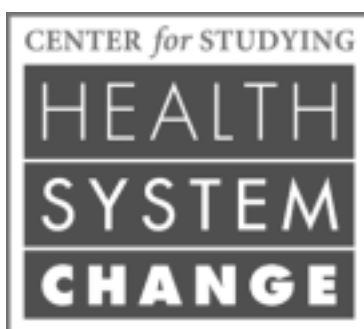


**Community Tracking Study**  
**Household Survey Restricted Use File: User's Guide**  
**(Round Two, Release 2)**



600 Maryland Avenue, SW  
Suite 550  
Washington, DC 20024

**Technical Publication No.**

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**June 2001**  
***Revised September 2002***

**Community Tracking Study (CTS)  
Household Survey and Followback Survey, Round Two  
Fact Sheet**

<b>Survey Details</b>																									
Sample	<p><u>Household Survey</u>: 58,956 people and 32,047 families in the contiguous U.S., representing the civilian noninstitutionalized population. The majority of the sample is clustered in 60 communities, with a smaller supplemental sample drawn from the entire contiguous U.S.</p> <p><u>Followback Survey</u> [restricted-use file only]: 22,235 nonelderly privately insured people from the Household Survey. Detailed information on their health insurance was obtained by contacting health plans and other organizations.</p>																								
Time period	<p><u>Household Survey</u>: July 1998 – October 1999</p> <p><u>Followback Survey</u>: December 1998 – October 2000</p>																								
Content	<table border="0"> <tr> <td><u>Household Survey</u>:</td><td><u>Followback Survey</u> [restricted use file]:</td></tr> <tr> <td>Health insurance coverage</td><td>Product type</td></tr> <tr> <td>Use of health services</td><td>Network model type</td></tr> <tr> <td>Unmet needs and expenses</td><td>Gatekeeping</td></tr> <tr> <td>Usual source of care</td><td>Consumer cost sharing</td></tr> <tr> <td>Patient trust and satisfaction</td><td>Provider payment methods</td></tr> <tr> <td>Last visit to a medical provider</td><td></td></tr> <tr> <td>Health status</td><td></td></tr> <tr> <td>Chronic conditions [restricted use file]</td><td></td></tr> <tr> <td>Risk behaviors and smoking</td><td></td></tr> <tr> <td>Employment, earnings, and income</td><td></td></tr> <tr> <td>Demographic characteristics</td><td></td></tr> </table>	<u>Household Survey</u> :	<u>Followback Survey</u> [restricted use file]:	Health insurance coverage	Product type	Use of health services	Network model type	Unmet needs and expenses	Gatekeeping	Usual source of care	Consumer cost sharing	Patient trust and satisfaction	Provider payment methods	Last visit to a medical provider		Health status		Chronic conditions [restricted use file]		Risk behaviors and smoking		Employment, earnings, and income		Demographic characteristics	
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Differences between the Round One and Round Two surveys	<p><u>Household Survey</u>: There were only minor differences between the two rounds. Among other changes, the Round Two survey modified the questions about public insurance and added questions about chronic conditions. See <i>User's Guide</i> Tables 2.3, 2.4, and 2.5 for more details about the differences.</p> <p><u>Followback Survey</u>: There were minor differences in question wording, data collection methods, and the nonresponse adjustment between the two rounds. Regarding the data files, Round Two contains new variables for out-of-network cost sharing but no longer contains variables for payment methods for specialist and hospital services. (Table 2.7.)</p>																								
<b>Types of estimates</b>																									
Geographic areas represented	These data are designed to allow the user to calculate nationally representative estimates and estimates for the 60 selected communities.																								
Round Two estimates	These data can be used for calculating cross-sectional estimates for Round Two.																								
Change estimates	The Round Two data can be combined with the Round One data to calculate the difference between cross-sectional estimates across rounds. (Note that differences in survey methods between the two rounds of the Followback Survey limit the ability to estimate change for those variables. Most importantly, the Followback data <i>cannot</i> be used to estimate changes in numbers of people. See Section 2.6.)																								
Pooled estimates	To benefit from increased sample size, data from Round One and Round Two can be combined to calculate a single “pooled” estimate. (Note that differences in survey methods between the two rounds of the Followback Survey limit the ability to calculate pooled estimates for those variables.)																								

(continued...)

**Community Tracking Study (CTS)  
Household Survey and Followback Survey, Round Two  
Fact Sheet (*continued*)**

<b>Using the Data Files</b>	
Obtaining the data files and documentation.	<p>The data files and documentation are available through the Inter-University Consortium for Political and Social Research (ICPSR). The web site is <a href="http://www.icpsr.umich.edu">www.icpsr.umich.edu</a>, and the ICPSR study number for the Round Two Household Survey and Followback Survey is 3199.</p> <p>The Public Use File can be downloaded at no cost directly from the ICPSR web site. The Restricted Use File is available to approved users only and is available at no or nominal fee. ICPSR provides the restricted data file on CD. To obtain permission to use the Restricted Use File, users must comply with conditions listed in the CTS Household Survey and Followback Survey Restricted Data Use Agreement, such as limiting data access to people specified in the agreement and destroying the data upon completion of the specified research project. Copies of the agreement and a description of the application process are available from the ICPSR web site.</p>
Software requirements	<p>Because the CTS Household Survey and Followback Survey have a complex sample design, most commonly used statistical software packages will not estimate standard errors correctly. Therefore, we provide standard error look-up tables and formulas to approximate standard errors (for the Household Survey only). In addition, the user's guide explains how to use one specialized software package (SUDAAN) to directly calculate standard errors.</p>
Differences between the Public Use File and the Restricted Use File	<p>The Public Use File contains less detailed information than the Restricted Use File in order to preserve the confidentiality of the survey respondents. The two files contain the same number of observations, but the Public Use File has fewer variables, some of which have undergone more extensive editing than those on the Restricted Use File. The Restricted Use File contains site, state, and county-level identifiers for each observation, while the Public Use File contains only site and state identifiers. In addition, some of the values for the state identifiers have been altered in the Public Use File but not in the Restricted Use File. The Restricted Use File contains information on chronic health conditions, while the Public Use File does not. Only the Restricted Use File contains information that allows the user to identify households and people that are part of both the Round One and Round Two samples. Lastly, the Restricted Use File includes variables from the Round Two Followback Survey, while the Public Use File does not.</p>
<i>Contacting the CTS help desk</i>	<a href="mailto:ctshelp@hschange.org">ctshelp@hschange.org</a>

## WHAT'S NEW

Version	Date	Description of Changes
Release One	June 2001	Original release
Release Two	September 2002	<p>Data from the Round Two Followback Survey were added to the data file.</p> <p>There are new SUDAAN parameters for national estimates from the augmented site sample for the Household Survey. The new parameters differ only slightly from the previously specified parameters.</p>

## ACKNOWLEDGMENTS

This User's Guide and the accompanying Codebook and data file were produced by the Center for Studying Health System Change (HSC) in collaboration with its contractors, Mathematica Policy Research, Inc. (MPR) and Social and Scientific Systems, Inc. (SSS). Peter Cunningham, Michael Park, and Elizabeth Schaefer provided direction for the production of the data file. Survey weights and procedures for variance estimation were developed by John Hall, Frank Potter, Barbara Lepidus Carlson, and Michael Sinclair of MPR. David Edson of MPR and Beny Wu of SSS had primary roles in developing the data confidentiality procedures, with the assistance of Thomas Jabine, an independent data confidentiality consultant. David Edson provided ongoing supervision and coordination to this project. Nancy Odaka, Beny Wu, and Gary Moore of SSS supervised the production of the data file and the codebook. Lee Hargraves of HSC reviewed a draft of the User's Guide. Sally Trude and Elizabeth Schaefer of HSC provided general oversight.

David Edson and Barbara Lepidus Carlson were the primary authors of Chapters 1 through 4 of the User's Guide. Paula Beasley of SSS was the primary author of Chapters 5 and 6, with assistance provided by Gary Moore. Elizabeth Schaefer contributed descriptions of the Followback Survey and the Followback variables. Barbara Lepidus Carlson wrote Appendix B, which explains the derivation of the standard error tables, with assistance from John Hall. John Hall developed the standard error look-up tables in Appendix C, with the assistance of Nancy Odaka of SSS. Gary Moore provided sample SUDAAN setups in Appendix D.

## PREFACE

The Community Tracking Study (CTS) provides information to help policy makers and health care leaders make sound decisions. The CTS collects information on how the health system is evolving in 60 communities across the United States and the effects of those changes on people. Funded by the Robert Wood Johnson Foundation, the study is being conducted by the Center for Studying Health System Change (HSC).

The CTS relies on periodic site visits and surveys of households, physicians, and employers. One component of the CTS, the Household Survey, provides cross-sectional estimates of health insurance and demographic characteristics, the use of health services, satisfaction with care, and health status. The Followback Survey is a supplement to the Household Survey in which the privately financed health insurance policies covering Household Survey respondents are “followed back” to the organizations administering those policies. It was designed as a mechanism for obtaining detailed and accurate information about privately insured Household Survey respondents’ health insurance. This User’s Guide gives researchers the information necessary for using the restricted use version of the data file containing information from the Round Two Household Survey and the Round Two Followback Survey.

Data collection for the Round Two Household Survey began in the summer of 1998 and was completed by the fall of 1999. An earlier version of the survey, Round One, was conducted in 1996 and 1997. The Round One Followback Survey was conducted in 1997 and 1998, and Round Two interviews were conducted 1998-2000. Each survey was designed to allow separate cross-sectional estimates. Researchers can use each round of the CTS Household Survey for separate cross-sectional analyses or use both rounds to study changes in the health care system over time.

