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2006 Health Care Survey of DoD Beneficiaries:

2007 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 2006, the survey has been fielded each quarter, as it will be in 2007. Data sets containing survey responses have been produced quarterly, along with a combined data set for each year. For the past six years, the HCSDB has also included a survey of child beneficiaries' sponsors. Before 2006, reporting and preparation of public use data sets were performed on a calendar year basis. An annual data set and annual reports combined the results of each survey conducted in the calendar year. Beginning in 2006, reporting and analysis changed to a fiscal year basis. Reports and data sets combined results from the 4 quarters of fiscal 2006. Analysis and reporting will continue on a fiscal year basis in 2007.

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 2007, we propose changes to survey reporting methods that will give researchers easier access to survey results. We propose revisions to the Consumer Watch to include measurements of the experience of beneficiaries enrolled to a managed care support contractor (MCSC). We propose changes to the sample design that will provide more precise estimates of the experience of beneficiaries using the TRICARE options of TRICARE Reserve Select and Prime through managed care support contractors. We propose research projects that will test the methods used to analyze and report survey results and prepare for the arrival of CAHPS Version 4.0.

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 permit monitoring of the experience of beneficiaries at the military treatment facility (MTF) level and enable survey responses to answer research questions about the operations of the MHS relevant to policymakers.

- 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.
- Chapter 4 describes the reports we will produce from the 2007 HCSDB and the changes in reporting compared to previous years. As in the 2006 HCSDB, the 2007 reports will include the TRICARE Beneficiary Reports (for adults and children), TRICARE Consumer Watch, and the HCSDB Annual Report. The description includes proposed changes to the TRICARE Consumer Watch and HCSDB Annual Report. It also includes a proposed reporting facility that will permit interactive analysis of survey data, including trending across quarterly surveys.
- 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.
- 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. We present weighting procedures for the surveys. We present design options for how experiences of beneficiaries with the new benefit, TRICARE Reserve Select, might be examined separately through changes 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 2006 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 2007 adult survey is 50,000 per quarter, the same as the 2006 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 2006 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 and Data File Construction

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 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, where the weighting classes are formed based on the percentile of the propensity scores. 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 how recent the reference period was 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.

2. Child Survey

a. Target population

The target population for the child survey, like that of the 2006 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 2006 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 2007 child survey will be the same as for the 2006 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) in the continental United States, the HLs should be less than 2 percentage points; (4) for the region outside the continental United States, the HLs should be less than 5 percentage point; and (5) 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 2006 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 and 25 percent for the adult and child surveys, respectively. 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.

Weights will be calculated as the inverse probability of selection, adjusted for nonresponse.

B. STANDARD ERROR ESTIMATION

Standard error estimation for statistics calculated from both the adult and child surveys will be similar to that of the 2006 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 2007 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. 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 1, FY2007 Adult Survey extract, there are 16,528 TRS beneficiaries in the CONUS region, but this number is expected to increase because TRS has been available only since April 2005. It now seems possible to produce annual CONUS estimates for the TRS. 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 creating separate strata for TRS members in the sample design. Furthermore, a supplemental sample during FY2007 can also provide more detailed 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 2006 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 not as significant a concern.

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 beneficiaries enrolled 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

We recommend that the FY2007 sample design include one stratum for TRS with a precision level and sample size sufficient for annual estimates of all TRS beneficiaries once per year. If resources

are available, we recommend three strata for TRS, one in each of the three CONUS regions. Again, we suggest a precision level and sample size sufficient for annual estimates of TRS beneficiaries in a particular region.

Because TRS is a new group of beneficiaries, changes in the sampling plan may be indicated 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.

D. MANAGED CARE SUPPORT CONTRACTOR

There is interest in reporting on Prime enrollees who receive care from managed care support contractors. Currently, these beneficiaries are identified by the combination of their Prime enrollment status and their enrollment to a civilian PCM. In the Quarter 3, FY 2006 adult survey, 2,090 beneficiaries with civilian PCM were sampled and 820 responded, distributed about evenly among the three TNEX regions. From this sample, TMA leadership monitors a quarterly CONUS-level estimate. It is at the level of the TNEX region, however, where MCSC contracts are enforced. Therefore, quarterly regional estimates may be useful. In addition, about a third of the enrollees to civilian PCM's that are sampled are beneficiaries enrolled to Primus and NAVCARE clinics or US Family Health Plans (USFHPs), reducing the sample allocated to beneficiaries enrolled to physicians in these contractors' civilian networks.

For all beneficiaries enrolled with a civilian PCM, a sample of the current 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. An increase in the sample size 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 civilian PCM in the managed care contractor's network (i.e. enrolled to MCSC), the current sample permits quarterly CONUS-level estimates within about ±5 percentage points, quarterly regional-level estimates within about ±9 points, and annual regional-level estimates within about ±4 points. The increase described above will result in quarterly regional estimates with a confidence interval half-length of about 6%. We believe that the current sample size can support this reallocation if MTF strata are no longer created for non-enrollees.

E. CHANGES TO THE NON-ENROLLED STRATA

Besides beneficiaries enrolled in Prime, MHS-eligible beneficiaries may participate in several other health insurance options, including TRICARE Standard or Extra, TRICARE for Life, which is TRICARE Standard coverage extended to beneficiaries purchasing Medicare Part B, or civilian insurance. These options are the basis of the two non-enrolled strata described above. Unlike Prime, beneficiaries selecting one of these options are not connected administratively to MTFs. Therefore we propose geographic stratification by TRICARE Region, rather than MTF catchment area of residence. TMA will desire precise estimates of TRICARE Standard/Extra beneficiaries, who, according to their self-reports appear to make up approximately one-third of non-enrolled beneficiaries under age 65. Therefore the regional samples will be made large enough to produce TRICARE Standard/Extra estimates comparable to those produced for Prime beneficiaries enrolled to the MCSC.

Chapter
3

Databases and Documentation

A. DATABASES

Databases for the 2007 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 TRICARE's identifier to protect the privacy of individuals in the sample

The change from a calendar year data set to a fiscal year data set will be complete by the end of FY 2006, and will require no changes to the 2007 data set. During 2007, we will eliminate patient and sponsor social security numbers from our sampling procedure to enhance security of beneficiaries' identities.

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.

