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2005 Health Care Survey of DoD Beneficiaries:

2006 Design Report

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Chapter 1

Introduction

The National Defense Authorization Act for fiscal year 1993 (P.L.102-48) mandates that the Department of Defense (DoD) monitor the satisfaction of beneficiaries in the military health system (MHS) with their health care and health plan. The Office of the Assistant Secretary of Defense (Health Affairs) [OASD (HA)] and TRICARE Management Activity (TMA) developed the Health Care Survey of DoD Beneficiaries (HCSDB) to fulfill that mandate.

The HCSDB was first fielded in 1995 on an annual basis. From 2001 to 2005, the survey has been fielded each quarter, as it will be in 2006. Data sets containing survey responses have been produced quarterly, along with a combined data set for each calendar year. For the past five years, the HCSDB has also included a survey of child beneficiaries' sponsors.

Among the many surveys collecting information about the MHS, only the HCSDB measures the health care experiences of MHS beneficiaries around the world during the previous 12 months, whether or not they use TRICARE or military facilities. Recent years' results have indicated an increase in the use of TRICARE benefits. The survey presents an opportunity to explain the apparent increase and identify its causes and effects.

One of the HCSDB's most useful features is that it combines core questions that change little from year to year with supplementary ones that change each quarter. Thus, the core questions can be used to track changes in coverage, access, and satisfaction over time, while the supplementary questions can reflect survey users' changing priorities. Responses to the supplementary questions may be addressed in the Issue Brief, the TRICARE Consumer Watch, or TRICARE Annual Reports—they can also be incorporated into briefings, fact sheets, or research papers.

For 2006, we propose changing the reporting and data set production periods from the calendar year to the fiscal year. This change will permit the HCSDB to be better coordinated with TMA's reporting and decision-making schedule. The change will affect sampling, fielding, reporting, data sets, and documentation. Several deliverables will be produced earlier than in previous years. To facilitate the transition, we will minimize changes in the questionnaire and sample design. The child survey, previously fielded in the third quarter of the calendar year, will be fielded in the third quarter of the fiscal year.

This report outlines the sampling plan for the quarterly and the child HCSDB surveys and describes the methods MPR uses to process the data, analyze and report on the results, and produce and document the analytic data sets created from survey responses. More specifically:

- Chapter 2 describes the methods used to draw the samples, field the survey, and produce and document the data sets. The proposed sampling plan will facilitate the transition to a fiscal-year reporting period while enabling survey responses to answer the research questions relevant to MHS policymakers. The design plan describes supplementary samples to address the performance of managed care support contractors and TRICARE Reserve Select.
- Chapter 3 describes the survey databases and the database documentation. The chapter also includes a plan for routine presentation of results in a user-friendly format. The data sets and reports created from the survey data are documented in the HCSDB Codebook

and Users Guide and in the HCSDB Technical Manual. The chapter describes the transition from using calendar years to fiscal years in data set development, and offers a revised format for presentation of cross-tabulation results.

- Chapter 4 describes the reports we will produce from the 2006 HCSDB and the changes in reporting compared to previous years. As in the 2005 HCSDB, the 2006 reports will include the TRICARE Beneficiary Reports (for adults and children), TRICARE Consumer Watch, and the HCSDB Annual Report. The chapter describes the transition to fiscal year reporting and a planned change in the software used to present results in the TRICARE Beneficiary Reports.
- Chapter 5 describes the research projects for which the HCSDB will be the data source. We propose several studies to strengthen the survey's methodological underpinnings and extend its results to the exploration of important health policy issues. Among the research topics: using small-area estimation methods for military treatment facilities (MTFs), identifying factors affecting the substitution of civilian insurance for TRICARE, and measuring the use of and access to care under TRICARE Standard.
- Chapter 6 presents the project work plan.

Chapter 2

Survey Methods

A. SAMPLING AND WEIGHTING

This section presents our sampling and weighting plan. We present the sample selection procedures for the adult and child surveys, and we list the analytic domains, such as enrollment groups and geographic areas for which we will report response rates. Lastly, we present weighting procedures for the surveys. We describe how the new benefit, TRICARE Reserve Select, might be accommodated by a change in sample design. We also describe changes to the sample design to increase precision of estimates for beneficiaries enrolled to civilian PCMs.

1. Adult Survey

a. Target population

As in the 2005 Adult HCSDB, the target population for the adult survey is all adults eligible to receive military health care benefits. The sampling frame will be identified from the Defense Eligibility and Enrollment Reporting System (DEERS) maintained by DoD. Each quarter, TMA will provide an extract file including the names and addresses of all beneficiaries who are eligible for the survey as of the reference date for the quarter. The reference date will be as close as possible to the file extraction date.

b. Sample Stratification

The adult survey will be stratified by a combination of three variables: (1) TRICARE Prime enrollment status, (2) beneficiary group, and (3) geographic area. The proposed stratification scheme ensures that we have a sufficient sample of beneficiaries from various population subgroups to support separate analysis for each. It will also permit us to make comparisons between geographic areas important to TMA leadership. Variables needed for stratification will be constructed and included in the sampling frame.

All active-duty personnel are regarded as Prime enrollees. Beneficiaries 65 and over are not allowed to enroll in Prime. Consequently, six enrollment-beneficiary combinations will be defined (1) active-duty, (2) active-duty family member enrolled in Prime, (3) active-duty family member not enrolled in Prime, (4) retirees and their family members who are younger than 65 and enrolled in Prime, (5) retirees and their family members who are younger than 65 and not enrolled in Prime, and (6) retirees and their family members 65 and over. Each geographic area will be stratified according to these beneficiary groups.

Geographic strata will be defined to permit comparisons between beneficiaries receiving care at different military treatment facilities (MTFs) or from civilian providers in different market areas. For Prime enrollees, geographic strata will be assigned according to the MTF at which the beneficiary is enrolled. For non-enrollees, geographic strata are defined by the beneficiary's place of residence. Beneficiaries who do not reside within a MTF catchment area are assigned to one of four non-catchment area strata. These strata will be based on the TNEX regions, one non-catchment area for each and one for OCONUS regions. The strata designated according to MTF

catchment areas generally combine several MTFs, which may or may not be administratively related or geographically proximate. The total number of strata will be determined at the time of sampling based on the composition of the sample frame.

c. Sample Allocation

The total sample size for the 2006 adult survey is 50,000 per quarter, the same as the 2005 HCSDB. This sample size will enable us to maintain the precision of overseas regions and to overcome the effects of low response rates across the system. We allocate the sample among strata to meet precision requirements on key analytic domains as well as to minimize the total variance.

The sample is allocated to meet the following precision objectives: (1) after combining four quarters catchment-area-level estimates will have a 95 percent confidence interval (precision) of ±5 percentage points; (2) branch of service quarterly estimates will have a precision of ±5 percentage points; (3) within each of the three TNEX regions in the continental United States, each beneficiary group will have a precision of ±5 percentage points; (4) for the combined regions outside the continental United States, quarterly estimates for active duty beneficiaries, for active duty family members, and for retirees and their family members younger than age 65 will have a precision of ±6 percentage points. These objectives are similar to the precision objectives for the 2005 HCSDB. A sample size of 50,000 permits us to maintain the precision objective from previous rounds of the HCSDB, even with low levels of response from most beneficiary groups.

d. Weighting

Survey responses are used to create analytic data sets that are used for reporting and research. Two data sets, a quarterly data set and a combined annual data set are produced from the adult survey. The quarterly data set contains responses from one quarter's fielding, produced soon after fielding ends. The combined data set contains responses from four consecutive quarters, including responses that arrive after the end of the fielding period for previous quarters' surveys. In order to calculate means, rates and other statistics from survey responses, we must attach weights that account for the number of responses each response in our sample represents.

When the sample is selected, we will calculate quarterly sampling weights equal to the inverse of the probability that a beneficiary is sampled. We will adjust these sampling weights to compensate for non-response using a weighting class adjustment method. This method divides strata into smaller groups and multiplies the sampling weight by the inverse of the probability that a sampled beneficiary actually responds. These adjusted weights will be included in the final deliverable database.

A data set combining adult surveys from four quarters will also be constructed along with the quarterly data sets. Because sample size in the combined data set is greater than the quarterly sample size, users of the combined data set will be able to calculate reliable estimates for smaller analytic domains, such as catchment areas, than can users of a single quarterly data set.

When the data sets are combined, a combined sampling weight is needed. The method used to combine the four quarters and calculate combined weights assumes that the variation in estimates from one quarter to the next is due merely to sampling variation. That is, combined estimates can be calculated from the four independent samples by averaging the estimates for the four quarters. These combined estimates will, in fact, be more precise than the quarterly estimates because they average out the variation across the quarters.

We will calculate combined weights as an equally weighted average of quarterly weights. Friedman et al. (2002) compared this equal weights scheme to weighting schemes based on the recency of the reference period and the size of the domain. They evaluated the relative errors of 23 key

survey estimates and found very few differences among the relative errors from each weighting scheme. Therefore, we are confident that this weighting scheme produces reliable estimates.

The final data file will retain the quarterly sampling stratum variables and quarterly weight as well as the combined weight. These quarterly weights are also revised because data arriving after the end of the fielding periods for previous quarters will be incorporated. The file will also contain an indicator variable for the quarter the survey was fielded. Both combined and quarterly estimates can be calculated from this combined data set.

e. New for 2006

Because of our plan to roll up quarterly data across fiscal years instead of calendar years, the four quarters that are combined will be the fourth quarter of the 2005 HCSDB and the first three quarters of the 2006 HCSDB. Only three quarters will be newly sampled for the 2006 HCSDB. The 2007 HCSDB will begin with the following quarter. Annual weights will remain an equally weighted average of each quarter's weights. As a result, data from the fourth quarter of 2005 will be part of both the CY 2005 and the FY 2006 data sets. To ensure that fiscal-year weights and reporting categories can be assigned easily, we will change the strata as little as possible between 2005 and 2006.

2. Child Survey

a. Target population

The target population for the child survey, like that of the 2005 child survey, is composed of children who are eligible for military health care benefits and are younger than 18 as of the reference date.

b. Sample Stratification

For the child survey, we will use a stratification scheme similar to the 2005 child survey. We will stratify the population into 18 groups based on the complete cross-classification of the two enrollment groups, three geographic areas, and three age groups. Enrollment groups consist of those enrolled in Prime and those who are not. The geographic areas are the TNEX regions, North, South, and West, and OCONUS. The age groups are younger than 6 years old, 6 through 12 years old, and 13 through 17 years old.

c. Sample Size

The total sample size for the 2006 child survey will be the same as for the 2005 child survey, 35,000. Precision objectives for the child survey are also specified in terms of the half-length (HL) of the 95 percent confidence interval for a given estimate. There are three precision goals: (1) For individual CONUS stratum-level estimates, the HLs should be about 5 percentage points; (2) for all OCONUS sampling stratum-level estimates, the HLs are 6.5 percentage points; (3) for TNEX region-level estimates (across all enrollment groups and ages), the HLs should be less than 2 percentage points; and (4) for estimates for the entire population, the HLs should be 1 percentage point. After calculating the desired number of eligible respondents needed to achieve the precision requirements specified, we will inflate the resulting sample sizes to account for survey nonresponse. For this calculation, we will use the achieved 2005 response rates for CONUS and OCONUS strata.

d. Poststratification for the child survey

To reduce the likelihood of selecting more than one child per household, we will assign all children from a household to the same age-based sampling stratum. The assignment will use a procedure to randomly assign children within the same household to one stratum. Therefore, we need to compensate for the resulting difference in population totals by using post-stratification.