The User’s Guide presents background information about the CTS and the Round Two Household Survey and Followback Survey, explains how to select samples and weight variables, and discusses the correct approach to estimating variances. This discussion is followed by a description of variable construction, editing, and other information about the data file. A copy of the Round Two Household Survey questionnaire appears in Appendix A. A discussion of the derivation of standard error look-up tables for use with the file is contained in Appendix B. Appendix C contains these tables. Appendix D provides instructions for the use of the SUDAAN software package to develop standard error estimates. Appendix E is an abbreviated version of the Household Survey questionnaire designed to help users follow the detailed questionnaire in Appendix A. Appendix F contains the Followback Survey questions. The *Community Tracking Study Household Survey Restricted Use File: Codebook (Round Two)* provides more detail on the file, including frequencies and definitions of variables. Information about the Round One Household Survey Restricted Use File can be found in the *Community Tracking Study Household Survey Restricted Use File: User’s Guide (Round One)* and the *Community Tracking Study Household Survey Restricted Use File: Codebook (Round One)*.

## OBTAINING AND USING THE RESTRICTED USE FILE

In order to obtain and use this Restricted Use File, researchers must apply for access to the data and agree to the strict terms and conditions contained in the *Community Tracking Study Household Survey Restricted Use Data Agreement*. Information about the application process and the data use agreement are available from the ICPSR website ([www.icpsr.umich.edu](http://www.icpsr.umich.edu)).

Before applying to use the CTS Household Survey Restricted Use File, researchers should consider whether the Public Use File would serve their analytic needs. The Public Use and Restricted Use versions differ in the amount of geographic detail provided, the confidentiality masking applied to some variables, and Followback Survey variables. The Restricted Use File contains site, state and county-level identifiers for each observation, while the Public Use File contains only site and state identifiers. In addition, some of the values for the state identifiers have been altered in the Public Use File but not in the Restricted Use File. The Restricted Use File contains information on chronic health conditions, while the Public Use File does not. Only the Restricted Use File contains information that allows the user to identify households and people that are part of both the Round One and Round Two samples. Lastly, the Restricted Use File includes variables from the Round Two Followback Survey, while the Public Use File does not.

For versions of the CTS Household Survey Restricted Use File that contain variables from the CTS Followback Survey (which is a supplement to the Household Survey that collects information on health insurance products from health plans and other organizations), special care must be taken to avoid publication or other dissemination of tables or analytic results that might permit the identification of individual health insurance plans, entities or products. In particular, tabulations of persons or families by plan characteristics for identified or easily identified sites or counties must not be released.

Information on the Public Use File is available in *Community Tracking Study Household Survey Public Use File: User's Guide* and *Community Tracking Study Household Survey Public Use File: Codebook*, available from the ICPSR web site ([www.icpsr.umich.edu](http://www.icpsr.umich.edu)).

## OBTAINING TECHNICAL ASSISTANCE

Information on the CTS Household Survey, the CTS Followback Survey, and the CTS in general, can be obtained through the HSC Internet home page at <http://www.hschange.org>. The Restricted Use File and the latest documentation are available through the Inter-university Consortium for Political and Social Research at <http://www.icpsr.umich.edu>.

Technical assistance on issues related to the data file may be obtained by contacting the CTS Help Desk by e-mail at [ctshelp@hschange.org](mailto:ctshelp@hschange.org) or fax (202-863-1763).

## VISIT THE HSC WEB SITE

[www.hschange.org](http://www.hschange.org)

For users of the CTS data files, the HSC Web site can be a valuable resource. In addition to the HSC technical publications and descriptions of the different CTS data collection activities, it has these useful features.

***CTSONline user-specified tables.*** CTSONline is an interactive Web-based system that allows users to request a wide variety of tables with estimates from the CTS surveys. Launched in June 2002, the system currently has results for the Physician Survey, and results for the Household Survey will be added soon.

***Lists of papers published from the public use and restricted use data files.*** In the section of the Web site that discusses the public and restricted use data, you can view a list of journal articles that have been published by users of the CTS public use and restricted use data files. If you have a paper based on the CTS data that is not included on the list, please let us know by sending an email to [CTSONline@hschange.org](mailto:CTSONline@hschange.org).

***Email list for updates on the CTS data.*** If you would like to receive email announcements when new versions of the CTS data files are released, go to the Web site and click on “Sign up for email alerts.” Then fill out the sign-up form and check the box specific to CTS email.



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## CHAPTER 1

### OVERVIEW OF THE COMMUNITY TRACKING STUDY AND THE HOUSEHOLD AND FOLLOWBACK SURVEYS

This guide is intended to assist researchers in using the Community Tracking Study (CTS) Round Two Household Survey Restricted Use File. The CTS is a national study of the rapidly changing health care market and the effects of these changes on people.<sup>1</sup> Funded by the Robert Wood Johnson Foundation, the study is being conducted by the Center for Studying Health System Change (HSC). Additional documentation and detailed information on the file layout and content are available in *Community Tracking Study Household Survey Restricted Use File: Codebook (Round Two)*. Information about other aspects of the CTS is available from HSC at [www.hschange.org](http://www.hschange.org). Technical assistance on issues related to the data file may be obtained by contacting the CTS Help Desk by e-mail at [ctshelp@hschange.org](mailto:ctshelp@hschange.org) or fax (202-863-1763).

#### 1.1. CTS OBJECTIVES

The CTS is designed to provide a sound information base for decisions made by health care leaders by collecting information on how the health system is evolving in 60 communities across the United States and the effects of those changes on people. Underway since 1996, the CTS is a longitudinal project that relies on periodic site visits and surveys of households, physicians and employers. While many studies have examined leading markets in California and Minnesota and analyzed local or selected data, there has been no systematic study of change in a broad cross-section of U.S. markets or analysis of the effects of those changes on service delivery, cost and quality. The Community Tracking Study is designed to provide sound empirical evidence that will inform the debate about health system change. The study addresses two broad questions that are important to public and private health decision-makers:

**How is the health system changing?** How are hospitals, health plans, physicians, safety net providers and other provider groups restructuring, and what key forces are driving organizational change?

**How do these changes affect people?** How are insurance coverage, access to care, use of services, health care costs and perceived quality of health care changing over time?

Focusing on communities is central to the design of the CTS. Understanding market changes requires studying local markets, including their culture, history and public policies relating to health care. HSC researchers randomly selected 60 communities stratified by region, community size and type (metropolitan-nonmetropolitan) to provide a representative profile of change across the United States.<sup>2</sup>

Of these communities, 12 are studied in depth, with site visits and survey samples large enough to draw conclusions about change in each community. These communities are a randomly selected subset of the sites that are metropolitan areas with more than 200,000 people and are referred to as the high-intensity sites.

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<sup>1</sup>An overview of the Community Tracking Study is contained in Kemper, et al. (1996).

<sup>2</sup>The CTS covers the contiguous 48 states. Alaska and Hawaii were not part of the study.

## 1.2. ANALYTIC COMPONENTS OF THE COMMUNITY TRACKING STUDY

The CTS has qualitative and quantitative components. Case studies in the 12 high-intensity sites make up one qualitative component of the CTS. The first three rounds of comprehensive case studies of the health systems in the 12 communities are completed. The first round was conducted in 1996 and 1997, the second in 1998 and 1999, and the third in 2000 and 2001. The findings are available from HSC.<sup>3</sup> This information is complemented by survey data from these 12 communities and from 48 additional sites, listed in Table 1.1. In all 60 sites, HSC simultaneously conducted independent surveys of households and physicians, enabling researchers to explore relationships among purchasers, providers, and consumers of health care. Another component of the CTS is the Followback Survey, in which the privately financed health insurance policies covering Household Survey respondents are “followed back” to the organization that administers the policy. The purpose of the Followback Survey is to obtain more detailed and accurate information about those private policies than Household Survey respondents could provide. A CTS survey of employers sponsored by the Robert Wood Johnson Foundation was conducted by RAND in 1996 and 1997.<sup>4</sup>

Data are being collected on a two-year cycle, allowing researchers to track changes in the health care system over time. The Round One Household and Physician surveys and case studies completed during 1996 and 1997 and the Followback Survey completed in 1997 and 1998 are the baseline. Data collection for the Round Two Household and Physician surveys began in 1998 and was completed in 1999. Round Two Followback Survey data collection was conducted during 1999 and 2000.

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<sup>3</sup>Community reports from each round are available through the HSC web site at [www.hschange.org](http://www.hschange.org).

<sup>4</sup>The Household and Physician surveys were conducted by HSC. The Employer Survey was conducted by RAND in collaboration with HSC. The surveys are available separately as both public and restricted use files. While these three surveys were conducted in the same communities, they were independent of one another and do not allow for the linking of persons, employers, or physicians.