As noted in Chapter 2, 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 2007 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 2006 HCSDB will be applied to the 2007 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 2007 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 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 2007 HCSDB

In 2007, 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 2007 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 2007 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 2007 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.

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 which will also contain frequencies along each question as shown in figure 3.2, (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.

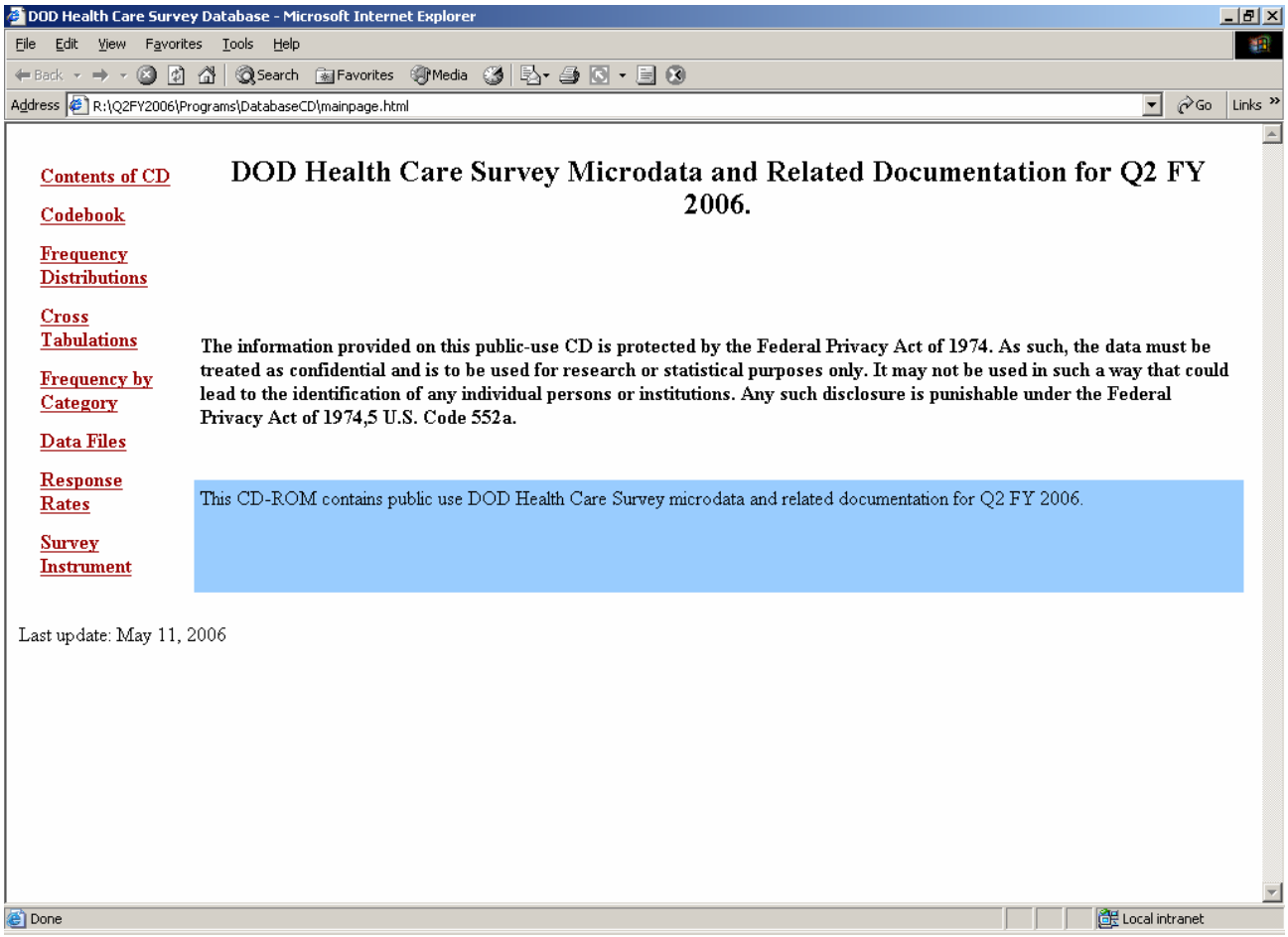
3. Online Data and Documentation System

As in 2006, 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).

No changes are being proposed for the main page of the web-based data and documentation system 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 fifth option, "Frequency by Category", provides standard errors for each HCSDB database variable by other key variables of interest. The sixth option, "Data Files," provides the user with a list of downloadable files (i.e. the HCSDB database in a variety of formats). The seventh option, "Response Rates," provides the user with weighted and unweighted response rates for key variables in spreadsheet format. The eighth option, "Survey Instrument," opens the PDF format annotated questionnaire.

FIGURE 3.2. ANNOTATED QUESTIONNAIRE WITH FREQUENCIES

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

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

2%	1 ☐	Less than 6 months	H06007
6%	2 ☐	6 up to 12 months	See Note 1
9%	3 ☐	12 up to 24 months	
24%	4 ☐	2 up to 5 years	
21%	5 ☐	5 up to 10 years	
27%	6 ☐	10 or more years	

YOUR PERSONAL DOCTOR OR NURSE

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

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

67%	1 ☐	Yes		H06008
32%	2 ☐	No	➔ Go to Question 11	See Note 2

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

0%	0 ☐	0 Worst personal doctor or nurse possible	
0%	1 ☐	1	H06009
0%	2 ☐	2	See Note 2
0%	3 ☐	3	
1%	4 ☐	4	
3%	5 ☐	5	
3%	6 ☐	6	
7%	7 ☐	7	
12%	8 ☐	8	
11%	9 ☐	9	
22%	10 ☐	10 Best personal doctor or nurse possible	
30%	-6 ☐	I don't have a personal doctor or nurse.	

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

20%	1 ☐	Yes	➔ Go to Question 12	H06010
47%	2 ☐	No		See Note 2

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

11%	1 ☐	A big problem	H06011
18%	2 ☐	A small problem	See Note 2
47%	3 ☐	Not a problem	

GETTING HEALTH CARE FROM A SPECIALIST

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

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

In the last 12 months, did you or a doctor think you needed to see a specialist? H06012

56%	1 ☐	Yes		See Note 3
43%	2 ☐	No	➔ Go to Question 14	

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

6%	1 ☐	A big problem	H06013
10%	2 ☐	A small problem	See Note 3
37%	3 ☐	Not a problem	
38%	-6 ☐	I didn't need a specialist in the last 12 months.	