Post-stratification adjustments force the adjusted weight totals to population totals for the specified population groups that form the post-strata. The non-response-adjusted weight counts for a particular domain may deviate from the corresponding population counts mainly because the sampling strata were constructed such that some children were assigned an age group to which they did not belong. The post-stratification variables are age, enrollment group, and region.

3. Sample Selection

Sample selection for the adult and child surveys will be different. Each selection method takes into consideration the unique circumstances of the population and the survey methodology. The adult sample will be selected independently across strata using a permanent random number technique. The child sample will be selected with a stratified sequential sample design.

4. Domains for Reporting Response Rates

For the adult survey, response rates will be reported for the following domains: MHS, Continental United States, Alaska, and Hawaii (CONUS) and outside the United States (OCONUS), beneficiary group, beneficiary group by TRICARE Prime enrollment status, catchment areas, TNEX regions, sex, enrollment status by beneficiary group, beneficiary group by service and beneficiary group by sex.

For the child survey, response rates will be reported for the following domains: CONUS, OCONUS, TNEX region, TRICARE Prime enrollment status, and age group.

Two key response rate measures will be reported: the final response rate (*FRR*) and the final weighted response rate (FRR_w,). These measures will be examined to identify patterns across domains or characteristics.

The precision of survey estimates depends on the number of completed questionnaires. To meet precision objectives, the size of the sample must be inflated above the required number of questionnaires to account for survey non-response. We assume the expected response rate will be approximately 28 percent for both the adult and child surveys. Because response rates for the HCSDB vary substantially across beneficiary groups, different response rates will be assumed for each beneficiary group at the time of sample size determination.

B. STANDARD ERROR ESTIMATION

Standard error estimation for statistics calculated from both the adult and child surveys will be similar to that of the 2005 HCSDB. Both surveys use a stratified sampling design. Taylor series linearization and resampling methods, such as jackknife replication or the balanced repeated replication method, are the customary methods to produce variance estimates for nonlinear statistics by taking into account the use of a complex sample design. We will include with the analytic datasets produced from the survey both final weights for calculating standard errors using Taylor series linearization and a full set of replicate weights for calculating standard errors using jackknife replication.

Reported estimates from the 2006 HCSDB Adult and Child surveys will be similar to estimates from previous HCSDB surveys. Estimates will incorporate weights that account for the complex sample design for the corresponding survey. Additionally, both surveys will produce estimates that will be compared with an independent benchmark. Standard errors for survey estimates will be calculated using Taylor series linearization. The test of whether the survey estimate differs significantly from the benchmark will use the appropriate hypothesis test.

In reporting survey estimates, cells that may produce unreliable estimates due to small sample size will be suppressed. In most cases, estimates with a cell count of 20 or fewer unweighted records will not be reported. For many characteristics, regional comparisons are of special interest. A series of multiple comparisons will be made to specify all regional differences.

C. QUESTIONNAIRE DEVELOPMENT

The core of the HCSDB questionnaire will remain unchanged in 2006 in order to facilitate the transition from calendar year to fiscal year reporting. Stability of core questions is also important to permit analysis of trends in reported access and satisfaction. One of the most useful features of the HCSDB is that the core questions change little in content or wording from year to year. This consistency in the core questionnaire provides data to track changes in reports of coverage, access and satisfaction. The HCSDB instrument also includes supplementary questions that change from quarter to quarter. The supplementary questions may be designed to reflect pressing concerns of survey data users and policy makers. We will use a combination of previously developed supplements and new supplements designed to meet emerging research interests.

D. TRICARE RESERVE SELECT ENROLLMENT

A new group of eligible MHS beneficiaries are enrolled in TRICARE Reserve Select (TRS), a continuation of TRICARE Standard/Extra for deactivated reservists. In the Quarter 4, 2005 Adult Survey extract, there are only 735 TRS beneficiaries, but this number is expected to increase because TRS has been available only since April 2005. Policymakers are interested in obtaining estimates of key outcomes for this new group, but not enough reservists have enrolled in TRS for us to establish a sampling stratum. We recommend monitoring until there are enough enrollees to include TRS members in the sample design. We also recommend avoiding changes to the sampling design until the transition from calendar year to fiscal year and the upcoming fiscal year surveys are complete; a supplemental sample during 2006 can provide results for TRS beneficiaries. This section outlines factors that affect the inclusion of TRS as a sampling domain, offers possible options under various assumptions, and lays out the next steps.

1. Modifying the Sample Design

Four factors affect how TRS is incorporated into the sample design:

1) TMA preference for either quarterly or annual estimates affects the sample design. If quarterly, the frame would need to be partitioned into four zones to minimize overlap among the four quarterly HCSDB surveys and prevent repeated surveying of the same beneficiaries (see Ch. 5 of the 2005 Adult Sampling Report). Therefore, sufficient population to support the partitioning of the frame into four zones is required for quarterly estimates. If only annual estimates are desired, and the data for them are gathered only once a year, overlapping is irrelevant.
2) Even if the TRS population is large enough to support a particular sample size, a high sampling rate for TRS beneficiaries will result. Again, if TMA desires quarterly samples, we

need enough enrollment to partition the frame into four zones to avoid sampling the same beneficiaries from one quarter to the next.

3) The desired precision of estimates and planned analytic domains also affect the sample design. Sample size is closely tied to the precision of estimates. Because sizes can vary for different domains, precision is also directly related to the domains TMA desires for key estimates. Suggested domains include TRS alone, TRS within each of the TNEX regions, TRS by service affiliation, or one or several beneficiary categories. Increases in both precision and the number of analytic domains increase sample needs.

4) Cost affects the sample design. The current HSCDB quarterly adult survey has a fixed sample size of 50,000. If the TRS sample is incorporated into the Adult Survey, results may not be sufficiently precise, depending on the amount of sample allocated to the TRS beneficiaries. Two obvious solutions are increasing the overall sample size accordingly or combining selected MTFs. Note that combining MTFs might prevent production of MTF level estimates for those facilities.

2. Recommended Next Steps

For each of the coming quarters, we recommend monitoring the number of TRS beneficiaries in the DEERS population until there are enough to form sampling strata. We will establish a threshold that will depend on whether the data will be collected quarterly or annually, the key domains of interest, the desired level of precision, and other factors.

Because TRS is a new group of beneficiaries, plans may change even after decisions are made on sample design modifications. If many enroll, we may be able to stratify by beneficiary category, TNEX region, branch of service, or other domains of interest. If the number of enrollees declines, however, we may need to combine strata.

E. MANAGED CARE CONTRACTOR

There is interest in reporting on Prime enrollees who receive care from managed care contractors. Currently, these beneficiaries are identified by the combination of their Prime enrollment status and their enrollment to a civilian facility. In the Quarter 2, 2005 adult survey, 1,758 such beneficiaries were sampled and 762 responded, about evenly among the three TNEX regions. From this sample, TMA leadership monitors a quarterly CONUS-level estimate. At the level of the TNEX region, however, where MCSC contracts are enforced, TMA may desire more precise quarterly estimates. In addition, about a third of the sample comprises beneficiaries enrolled to Primus and NAVCARE clinics or US Family Health Plans (USFHPs), and TMA may desire separate estimates for beneficiaries enrolled to physicians in the contractor's civilian network.

For all beneficiaries enrolled with a civilian provider, a sample of this size permits quarterly CONUS-level estimates with about ±4 percentage points, quarterly regional-level estimates with about ±7 percentage points, and annual, regional-level estimates with about ±3 percentage points. A supplementary sample of 500 enrollees per region (bringing the total to 400 completed interviews per region) would increase the precision of quarterly, region-level estimates to about ±5 percentage points for questions that most beneficiaries answer, such as health plan ratings.

For beneficiaries assigned to a PCM in the managed care contractor's network, the current sample permits quarterly CONUS-level estimates within about ±5 percentage points, quarterly regional-level estimates within about ±10 points, and annual regional-level estimates within about ±5 points. A supplementary sample of 650 per region (resulting in a total of 400 completed MCSC interviews per region) would allow more precise regional-level quarterly estimates with precision of about ±5 percentage points. Generally, if we achieve 400 completed interviews in each region, those estimates will be within about ±5 points for questions that most beneficiaries answer.

Chapter
3

Databases and Documentation

A. DATABASES

Databases for the 2006 HCSDB for adults and children will include the following types of variables:

- Recoded questionnaire responses
- Coding scheme flags
- Constructed variables for analysis
- A new ID replacing Social Security Numbers to protect the privacy of individuals in the sample

The change to a fiscal year basis for the survey will require no substantial changes to database design. However, the fiscal year data set for 2006 and the calendar year data set for 2005 overlap in quarter 4 of 2005. Because the annual database will be based on the fiscal year, variables from the fourth quarter of 2005 must be assigned 2006 variable names.

As in previous years, we plan to structure the final database so that all variables from a particular source are grouped together by position. We will also include only recoded variables in the public use files for the survey of adults and children.

There are two kinds of data sets for the adult survey: quarterly data sets and combined annual data sets. Quarterly data sets contain the responses for one quarter, received within the first eight weeks of fielding the survey. The combined annual data sets contain responses for surveys from four quarters, and include responses received after the fielding period ends. The cumulative data set will be produced after the data from the survey fielded in the fourth quarter of FY 2006 has been processed.

Responses received from the operations vendor are cleaned, edited, and recoded to ensure that the responses to interdependent questions are consistent. Constructed variables are added. When respondents return multiple questionnaires, those containing the least information are eliminated. Then sampling weights adjusted for non-response are added. Below we describe the processes for editing the data, selecting records and creating constructed variables. See Chapter 2 for a discussion of weighting.

1. Data Cleaning and Editing

Data cleaning and editing procedures ensure that the data are free of inconsistencies and errors. The same standard edit checks that were used in the 2005 HCSDB will be applied to the 2006 HCSDB including:

- Checks for multiple surveys returned by any one person
- Checks for multiple responses to any question that should have one response
- Logic checks for consistent responses throughout the questionnaire

The Adult Coding Scheme and the Child Coding Scheme document the procedures for editing the original questionnaire and for recoding variables so that responses are consistent throughout the entire questionnaire. The Coding Scheme has three major components: variable naming conventions, missing value conventions, and coding tables. The coding scheme procedures used for previous years will be followed for the 2006 HCSDB.

MPR will create an edit flag for recoded variables that will indicate what, if any, edits were made in the cleaning and editing process. As in previous years, the different values of edit flag variables indicate exactly what pattern of the Coding Scheme was followed for a particular set of responses. These edit flags will have a unique value for each set of original and recoded values, allowing us to match original values and recoded values for any particular sequence. Additionally, MPR will prepare cross-tabulations between the original variables and the recoded variables with the corresponding edit flag so that we can identify any discrepancies that need to be addressed.

2. Record Selection

Until final records are selected, the database file will contain at least one record for every sampled beneficiary as well as additional records for respondents who returned more than one survey. The selection of final records is a three-step process. First, we will examine the survey database to determine response status. Only records for eligible beneficiaries who return questionnaires with at least one complete answer will be retained. All other records will be dropped. Next, incomplete questionnaires are dropped. Questionnaires will be considered incomplete if less than 50 percent of the key survey questions are answered. The final step in record selection is to examine multiple submissions from beneficiaries, retaining only the most complete returned questionnaire.