TABLE 1.1

## SITES SELECTED FOR THE COMMUNITY TRACKING STUDY

High-Intensity Sites	Low-Intensity Sites	
Metro areas >200,000 population	Metro areas >200,000 population	Metro areas <200,000 population
01-Boston (MA)	13-Atlanta (GA)	49-Dothan (AL)
02-Cleveland (OH)	14-Augusta (GA/SC)	50-Terre Haute (IN)
03-Greenville (SC)	15-Baltimore (MD)	51-Wilmington (NC)
04-Indianapolis (IN)	16-Bridgeport (CT)	
05-Lansing (MI)	17-Chicago (IL)	Nonmetropolitan Areas
06-Little Rock (AR)	18-Columbus (OH)	
07-Miami (FL)	19-Denver (CO)	52-West Central Alabama
08-Newark (NJ)	20-Detroit (MI)	53-Central Arkansas
09-Orange County (CA)	21-Greensboro (NC)	54-Northern Georgia
10-Phoenix (AZ)	22-Houston (TX)	55-Northeastern Illinois
11-Seattle (WA)	23-Huntington (WV/KY/OH)	56-Northeastern Indiana
12-Syracuse (NY)	24-Killeen (TX)	57-Eastern Maine
	25-Knoxville (TN)	58-Eastern North Carolina
	26-Las Vegas (NV/AZ)	59-Northern Utah
	27-Los Angeles (CA)	60-Northwestern Washington
	28-Middlesex (NJ)	
	29-Milwaukee (WI)	
	30-Minneapolis (MN/WI)	
	31-Modesto (CA)	
	32-Nassau (NY)	
	33-New York City (NY)	
	34-Philadelphia (PA/NJ)	
	35-Pittsburgh (PA)	
	36-Portland (OR/WA)	
	37-Riverside (CA)	
	38-Rochester (NY)	
	39-San Antonio (TX)	
	40-San Francisco (CA)	
	41-Santa Rosa (CA)	
	42-Shreveport (LA)	
	43-St. Louis (MO/IL)	
	44-Tampa (FL)	
	45-Tulsa (OK)	
	46-Washington (DC/MD)	
	47-West Palm Beach (FL)	
	48-Worcester (MA)	

Note: The numbers listed above are a shorthand site identification and are provided in the data file as the variables SITE and SITEID.

### 1.3. THE HOUSEHOLD SURVEYS

The Round One and Round Two Household Surveys, funded by the Robert Wood Johnson Foundation, were conducted under the direction of HSC. Mathematica Policy Research, Inc. (MPR) was the primary contractor for survey designs, instrument development, sample designs and implementation, most of the interviewing, weighting, and variance estimation. Social and Scientific Systems, Inc. (SSS) was instrumental in converting the raw survey data into a data file suitable for analysis. MPR and SSS collaborated to prepare the documentation for the CTS Household Survey Restricted Use File.

The Household Survey instruments covered health insurance, use of health services, satisfaction with care, health status, and demographic information. A family informant provided information on insurance coverage, health resource use, usual source of care, and general health status of all family members. This informant also provided information on family income as well as employment, earnings, employer-offered insurance plans, and race/ethnicity for all adult family members. Each adult in the family (including the informant) responded through a self-response module (SRM) to questions regarding unmet needs, patient trust, satisfaction with physician choice, detailed health questions, risk and smoking behaviors, and the last doctor visit. The SRM included mostly subjective questions that could not be answered reliably by proxy respondents. The family informant responded on behalf of children regarding unmet needs and satisfaction with physician choice.<sup>5</sup> The adult family member who took the child to his or her last doctor visit responded to questions about this visit. (This adult family member might not have been the family informant.) A Spanish version of the instrument was used when appropriate.

The survey instruments used in the two rounds were similar, but not identical. The Round Two instrument altered some of the questions regarding public insurance and added questions concerning chronic health conditions. Chapter 2 contains more detailed information on those changes. The surveys were administered by telephone, using computer-assisted telephone interviewing technology.

Although the majority of the respondents in each round were selected through the use of a list-assisted random-digit-dialing sampling methodology, families without working telephones were represented in the sample as well. Field staff using cellular telephones enabled these families to complete interviews.

A sample of the telephone numbers from the Round One random-digit-dialing sample were included in the Round Two sample to improve precision for estimates of population change, to reduce costs, and to marginally increase response rates. While there are some individuals who responded to both rounds, the samples were not specifically designed as a longitudinal panel. The design does allow for comparisons of cross-sectional estimates between Round One and Round Two.

Round Two interviews for 58,956 individuals from 32,047 family insurance units (FIUs) were completed between July 1998 and October 1999.<sup>6</sup>

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<sup>5</sup>In families with more than one child under age 18, one child was randomly selected for inclusion in the survey.

<sup>6</sup>The family insurance unit (FIU) is based on groupings of people typically used by insurance carriers. It includes an adult household member, spouse, and dependent children up to age 18 (or age 18-22 if the child is in school). A more detailed definition of the FIU is presented in Chapter 2.

## 1.4. THE FOLLOWBACK SURVEYS

Like the Household Surveys, the Round One and Round Two Followback Surveys were funded by the Robert Wood Johnson Foundation and were conducted under the direction of HSC. MPR was the primary contractor for survey design, instrument development, sample design and implementation, interviewing, imputation, weighting, and variance estimation. SSS converted the raw survey data into analytic data files.

The purpose of the Followback Surveys was to obtain more detailed and accurate information about consumers' health insurance plans than they could provide. Thus, we contacted health plans and other organizations that were associated with those private policies in order to ask about the policy characteristics.<sup>7</sup> Because the Followback Surveys were not able to obtain information on all of the insurance policies covering the privately insured, information is available for only a portion of the full Household Survey sample. In Round Two, we were able to get information on 22,235 people, or 59 percent of the original Round Two sample of 37,486.<sup>8</sup> This final Round Two Followback Sample of 22,235, properly weighted, can be used to generate estimates that are nationally representative of the privately insured in the United States.

The information obtained from the Followback Survey respondents about health insurance characteristics includes product type, in-network and out-of-network coverage, and provider payment methods. Data for the Followback Survey were collected by telephone interviews. There were a few differences in data collection procedures for the two rounds, and those are discussed in Section 2.6. Interviews for the Round Two survey were conducted between December 1998 and October 2000.<sup>9</sup>

## 1.5. THE HOUSEHOLD SURVEY RESTRICTED USE AND PUBLIC USE FILES

Two versions of the CTS Household Survey data are available to researchers: the Restricted Use File and the Public Use File. The ***Restricted Use File*** may only be used under the conditions listed in the *Community Tracking Study Household Survey Restricted Use Data Agreement*. This agreement provides details on ownership of the data, when the data may be accessed and by whom, how the data may be used and reported, the data security procedures that must be implemented, and the sanctions that will be imposed in the case of data misuse. Researchers must specifically apply to the Inter-university Consortium for Political and Social Research (ICPSR) for use of the Restricted Use File. Copies of the agreement and a description of the application process are available from the ICPSR web site at [www.icpsr.umich.edu](http://www.icpsr.umich.edu).

The Restricted Use File is provided to researchers for use on only a specific research project (new applications would be required for subsequent analyses) and for a limited time, after which all copies of the data must be destroyed. Moreover, researchers using the Restricted Use File may be required to undertake costly or inconvenient security measures.

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<sup>7</sup> Most organizations contacted for the Followback Surveys were health plans. Other types of respondents included managed care organizations, third-party administrators, employer or union plans, and employers. These organizations are also generically referred to as "entities" for the purposes of the Followback Surveys.

<sup>8</sup> In Round One, information is available for 28,578 people, 75 percent of the original sample of 38,310.

<sup>9</sup> Round One data collection was conducted from October 1997 to August 1998.



The Public Use File is also available from ICPSR. Researchers need not specifically apply for use of the Public Use File. It is suitable for most researchers who wish to perform analysis at the national or site level. The Public Use File does not support analysis at the county level or analysis that uses county-level data. The Public Use File contains observations on the same individuals and families as the Restricted Use File.

***The Public Use and Restricted Use versions differ in the amount of geographic detail provided, the confidentiality masking applied to some variables, and Followback Survey variables. The Restricted Use File contains site, state and county-level identifiers for each observation, while the Public Use File contains only site and state identifiers. In addition, some of the values for the state identifiers have been altered in the Public Use File but not in the Restricted Use File. The Restricted Use File contains information on chronic health conditions, while the Public Use File does not. Only the Restricted Use File contains information that allows the user to identify households and people that are part of both the Round One and Round Two samples. Lastly, the Restricted Use File includes variables from the Round Two Followback Survey, while the Public Use File does not.***

## CHAPTER 2

### THE STRUCTURE AND CONTENT OF THE COMMUNITY TRACKING STUDY HOUSEHOLD AND FOLLOWBACK SURVEYS

The Household Survey was administered to households in the 60 CTS sites and to an independent national sample of households. The Followback Survey was administered to health plans associated with the private comprehensive health insurance policies identified by Household Survey respondents. The CTS's three-tier sample design makes it possible to develop estimates at the national and community (site) levels:

- The first tier is a sample of 12 communities from which a large number of households in each community were surveyed. The sample in each of these “high-intensity” sites was large enough to support estimates in each site.
- The second tier is a sample of 48 communities from which a smaller sample of households in each community was surveyed. This sample of “low-intensity” sites allows us to validate results from the high-intensity sites and permits findings to be generalized to the nation. The first and second tiers together are known as the *site sample*.
- The third tier is a smaller, independent national sample known as the *supplemental sample*. This sample augments the site sample and substantially increases the precision of national estimates with a relatively modest increase in total sample.

The analysis of survey data from the CTS's three-tier sample design is more complex than it would be if a simpler sample design were used. Chapter 3 explains how to choose the sample and weighting variables appropriate for your analysis. This chapter describes the sample design, the process of conducting the survey, and the survey content.

#### 2.1. CTS SAMPLE SITES

The primary goal of the CTS is to track health system change and its effects on people at the local level. The first step in designing the CTS sample, therefore, was to determine the appropriate communities, or sites, to study. Three issues were central to the sample design: the definition of the sites, the number of sites, and the selection of the sites.