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

H06014

55%	1 ☐	Yes		See Note 4
44%	2 ☐	No	➔ Go to Question 16	

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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 2007 HCSDB. We will continue to produce:

- TRICARE Beneficiary Reports
- TRICARE Consumer Watch
- HCSDB Annual Report

We will continue to contribute to:

- Hot Metrics
- TRICARE Evaluation Report
- MHS Atlas

We propose the following additional report:

- HCSDB Data Analysis/Reporting Tool

Several changes are planned for the Beneficiary Reports and Consumer Watch. Scores for Prime enrollees enrolled to the MCSC will be included in the quarterly Beneficiary Reports and child report. In addition, the pages in the annual report showing scores for enrollees with civilian PCM will be adjusted to show results for enrollees to the MCSC. Similarly, Regional and CONUS-level Consumer Watches will be produced that show separately results of Prime enrollees with a military PCM and those enrolled to the MCSC.

TABLE 4.1

2007 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. Appended to the Consumer Watch is an issue brief, a two-page report on a topic 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.
HCSDB DATA ANALYSIS/REPORTING TOOL
The HCSDB Data Analysis/Reporting Tool will give the user the ability to generate tabular and graphical displays of survey items across quarters and survey years. Variable cross-walks, annotated questionnaires and data dictionaries will also be available.

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 BENEFICIARY 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

We will continue to prepare the reports as HTML web pages accessible on TRICARE's website, and 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. The procedures for navigating through the web pages will be the same as in 2006. 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 HTML 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. 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. Changes

For 2007, we plan the following changes:

- Pages for managed care support contractors will be included in the quarterly adult report
- In the annual adult report, the results for Prime with civilian PCM will be replaced with Prime enrolled to MCSC

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.

For 2007, we propose a revision to the Consumer Watch provided to the TRO's. Instead of presenting combined results for all Prime enrollees in the region, we will present separate rates for beneficiaries enrolled to a direct care PCM and beneficiaries enrolled to the MCSC. The new design will permit TRO's to monitor results for Prime enrollees enrolled with either type of PCMs.

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 2006 TRICARE Consumer Watch are reserve component issues, use of civilian health insurance, overweight and deployment-related stress. Proposed topics for the 2007 issue briefs include:

- Reserve component issues
- Adequacy of the civilian network
- Base realignments and closures
- Use of civilian health insurance

3. Format

The 2007 version of the quarterly Consumer Watch for the services, delivered as a PDF file, will consist of four pages of text and graphs and will be the same as the 2006 version. The first two pages of CONSUMER Watches for CONUS and the regions will differ, however, containing separate direct care and MCSC results. The last two pages will be the quarterly issue brief. A possible design for the CONUS report appears as Figure 4.1. The layout will be revised by a professional graphics designer.

FIGURE 4.1

CONUS REPORT

TRICARE Consumer Watch

CONUS MHS◆Quarter 2 FY 2006

HEALTH PROGRAM ANALYSIS & EVALUATION DIRECTORATE

MHS: Sample size-50,000 Response rate-29.8%

Inside Consumer Watch

TRICARE Consumer Watch is a brief summary of what TRICARE Prime enrollees in CONUS MHS 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 Healthcare Providers and Systems (CAHPS), a survey designed to help consumers choose among health plans.

Figure 1: Health Care Rating

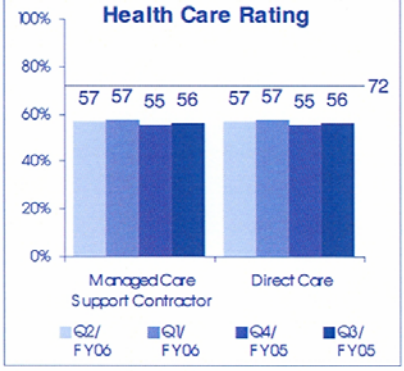
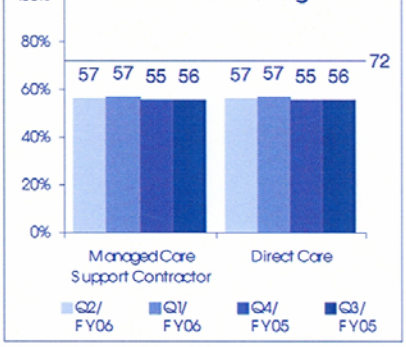


Figure 2: Health Plan Rating



Figures 1 through 4 show the proportion of Prime enrollees enrolled to direct care or the managed care support contractor (MCSC) who respond with a rating of 8 or above when ask to provide a rating on a 0 to 10 scale (where 0 is bad, and 10 is good), of their Health Care, Health Plan, Personal Doctor, or the Specialist they see most often. Rates are adjusted for age and health status.

Rates are compared with averages taken from the 2005 National CAHPS Benchmarking Database (NCBD), which contains results from surveys given to beneficiaries by civilian health plans. Rates differing significantly from the benchmark are bolded and shown in red.

Figure 3: Personal Provider Rating

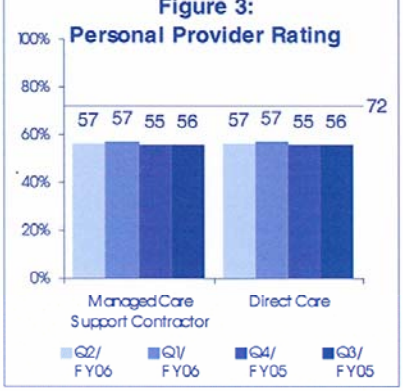
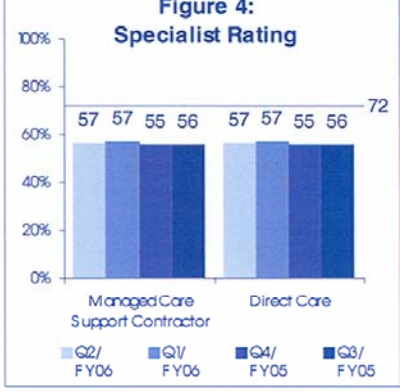