3. Constructed Variables

As in previous years, the 2006 variables that require special recoding and scaling include satisfaction measures, health status, preventive care, and demographic variables. MPR will also construct the same independent variables for region, enrollment status (Prime, Senior Prime, non-enrollees under age 65, and non-enrollees 65 and older), PCM (military or civilian) and catchment area as previous years.

4. Changes to Databases for the 2006 HCSDB

In 2006, as in prior years, we propose providing the HCSDB public-use and restricted-use data files on CDs. We propose these data continue to be provided in a variety of formats including text, SPSS, SAS, and STATA.

B. DOCUMENTATION

The adult and child databases for the 2006 HCSDB will be documented separately and provided on CDs. There will be three documents for each: a Technical Manual, a Codebook and a User's Guide. Although the following descriptions primarily focus on the adult survey, the documentation for the Child HCSDB will be similar. The Adult Technical Manual, the Child Technical Manual and the Child Codebook will be produced once each year. The Adult Codebook will be produced each quarter.

The 2006 HCSDB Technical Manual (described in Section 1) and the Codebook and User's Guide (described in Section 2) will be provided in printed form as well as in electronic form on CDs. The 2006 HSCDB will be provided on a web-based CD with data and documentation (described in section 3). This web-based CD centralizes the location of and facilitates access to all documentation along with the HCSDB databases.

For 2006, we propose presenting results from the survey in a new format. Past reports have shown cross-tabulations of question responses with key analytic variables in tabular form. We propose that these results now be presented in graphical form with precision information included to facilitate analysis of the data by a wider range of users.

1. Technical Manual

The technical manual will explain the survey's fielding process and database development. Chapter 1, the introduction, will provide a brief overview of the HCSDB and will describe the organization of the manual. In Chapter 2, MPR will describe the creation of the analysis database each quarter, including editing and cleaning, selecting records, constructing variables for analysis, and weighting. Chapter 3 will explain the procedures involved in calculating response rates and developing independent and dependent variables for analysis, provide the methods used to estimate the variance of the statistics, and describe the content and format of the TRICARE Beneficiary Report, TRICARE Consumer Watch, and TRICARE Annual Report. The Appendix contains response rate tables, and SAS code for file development and for production of the Beneficiary Reports.

2. Codebook and User's Guide

The Codebook and User's Guide will provide programmers and analysts with instructions for creating tabulations, cross-tabulations, and basic statistical estimates. The codebook will also contain information on survey fielding, including a report on response rates and a report on fielding. The survey operations vendor will write the section that describes the quarterly fielding procedures. The Adult Codebook will be produced each quarter and will contain data from the reference quarter. The Annual Codebook will contain frequency distributions for the fourth fiscal quarter's data as well as cumulative data from the full year.

The User's Guide will be organized into three chapters. Chapter 1 will describe the HCSDB and the sample design. Chapter 2 will contain the fielding report. Chapter 3 will explain the variable naming conventions and briefly describe the weighting procedures. Chapter 4 will help individuals with limited programming experience create tables using SAS or SPSS.

The Codebook will provide weighted and unweighted frequency distributions for each variable in the database as well as variable descriptions. In addition, it will provide: (1) an annotated questionnaire, (2) the data quality coding scheme and coding tables, (3) a crosswalk between questions from each year of the survey, (4) a SAS PROC Contents arranged in alphabetical order, (5) a SAS PROC Contents arranged by position in the database and (6) response rate tables.

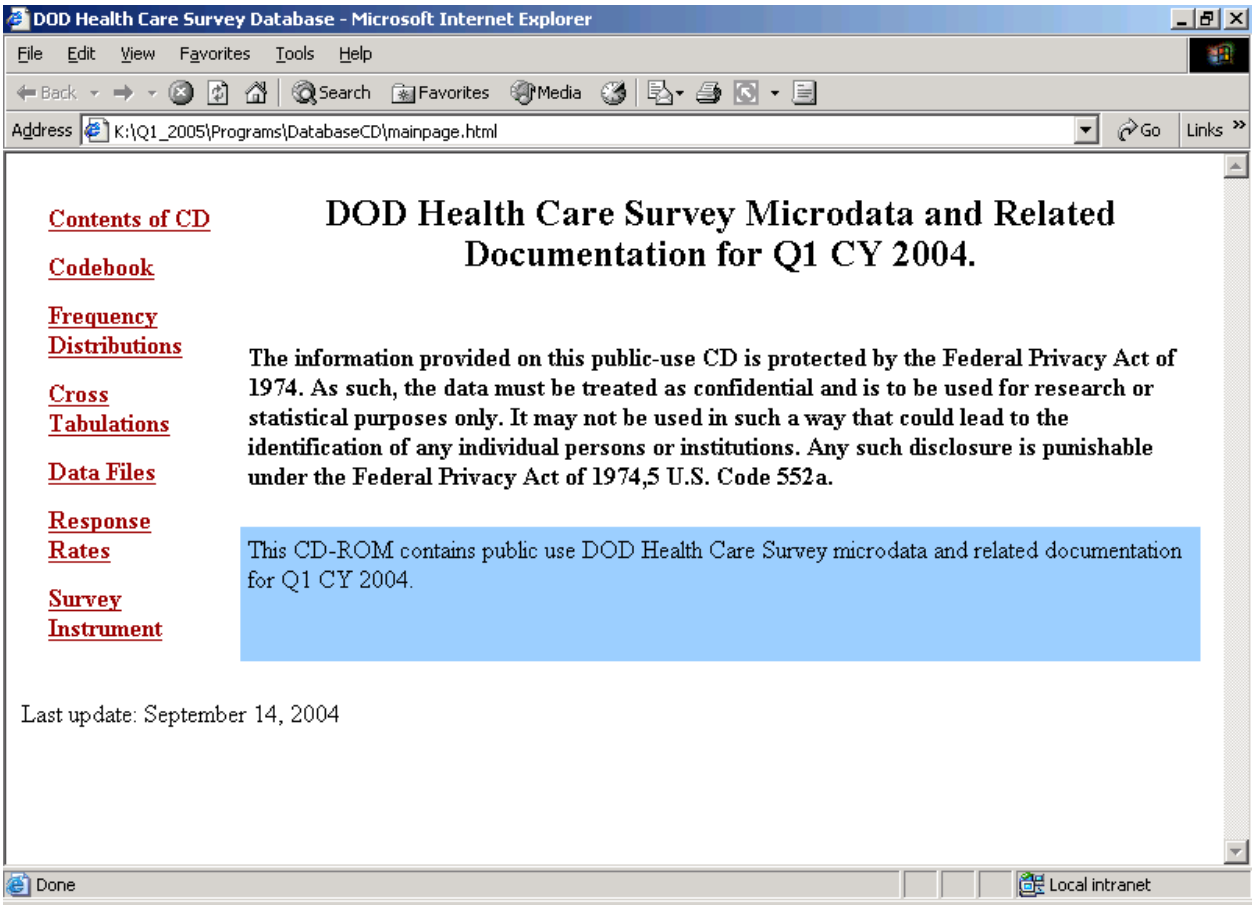
3. Online Data and Documentation System

As in 2005, we will produce a web-based CD with data and documentation that improves access to the survey data for the general public and for TRICARE leadership. The CD will enable users to view summary counts of survey item responses, either in the aggregate or disaggregated by one of several user-specified variables. The documentation described in sections 1 and 2 of this chapter will be delivered on web-based CD(s).

The main page for the web-based data and documentation system is shown below. The screen contains a list of data file and documentation options that are available on the CD.

FIGURE 3.1

ONLINE DATA AND DOCUMENTATION – MAIN SCREEN



The first option, "Contents of CD," provides a file inventory of data and documentation available on the CD Rom. The second option, "Codebook," opens the PDF format codebook and users guide. The third option, "Frequency Distributions," provides counts of all variables contained in the HCSDB database. The fourth option, "Cross Tabulations, " provides a breakdown of counts for each HCSDB database variable by other key variables of interest. The format for these cross-tabulations will be as shown in Figure 3.2. The fifth option, "Data Files," provides the user with a list of downloadable files (i.e. the HCSDB database in a variety of formats). The sixth option, "Response Rates," provides the user with weighted and unweighted response rates for key variables in spreadsheet format. The seventh option, "Survey Instrument," opens the PDF format annotated questionnaire.

FIGURE 3.2

FORMAT FOR HCSDB CROSS-TABULATIONS

H05038

In the last 12 months, where did you go most often for your healthcare?

CATEGORY	PERCENT RESPONDING	N	MILITARY	CIVILIAN	VA	USFHP	NONE	STANDARD ERROR	PERCENTAGE USING MILITARY HEALTHCARE
			PERCENT						
MHS	36	50000	55	20	15	9	1	± 2	
CONUS	35	40000	80						
NORTH	33	13263	70						
SOUTH	34	13605	72						
WEST	33	15543	60						
OCONUS	22	6521	36						
ARMY	28	14001	80						
NAVY	29	13513	81						
AIR FORCE	33	14760	85						
ACTIVE DUTY	33	13263	88						
ADFM	34	13605	62						
RET<65	33	15543	50						
RET65+	22	6521	42						
PRIME	28	14001	80						
STD/EXTRA	29	13513	88						
NONUSER	33	14760	60						
ACTIVE DUTY	33	13263	65						
DA	34	13605	48						
DGR/IDG	33	15543	75						
DR	22	6521	62						
DS	28	14001	58						
GRD/IRG	29	13513	69						
OTH	33	14760	50						
RET	33	14760	40						

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Chapter
4

Reporting

The following reports, described in this chapter and summarized in Table 4.1, will be produced from or receive contributions from the 2006 HCSDB.

1) TRICARE Beneficiary Reports
2) TRICARE Consumer Watch
3) HCSDB Annual Report
4) Hot Metrics
5) TRICARE Evaluation Report
6) MHS Atlas

For the 2006 HCSDB, we propose changing the software used to post beneficiary reports on the TRICARE Web site. We will retain the existing composite and rating scores in the Beneficiary Reports and Consumer Watch. The Adult Beneficiary Reports will contain CAHPS composites and ratings, as well as measures of preventive care and healthy behavior. Regional and service affiliation reports will be produced each quarter, broken down by TNEX Region, and an MTF-level report—broken down by enrollment and beneficiary groups—will be produced at the end of the year. The Consumer Watch, which will summarize information in the Adult Beneficiary Reports, will be published quarterly in conjunction with an issue brief. The Annual Report will incorporate the issue briefs and topics from the Child and Adult surveys. We will continue to produce Hot Metrics, a data release in the form of PowerPoint slides. Finally, we propose contributing to two publications using HCSDB and other data sources: The TRICARE Evaluation Report and the MHS Atlas.

TABLE 4.1

2006 HEALTH CARE SURVEY OF DOD BENEFICIARIES
DESCRIPTION OF REPORTS

ADULT TRICARE BENEFICIARY REPORTS
The TRICARE Beneficiary Reports, prepared as tables in HTML, provide TRICARE Regional Offices (TROs) and MTF commanders with a comprehensive description of TRICARE beneficiaries' access, preventive care services, and satisfaction across the MHS regions and catchment areas and relative to relevant national benchmarks. The quarterly report presents the most recent quarter's results for each region, service, and CONUS MHS. The Annual Report presents cumulative MTF, service, and regional results from all quarters along with previous HCSDB findings.
TRICARE CONSUMER WATCH
The TRICARE Consumer Watch provides TROs, the surgeons general, OASD(HA) and TMA with a summary of quarterly survey results for each region and service. Topics covered include access to care, customer service, communication with providers, and ratings of health plan, health care, and PCMs. Each report also contains a section based on the questionnaire supplements. Appended to the Consumer Watch is an issue brief, a two-page "fact sheet" on topics of interest to TMA.

