2165	$3378	$12232	$16144	$980	$1,032	$2290	$2599	$3956	$4378	$19567	$22716
Mean Expenditure per MH user	$149	$1591	$1240	$1797	$1418	$1934	$1477	$1703	$1648	$1474	$1169	$1203	$1405	$1500	$1341	$1387
Expenditures for ALL Inpatient Admissions Received by MH Users																
Total Expenditures (in thousands)	$681	$707	$1337	$2068	$1556	$2267	$14720	$17107	$425	$772	$1148	$1534	$3004	$3222	$19289	$24713
Mean Expenditure per MH user	$1130	$942	$652	$1090	$757	$1298	$1777	$1804	$714	$1102	$586	$710	$1067	$1104	$1322	$1509

Table E.9 Visits and Payments to Providers by Provider Type, Demonstration Region and Year

	Demonstration Regions								Non Demonstration Regions							
	LMHCs		OMH Providers		Psychiatrists		Other Physicians		LMHCs		OMH Providers		Psychiatrists		Other Physicians	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Total Number of Unique Beneficiaries Seen	603	750	2714	2691	1778	1988	5302	6013	595	700	3037	3260	3056	3204	8648	10289
Visits to Providers																
Total Number of visits made by MH Users	5569	6405	22667	24242	7465	7698	10865	12363	4531	5302	22450	25070	11112	11155	19180	22679
Mean number of visits made per MH users	0.45	0.46	1.82	1.75	0.60	0.57	0.87	0.89	0.23	0.24	1.12	1.13	0.56	0.56	0.96	1.02
Mean number of visits made per MH users who saw this type of provider	9.2	8.5	8.4	9.0	4.2	4.0	2.0	2.1	7.6	7.6	7.4	7.7	3.6	6.5	2.2	2.2
Payments made to Provider (In dollars)																
Total Payments by government to provider (in dollars)	277872	309563	1166402	1292224	423694	450060	2095507	2755740	238315	299216	1246387	1528186	547406	597587	1828014	2403391
Average payment for provider type per MH user (in dollars)	461	413	430	480	238	226	395	458	401	427	410	469	179	187	211	234
Average payment per user in this provider group (in dollars)	22.30	22.31	93.60	93.13	34.00	32.43	168.15	198.60	11.94	13.51	62.43	68.98	27.42	26.97	91.56	108.49

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