##### 2.1.1. Definition of Sites

The sites encompass local health care markets. Although there are no set boundaries for these local markets, the intent was to define areas such that residents predominately used health care providers in their area and providers served predominately area residents. We generally defined sites as metropolitan statistical areas (MSAs) as defined by the Office of Management and Budget

or the nonmetropolitan portions of economic areas as defined by the Bureau of Economic Analysis (BEAEAs).<sup>10</sup>

### 2.1.2. Number of Sites

The next step in creating the site sample was to determine the number of high-intensity sites. In making this decision, we considered the tradeoffs between data collection costs (case studies plus survey costs) and the research benefits of a large sample of sites. The research benefits of a larger number of sites include a greater ability to empirically examine the relationship between system change and its effect on care delivery and consumers and to make the study findings more “generalizable” to the nation. Despite the cost advantages of conducting intensive case studies in fewer sites, focusing on a smaller number of communities makes it more difficult to distinguish between changes of general importance and changes or characteristics unique to a community. Solving this problem by increasing the number of case study sites would make the cost of data collection and analysis prohibitively high.

We chose 12 sites for intensive study and added 48 sites for less-intensive study. These 60 high-intensity and low-intensity sites form the *site sample*. Although there was no formal scientific basis for choosing 12 high-intensity sites, this number reflects a balance between the benefits of studying a range of different communities and the costs of doing so. The addition of 48 low-intensity sites solves the problem of limited generalizability associated with only 12 sites and provides a benchmark for interpreting how representative the high-intensity sites are.

### 2.1.3. Site Selection

Once the number of sites for the site sample had been determined, we selected the actual sites. Shown previously in Table 1.1, the 60 sites, or “primary sampling units,” were chosen for the first stage of sampling. Sites were sampled by stratifying them geographically by region and selecting them randomly, with probability in proportion to their 1992 population. There were separate strata for small MSAs (population of less than 200,000) and for nonmetropolitan areas. The high-intensity sites were selected randomly from MSAs with a 1992 population of 200,000 or more. Of the low-intensity sites, 36 are large metropolitan areas (also having a 1992 population of 200,000 or more), 3 are small metropolitan areas (population of less than 200,000), and 9 are nonmetropolitan sites. The *Community Tracking Study Site-County Crosswalk*, available through ICPSR at [www.icpsr.umich.edu](http://www.icpsr.umich.edu), identifies the specific counties, by FIPS code, that make up each CTS site. This sampling approach provided maximum geographic diversity, judged critical for the 12 high-intensity sites in particular, and acceptable natural variation in city size and degree of market consolidation.<sup>11</sup>

Together, the high-intensity and low-intensity sites account for about 90 percent of all Round Two survey respondents and can be used to make national estimates. The sample of high-intensity sites may also be used to make site-specific estimates for these twelve sites. However, the small sample size for each low-intensity site means that site-specific estimates for these sites will not be precise enough to support separate site analyses.

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<sup>10</sup>For more details on the definition of CTS sites, refer to Metcalf, et al. (1996).

<sup>11</sup>Additional information about the number of sites and the random selection of the site sample is available in Metcalf et al. (1996).

## 2.2. ADDITIONAL SAMPLES AND BETTER NATIONAL ESTIMATES

Although the site sample alone will yield national estimates, they will not be as precise as they could have been had more communities been sampled or had the sample been a simple random sample of the entire U.S. population. The *supplemental sample*, the third tier in the design of the CTS Household Survey sample, was added to increase the precision of national estimates at a relatively small incremental increase in survey costs.

The supplemental sample is a relatively small, nationally representative sample made up of households randomly selected from the 48 states in the continental United States. It is stratified by region but essentially uses simple random sampling techniques within strata. When it is added to the site sample to produce national estimates, the resulting sample is called the *combined sample*.

In addition to making national estimates from the site sample more precise, the supplemental sample also slightly enhances site-specific estimates derived from the site sample. Because approximately half of the U.S. population lives in the 60 site sample communities, approximately half of the supplemental sample also falls within those communities. Therefore, when a site-specific estimate is made, the individual site sample can be augmented with observations from the supplemental sample. The resulting sample is known as the *augmented site sample*.

Figure 2.1 illustrates the sample design. Site-specific estimates may be obtained from the site sample alone or the augmented site samples. The shaded area shows the augmented site sample for site 2. National estimates may be obtained from the site sample alone, the supplemental sample alone, the augmented site sample, or the combined sample. The combined sample will provide the most precise estimates. Generally, the site sample alone will provide more precise estimates than those provided by the supplemental sample alone because the site sample is larger. Decisions about which sample to use for a specific analysis will depend on the analysis and the level of precision required (see Chapter 3 for a discussion of when to use a particular sample).

FIGURE 2.1

THE CTS ROUND TWO HOUSEHOLD SAMPLE STRUCTURE

Site Sample (52,974 individuals)	Supplemental Sample (5,982 individuals)
<b>High-Intensity Sites</b> (26,365 individuals)	<b>High-Intensity Sites</b> (461 individuals)
Site 1	Site 1
Site 2	Site 2
Site 3	Site 3
.	.
.	.
.	.
Site 12	Site 12
<b>Low-Intensity Sites</b> (26,609 individuals)	<b>Low-Intensity Sites</b> (1,982 individuals)
Site 13	Site 13
Site 14	Site 14
Site 15	Site 15
.	.
.	.
.	.
Site 60	Site 60
	<b>Other areas</b> (3,539 individuals)

## 2.3. CONDUCTING THE HOUSEHOLD SURVEY

After selecting the sample sites, we selected households within each site. The Round One Household Survey used a sample that was derived by randomly selecting households within each site using Random Digit Dialing techniques. This was augmented with a non-telephone sample consisting of households that did not have a telephone.<sup>12</sup> We also randomly selected households for the supplemental sample, an independent national sample.

The Round Two Household Survey sample was derived by randomly selecting a sample of Round One telephone numbers and adding some randomly selected households with telephone numbers that were not part of the Round One sample. We also attempted to both recontact the addresses that were part of the Round One non-telephone sample and contact some new addresses of households without telephones. The supplemental sample was comprised of some telephone numbers selected in Round One and some new, randomly selected households.<sup>13</sup>

Our goals in sampling the Round One telephone numbers were to improve precision for estimates of population change, to reduce costs, and to increase response rates. We did not attempt to trace individuals between rounds because of poor tracking information and the expected high cost and low response rates for movers. Consequently, the CTS Household Surveys should not be considered a panel survey but rather as two cross-sectional surveys.

Once we contacted the selected households, we determined the composition of each household, grouped household members into family insurance units (FIUs), and obtained information on each adult in each FIU. If a FIU contained one child, we collected information about him or her. If a FIU contained two or more children, we collected information about one randomly selected child. Figure 2.2 shows an overview of survey procedures. The interview process is described below.

### 2.3.1. Households

At the beginning of the interview, a household informant was identified (typically the person who answered the phone, if it was an adult) and queried about the composition of the household.<sup>14</sup> The person who owned or rented the home was identified as the head of the household, or the householder. People who usually live in the household but who were temporarily living elsewhere, including college students, were included in the household.

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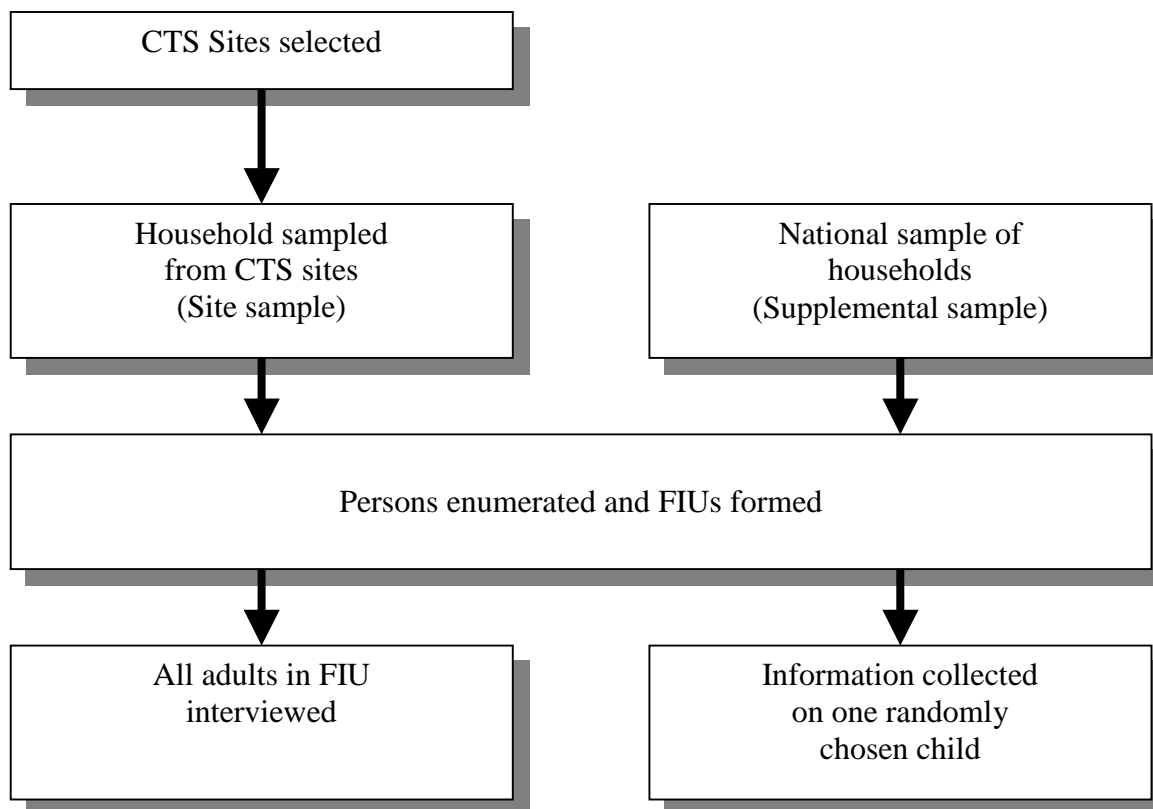
<sup>12</sup> The non-telephone sample consisted of households in the high-intensity sites who did not have telephones or who had substantial interruptions in telephone service. Within the high-intensity sites, the general strategy was to select geographic clusters through probability proportional to size sampling; count, list, and select housing units within these clusters; and screen this sample for eligible households. Refer to Strouse, et al. (1998) for details.