HCSDB ANNUAL REPORT
The HCSDB Annual Report, which will include the results presented in the issue briefs and an executive summary, will describe TRICARE from the point of view of its beneficiaries. The body of the report will include the issue briefs originally published in Consumer Watch and a presentation of results from ad hoc research conducted during the year. The report will also contain a summary of metrics found in the Consumer Watch and Beneficiary Reports.
HOT METRICS
The preliminary results cover MHS level and adjusted service-level health plan ratings and unadjusted MHS-level composite scores. Released each quarter as soon as final weights are calculated, the results are presented in slides.
TRICARE EVALUATION REPORT
The annual report to Congress on the performance of TRICARE includes results taken from the HCSDB. The switch to a fiscal-year reporting period will facilitate contributing to this report, which is prepared at the end of the calendar year based on fiscal -year results.
MHS ATLAS
The MHS Atlas compiles information from surveys and administrative data with maps to describe variations in health care metrics across MHS.

A. ADULT TRICARE BENEFICIARY REPORTS

1. Purpose and Content

The purpose of the Adult TRICARE Beneficiary Reports is to provide TROs services and MTF commanders with a comprehensive profile of TRICARE beneficiaries' satisfaction with care, access to care, and use of preventive care across the MHS regions, service, and catchment areas, and relative to relevant national benchmarks. This information will be presented in terms of 12 scores for each region, service, and catchment area, and for the MHS overall. The scores rate MHS performance in the following areas: getting needed care, getting care quickly, courteous and helpful office staff, how well doctors communicate, customer service, claims processing, healthy behavior, rating of the health plan, health care, personal doctor, and specialist, and preventive care standards. There will be three types of scores—CAHPS composites, ratings, and TMA composites (see Table 4.2)—that will be calculated and adjusted as in the past but with the changes described in Section 2 below.

TABLE 4.2

CONTENT OF THE TRICARE CONSUMER REPORTS

CAHPS COMPOSITES
The CAHPS composites group survey responses to a set of related HCSDB questions taken from CAHPS. Scores expressed as CAHPS composites profile TRICARE beneficiaries' satisfaction with their ability to get needed care, the speed with which they receive care, interactions with their doctor, and their experience with doctors' offices, customer service representatives, and claims processing. Scores will be presented in relation to national benchmarks.
SATISFACTION RATINGS
Scores expressed as ratings reflect beneficiaries' self-rated satisfaction with their health plan, health care, and personal providers. Adjusted for patient age and health status, the scores will be presented relative to national benchmarks.
TMA COMPOSITES
Currently there are two TMA composites scores. The preventive care composite score will be based on how the preventive care received by beneficiaries compares with Healthy People 2010 standards. Preventive care indicators to be combined are prenatal care, hypertension screening, mammography, and Pap smears. We also developed a healthy behavior composite using questions on non-smoking rates, smoking cessation counseling and height and weight

The reports will be prepared as interactive tables in Active Server Pages (ASP) format accessible on TRICARE's website, but readers will be able to print them from the TMA website and/or download results into a spreadsheet. Each report will consist of several thousand pages of tables. In the interactive electronic version, readers will be able to see the scores by beneficiary group and enrollment status by clicking on an element in the table. For example, clicking on a given region in a table may bring up another table with information about all beneficiary and enrollment groups in that particular region. Likewise, clicking on a score will bring up a table with more detailed information on that score for the region or regions in the original table. Scores that differ significantly from the national benchmark will be identified by color, bold type, and italics. Scores significantly above the benchmark will be green and bold. Scores significantly below the benchmark will be red and italicized.

There are two types of Adult Beneficiary Reports: quarterly and annual.

a. Quarterly Reports

The quarterly reports comprise five sets of tables. One set presents the findings for a single quarter, expressed as composites and ratings, for all enrollment and beneficiary groups by region, service, and CONUS MHS as a whole. For instance, a table in this set will show scores health care scores given by Prime enrollees in each of the MHS regions and in CONUS MHS, for each performance area mentioned in Section A.1 above. Another table in this set will show the same kind of information for active-duty enrollees. Each row in this set of tables is a region broken down by service affiliation in the MHS; there is also a row for CONUS MHS and for the national benchmark. The columns in this set of tables are the scores.

The second set of tables presents the findings for the current quarter and for past quarters for each enrollment and beneficiary group by region, service, and CONUS MHS as a whole on a single score. For instance, a table in this set will show composite scores given by Prime enrollees in the current and in previous quarters for getting care quickly. These tables will also indicate whether the changes shown are statistically significant.

The third set of tables will present findings for each enrollment and beneficiary group and service in a given region or CONUS MHS. The enrollment and beneficiary groups form the rows. Columns consist of the composite scores and ratings from the first set of tables or the current and previous quarters' scores contained in the second set.

The fourth set of tables will show findings for the current quarter on each question that makes up a composite, and the fifth set of tables will show the findings for of each question compared to findings from past quarters, with a test of the significance of changes in value.

b. Annual Report

Like the quarterly report, the annual report will consist of tables prepared in ASP format. There will be five sets of tables. One set will show cumulative scores for the HCSDB by region and service for all beneficiary and enrollment groups. These scores will be expressed as composites and ratings. The second set of tables will show scores for health care areas reflected in the questions that make up the composites, and the third set will compare current scores with scores for composites or ratings from previous surveys. The fourth set of tables will compare current and past values for individual questions. The last set will show scores of each catchment area affiliated to a particular service in a region and beneficiary groups in each region, service, or catchment.

The child Beneficiary Reports present composites and ratings similar to those in the adult report. These scores are presented for each TNEX region. For 2006, OCONUS scores will be included. There will be four sets of tables: one showing composites and ratings, another comparing current and previous scores, a third showing questions that make up composites and a fourth showing trends in responses to those individual questions. Scores will be shown for Prime enrollees, Standard/Extra users and all users.

2. New Features in the 2006 Adult TRICARE Beneficiary Reports

For the 2006 HCSDB, we plan to use a dynamic ASP Web-based system. Currently, the report comprises thousands of HTML pages, which take hours to generate. If an error is found or calculations are changed after that the pages have been generated, the pages must be regenerated, which can be a lengthy process. ASP Web pages, however, update changes automatically and immediately.

We will use several different ASP templates for the different sets of tables in the Beneficiary Report. For example, one template can be used for pages containing the component scores that make up a composite, while another template can be used to display all ratings and composite scores by region and service. If a change is needed for a particular type of table, the change will be made to the template, which will automatically update all tables using it instead of having to regenerate HTML pages for every changed table. If there are no changes to a template from one quarter to the next, it can be used each quarter, automatically updating the reports with new data only.

In addition, the quarterly and annual reports will no longer follow the calendar year but will follow the fiscal year, starting with Quarter 1, FY 2006. References to the survey fielding period, including column headings and title lines, will refer to the quarter of the fiscal year in which the survey was fielded. The annual report will contain results averaged across fiscal years.

B. TRICARE CONSUMER WATCH

1. Purpose

The purpose of the TRICARE Consumer Watch is to provide TROs services and MTF commanders with a timely snapshot of TRICARE beneficiaries' satisfaction with care, and several other performance metrics. Consumer Watch will be produced quarterly for each region and for the Army, Navy, Air Force, and CONUS MHS. Consumer Watch for the MHS overall will be produced annually and will include results for each MTF catchment area. All results will be shown in comparison with relevant national benchmarks. Each quarterly Consumer Watch will also include an issue brief developed from responses to the supplemental questions in that quarter's survey. This issue brief possibly will examine issues that are not addressed in the TRICARE Beneficiary Reports.

2. Content

Each quarter, Consumer Watch will present scores for six CAHPS composites, four ratings, and seven preventive care indicators.

The six CAHPS composites will be getting needed care, getting care quickly, courteous and helpful office staff, how well doctors communicate, customer service, and claims processing. The three ratings scores will be health care rating, health plan rating, specialist and personal provider rating. The preventive care indicators will be mammography, Pap smear, hypertension, prenatal care, smoking rate, obesity rate and smoking cessation counseling rate. All will be taken from the Adult Beneficiary Reports.

The topic addressed by the issue brief changes quarterly, reflecting the changes in the supplemental questions from quarter to quarter. Examples of issue brief topics included in the 2005 TRICARE Consumer Watch are reserve component issues, use of civilian health insurance, overweight and deployment-related stress. Proposed topics for the 2006 issue briefs include:

- Reserve component issues
- Adequacy of the civilian network
- TRICARE Standard access
- Use of civilian health insurance

3. Format

The 2006 version of the quarterly Consumer Watch, delivered as a PDF file, will consist of four pages of text and graphs and will be similar to the 2005 version. See Figure 4.1 for a sample of the 2005 Consumer Watch.

FIGURE 4.1

SAMPLE TRICARE CONSUMER WATCH

TRICARE Consumer Watch

Air Force◆Quarter 2 CY 2005

HEALTH PROGRAM ANALYSIS & EVALUATION DIRECTORATE

Air Force: Sample size-14,760 Response rate-32.6% **MHS: Sample size-50,000 Response rate-31.4%**

Inside Consumer Watch

TRICARE Consumer Watch is a brief summary of what TRICARE Prime enrollees in your service say about their healthcare. Data are taken from the Health Care Survey of DoD Beneficiaries (HCSDB). The HCSDB includes questions from the Consumer Assessment of Health Plans Survey (CAHPS) version 3.0H, a survey designed to help consumers choose among health plans. Every quarter, a representative sample of TRICARE beneficiaries are asked about their care in the last 12 months and the results are adjusted for age and health status and reported in this publication.

Scores are compared with averages taken from the 2004 National CAHPS Benchmarking Database (NCBD), which contains results from surveys given to beneficiaries by civilian health plans.

Health Care

Prime enrollees were asked to rate their healthcare from 0 to 10, where 0 is worst and 10 is best.

Figure 1: Health Care Rating

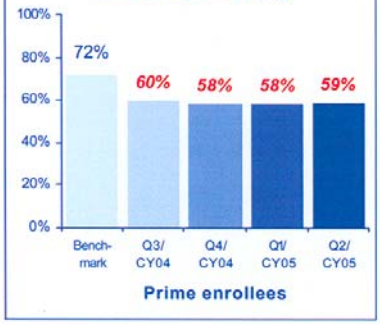
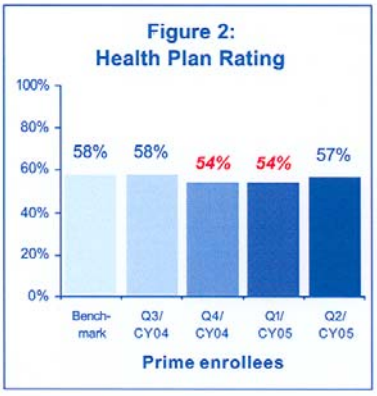


Figure 1 shows the percentage who rated their healthcare 8 or above in the survey fielded in the 2nd quarter of 2005, describing the period April 2004 to March 2005, and each of the 3 previous quarters. Numbers in red italics are significantly different from the benchmark (p<.05). Health care ratings depend on things like access to care, and how patients get along with the doctors, nurses, and other care providers who treat them.

Health Plan

Prime enrollees were asked to rate their health plan from 0 to 10, where 0 is worst and 10 is best. Figure 2 shows the percentage who rated their plan 8 or above for each reporting period.