Figure 4: Specialist Rating



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

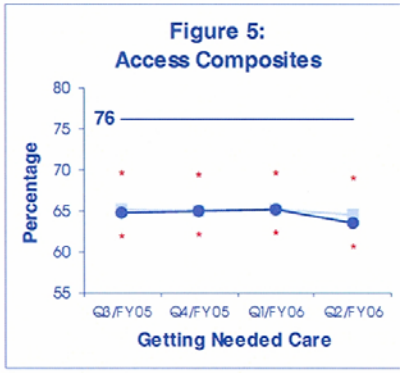
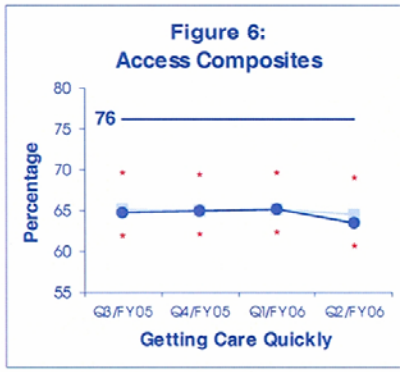


Figure 6: Access Composites



Legend:

- Direct Care
- Managed Care Support Contractor
- Benchmark

1

CONUS MHS◆Quarter 2 FY 2006

Figure 7: Office Composites

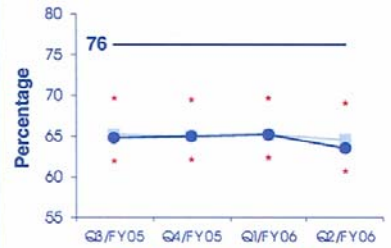
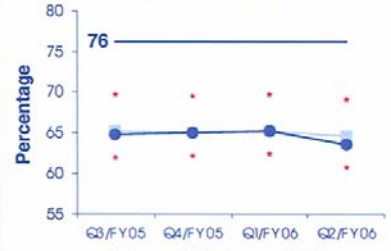


Figure 5 presents the composites "Getting needed care". Scores in "are based on patients' problems getting referrals and approvals and finding a good doctor. "Getting care quickly", shown in Figure 6 scores concern how long patients wait for an appointment or wait in the doctor's office.

Figure 8: Office Composites



Scores in Figure 7, "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, shown in Figure 8, measure the courtesy and helpfulness of doctor's office staff.

Figure 9: Claims/Service Composites

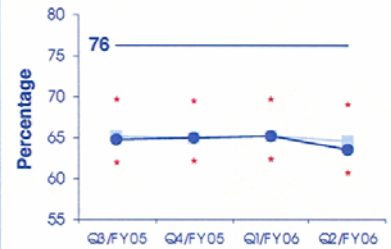
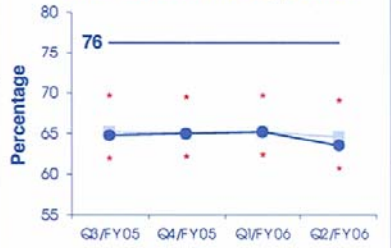


Figure 9 shows "Customer service" scores, which concern patients' ability to get information about their health plan and manage its paperwork. "Claims processing" scores in Figure 10 are based on the timeliness and correctness of plan's claims handling.

Figure 10: Claims/Service Composites



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.

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

Legend:
- Direct Care
- Managed Care Support Contractor
- Benchmark

Preventive Care

Type of Care	Qtr 3 FY 2005	Qtr 4 FY 2005	Qtr 1 FY 2006	Qtr 2 FY 2006	Healthy People 2010 Goal
Mammography (women > 40)					
Direct Care	82	83	82	84 (1522)	70
Managed Care Support Contractor	82	83	82	84 (1522)	
Pap Smear (women > 18)					
Direct Care	82	83	82	84 (1522)	90
Managed Care Support Contractor	82	83	82	84 (1522)	
Hypertension Screen (adults)					
Direct Care	82	83	82	84 (1522)	95
Managed Care Support Contractor	82	83	82	84 (1522)	
Prenatal Care (in 1st trimester)					
Direct Care	82	83	82	84 (1522)	90
Managed Care Support Contractor	82	83	82	84 (1522)	
Percent Not Obese (adults)					
Direct Care	82	83	82	84 (1522)	85
Managed Care Support Contractor	82	83	82	84 (1522)	
Non-Smokers (adults)					
Direct Care	82	83	82	84 (1522)	88
Managed Care Support Contractor	82	83	82	84 (1522)	
Counseled to Quit (adults)					
Direct Care	82	83	82	84 (1522)	-
Managed Care Support Contractor	82	83	82	84 (1522)	

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.

C. 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. Topics in addition to those covered by the issue briefs may include:

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

D. HOT METRICS

The Hot Metrics are 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. CONTRIBUTIONS TO THE TRICARE EVALUATION REPORT

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.

F. 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.

G. HCSDB DATA ANALYSIS/REPORTING TOOL

The HCSDB Data Analysis/Reporting Tool will permit researchers to view survey results from any quarterly and annual data set, beginning with the 2000 HCSDB. The application be written as an Active Server Page (ASP) application that allows the user to dynamically generate graphical displays of survey data items for a particular time period, or across multiple years or quarters of the HCSDB data. The graphical displays will present means or proportions with their associated 95 percent confidence intervals. The user may select survey response, sample frame or constructed variables and the time periods of interest. The user may then a tabular or graphical display. Figure 4.2 below shows a possible design for the main menu. Figures 4.3 and 4.4 present graphs for one time period and for trend analysis.

The main menu will also include a look-up feature that will assist users in identifying the HCSDB variables needed. The application will be based on a cumulative data file containing estimated proportions or means with standard errors for all relevant variable combinations. The data set will also embody a crosswalk that links identical or similar variables from different iterations of the survey so that time series can be plotted. In the event of a change to question wording or response options, the display will indicate discontinuities in the time series.