<sup>13</sup> Refer to Strouse, et al. (2002) for additional information on Round Two sample selection.

<sup>14</sup> Note that the household informant was identified only for the purpose of obtaining information to be used in identifying family insurance units. The household informant is not identified on the Restricted Use File. Designation of the household informant in Round One had no bearing on the designation of the household informant in Round Two.

FIGURE 2.2

OVERVIEW OF HOUSEHOLD SURVEY PROCEDURES



### 2.3.1.1. Family Insurance Units

Individuals in the household were grouped into FIUs.<sup>15</sup> A FIU reflects family groupings typically used by insurance carriers, which differ from groupings defined by the Bureau of the Census.<sup>16</sup> A FIU is also similar to the filing unit used by Medicaid and state-subsidized insurance programs. The FIU includes an adult household member, his or her spouse, if any, and any dependent children 0-17 years of age or 18-22 years of age if a full-time student (even if living outside the household).

All FIUs were selected to participate in the remainder of the interview as long as there was at least one civilian adult in the unit.<sup>17</sup> In each FIU, one informant was responsible for providing the bulk of the information about the family and its members. Figure 2.3 shows how one household of seven people could be divided into three FIUs. In this example, the head's spouse is the household informant because he/she answered the telephone and is familiar with the composition of the household. Because he/she is also familiar with the health care of her family members, he/she is also the informant for the first FIU (F1). The head's father is the informant for family unit two (F2), and the unrelated boarder responds for himself (F3). The head's daughter is the randomly selected child in F1 and the head's son is not in the survey.<sup>18</sup>

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<sup>15</sup> FIUs were constructed using information collected in Round Two. The structure of the FIU in Round One, if available, had no bearing on the Round Two structure.

<sup>16</sup>The Census Bureau's definition of a family includes all people related to the head of the household either by blood or marriage; it is often larger than a FIU.

<sup>17</sup>For the Household Survey, individuals who were not on active military duty at the time of the interview were considered to be civilians.

<sup>18</sup>The distinction between a FIU and a Census family can also be illustrated by Figure 2.3. Family insurance units F1 and F2 together would constitute a Census family unit.



FIGURE 2.3

## EXAMPLE OF FIUs IN A HYPOTHETICAL HOUSEHOLD

Members of Household	FIU
Head of Household	F1
Head of Household's Spouse	
Head of Household's Daughter	
Head of Household's Son	
Head of Household's Father	F2
Head of Household's Mother	
Unrelated Boarder	F3

**2.3.1.2. Individuals**

In addition to providing information about his or her FIU, each family informant was asked questions about his or her own health care situation and experiences. Other civilian adults in the FIU were similarly interviewed. In FIUs containing more than one child, information on one randomly selected child was collected. "Child" was defined as an unmarried individual younger than 18. As stated above, full-time college students (age 18-22), even if they were living away from home at the time of the survey, were listed as household members and were included in their parents' FIU. These students were treated as adults in the survey; that is, they were asked all the questions asked of adults and could not be the randomly selected child.

For Round Two, selection was random within a FIU if the FIU contained no children interviewed in Round One. If a FIU contained one child for whom data were collected in Round One, that child was selected. If there were more than one such child (as Round One FIUs were combined), we randomly selected one such child.

**2.3.1.3. Individuals Excluded from the File**

The computerized survey instrument imposed a maximum of eight persons per household to be included in the survey. All members of responding households were identified by the household informant, but in the rare instance of households exceeding eight persons, the interviewers were instructed to list all adults in the household first and then as many children as possible before reaching the maximum. However, the fact that a household member was enumerated does not necessarily mean that the person ended up on the survey data file. As mentioned, in families with more than one child under age 18, one child was randomly selected for the survey. Any children

not selected were left off the file but are represented statistically by the children who are on the file.

Some household members were classified as ineligible and therefore not included on the file. To avoid giving unmarried full-time college students (age 18-22) multiple chances of selection, they were excluded from sampled dwellings in which their parents did not reside. Similarly, unmarried children under age 18 with no parent or guardian in the household were also excluded. Adults on active military duty were also classified as ineligible; however, such a person could have acted as a family informant as long as there was at least one civilian adult in the family. Families in which all adults were active duty military personnel were considered ineligible for the survey and were excluded from the file.

Some of the families listed by, but not including the household informant, did not respond to the interview. Nonresponding families were excluded from the file but are statistically represented by responding families. Adult family members who did not respond to the self-response module were included on the file as long as the core interview contained responses for them.<sup>19</sup>

## **2.4. HOUSEHOLD SURVEY QUESTIONS**

Respondents to the survey were questioned about the following:

- Household composition
- Health insurance coverage
- Use of health services
- Unmet needs and expenses
- Usual source of care
- Patient trust and satisfaction
- Last visit to a medical provider
- Health status (and SF-12)
- Presence of chronic conditions
- Risk behaviors and smoking
- Employment, earnings, and income
- Demographic characteristics

Not all questions were asked of all respondents. Only the household informant was asked about household composition. Family informants were asked about the insurance coverage, service use, usual source of care, general health status, employment, earnings, income, and demographic characteristics of all FIU members selected for the survey. Each adult, not just the family informant, provided information on unmet needs, patient trust, satisfaction, last visit, health status, and risk behaviors as part of the survey's self-response module. Information about the randomly selected child was provided by the family informant and the adult in the family who took the child to the last doctor visit.

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<sup>19</sup> Ten people had such high levels of nonresponse to individual survey questions that they were considered to be nonrespondents and so were excluded from the file. They are also statistically represented by survey respondents.

Table 2.1 shows the topics covered in the survey and who, according to the hypothetical household in Figure 2.3, responded to the questions under each section. Table 2.2 delineates the survey content in more detail. Geographic and chronic condition variables that are available only on the Restricted Use File are noted. Detailed documentation for the computer-assisted telephone interview program, the equivalent of a survey instrument, is provided in Appendix A.<sup>20</sup> Appendix E is a simplified representation of Appendix A.

#### **2.4.1. Differences Between Round One and Round Two Content**

The survey instruments used in Round One and in Round Two were similar, but not identical. For example, the Round Two instrument altered the skip logic for some of the questions regarding public insurance and added questions concerning chronic health conditions. Tables 2.3 and 2.4 list the variables added or dropped between the Round One and Round Two data files. Table 2.5 shows how the changes in the skip logic affected the coverage of some of the insurance questions.

### **2.5. HOUSEHOLD SURVEY ADMINISTRATION AND PROCESSING**

The survey was administered by telephone, using computer-assisted telephone interviewing technology. Although the majority of the respondents were selected using list-assisted random-digit-dialing sampling methodology, families without working telephones were represented in the sample as well.<sup>21</sup> Field staff provided a cellular telephone so that family members could respond to the computer-assisted telephone interview. The survey was fielded between July 1998 and October 1999. The total number of completed interviews consisted of 32,047 FIUs and 58,956 individuals.

Sixty six percent of the eligible random-digit-dialing and field sample households had at least one family complete the Round Two survey. Ninety six percent of the families in these households completed the survey, for a cumulative response rate of 63 percent.<sup>22</sup> Tables 2.6 and 2.7 show the number of FIUs and individuals interviewed for each site and each sample.

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<sup>20</sup>The term “interviewing unit” used in the questionnaire is synonymous with FIU. The term “householder” used in the questionnaire is synonymous with household informant.

<sup>21</sup>Families without working telephones were sampled from Census blocks with lower telephone penetration rates, as observed in the 1990 Census. For more details on survey sampling and operations, refer to Strouse et al. (2001).

<sup>22</sup> This is comparable to the response rates experienced for Round One, in which 66 percent of eligible households had at least one family complete the survey and 96 percent of families in those households completed the survey, for a Round One cumulative response rate of 64 percent.