Figure 2: Health Plan Rating



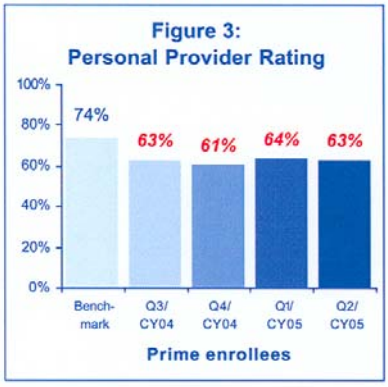
Health plan ratings depend on access to care and how the plan handles things like claims, referrals and customer complaints.

Personal Provider

Prime enrollees who have a personal provider were asked to rate their personal provider from 0 to 10, where 0 is worst and 10 is best.

Figure 3 shows the percentage who rated their doctor 8 or above for each reporting period. Personal doctor ratings depend on how the patient gets along with the one doctor responsible for their basic care.

Figure 3: Personal Provider Rating

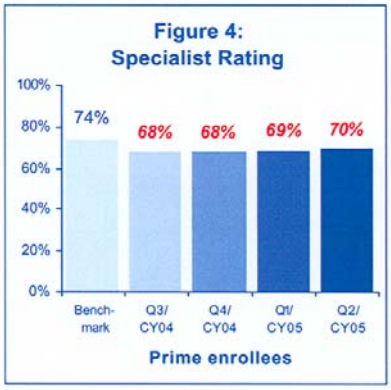


Specialist

Enrollees who have consulted specialist physicians were asked to rate from 0 to 10 the specialist they had seen most in the previous 12 months.

Figure 4 shows the proportion of enrollees who rated their specialist 8 or above for each reporting period. Specialist ratings depend on beneficiaries' access to doctors with the special skills they need.

Figure 4: Specialist Rating



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Air Force◆Quarter 2 CY 2005

Health Care Topics

Health Care Topics scores average together results for related questions. Each score is the percentage who "usually" or "always" got treatment they wanted or had "no problem" getting a desired service. Asterisks show values significantly different from the NCBD benchmark ($p < .05$).

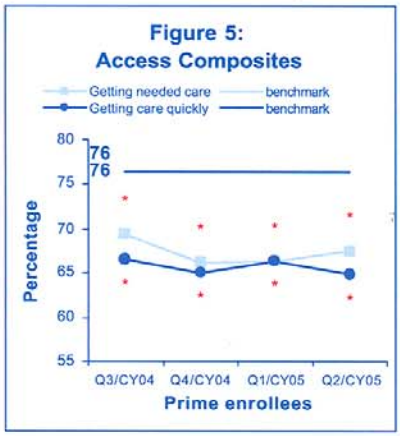
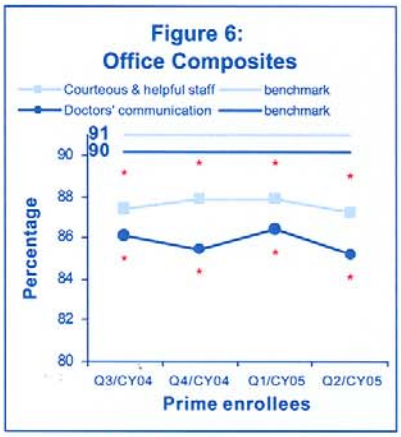


Figure 5 (Access Composites) includes the composites "Getting needed care" and "Getting care quickly." Scores in "Getting needed care" are based on patients' problems getting referrals and approvals and finding a good doctor. "Getting care quickly" scores concern how long patients wait for an appointment or wait in the doctor's office.

Figure 6 (Office Composites) includes the composites "Courteous and helpful office staff" and "How well doctors communicate." Scores in "How well doctors communicate" are based on whether the doctor spends enough time with patients, treats them respectfully and answers their questions. "Courteous and helpful staff" scores measure both the courtesy and helpfulness of doctor's office staff.

Figure 7 (Claims/Service Composites) includes composite scores for "Customer service" and "Claims processing." Scores in the "Customer service" composite concern patients' ability to get information about their health plan and manage its paperwork. "Claims processing" scores are based on both the timeliness and correctness of plan's claims handling.

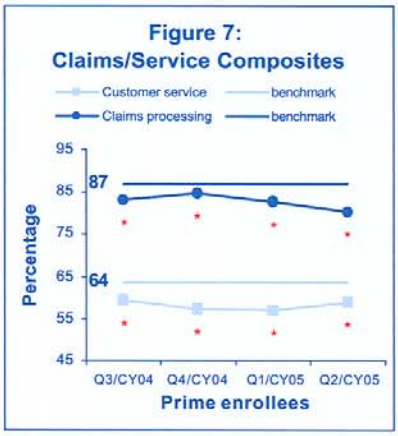


Preventive Care

The preventive care table compares Prime enrollees' rates for diagnostic screening tests and smoking cessation with goals from Healthy People 2010, a government initiative to improve Americans' health by preventing illness.

The mammography rate shown is the proportion of women 40 or above with a mammogram in the past two years. Pap smear is the proportion of adult women screened for cervical cancer in the past three years. Hypertension is the proportion of adults whose blood pressure was checked in the past two years and who know whether their pressure is too high. Prenatal care is the proportion of women pregnant now or in the past 12 months who received prenatal care in their first trimester. Normal weight is defined by Department of Agriculture guidelines based on body mass index (BMI), which is calculated from height and weight. The non-smoking rate is the proportion of adults who have not smoked in over a year. Counseled to quit is the number of smokers whose doctor told them to quit, over the number of smokers with an office visit in the past 12 months.

Rates that are significantly different ($p < .05$) from the Healthy People 2010 goal are shown by red italics.



Preventive Care

Type of Care	Qtr 3 CY 2004	Qtr 4 CY 2004	Qtr 1 CY 2005	Qtr 2 CY 2005	Healthy People 2010 Goal
Mammography (women ≥ 40)	*86*	*86*	*83*	*85* (622)	70
Pap Smear (women ≥ 18)	*94*	*95*	*93*	*94* (1476)	90
Hypertension Screen (adults)	*90*	*91*	*91*	*91* (3219)	95
Prenatal Care (in 1st trimester)	89	92	84	88 (176)	90
Percent Not Obese (adults)	*81*	*81*	*81*	*79* (3112)	85
Non-Smokers (adults)	*82*	*80*	*81*	*82* (3169)	88
Counseled to Quit (adults)	80	80	77	79 (467)	-

Issue Brief: Deployment-related Stress

Each quarter, we publish a brief discussion, or issue brief, of a health policy issue relevant to users of TRICARE, based on data from the Health Care Survey of DoD Beneficiaries (HCSDB). This quarter, the issue brief concerns deployment-related stress.

Along with the usual stresses faced by American families, military families face stresses unique to military service. Some are related to deployment, including separation from deployed spouses, and the exposure of a family member to the dangers of combat. Spouses of Guard or Reserve members may be less prepared than other active duty spouses to cope with deployment-related stress.

Stress and its impact

Results from the HCSDB show that stress levels are higher for dependents of active duty, including reservists, whose spouse was deployed to a combat zone, compared to those whose spouse was not. As shown in Table 1, of those whose spouse is deployed to a combat zone, 63 percent reported experiencing "more" or "much more" stress than usual, compared to 36 percent of those whose spouse is not. Sixty-eight percent of reservist dependents reported experiencing "more" or "much more" stress than usual, as did 60 percent of those with other active duty spouses.

There is little difference in self-reported mental health status between dependents whose spouse has been deployed and those whose spouse has not. Unlike large differences in stress, differences in the proportion rating mental health fair or poor (7 percent when spouse is deployed, compared to 5 percent when spouse is not), or seeking treatment or counseling are small (21 percent when spouse is deployed, compared to 18 percent) and not statistically significant.

Table 1. Stress, mental and emotional health: Dependents of active duty

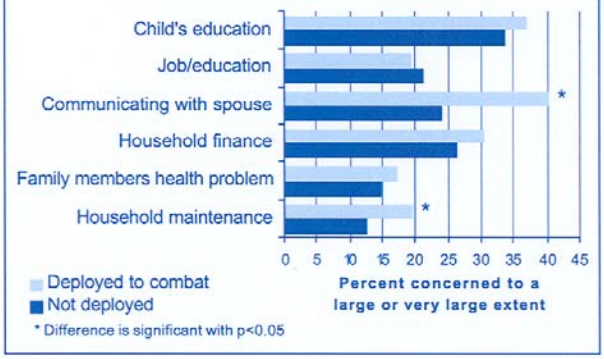
	Among those who do NOT have a deployed spouse	Among those who have a deployed spouse	Among those whose deployed spouse is	
			Guard/ Reserve	Other Active Duty
	Percent			
More or much more stress than usual	36	63*	68	60
Self-reported mental health - fair/poor	5	7	7	6
Needed counseling for a personal or family problem	18	21	24	19

* Difference is significant with p<0.05

Sources of stress

Leading concerns identified by survey respondents are shown in Figure 1. Other than the risks of combat, the issues that concern spouses of active duty who are deployed and of those who are not are similar. Only communicating with one's spouse is a substantially greater source of stress among spouses of deployed. Other concerns, such as children's education, household finance and one's own job or education are common to both groups.

Figure 1:
Concerns of Active Duty Dependents



Resources available

The Department of Defense and the branches of service offer or support programs and resources for military families, to help them cope with these sources of stress. In addition, TRICARE benefits include psychiatrists, counselors and social workers for those who need professional help.

Examples of resources provided to cope with deployment include:

Military OneSource is a 24-hour information and referral phone counseling service specifically for active duty TRICARE members and their dependents. The OneSource website houses a family assistance center including a library of articles on topics such as Parenting, Readiness, Education, Disability, Financial Planning. The OneSource website also offers a locator service (for child care, etc.) and educational materials.

Issue Brief: Deployment-related Stress

The **Deployment Connections** website delivers deployment-related information and services to all active duty and reserve personnel and their dependents. Website users can access information on their benefits and privileges, what to expect during deployment, and resources available to family members.

A *Family Readiness Handbook*, provided to all families of deployed personnel, includes information for families on where to look for support groups, counseling, and other resources.

Families of deployed personnel may also turn to **Family Readiness Groups**, support groups sponsored by the branches of service.

Surveys of the reserve component have indicated that reservists and their families are less likely than other active duty to be aware of resources available to them. DoD and the services have responded with outreach specifically directed at reservists, including a *Guide to Reservist Family Member Benefits* and family readiness toolkits for reservists (GAO, 2003).

Getting help

The resources available to assist beneficiaries in coping with their deployed spouses' absence include information, support groups, and counseling. As shown in Table 2, nearly half of the dependents surveyed have tried to get some kind of help. Fifty percent have sought information, 28 percent have tried support groups and 10 percent have sought counseling specifically to help cope with the deployment.

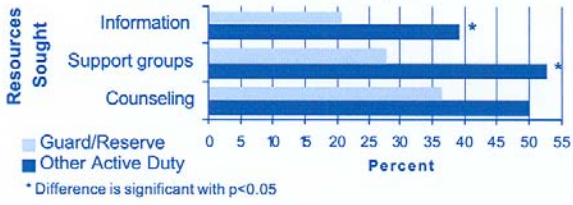
Table 2. Resource use: Percent who sought a resource to help deal with spouse's deployment

Resources Sought	Among those who have a deployed spouse	Among those whose deployed spouse is	
		Guard/ Reserve	Other Active Duty
	Percent		
Information	50	58	46
Support groups	28	40	23*
Counseling	10	14	8

* Difference is significant with p<0.05

Most users found the resources provided them to be at least somewhat helpful (not shown). However, resources appear to be less helpful to reservist families than to other active duty families. Many reservist spouses, 40 percent of those who responded, sought out support groups, but only 28 percent thought they were very helpful. By contrast, 53 percent of other active duty spouses who tried them found their support groups to be very helpful. Similarly, while 39 of other active duty found informational resources provided to them to be very helpful, only 21 percent of reservist spouses did.