FIGURE 4.2

HCSDB DATA ANALYSIS/REPORTING TOOL

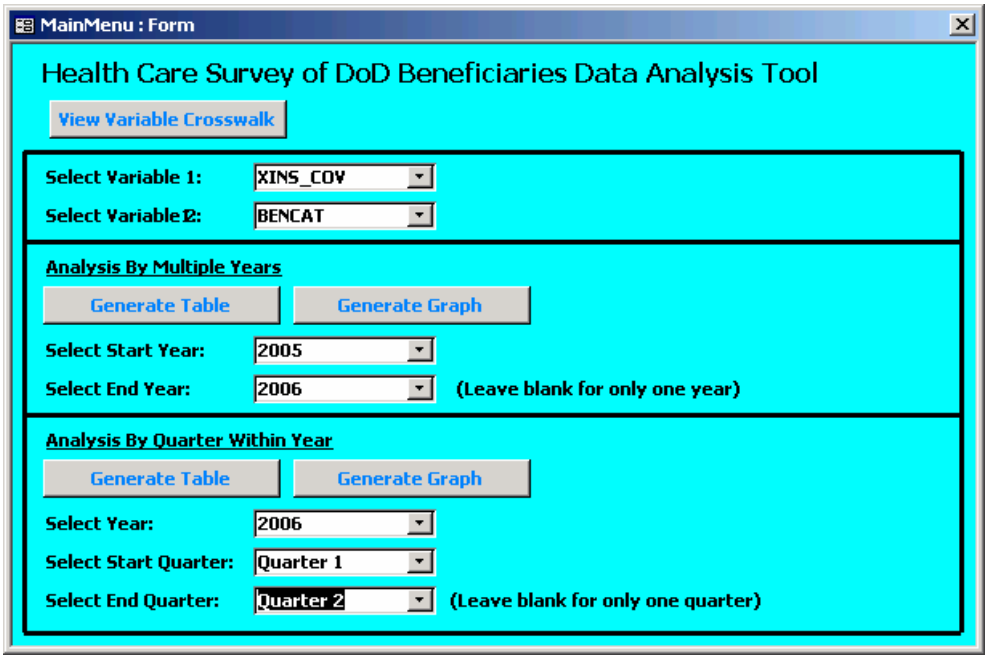


FIGURE 4.3

PERCENT WITH PERSONAL DOCTOR BY BENEFICIARY CATEGORY

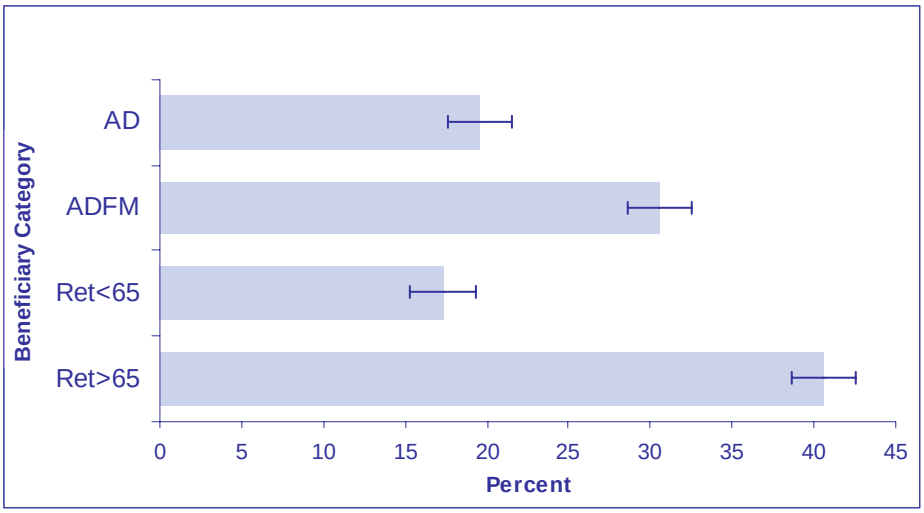
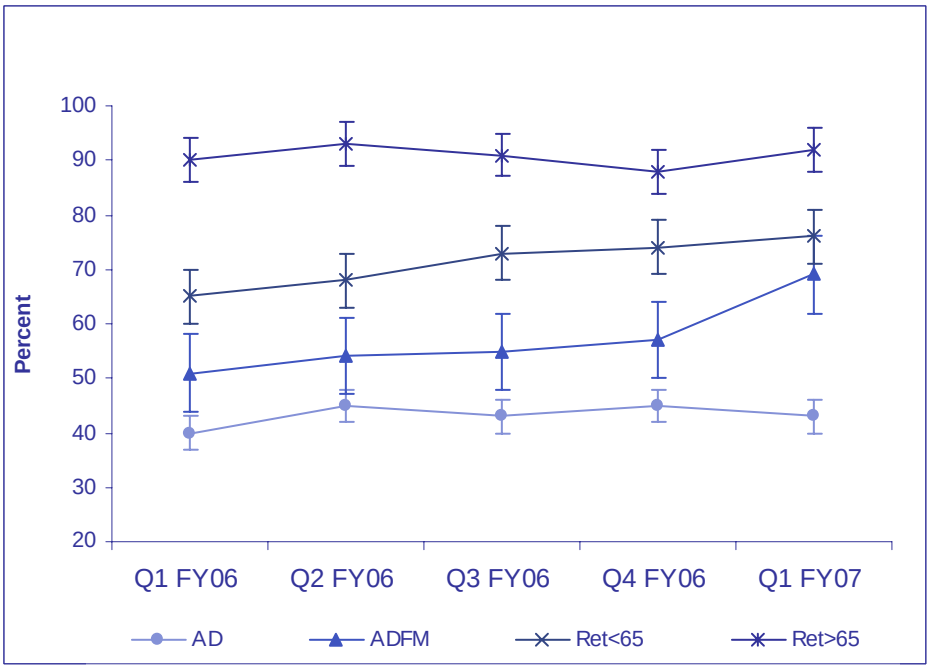


FIGURE 4.4

PERCENT WITH PERSONAL DOCTOR, BY BENEFICIARY CATEGORY, Q1 FY06 - Q1 FY07



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 and analysis methods.

We propose to conduct up to nine studies relevant to the 2007 HCSDB. Policy research may include studies on: TRICARE Standard access, use of civilian health insurance, the effects of base realignments and closures (BRACs), and studies of selected foreign health markets. Methods research may include: confidence interval estimation, small area estimation, case-mix adjustment methods, regression techniques for risk adjustment, and testing and evaluating HCSDB questions. Each completed 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 are not enrolled in Prime and rely on civilian coverage provided through TRICARE Standard or Extra 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, especially when beneficiaries do not reside in a Prime service area. 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 research questions include:

- What is variation in access to care for Standard/Extra users?