TABLE 2.1  
SOURCE OF DATA FOR INDIVIDUALS, BY QUESTION TOPIC  
(Illustrative household described in Figure 2.3)

Family Insurance Unit Member	Question Topic													
	Household Composition	Insurance Coverage	Resource Use/ Expenses	Unmet Needs	Usual Source Of Care	Patient Trust	Satisfaction	Last Visit	General Health Status	Chronic Conditions	Risk/ Smoking/ SF-12	Employment/ Earnings/ Employer Plan	Family Income	Race

First Family Insurance Unit

Family Informant	<b>H</b>	<b>F1</b>	<b>F1</b>	<b>F1</b>	<b>F1</b>	<b>F1</b>	<b>F1</b>	<b>F1</b>	<b>F1</b>	<b>F1</b>	<b>F1</b>	<b>F1</b>	<b>F1</b>	<b>F1</b>
Spouse	<b>H</b>	<b>F1</b>	<b>F1</b>	<b>SRM</b>	<b>F1</b>	<b>SRM</b>	<b>SRM</b>	<b>SRM</b>	<b>F1 and SRM</b>	<b>SRM</b>	<b>SRM</b>	<b>F1</b>	<b>F1</b>	<b>F1</b>
Randomly Selected Child	<b>H</b>	<b>F1</b>	<b>F1</b>	<b>F1</b>	<b>F1</b>	<b>Not Asked</b>	<b>F1</b>	<b>FC</b>	<b>FC</b>	<b>FC</b>	<b>Not Asked</b>	<b>Not Asked</b>	<b>F1</b>	<b>Not Asked</b>
Other Children	<b>H</b>	Data not available - Not randomly selected child												

Second Family Insurance Unit

Family Informant	<b>H</b>	<b>F2</b>	<b>F2</b>	<b>F2</b>	<b>F2</b>	<b>F2</b>	<b>F2</b>	<b>F2</b>	<b>F2</b>	<b>F2</b>	<b>F2</b>	<b>F2</b>	<b>F2</b>	<b>F2</b>
Spouse	<b>H</b>	<b>F2</b>	<b>F2</b>	<b>SRM</b>	<b>F2</b>	<b>SRM</b>	<b>SRM</b>	<b>SRM</b>	<b>F2 and SRM</b>	<b>SRM</b>	<b>SRM</b>	<b>F2</b>	<b>F2</b>	<b>F2</b>

Third Family Insurance Unit

Unrelated Adult	<b>H</b>	<b>F3</b>	<b>F3</b>	<b>F3</b>	<b>F3</b>	<b>F3</b>	<b>F3</b>	<b>F3</b>	<b>F3</b>	<b>F3</b>	<b>F3</b>	<b>F3</b>	<b>F3</b>	<b>F3</b>
-----------------	----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

Notes:

<b>H</b>	Data provided by the household informant (typically person who answers the telephone, if adult)
<b>Fi</b>	Data provided by family informant for family insurance unit I
<b>SRM</b>	Data provided by the individual adult family member via the Self-Response Module questions
<b>Fi/SRM</b>	Data on general health status provided by the family informant and each individual adult family member via the Self-Response Module. In constructing the variable GENHLH, the SRM response was used when available. Otherwise, the family informant's response was used.
<b>FC</b>	Data provided by adult in family who took randomly selected child to last doctor visit

TABLE 2.2  
CONTENT OF THE HOUSEHOLD SURVEY

Health Insurance (Questionnaire Section B)	
Private insurance coverage	Covered by employer- or union-related private insurance Covered by other private insurance: Directly purchased Premium for directly purchased private insurance Provided by someone not in household
Public insurance coverage	Covered by Medicare Covered by both Medicare and supplemental private insurance Covered by both Medicare and Medicaid Covered by Medicaid Covered by other public insurance (military, Indian Health Service, other state and local)
Uninsured	Not covered by public or private insurance
Continuity of coverage/ changes in coverage	Currently insured; lost coverage in past 12 months Currently uninsured; gained coverage in past 12 months Uninsured during all of past 12 months Uninsured at some point in past 12 months Reasons for losing health insurance coverage Any type of change in health coverage: Changed private insurance plans Reasons for changing private plans Whether previous plan was HMO/non-HMO Changed from public or private plans Gained or lost coverage
Insurance plan attributes	Whether plan requires signing up with primary care doctor or clinic for routine care Whether plan requires approval or referral to see a specialist Whether plan requires choosing a doctor or clinic from a book, directory, or list Whether plan is a HMO Whether plan will pay any costs for out-of-network care
Other insurance variables	Ever enrolled in a HMO Number of total years enrolled in a HMO

\*Denotes information obtained from the Self-Response Module.

TABLE 2.2  
CONTENT OF THE HOUSEHOLD SURVEY  
(Continued)

Access to Health Care	
Usual source of care (Section D)	Currently has/does not have a usual source of care Type of place of usual source of care Type of professional seen at usual source of care Reason for changing usual source of care
Travel/waiting time for Physician visit (Section E)	Lag time between making appointment and seeing doctor at last Physician visit* Travel time to physician's office at last visit* Time spent in waiting room before seeing medical person at last Physician visit*
Difficulty getting needed services in past year (Section C)	Did not get needed services* Delayed getting needed services* Reasons for delaying or not getting needed services*
Resource Use	
Use of ambulatory services in past 12 months (Section C)	Number of physician visits Number of emergency room visits Number of visits to nonphysician providers (nurse practitioner, physician assistant, midwife) Whether there were any mental health visits Number of surgical procedures
Use of inpatient services in past 12 months (Section C)	Number of overnight hospital stays Number of overnight hospital stays excluding delivery/birth Number of inpatient surgical procedures Total number of nights spent in hospital
Preventive service use (Section C)	Whether person has had flu shot in past 12 months Whether person has ever had mammogram (asked of women) If yes, time elapsed since last mammogram
Nature of last physician visit (Section E)	Reason for last visit: Illness or injury* Checkup, physical exam, other preventive care* Type of physician seen at last visit (PCP or specialist)* Whether last visit was to usual source of care* Whether last visit was to an emergency room* Whether last visit was with appointment or walk-in*
Costs (Section C)	Total family out-of-pocket expenses for health care in past 12 months

\*Denotes information obtained from the Self-Response Module.

TABLE 2.2  
CONTENT OF THE HOUSEHOLD SURVEY  
(Continued)

Satisfaction and Patient Trust	
General satisfaction (Section E)	Overall satisfaction with health care received by family Satisfaction with choice of primary care doctors* Satisfaction with choice of specialists*
Satisfaction with last doctor visit (Section E)	Satisfaction with thoroughness and carefulness of exam* Satisfaction with how well doctor listened* Satisfaction with how well doctor explained things*
Patient's trust in physicians (Section D)	Agree/disagree that doctor may not refer to specialist when needed* Agree/disagree that doctor may perform unnecessary tests or procedures* Agree/disagree that doctor is influenced by health insurance company rules* Agree/disagree that doctor puts patient's medical needs above all other considerations*
Employment and Earnings	
Employment status and Characteristics (Section F)	Whether adult respondent has the following characteristics: Owned a business or farm Worked for pay or profit in the past week Had more than one job or business Worked for private company/government/self-employed/family business Average hours worked per week, at primary job and at other jobs Size of firm (number employees), at site where respondent works; at all sites Type of industry
Earnings (Section F)	Earnings, from primary job and from all jobs
Health insurance options at Place of employment (Sections B and F)	Whether eligible for health insurance coverage by employer Reasons for ineligibility Whether offered health insurance coverage by employer Reasons for declining coverage (if eligible but not covered) Whether offered multiple plans Whether offered HMO plan Whether offered non-HMO plan

\*Denotes information obtained from the Self-Response Module.

TABLE 2.2  
CONTENT OF THE HOUSEHOLD SURVEY  
(Continued)

Other Variables	
Demographics (Section A)	Age Gender Highest education level completed Whether the interview was administered in Spanish CTS site State County (Restricted Use File only)
Health status (Section E)	Overall health status (5-point scale from excellent to poor)* Limited in moderate activity* Limited in climbing stairs* Accomplished less because of physical health* Limited in kind of work because of physical health* Accomplished less because of emotional health* Less careful in work because of emotional health* Pain interfered with work* How much time have health problems interfered with social activities* How much time calm and peaceful* How much time have energy* How much time downhearted/blue* SF-12 scores: Physical Component Summary; Mental Component Summary*
Chronic conditions (Section E)	<i>Available on Restricted Use File only:</i> Presence of chronic conditions, including recent childbirth, acne, headaches, abnormal uterine bleeding, alcohol-related problems, cataracts, diabetes, arthritis, asthma, pulmonary disease, atrial fibrillation, hypertension, high cholesterol, atherosclerosis, heart diseases, cancers, hernia, ulcer, gastritis, depression, HIV, AIDS, ADHD, asthma, tuberculosis, sickle cell disease, diabetes, ear infections
Family income (Section G)	Family Income Race
Consumer preferences (Section B)	Whether person would be willing to accept limited provider choice in order to save on out-of-pocket expenses*
Risk behaviors (Section E)	Whether person agrees that he/she is more likely to take risks than the average person*
Smoking cessation interventions (Section E)	Whether person has smoked at least 100 cigarettes in lifetime* Whether currently smoking cigarettes every day, some days, or not at all* Average number of cigarettes smoked per day in past 30 days* How long since quit smoking* Whether stopped smoking one day or longer in past 12 months, in effort to quit* Whether doctor advised smoker to stop smoking in past 12 months*

\*Denotes information obtained from the Self-Response Module.