Figure 2:
Helpfulness of resources: Percent finding the resource "very helpful"



Conclusion

Results from the HCSDB survey indicate that beneficiaries who have a spouse currently deployed to a combat zone face more stress but do not appear to suffer poorer mental health compared to other active duty dependents. To beneficiaries in this situation, DoD's Office of Personnel and Readiness, TRICARE and the branches of the armed services provide informational resources and access to support groups and counseling. Most users found these resources to be at least somewhat helpful. However, though they were equally or more likely to look for help compared to other active duty spouses, spouses of reservists find support groups and the information provided to them less helpful. Our findings suggest that efforts by the DoD and services to reach reservists and target support are still needed.

Sources

Health Care Survey of DoD Beneficiaries, fielded April, 2005.

U.S. GAO *DoD Needs More Data to Address Financial and Health Care Issues Affecting Reservists.* Washington D.C., September, 2003.

Military OneSource website
http://www.militaryonesource.com

Hooah4Health
http://www.hooah4health.com/deployment/familymatters/FSGhandbook.htm

TRICARE website http://www.tricare.org/

4. Technical Description

Data for the ratings, CAHPS composites and preventive care measures will come from the SAS data set compiled for the Adult TRICARE Beneficiary Reports.

5. Changes in 2006 Consumer Watch

The annual 2006 Consumer Watch will be produced at the end of FY 2006.

D. HCSDB ANNUAL REPORT

MPR will also produce a 15 to 20-page Annual Report that will feature a custom-designed color front cover, an executive summary, an introduction and a methods section. Each issue brief will appear as a chapter. Other topics covered may include:

- Active Duty health care
- TRICARE Standard and Extra
- Children's health care
- Women's health care
- TRICARE for Life

E. HOT METRICS

The Hot Metrics will be a set of PowerPoint slides based on the most recent survey results and including metrics monitored by Health Affairs leadership. The slide format will be the same throughout the year. Results from the most recent quarter will be added to previous results and e-mailed to TMA.

The design and content of the slides will be determined by discussions with TMA. Current topics are:

- Ratings given to health plan
- Women's preventive care

Potential new topics are

- Health-related behaviors
- Ratings of civilian contractors

E. TRICARE Evaluation

The TRICARE Evaluation Report—compiled from survey and administrative data sources to show the program's progress in ensuring its beneficiaries' access and satisfaction—is presented to Congress each year. The report tracks several metrics from the HCSDB, including rating of health care, health plan, and personal physician; problems seeing a specialist; and customer service problems. It also includes several preventive care metrics. Data for the report will be contributed after the fiscal-year data set is created. We will recommend changes or additions to the report based on HCSDB data.

E. Contributions to the MHS Atlas

The MHS Atlas presents performance metrics and descriptive information about the MHS and about civilian resources in the form of a Geographic Information System (GIS). The atlas draws on survey and administrative data from both the DoD and civilian sources. Information from the HCSDB includes behavioral risk factors, preventive care metrics, and ratings of local health care providers. We propose using mapping software to associate the Beneficiary Report metrics with map shapes to present individual items, composites and trends, and indicators of statistical significance. Additional items that can be taken from the survey include coverage choices and use of military facilities by different types of beneficiaries.

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Chapter
5

Research

Data from the HCSDB can shed light on a variety of questions of interest to policymakers and administrators of the MHS. The public use data sets and the reports described in Chapter 4 are two vehicles through which the answers to these questions will be made available to these groups of users. Another way to exploit the survey data is through open-ended research. Research can also point to improvements in survey methods.

We propose to investigate six issues relevant to the 2006 HCSDB: TRICARE Standard access, use of civilian health insurance, the effects of base realignments and closures (BRACs), simulation research on hot deck and multiple imputation, confidence interval estimation, small area estimation, and testing and evaluating HCSDB questions. Each investigation will be documented in a report.

A. FACTORS AFFECTING ACCESS TO CARE FOR STANDARD AND EXTRA USERS

1. Background

Many active-duty dependents and retired families rely on civilian coverage provided through TRICARE to meet their health care needs—especially those who live far from MTFs or in areas where MTFs have limited specialty services. Beneficiaries who live near MTFs may use Standard instead of Extra if their preferred physicians are not network members. For beneficiaries who live outside MTF catchment areas, however, TRICARE's civilian network may not be a realistic option. Their access to care depends on the availability of physicians who, though not members of the network, accept TRICARE reimbursement as payment. In response to concerns about access, Congress has mandated surveys of physicians and their office managers—concerning whether physicians are seeing TRICARE patients—in 20 health care market areas each year. HPA&E has directed these surveys. The physician survey was first fielded in 2004. In six market areas where the survey was fielded in 2004, the HCSDB has been fielded to a supplemental sample identified from medical claims as users of Standard or Extra.

For the years 2005 through 2007, the physician survey will be administered to physicians in a randomly selected set of market areas representing the U.S. and in selected health service areas (HSAs) and market areas identified by stakeholders.

2. Technical Approach

Our objective will be to identify areas with shortages of physicians, certain specialists, and physicians who accept TRICARE. These factors will be correlated with the use of TRICARE Standard by beneficiaries in the area. We will assemble information on managed care penetration, the proportion of population eligible for TRICARE, the proportion of TRICARE beneficiaries with other insurance options, and beneficiaries' perception of access to care. We will identify the proportions of physicians who participate in TRICARE and those who require additional payment.

Data sources will include the health care service records (HCSRs) database, the physician surveys conducted by HPA&E, and data from the HCSDB and the American Medical Association (AMA).

a. Comparison by market area

We will compare reported access to care, health care ratings, and use of care between beneficiaries residing in different market areas. We will also compare the number of physicians seen, provider reimbursement, and the proportion of physicians accepting TRICARE. We will identify shortage areas from their physician survey results and profile them based on these factors.

b. Predictive models

We will use information from the HCSDB responses, HCSRs, and demographic information from the sample frame to build predictive models of Standard and Extra use, perceived access, and use of civilian specialists. Using these models, we will predict the impact of changes in reimbursement under Standard, MTF access, civilian network coverage, and other variables on (1) the likelihood that beneficiaries will use Standard and (2) the access of those who choose Standard.

3. Report

The report on this research will include:

- A comparison of survey results between shortage and non-shortage regions
- A description of the factors affecting access and choice of benefits
- An estimate of the changes—in reimbursement, network capacity, and MTF capacity—needed to ensure access for all

B. SUBSTITUTION OF CIVILIAN INSURANCE FOR TRICARE

1. Background

Many TRICARE beneficiaries have the option of using civilian health insurance instead of or in addition to their TRICARE benefits. Civilian health insurance may be offered through a family member or employer. Other beneficiaries may opt for Veterans Administration coverage. TRICARE benefits have increased, compared to civilian benefits, because civilian plans' cost sharing and premiums have risen while TRICARE's out-of-pocket cost has not. These factors encourage beneficiaries to shift coverage from other insurance to TRICARE. The use of other coverage options has important implications for the costs borne by the MHS. We propose using data from the HCSDB to test the hypothesis that beneficiaries would choose civilian coverage if given a financial incentive, to estimate the financial incentive needed to switch significant numbers of beneficiaries from TRICARE to civilian insurance, and to measure how much that switching would save the MHS. Because the military has made a large investment in providing lifetime health care benefits to career personnel and their families, the value that beneficiaries assign to their benefits relative to their cost is also important.

2. Technical Approach

The approach selected will identify beneficiaries with the option of choosing other insurance, the cost of using that option, and their willingness to forgo TRICARE.

a. Selection of survey measures

We will identify civilian options through survey questions that ask beneficiaries the options available to them, the generosity of benefits, whether they use civilian insurance, and if they do not, the TRICARE premium or civilian health insurance premium that would induce them to choose civilian insurance.

b. Measures of use and medical conditions

Using HCSRs, Standard Ambulatory Data Records (SADRs) and Standard Inpatient Data Records (SIDRs), we will measure the cost of care provided to survey subjects. We will look at the prevalence of conditions related to choice of TRICARE.

c. Comparison of cost and use

Using identifiers of sample members, we will extract service records from administrative databases of the MHS: SIDRs, SADRs and HCSRs. To estimate the resource costs that each beneficiary might incur, we will use imputed and actual cost numbers contained in these administrative data sets and projected and current expenditures from the clinical data payment system (CDPS) of Kronick et al. (2000). Using survey responses and evidence from claims, we will classify beneficiaries by those with TRICARE only, civilian coverage and TRICARE, and civilian coverage only. Finally, we will estimate predictive models to measure the elasticity of choice among different options according to projected expenditures, premium cost, and availability of coverage options. These elasticities and the estimates of the cost of care, will permit us to calculate the cost effects of financial inducements for choosing civilian coverage.

3. Reporting

The final report will:

- Describe respondents' coverage options and the relation of those options to service use and beneficiary characteristics
- Estimate to beneficiaries who have choices of coverage the value of their TRICARE benefit option
- Project the impact of policy changes on those choices and their cost to the MHS

C. IMPACT OF PROSPECTIVE BASE CLOSING ON MTF USE

1. Background

Among the many impacts of base closures are ongoing changes in the use of health care resources. Many retirees settle near military bases to have access to the facilities they afford or to post-retirement work, or to retain contact with their peer community. With the most recent round of closures, beneficiaries may respond in several ways that could affect their use of the MHS: They may relocate near other facilities, switch to civilian coverage, or retain their TRICARE coverage but switch to TRICARE Standard from Prime or Extra. These responses imply shifts in the use of health care resources from one direct-care facility to another, from direct care to purchased care, and from the MHS to civilian coverage. Beneficiaries' responses to base closures will also affect their access to and quality of health care.

We plan to evaluate the effect of BRAC by surveying beneficiaries about their proposed responses. At some point following realignment, we will sample beneficiaries who resided near the relevant bases in 2005 to learn how the closings have affected them. We will compare their place of

residence, coverage choices, and reported access and rating of health care to those of similar beneficiaries in other areas.

2. Technical Approach

a. Sample size

After identifying retirees living near BRAC sites, we will create a supplementary sample, as needed, large enough to detect a difference in responses between these and other retirees of 5 percent with 95 percent confidence around a mean value of 50 percent. When the post-BRAC sample is drawn, it will be similarly sized.

b. Questionnaire design

Most of the analysis will rely on questions that are part of the HCSDB core: those about insurance coverage, access, and satisfaction. Supplementary questions will ask beneficiaries whether they plan to move, disenroll from Prime, or use civilian health insurance.

c. Analysis

We will develop predictive models of relevant behaviors, including use of Standard/Extra, use of civilian insurance, and moving as a function of personal and market characteristics and service use. We will model the association of these choices with access and with health plan and health care ratings.