- How is variation related to the market characteristics of local areas where beneficiaries reside?
- How is variation related to physicians' acceptance of TRICARE and Medicare?
- How is variation related to beneficiary characteristics?

The analysis will allow us to better understand which beneficiaries are most likely to experience access problems, and why access problems arise. Market characteristics to be examined will include shortages of physicians, availability of certain specialists, and the rate of physician acceptance of TRICARE. These characteristics or market 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. We will investigate the following research questions

- What is the offer rate for alternative civilian insurance?
- What is the take-up rate?
- How do offers and take up vary with insurance characteristics, beneficiary characteristics and state insurance regulations?
- How is take up affected by changes in TRICARE benefits?

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 BASE REALIGNMENT AND CLOSURE ON ACCESS, SATISFACTION AND MTF USE

1. Background

The current round of realignments and closures involves the shut down of some facilities. Many more are being downsized. Others are seeing an increase in demand for their services. Among many other effects, these changes will result in changes in the use of health care resources. The results may be decreases in the availability of medical resources, and the need to change doctors or coverage. 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/Extra from Prime. 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 satisfaction with 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 2006 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

We propose to investigate the following questions:

- How is the access and satisfaction of active duty family members affected by closure, downsizing or upsizing?
- How is the access and satisfaction of retirees affected?
- How is the beneficiary's choice of health plan affected?
- How is the retiree's choice of location affected?

a. Sample design

After identifying retirees and active duty and their families living near BRAC sites, we will create a supplementary sample 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. We intend to follow this cohort to the end of their eligibility or the post-BRAC period, whichever comes first.

When the post-BRAC sample is drawn, we will include an additional independent sample at the relevant sites.

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. TRICARE BENEFICIARIES IN SELECTED OVERSEAS MARKETS

1. Background

Beneficiaries residing overseas may have widely varying experiences based on their local health care system, and the military establishment in their local market. Overseas regions typically have lower response rates than CONUS regions due to longer lags in mail delivery. They may also be affected by lower English proficiency (in particular, family members) and the apparent irrelevance of some survey questions. The size of beneficiary population in these markets is also typically low. Thus, to measure their ratings of access and satisfaction will require an oversample of the subject markets, and may also require a foreign language questionnaire, and additional questions specifically designed for overseas markets.

2. Technical Approach

a. Sample size

After identifying beneficiaries living in overseas markets, 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. We will stratify this sample by beneficiary category. We anticipate that in many overseas markets a census of beneficiaries will be needed. The CONUS sample and usual OCONUS samples will serve as controls for the oversamples in selected regions.

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 addressed only to OCONUS beneficiaries will ask about features of the local market and interaction of TRICARE benefits with that market. If beneficiaries are believed to prefer a language other than English, a foreign language version of the questionnaire will be mailed along with the English language version, but only in the oversampled regions.

c. Analysis

We will adjust supplementary samples for nonresponse and compare results from the supplementary sample to results from the CONUS and OCONUS beneficiaries surveyed in the HCSDB.

3. Report

The final report will present:

- A comparison, stratified by beneficiary category, of selected markets, CONUS and OCONUS samples on CAHPS metrics
- A comparison of selected markets with OCONUS sample on supplementary questions

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. ESTIMATING SMALL DOMAINS USING SMALL AREA ESTIMATION TECHNIQUES

1. Background

Small-area estimation is a technique developed to produce estimates from a small subpopulation of analytic interest. During the last twenty years there has been a great deal of research on this topic (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 domain data. The basic idea of small area estimation is that better estimates, usually in the sense of lower mean square error, can be developed by borrowing strength from other related analytic domains or other related data sources. In practice, this means data in "neighboring" domains are combined, usually through a statistical model, to reduce the variability in the estimates (under the assumption that the "neighboring" domains have similar data relationships). Such assumptions can be validated using more comprehensive population datasets. For example, HCSDB sample has been selected from extract files of the DEERS, a data set that has 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 a number of small domains that are of interest to DOD, such as women in the Marines and catchment areas. We will establish appropriate comparison criteria and compare estimates using several small area estimation methods with direct estimates from the HCSDB quarterly and combined datasets. Subject to available budget, we will conduct some simulations to evaluate the estimation methods considered for HCSDB.

3. Report

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

G. CASE-MIX ADJUSTMENT METHODS

1. Background

Results from the HCSDB vary according to beneficiary characteristics that vary among providers. Case-mix adjustment that controls for these differences in beneficiary characteristics permits comparison. The methods currently employed in the TRICARE Beneficiary Reports adjust dichotomized responses to CAHPS questions for age and health status by ordinary least squares. CAHPS reports for CMS and other CAHPS research use a wider array of variables including education. Generally, case-mix adjustment should use an array of exogenous variables, i.e. those that cannot be affected by the provider, to level the playing field among providers. Health status in this context is assumed to be determined by the patient's health prior to the period in question. Some patient characteristics may be excluded from case-mix adjustment because we desire to compare care provided to beneficiaries with different characteristics. Race or sex may be variables of that type. We propose to test the current specification of the HCSDB risk adjustment model against other specifications for explanatory power and acceptability to stakeholders.

2. Technical Approach

MPR will evaluate the model fit of the risk adjustment methods among different beneficiary groups and in the commercial version of the NCBD. We will test the impact of age, sex, health status, education and interactions of these variables. We will test these variables using linear regression on dichotomized CAHPS variables. The variables will be assessed on the basis of explanatory power and stability of coefficients. We will compare all new models to the current model. We will also interview selected users of reports generated from the HCSDB to determine their attitude toward different risk adjusters. We will review the literature on case-mix adjustment of CAHPS variables.

3. Report

The report will contain the results of our comparison of risk adjustment models and a description of our interview results. It will contain recommendations for changes in the current model based on these results and comparison with CMS's models.

H. REGRESSION METHODS

1. Background

Beneficiaries of the military health system receive care in local markets or from military treatment facilities that provide care with similar characteristics to each person who receives care from that market or provider. Beneficiaries' assessment of care varies with their personal characteristics and with the characteristics of their source of care. The current approach to risk adjustment and ratings of local markets models outcomes as a function of beneficiaries' characteristics and either the MTF or region from which care is received. A model that explicitly accounts for the hierarchical structure of outcomes variation may do a better job of producing accurate measures of precision for estimates of MTF effects, and result in more stable estimates of their effects.