TABLE 2.3

**DIFFERENCES BETWEEN THE ROUND ONE AND ROUND TWO HOUSEHOLD  
SURVEY DATA FILES: VARIABLES ADDED IN ROUND TWO**

Variable Name	Question Number	Questionnaire Text
<b>Section C: Resource Use During the Last Twelve Months*</b>		
DPHYEXM	c3p1	[ASK OF ALL PERSONS] (Were any of these visits/Was this visit) for routine preventive care such as a physical examination (well-child if child <5) or check up?
DRTNPRM	c3c1	(Were any of these visits/Was this visit) for a routine check up for an ongoing health problem?
<b>Section D: Usual Source of Care/Patient Trust*</b>		
USCRHLH	d161	Did [fill NAME] change the [fill PROVIDER/PLACE] (you/he/she) usually (go/goes) for health care because [fill NAME] or [fill NAME]'S employer changed health plans, because [fill NAME]'s [fill PROVIDER/PLACE] was not covered by the health plan, or for some other reason?
USCROTH	d171	Which of the following reasons best describes why [fill NAME] changed the place (you/he/she) usually go(es) for health care? NOTE: Use second person for child and informant.
<b>Section E: Satisfaction/Risk Behaviors*</b>		
HAVBABY	cc1	During the past two years, have you had a baby?
ACNE	cc2a	During the past two years, have you seen a doctor or health care professional for acne?
HDACHE	cc2b	During the past two years, have you seen a doctor or health care professional for every frequent or severe headaches, including migranes?
UTRNBLD	cc2c	During the past two years, have you seen a doctor or health care professional for IF FEMALE: abnormal uterine bleeding?
ALCHPRM	cc2d	During the past two years, have you seen a doctor or health care professional for alcohol related problems?
CATRCT	cc3a	Has a doctor or health professional ever told you that you had:[IF OVER 50 YEARS] cataracts?
CATRCTX	c3a	During the past two years, have you seen a doctor or other health care professional for [IF OVER 50 YEARS] cataracts?
DIABET	cc3b	Has a doctor or health professional ever told you that you had: diabetes or high blood sugar?
DIABETX	c3b	During the past two years, have you seen a doctor or other health care professional for diabetes or high blood sugar?
ARTHR	cc3c	Has a doctor or health professional ever told you that you had: arthritis?
ARTHRX	c3c	During the past two years, have you seen a doctor or other health care professional for arthritis?

\*The variables in this table from Sections C and D are available on both the Public and Restricted Use Files. The variables in this table from Section E are available only on the Restricted Use File.

TABLE 2.3

DIFFERENCES BETWEEN THE ROUND ONE AND ROUND TWO HOUSEHOLD  
SURVEY DATA FILES: VARIABLES ADDED IN ROUND TWO  
(Continued)

Variable Name	Question Number	Questionnaire Text
RHARTHR	c3ac	Did the doctor tell you that you have a special kind of arthritis called Rheumatoid Arthritis?
ASTHMA	cc3d	Has a doctor or health professional ever told you that you had: asthma?
ASTHMAX	c3d	During the past two years, have you seen a doctor or other health care professional for asthma?
COPD	cc3e	Has a doctor or health professional ever told you that you had: chronic obstructive pulmonary disease
COPDX	c3e	During the past two years, have you seen a doctor or other health care professional for chronic obstructive pulmonary disease
ATLFBR	cc3f	Has a doctor or health professional ever told you that you had: atrial fibrillation?
ATLFBRX	c3f	During the past two years, have you seen a doctor or other health care professional for atrial fibrillation?
HYPTEN	cc3g	Has a doctor or health professional ever told you that you had: hypertension or high blood pressure?
HYPTENX	c3g	During the past two years, have you seen a doctor or other health care professional for hypertension or high blood pressure?
HICHOL	cc3h	Has a doctor or health professional ever told you that you had: high cholesterol?
HICHOLX	c3h	During the past two years, have you seen a doctor or other health care professional for high cholesterol?
ATHRSCL	cc4a	Has a doctor or health professional ever told you that you had: hardening of the arteries, also called atherosclerosis or arteriosclerosis?
ATHRSCX	c4a	During the past two years, have you seen a doctor or other health care professional for hardening of the arteries, also called atherosclerosis or arteriosclerosis?
ISCHMC	cc4b	Has a doctor or health professional ever told you that you had: ischemic heart disease?
ISCHMCX	c4b	During the past two years, have you seen a doctor or other health care professional for ischemic heart disease?
ANGINA	cc4c	Has a doctor or health professional ever told you that you had: angina?
ANGINAX	c4c	During the past two years, have you seen a doctor or other health care professional for angina?
CABG	c4ae	Have you every had angioplasty - or heart bypass surgery?
CHF	cc4d	Has a doctor or health professional ever told you that you had: congestive heart failure?

TABLE 2.3

**DIFFERENCES BETWEEN THE ROUND ONE AND ROUND TWO HOUSEHOLD  
SURVEY DATA FILES: VARIABLES ADDED IN ROUND TWO  
(Continued)**

Variable Name	Question Number	Questionnaire Text
CHFX	c4d	During the past two years, have you seen a doctor or other health care professional for congestive heart failure?
DIURTC	c4af	Have you ever taken water pills, called diuretics, to treat a heart condition?
STROKE	cc4e	Has a doctor or health professional ever told you that you had: a stroke?
STROKEX	c4e	During the past two years, have you seen a doctor or other health care professional for a stroke?
BRTCAN	cc5b	Has a doctor or health professional ever told you that you had: IF FEMALE: breast cancer.
BRTCANX	c5b	During the past two years, have you seen a doctor or other health care professional for IF FEMALE: breast cancer.
SKNCAN	cc5c	Has a doctor or health professional ever told you that you had: skin cancer?
SKNCANX	c5c	During the past two years, have you seen a doctor or other health care professional for skin cancer?
LNGCAN	cc5d	Has a doctor or health professional ever told you that you had: lung cancer?
LNGCANX	c5d	During the past two years, have you seen a doctor or other health care professional for lung cancer?
CLNCAN	cc5e	Has a doctor or health professional ever told you that you had: cancer of the colon or rectum?
CLNCANX	c5e	During the past two years, have you seen a doctor or other health care professional for cancer of the colon or rectum?
PRSCAN	cc5f	Has a doctor or health professional ever told you that you had: IF MALE, OVER 50: cancer of the prostate
PRSCANX	c5f	During the past two years, have you seen a doctor or other health care professional for IF MALE, OVER 50: cancer of the prostate
PRSBGN	cc5g	Has a doctor or health professional ever told you that you had: IF MALE OVER 50: benign prostate disease or a large prostate that was not prostate cancer
PRSBGNX	c5g	During the past two years, have you seen a doctor or other health care professional for IF MALE OVER 50: benign prostate disease or a large prostate that was not prostate cancer
HERNIA	cc6a	Has a doctor or health professional ever told you that you had: a hernia in the groin area?
HERNIAX	c6a	During the past two years, have you seen a doctor or other health care professional for a hernia in the groin area?
ULCER	cc6b	Has a doctor or health professional ever told you that you had: an ulcer?
ULCERX	c6b	During the past two years, have you seen a doctor or other health care professional for an ulcer?
GASTRS	cc6c	Has a doctor or health professional ever told you that you had: gastritis?

TABLE 2.3

**DIFFERENCES BETWEEN THE ROUND ONE AND ROUND TWO HOUSEHOLD  
SURVEY DATA FILES: VARIABLES ADDED IN ROUND TWO**

(Continued)

Variable Name	Question Number	Questionnaire Text
GASTRSX	c6c	During the past two years, have you seen a doctor or other health care professional for gastritis?
HIV	cc6d	Has a doctor or health professional ever told you that you had: HIV or AIDS?
HIVX	c6d	During the past two years, have you seen a doctor or other health care professional for HIV or AIDS?
DPRESN	cc6e	Has a doctor or health professional ever told you that you had: depression?
DPRESNX	c6e	During the past two years, have you seen a doctor or other health care professional for depression?
KACNE	ee2a	Has [fill NAME] ever seen a doctor or health care professional for: acne?
KHDACHE	ee2b	Has [fill NAME] ever seen a doctor or health care professional for: very frequent or severe headaches, including migraines?
KEARINF	ee2c	Has [fill NAME] ever seen a doctor or health care professional for: four or more ear infections in any one year?
KEARTUB	ee3	Has [fill NAME] ever had tubes placed in [fill his] ears?
KSCKLE	ee4a	Has a doctor or health professional ever told you that [fill NAME] had: sickle cell disease?
KSCKLEX	e4a	During the past two years, has [fill NAME] seen a doctor or other health care professional for sickle cell disease?
KTB	ee4b	Has a doctor or health professional ever told you that [fill NAME] had: tested positive for tuberculosis?
KTBX	e4b	During the past two years, has [fill NAME] seen a doctor or other health care professional for tested positive for tuberculosis?
KASTHMA	ee4c	Has a doctor or health professional ever told you that [fill NAME] had: asthma?
KASTHMX	e4c	During the past two years, has [fill NAME] seen a doctor or other health care professional for asthma?
KADHA	ee4d	Has a doctor or health professional ever told you that [fill NAME] had: Attention Deficit Hyperactivity Disorder, which is also called ADHD or ADD?
KADHAX	e4d	During the past two years, has [fill NAME] seen a doctor or other health care professional for Attention Deficit Hyperactivity Disorder, which is also called ADHD or ADD?
KDIABT	ee4e	Has a doctor or health professional ever told you that [fill NAME] had: diabetes or high blood sugar?
KDIABTX	e4e	During the past two years, has [fill NAME] seen a doctor or other health care professional for diabetes or high blood sugar?