3. Report

The results of this research will be presented in a baseline report and a follow-up report. The baseline report will contain:

- A profile of BRAC areas based on personal and market characteristics and health care metrics
- Projected impact of closures on coverage, access, and satisfaction and use

D. SIMULATION RESEARCH ON HOT DECK AND MULTIPLE IMPUTATION

1. Background

This is follow-up research of the imputation evaluation task (Sukasih et al., "Imputation Study on the Health Care Survey of DoD Beneficiaries Data," May 31, 2005). Currently, HCSDB does not impute any item missing values for its data analysis. Rather, it excludes from analysis cases from which a relevant item is missing, resulting in the reduction of effective sample sizes. While MTF catchment areas have long been important domains of analysis by researchers and policymakers, small initial sample sizes, low response rates, and items missing data might keep those areas from producing statistically reliable estimates at the catchment-area level. Imputation of items missing from the data can help not only reduce the bias of the estimate but also enhance estimation capacity. Sukasih et al. (2005) presented pros and cons of two imputation methods: a single imputation method—the within-class nearest neighbor hot-deck imputation—and a multiple imputation method, the sequential regression multivariate imputation (SRMI). The study compared estimates of scores or proportions computed from the imputed data with those computed from unimputed data. However, it did not quantify the extent to which item nonresponse in the HCSDB data may have introduced bias.

2. Technical Approach

We plan to address this limitation with a small simulation study that would allow us to measure that bias in a few selected items. The reported values for those items will be treated as the "true" values, and we will simulate the item nonresponse by replacing about 10 percent to 15 percent "true" values with missing values, using different assumptions about the pattern of nonresponse. We may use the results from this simulation study to decide which method to implement for the HCSDB imputation.

3. Report

The report will present simulation results and recommend the preferred imputation method for the HCSDB.

E. CONFIDENCE INTERVAL ESTIMATION

1. Background

Parameter estimation is often presented as a confidence interval (CI). When data are gathered from a complex survey, the CI is usually computed under a normality assumption. However, when the parameter of interest is a proportion, and the estimate of the proportion is extremely small (close to zero) or large (close to one), this approximation becomes less accurate. Alternatively, different approaches have been suggested, among them the binomial approach, exact confidence interval, Poisson approach, Logit transformation approach, and Wilson methods (see Korn and Graubard 1998; and Kott, Anderson and Nerman 2001).

2. Technical Approach

MPR will evaluate the accuracy of these methods under a complex survey setting for two-sided CIs. We will demonstrate application of these methods with data from the quarterly Health Care Survey of DoD Beneficiaries. We will compare and simulate to investigate how well each method works in terms of coverage probability.

3. Report

Proportions are important parameters for HCSDB analysis. With this proposed research, we will report on the performance of alternative methods to construct CIs of proportion estimates in HCSDB analysis, especially for small domains like catchment areas and for moderate or small proportions. We will make recommendations for methods used in reporting and analysis of the HCSDB.

F. SMALL-AREA ESTIMATION

1. Background

Small-area estimation refers to different methods that attempt to increase the precision of results for geographic area specific data without increasing sample sizes. During the past 20 years, there has been a great deal of research in this area (Fay and Herriot 1979; Ghosh and Rao 1994: National Research Council 1980, 2000; U.S. Office of Management and Budget 1993). Recent interest in policy research that focuses on the effects of programs and policy on subpopulations

often drives the need for small-area data. Basically, using small-area estimation produces better estimates (usually in the sense of lower mean square error) by borrowing strength from other related analytic domains or data sources. In practice, this means combining data in neighboring domains, usually through a statistical model, to reduce variability in the estimates (assuming that the neighboring domains have similar data relationships). Using more comprehensive population data sets can validate such assumptions. For example, the HCSDB sample has been selected from extract files of the DEERS, a data set with very comprehensive information about the population.

2. Technical Approach

To improve the estimation capacity of the HCSDB, we will investigate the feasibility of using small-area estimation techniques on several small domains of interest to DoD. We will establish appropriate comparison criteria and compare estimates using several small-area estimation methods with direct estimates from the HCSDB quarterly and combined data sets. Subject to available funds, we will conduct some simulations to evaluate the estimation methods being considered for HCSDB.

3. Report

The final report will contain a summary of the work accomplished under this task.

G. TESTING AND EVALUATING HCSDB QUESTIONS

1. Background

TMA uses survey methods to monitor the performance of TRICARE and to answer many research questions that arise in the course of its operation. New questionnaires and revisions of questionnaires, including questions unique to the MHS, must be developed rapidly. Hence, it is desirable to have in place a method by which the accuracy of information to be obtained by questions can be efficiently evaluated before the questions are fielded.

To answer a survey question as it was intended, respondents must go through four cognitive steps: (1) comprehend the instructions and key terms as the researcher meant them; (2) retrieve relevant information; (3) make decisions, estimations, or judgments about the reporting of the retrieved information; and (4) respond by mapping answers to the response categories offered (Tourangeau, Rips, and Rasinski 2000). If the respondent has problems with any of these steps, his or her response could contain errors. Therefore, before collecting data, the researcher usually pretests the survey questions. We recommend two commonly used, complementary pretest methods to evaluate the HCSDB questionnaire: focus groups and cognitive interviews.

2. Technical Approach

These two quite different techniques can test different aspects of an instrument by taking advantage of each method's unique dynamic. Focus groups, which typically consist of an experienced moderator and 8 to 10 participants, exploit the information derived from the informal discussion and group interaction. Focus groups are well suited to test research concepts, wording or vernacular, and response categories, so they are often used in designing an instrument. The cognitive interviewer focuses on one respondent at a time and can tailor specific cognitive approaches to address each pretest case. Specially trained cognitive interviewers administer questions using techniques that detect potential sources of response error. Cognitive interviews

are useful to test respondents' willingness to answer items, ability to recall information, and understand definitions and the intent of the question. This type of interview also tests how well respondents' answers fit the response categories.

Focus groups have traditionally been essential for designing questionnaires. The exchange between group members provides rich qualitative information that can confirm or contradict the researcher's hypotheses. Focus groups can also provide information that might not have been uncovered through other forms of pretesting (Krueger and Casey 2000). Focus group members cue each other during the discussion, thus facilitating recall, motivating participation in the group, and encouraging self-revelation.

To test self-administered questionnaires like the HCSDB, we recommend retrospective cognitive interviewing, in which subjects are asked to complete a questionnaire as if they are at home, ignoring the interviewer's presence. The interviewer observes the answering process while noting errors (for example, missed branching instructions) and such signals as hesitancies and changes in facial expression. Then, after the subject completes the questionnaire, the interviewer asks questions to interpret those signals (Dillman and Redline 2004). He or she asks additional debriefing questions to further explain the subject's thinking. Standardizing the way debriefing questions are asked can reveal both the meaning of questions and respondents' reactions to them. Debriefings can also be used to measure the extent to which survey questions lead to missed or misreported information (Martin 2004).

3. Recruiting participants

We recommend using the DEERS database to contact and recruit a large pool of eligible beneficiaries, an efficient way to convene focus groups and cognitive interviews quickly. Each recruited beneficiary would agree in principal to come to a facility to test questions or to meet in a focus group. We would recruit a large group to ensure that enough beneficiaries would be available when needed—at least 100 for the initial pool. Over time, as they move, we will periodically contact them to obtain current contact information and verify that they are still eligible for military health benefits and willing to participate; we will replace beneficiaries who become ineligible.

The pool should also represent the diversity of beneficiaries in such categories as enrollment status, primary care manager, age, sex, education, service affiliation, and beneficiary group. Moreover, some questions that need testing may apply to only a subset of beneficiaries; therefore, the pool must contain sufficient numbers of these subgroups. If possible, beneficiaries should be recruited from outside of the Washington, DC, area, because residents of that area tend to have more education than beneficiaries in other locations. To motivate participation in a particular cognitive interview or focus group, we recommend compensating participants $40 each for their time or travel expenses.

4. Report

The results of each focus group or set of cognitive interviews will be summarized in a memo, including highlighted problems and recommended changes.

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Chapter
6

Management Plan

This chapter outlines the management plan for sampling and reporting in the 2006 HCSDB. This plan covers the work plan for each task, the project organization, and the schedule of deliverables. The most important changes are related to management challenges of converting the reporting and documentation period from calendar year to fiscal year. In addition, a quarterly meeting to discuss sample design is proposed.

A. TASK WORK PLAN

The period of performance for the work described in this section is March 2006 to March 2007. Figure 6.1 presents a timeline for the tasks during this period of performance. The proposed schedule of deliverables appears in Table 6.1.

1. Task 1: Adult and Child Sampling

As in past years, each quarter, MPR will develop a sampling frame and draw a representative sample of the adult MHS population. MPR will receive a population extract from DoD Defense Manpower Data Center (DMDC) 12 weeks before each quarterly survey is mailed. The survey vendor will mail the survey during the first week of each calendar quarter in 2006. MPR will provide the sample to the survey operations contractor six weeks before the questionnaire is mailed in each quarter. MPR will provide the sample for the second and third quarters of the FY 2006 HCSDB (the surveys to be fielded in the first and second quarters of CY 2006) to the survey vendor under the current contract.

The sampling frame for the 2006 Child HCSDB will be developed annually— the sample frame will be requested under the current contract, 10 weeks before the fielding period. The sample will be delivered to the survey operations contractor six weeks before the questionnaire is mailed, under the succeeding contract. The questionnaire will be fielded in the third quarter of FY 2006, beginning 6 weeks after the adult survey.

We recommend a quarterly meeting be convened at TMA with vendors responsible for data extraction and others knowledgeable about TRICARE's enrollment data. The agenda would focus on changes in programs, eligibility, and practices affecting the data needed for sampling, such as changes to the variables, the impact of BRAC decisions on geographic stratification, and TRS.

2. Task 2: Preparation of Databases

Each quarter, MPR will prepare the adult data for analysis. As specified in Chapter 3, this process includes editing and cleaning the data, implementing the coding scheme, weighting the data, and constructing the analytic variables. MPR will deliver 5 copies of the final/public-use data set each quarter to DoD 10 weeks after receiving data from the survey operations vendor. Three copies of the restricted-use version, which includes ZIP code and pay-grade data, will also be delivered. The child data will be processed in the same way the adult data is processed. Five copies of the final/public-use data set will be delivered to DoD 12 weeks after MPR receives the data.

3. Task 3: Preparation of Reports

MPR will produce a number of deliverables that document our analysis of the data from the 2006 Adult HCSDB and the 2006 Child HCSDB. Analysis of the quarterly data will be presented in the Adult TRICARE Beneficiary Reports, TRICARE Consumer Watch, and in the HCSDB Annual Report. Analysis of data from the 2006 Child HCSDB will be presented in the HCSDB Annual Report and Child Beneficiary Reports.

a. Adult TRICARE Beneficiary Reports

The web-based Beneficiary Reports will present our analysis of the survey results for each quarter. The reports will be available for public use on TMA's website. Each quarter, MPR will deliver the Beneficiary Reports nine weeks after receiving the data from the survey operations vendor. The delivery date is contingent upon timely receipt of the data from the survey operations vendor. Findings will be based on the previous four quarters of data and will be presented by the overall MHS population, beneficiary group, region, service, and catchment area.

b. TRICARE Consumer Watch

The TRICARE Consumer Watch will present results from the quarterly surveys in a combination of graphs and text. This deliverable, created as a PDF file, will be a four-page report highlighting six CAHPS composite scores, four CAHPS ratings, and seven preventive care indicators. In addition, each quarterly publication will include an issue brief on a different health care topic of importance to the MHS population. Like the Beneficiary Reports, Consumer Watch will also be available on the TMA website for public use. MPR will deliver the TRICARE Consumer Watch ten weeks after receipt of the data.

c. HCSDB Annual Report

The issue briefs appended to Consumer Watch each quarter will be chapters in the Annual Report. Each brief will address health care issues salient to the military health system in a timely manner. MPR staff will work with the project officer each quarter to develop topics and storylines. In the fourth quarter, the issue briefs will be combined into the Annual Report along with an executive summary, a methods section, and a master bibliography. The Annual Report will be due 10 weeks after receipt of the fourth-quarter data set.

d. Hot Metrics

This report, presented as PowerPoint slides, will provide TMA with the most timely figures possible. Each quarter, MPR will prepare 10 slides reflecting preliminary findings and designed in consultation with the project officer. This file will be due five weeks after receipt of the data set from the survey operations vendor.

f. Analytic Tables

Cross tabulations presenting responses to core and supplemental questions will be run each quarter and annually. The tables will be available on TMA's website for public use. The Analytic Tables will be due with the dataset each quarter.