2. Technical Approach

MPR will estimate models of beneficiary ratings using various risk adjusters. We will estimate MTF CAHPS ratings of regional or service level CAHPS ratings as a function of the source of care. We will explore several specifications including one that lets the impact of risk factors vary among providers and another that uses provider characteristics to explain variations in provider effects. We will contrast estimates produced by the model for stability between years, consistency of ratings by different measures, and ease of explaining and manipulating estimates for reporting purposes.

3. Report

The report will contain the results of our comparison of risk adjustment methods and a description of the resulting regional and MTF ratings. It will contain recommendations for changes in methods based on these results.

I. 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. In conducting testing, we will build on knowledge gleaned from testing of CAHPS measures in other settings.

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.

Chapter 6

Management Plan

This chapter outlines the management plan for sampling and reporting in the 2007 HCSDB. This plan covers the work plan for each task, the project organization, and the schedule of deliverables.

A. TASK WORK PLAN

The period of performance for the work described in this section is January 2007 to January 2008. 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 2007. MPR will provide the sample to the survey operations contractor six weeks before the questionnaire is mailed in each quarter.

The sampling frame for the 2007 Child HCSDB will be developed annually— the sample frame will be requested 10 weeks before the fielding period. The sample will be delivered to the survey operations contractor six weeks before the questionnaire is mailed. The questionnaire will be fielded in the third quarter of FY 2006, at approximately the same time as 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 five 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 15 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 2007 Adult HCSDB and the 2007 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 2007 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 10 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 15 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 slides reflecting preliminary findings and designed in consultation with the project officer. This file will be due three 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 the

Adult Technical Manual, which will be due 12 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. MPR will deliver all documents to the client 15 weeks after the receipt of the data set from the survey operations vendor.

5. Task 5: Research

MPR will conduct up to 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 2008 HCSDB

In preparation for the 2008 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 DMDC and the data from the survey operations vendor.

DELIVERABLE	DUE DATE
SAMPLING	
Sample for Quarter 3, FY07	2/19/07
Sample for Quarter 4, FY07	5/21/07
Sample for Quarter 1, FY08	8/20/07
Sample for 2007 Child HCSDB	2/19/07
Sample for Quarter 2, FY08	11/21/07
DATABASES	
Final/Public-Use File for Quarter 1, FY07	2/16/07
Final/Public-Use File for Quarter 2, FY07	5/25/07
Final/Public-Use File for Quarter 3, FY07	8/17/07
Final/Public-Use File for Quarter 4, FY07	11/16/07
Final/Public-Use File for FY07	11/16/07
Final/Public-Use File for 2007 Child HCSDB	10/5/07

DELIVERABLE	DUE DATE
REPORTS	
ADULT TRICARE BENEFICIARY REPORTS	
Quarter 1, FY07	2/9/07
Quarter 2, FY07	5/18/07
Quarter 3, FY07	8/10/07
Quarter 4, FY07	11/9/07
ADULT TRICARE CONSUMER WATCH	
Quarter 1, FY07	2/16/07
Quarter 2, FY07	5/25/07
Quarter 3, FY07	8/17/07
Quarter 4, FY07	11/16/07
2008 HCSDB DESIGN REPORT	6/29/07
2007 CHILD BENEFICIARY REPORT	10/5/07
HOT METRICS	
Quarter 1, FY07	12/29/06
Quarter 2, FY07	4/6/07
Quarter 3, FY07	6/29/07
Quarter 4, FY07	9/28/07
TRICARE ANNUAL REPORT	
ANNUAL REPORT	
Quarter 4, FY07	12/21/07
DOCUMENTATION	
DATA BASE AND DATA DOCUMENTATION SYSTEM	
Quarter 1, FY07	2/16/07
Quarter 2, FY07	5/25/07
Quarter 3, FY07	8/17/07
Quarter 4, FY07	11/16/07
ADULT CODEBOOK AND USER'S GUIDE	
Quarter 1, FY07	2/16/07
Quarter 2, FY07	5/25/07
Quarter 3, FY07	8/17/07
Quarter 4, FY07	11/16/07
ADULT TECHNICAL MANUAL	
Final	11/30/07
CHILD DATA, CODEBOOK AND USER'S GUIDE	10/5/07
CHILD TECHNICAL MANUAL	10/5/07

DELIVERABLE	DUE DATE
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:

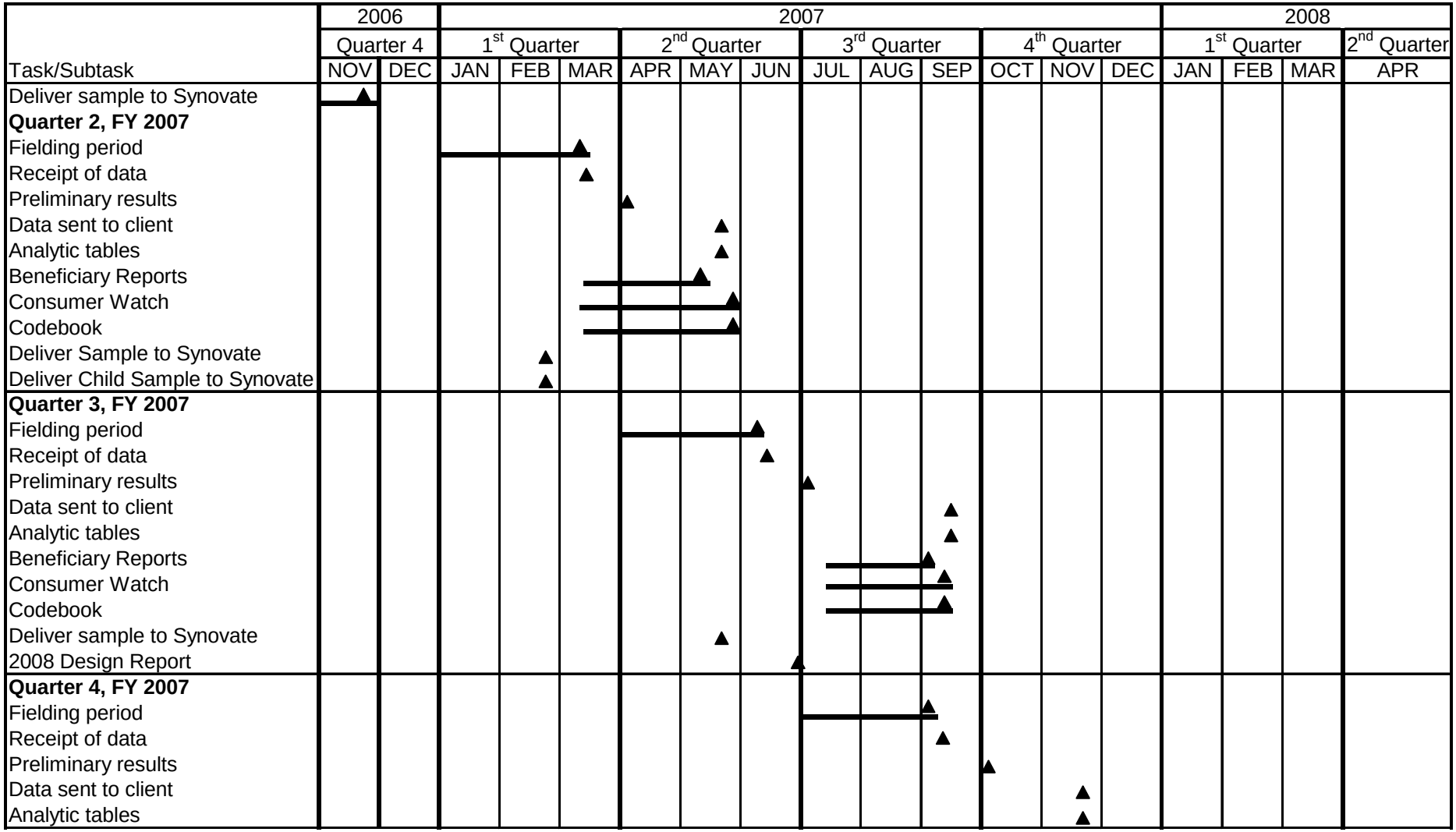
- DMDC will provide the DEERS extract, as specified by MPR under Task 1, within four weeks of when MPR's submits the specifications for the extract.
- Timely delivery of the Adult TRICARE Beneficiary Reports and the TRICARE Consumer Watch is contingent on the timely receipt of the data from the survey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

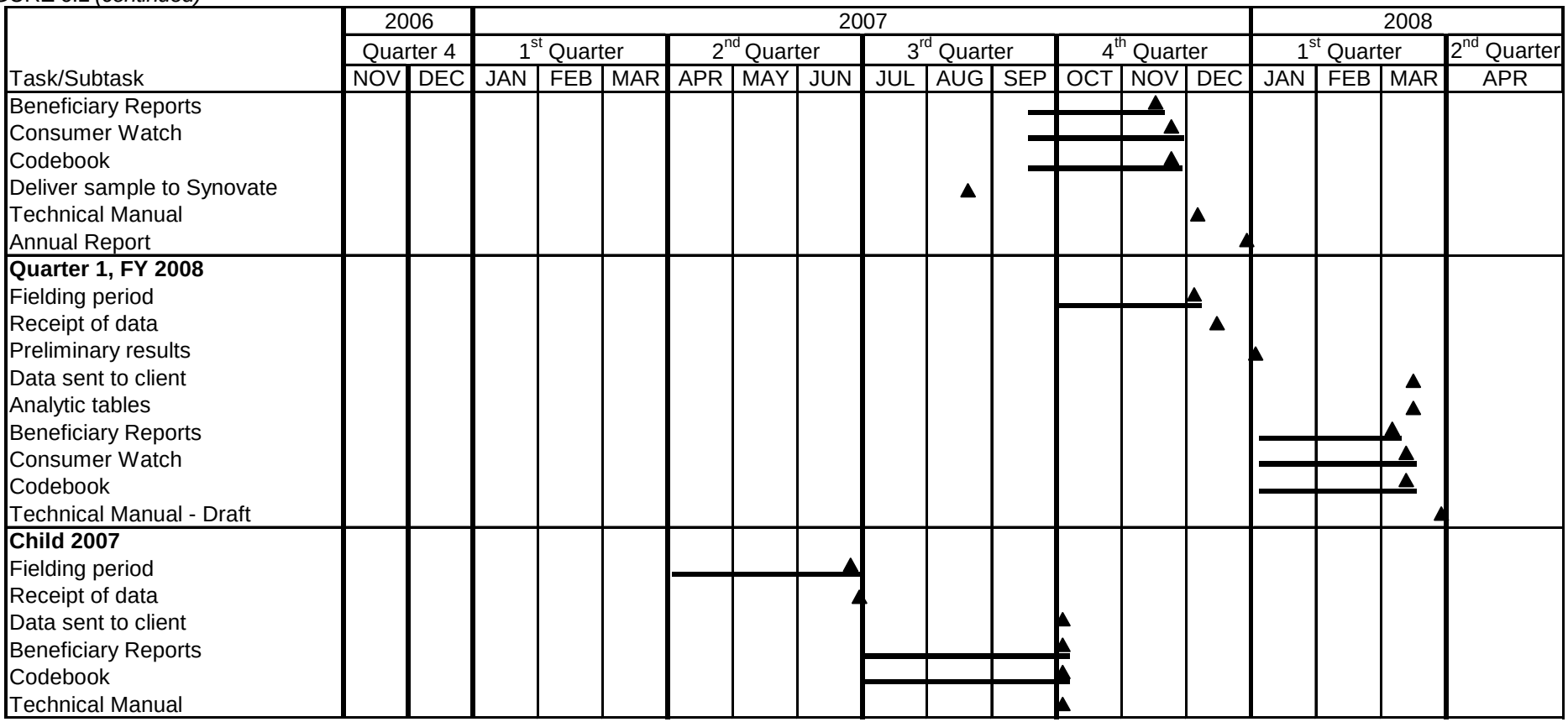
ESTIMATED DELIVERABLE SCHEDULE FOR 2007 HCSDB



▲ = 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)*



▲ = 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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