4. Task 4: Documentation

The adult and the child databases will be documented separately. For the adult database, a Codebook and User's Guide will be developed each quarter and included with the final/public-use data set sent to the client. MPR will deliver the Codebook and User's Guide 10 weeks after receipt of the data. Both will only contain information regarding the reference quarter, and the documentation for the fourth quarter will contain frequency distributions for that fourth quarter as

well as cumulative data from the previous three quarters. Documentation will also include two versions of the Adult Technical Manual: a draft and a final. The draft will be based on data from the first quarter and will be due 10 weeks after receipt of data from the first calendar quarter. The final version of the Adult Technical Manual, which will be due 10 weeks after receipt of data from the fourth fiscal quarter, will contain information for all four quarters.

MPR will also deliver a Codebook, User's Guide, and technical manual for the child data. However, only final versions of both documents will be produced. MPR will deliver all documents to the client 12 weeks after the receipt of the data set from the survey operations vendor.

5. Task 5: Research

MPR will conduct three studies using data from the quarterly surveys and the child survey. Topics include TRICARE Standard/Extra access, factors affecting health-related behaviors, and the impact of using an abbreviated questionnaire on non-response. Results from the studies will be presented in shorter fact sheets or conference papers. In addition to papers and fact sheets, MPR will conduct ad hoc evaluations at DoD's request. The degree to which MPR is able to perform these shorter studies will depend on project resources. The subject of fact sheets and the delivery date will be negotiated with the client.

6. Task 6: Update for 2007 HCSDB

In preparation for the 2007 HCSDB, MPR will prepare a work plan outlining the modifications necessary for next year's survey. At the end of the second quarter of the calendar year, the MPR project director and the DoD project officer will discuss proposed changes to the survey for the following year. Task leaders will present proposed changes to the questionnaires, sampling, software, and documentation to the project officer. Based on the client's comments, MPR will prepare a revised design for the following year's survey.

TABLE 6.1

ESTIMATED SCHEDULE OF DELIVERABLES

All dates here are relative and depend on the timely delivery of both the population extract from DMDR and the data from the survey operations vendor.

DELIVERABLE	DUE DATE
SAMPLING	
Sample for Quarter 3, FY06	2/14/06
Sample for Quarter 4, FY06	5/16/06
Sample for Quarter 1, FY07	8/15/06
Sample for 2006 Child HCSDB	4/4/06
Sample for Quarter 2, FY07	11/14/06
DATABASES	
Final/Public-Use File for Quarter 2, FY06	5/19/06
Final/Public-Use File for Quarter 3, FY06	8/18/06
Final/Public-Use File for Quarter 4, FY06	11/17/06
Final/Public-Use File for Quarter 1, FY07	2/16/07
Final/Public-Use File for 2006 Child HCSDB	12/19/06
REPORTS	
ADULT TRICARE BENEFICIARY REPORTS	

DELIVERABLE	DUE DATE
Quarter 2, FY06	5/12/06
Quarter 3, FY06	8/11/06
Quarter 4, FY06	11/10/06
Quarter 1, FY07	2/9/07
ADULT TRICARE CONSUMER WATCH	
Quarter 2, FY06	5/19/06
Quarter 3, FY06	8/18/06
Quarter 4, FY06	11/17/06
Quarter 1, FY07	2/16/07
2006 HCSDB DESIGN REPORT	6/30/06
2006 CHILD BENEFICIARY REPORT	11/3/06
HOT METRICS	
Quarter 2, FY06	4/11/06
Quarter 3, FY06	7/11/06
Quarter 4, FY06	10/10/06
Quarter 1, FY07	1/7/07
TRICARE ANNUAL REPORT	
ANNUAL REPORT	
Quarter 4, FY06	1/5/07
DOCUMENTATION	
DATA BASE AND DATA DOCUMENTATION SYSTEM	
Quarter 2, FY06	5/19/06
Quarter 3, FY06	8/18/06
Quarter 4, FY06	11/17/06
Quarter 1, FY07	2/16/07
ADULT CODEBOOK AND USER'S GUIDE	
Quarter 2, FY06	5/19/06
Quarter 3, FY06	8/18/06
Quarter 4, FY06	11/17/06
Quarter 1, FY07	2/16/07
ADULT TECHNICAL MANUAL	
Draft	5/19/06
Final	11/7/06
CHILD DATA, CODEBOOK AND USER'S GUIDE	11/3/06
CHILD TECHNICAL MANUAL	11/3/06
RESEARCH	
SELECTED STUDY	
Draft Report	
Final Report	
SELECTED STUDY	
Draft Report	
Final Report	

Critical Assumptions

The timely completion of each task depends on the following critical assumptions and on the timely receipt of requested materials from the government and/or other contractors:

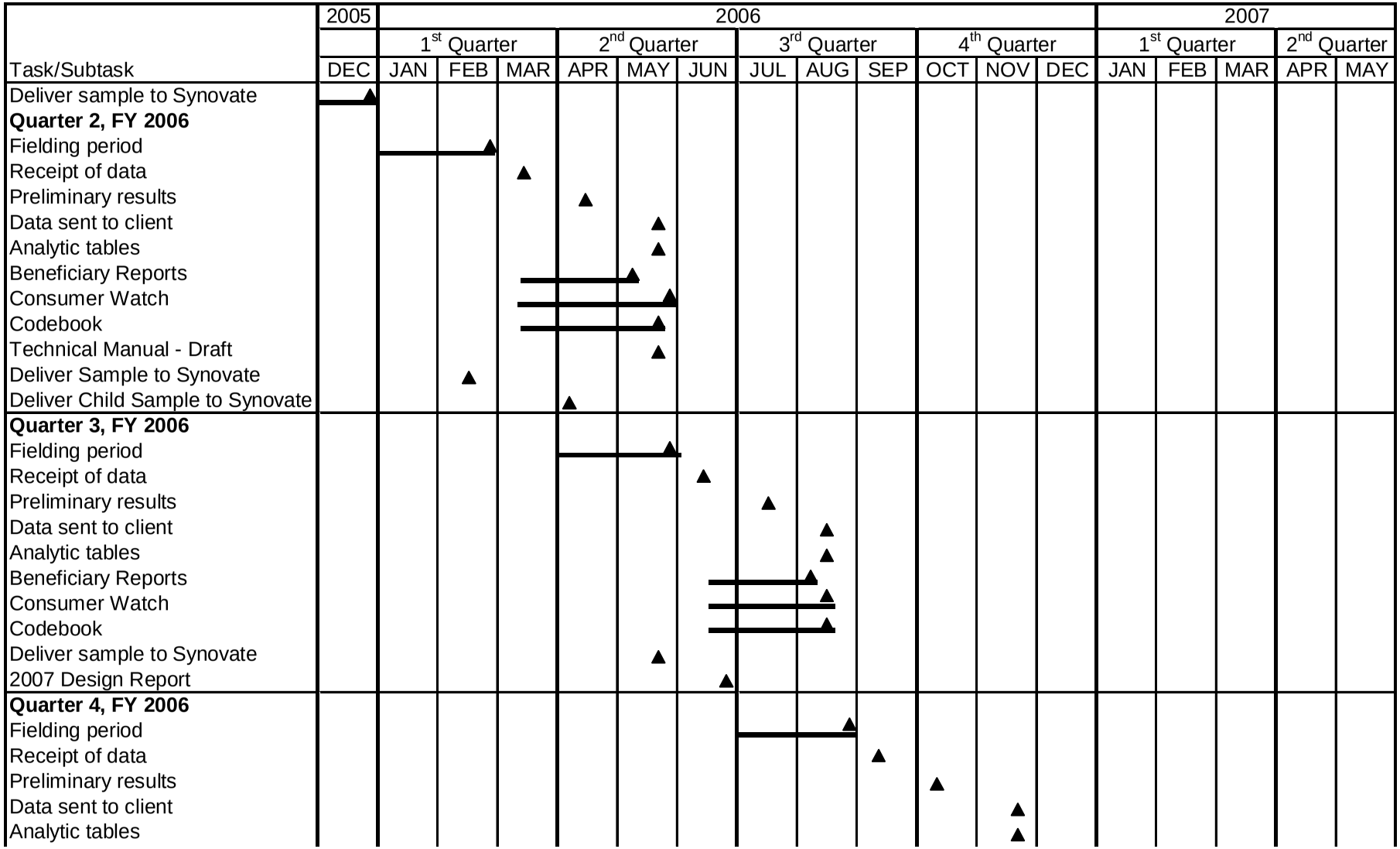
- DMDC will provide the DEERS extract, as specified by MPR under Task 1, within four weeks of when MPR's submits the specifications for the extract.
- Timely delivery of the Adult TRICARE Beneficiary Reports and the TRICARE Consumer Watch is contingent on the timely receipt of the data from the survey vendor.
- Deliverables for the child survey are conditional upon timely receipt of the child data sets.

B. PROJECT ORGANIZATION

As project director, Eric Schone will be the primary contact for DoD at MPR. He will also coordinate the efforts of the task leaders and of the project team overall. Jacqueline Agufa will oversee all programming tasks, including the production of databases, and the Annual Report. Regina Gramss will lead the production and design of the Adult Beneficiary Reports. Nancy Clusen will coordinate the sampling. Keith Rathbun will lead the design of the databases and the on-line documentation each quarter. Lucy Lu will manage the production of the TRICARE Consumer Watch.

FIGURE 6.1

ESTIMATED DELIVERABLE SCHEDULE FOR 2006 HCSDB



▲ = Due dates

NOTE: All dates shown here are relative and depend on the timely receipt of data from the survey operations vendor.

FIGURE 6.1 *(continued)*

	2005	2006												2007				
		1st Quarter			2nd Quarter			3rd Quarter			4th Quarter			1st Quarter			2nd Quarter	
Task/Subtask	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
Beneficiary Reports										▲		▲						
Consumer Watch										▲		▲						
Codebook										▲		▲						
Deliver sample to Synovate									▲									
Technical Manual										▲			▲					
Annual Report										▲			▲					
Quarter 1, FY 2007																		
Fielding period											▲	▲						
Receipt of data													▲					
Preliminary results														▲				
Data sent to client															▲			
Analytic tables															▲			
Beneficiary Reports													▲	▲				
Consumer Watch													▲	▲				
Codebook													▲	▲				
Child 2006																		
Fielding period						▲	▲	▲										
Receipt of data									▲									
Data sent to client									▲			▲						
Codebook									▲			▲						
Technical Manual									▲			▲						
Beneficiary reports									▲			▲						

▲ = Due dates

NOTE: All dates shown here are relative and depend on the timely receipt of data from the survey operations vendor.

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