TABLE 2.4

**DIFFERENCES BETWEEN THE ROUND ONE AND ROUND TWO HOUSEHOLD  
SURVEY DATA FILES: VARIABLES DELETED IN ROUND TWO**

Variable Name	Round One Question Number	Description
<b>Section B: Health Insurance</b>		
MCRSUPP	b59b	How much is the insurance premium for this supplemental or Medigap policy?
MCRSUPU	b59c	CODE TIME PERIOD.
FMCRCMD	b60	(Are/Is) [fill NAMES OF MEDICARE ENROLLEES] covered by [Medicaid/fill STATE NAME], the government assistance program for people in need?
MCDSIGN	b61	According to the information I have, [fill NAMES OF MEDICAID ENROLLEES] (is/are) covered by [Medicaid/fill State Name].
MCDREF	b62	(Do(es) (they/he/ she/you) need approval or a referral to see a specialist or get special care?
MCDLST	b63	Can [fill NAMES] go to any doctor or clinic who will accept (Medicaid/STATE NAME) or MUST (he/she/you/they) choose from a book, directory or list of doctors?
MCDPAY	b66	If (you/members) do not have a referral, will [fill PLAN NAME] pay for any of the costs of visits to doctors who are not [associated with the plan /part of the HMO]?
STSIGN	b72	Does (fill PLAN NAME) require (you/members) to sign up with a certain primary care doctor, group of doctors, or clinic, which (you/members) must go to for all of your routine care?
STREF	b73	Under [PLAN NAME], do (you/members) need approval or a referral to see a specialist or get special care?
STLST	b74	Can (you/members) go to any doctor or clinic who will accept [fill PLAN NAME] or must (he/she/you/they) choose from a book, directory, or list of doctors?
STPAY	b76	If (you/members) do not have a referral, will [fill PLAN NAME] pay for any of the costs of visits to doctors who are not [associated with the plan /part of the HMO]?
DENIANY	b98	During the past two years, (have you/has anyone in your family) been denied health insurance or limited in the kind of health insurance (you/they) could buy because of poor health?
DENHLH	b99	Who was that?
<b>Section C: Resource Use</b>		
NURCARE	c521	During the past 12 months, did [fill NAME] receive care at home from a nurse or other health care professional?
GETMED	c90	Compared with three years ago, is getting the medical care (you/your family) need(s) becoming easier, harder, or has it stayed the same?
<b>Section D: Usual Source of Care/Patient Trust</b>		
USCNOR1- USCNOR5	d201	I am going to read some reasons people have given for not having a usual source of medical care. For each one, please tell me whether that is a reason in [fill NAME'S] case.

TABLE 2.5

## COMPARISON OF SECTION B HEALTH INSURANCE QUESTIONS – ROUND ONE AND ROUND TWO

Variable	Question	Universe: Round One	Universe: Round Two
FPRVJOB	b1a	All persons in families with at least one person age 0 to 64	All persons
PRIVJOB	b1a	All persons age 0 to 64	All persons
FPRVDIR	b1b	All persons in families with at least one person age 0-64 and not covered by a private health plan from a current or former employer	All persons
PRIVDIR	b1b	All persons 0-64 in a family where at least one person is not covered by insurance from current or former job	All persons
FPRVOTH	b1c	All persons in families with at least one person age 0-64 and not covered by a private health plan from a current or former employer or purchased on their own	All persons
PRIVOTH	b1c	All persons age 0-64 and not covered by health insurance from a current or former job or purchased on their own.	All persons
FM CARE	b1d	All persons	All persons
MCARE	b1d	All persons	All persons
FMCAID	b1e	All persons in families where at least one person is not covered by private insurance or Medicare	All persons
MCAID	b1e	All persons in families where at least one person is not covered by private insurance or Medicare	All persons in families where at least one person is not covered by private health insurance or Medicare
FMILINS	b1f	All persons in families where at least one person is not covered by private insurance, Medicare or Medicaid	All persons
MILINS	b1f	All persons in families where at least one person is not covered by private insurance, Medicare or Medicaid	All persons in families where at least one person is not covered by private insurance, Medicare or Medicaid
FOTHPUB	Constructed	All persons in families where at least one person is not covered by private insurance, Medicare, Medicaid or military plans	All persons in families where at least one person is not covered by private insurance, Medicare, Medicaid or military plans
OTHPUBX	Constructed	All persons in families where at least one person is not covered by private insurance, Medicare, Medicaid or military plans	All persons in families where at least one person is not covered by private insurance, Medicare, Medicaid or military plans
FOTHINS	b1i2	All persons in families where at least one person is not covered by private insurance, Medicare, Medicaid, military, IHS or state plans	All persons in families where at least one person is not covered by private insurance, Medicare, Medicaid or military plans
OTHINS	b1i2	All persons in families where at least one person is not covered by private insurance, Medicare, Medicaid, military, IHS or state plans	All persons in families where at least one person is not covered by private insurance, Medicare, Medicaid, military, IHS or state plans
UNINSUR	b1j	All persons not covered by private insurance, Medicare, Medicaid, military, IHS, state or other plans	All persons not covered by private insurance, Medicare, Medicaid, military, IHS, state or other plans

TABLE 2.6

## NUMBER OF FAMILY INSURANCE UNITS INTERVIEWED, BY SITE AND SAMPLE

Site/Geographic Area	Sample			
	Site	Supplemental	Augmented Site	Combined
TOTAL	28,796	3,251	30,143	32,047
01-Boston (MA)	1,127	51	1,178	1,178
02-Cleveland (OH)	1,189	27	1,216	1,216
03-Greenville (SC)	1,343	11	1,354	1,354
04-Indianapolis (IN)	1,235	21	1,256	1,256
05-Lansing (MI)	1,222	6	1,228	1,228
06-Little Rock (AR)	1,322	5	1,327	1,327
07-Miami (FL)	1,199	24	1,223	1,223
08-Newark (NJ)	1,253	25	1,278	1,278
09-Orange County (CA)	1,134	26	1,160	1,160
10-Phoenix(AZ)	1,276	32	1,308	1,308
11-Seattle (WA)	1,031	24	1,055	1,055
12-Syracuse (NY)	1,202	5	1,207	1,207
13-Atlanta (GA)	264	36	300	300
14-Augusta (GA/SC)	286	3	289	289
15-Baltimore (MD)	292	33	325	325
16-Bridgeport(CT)	269	6	275	275
17-Chicago (IL)	299	78	377	377
18-Columbus (OH)	274	22	296	296
19-Denver (CO)	274	45	319	319
20-Detroit (MI)	279	58	337	337
21-Greensboro (NC)	250	10	260	260
22-Houston (TX)	277	50	327	327
23-Huntington (WV/KY/OH)	288	12	300	300
24-Killeen (TX)	294	3	297	297
25-Knoxville (TN)	292	10	302	302
26-Las Vegas (NV/AZ)	288	14	302	302
27-Los Angeles (CA)	295	115	410	410
28-Middlesex (NJ)	288	21	309	309
29-Milwaukee (WI)	270	24	294	294
30-Minneapolis (MN/WI)	311	38	349	349

TABLE 2.6

NUMBER OF FAMILY INSURANCE UNITS INTERVIEWED, BY SITE AND SAMPLE  
(Continued)

Site/Geographic Area	Sample			
	Site	Supplemental	Augmented Site	Combined
31-Modesto (CA)	323	7	330	330
32-Nassau (NY)	318	36	354	354
33-New York City (NY)	306	50	356	356
34-Philadelphia (PA/NJ)	291	53	344	344
35-Pittsburgh (PA)	294	24	318	318
36-Portland (OR/WA)	337	20	357	357
37-Riverside (CA)	321	30	351	351
38-Rochester (NY)	357	10	367	367
39-San Antonio (TX)	280	29	309	309
40-San Francisco (CA)	256	26	282	282
41-Santa Rosa (CA)	272	2	274	274
42-Shreveport (LA)	290	9	299	299
43-St. Louis (MO/IL)	338	21	359	359
44-Tampa (FL)	252	31	283	283
45-Tulsa (OK)	332	9	341	341
46-Washington (DC/MD)	306	77	383	383
47-W Palm Beach (FL)	241	12	253	253
48-Worcester (MA)	315	3	318	318
49-Dothan (AL)	330	2	332	332
50-Terre Haute (IN)	268	1	269	269
51-Wilmington (NC)	275	4	279	279
52-W-Cen Alabama	326	2	328	328
53-Cen Arkansas	380	12	392	392
54-N Georgia	261	11	272	272
55-NE Illinois	287	3	290	290
56-NE Indiana	273	5	278	278
57-E Maine	317	10	327	327
58-E North Carolina	290	8	298	298
59-N Utah	413	3	416	416
60-NW Washington	324	2	326	326
Areas other than CTS Sites	----	1,904	----	1,904



TABLE 2.7  
NUMBER OF PERSONS INTERVIEWED, BY SITE AND SAMPLE

Site/Geographic Area	Sample			
	Site	Supplemental	Augmented Site	Combined
TOTAL	52,974	5,982	55,417	58,956
01-Boston (MA)	2,007	83	2,090	2,090
02-Cleveland (OH)	2,116	51	2,167	2,167
03-Greenville (SC)	2,574	23	2,597	2,597
04-Indianapolis (IN)	2,274	38	2,312	2,312
05-Lansing (MI)	2,258	14	2,272	2,272
06-Little Rock (AR)	2,465	13	2,478	2,478
07-Miami (FL)	2,065	40	2,105	2,105
08-Newark (NJ)	2,263	45	2,308	2,308
09-Orange County (CA)	2,057	45	2,102	2,102
10-Phoenix (AZ)	2,310	64	2,374	2,374
11-Seattle (WA)	1,792	40	1,832	1,832
12-Syracuse (NY)	2,184	5	2,189	2,189
13-Atlanta (GA)	488	59	547	547
14-Augusta (GA/SC)	542	5	547	547
15-Baltimore (MD)	520	61	581	581
16-Bridgeport (CT)	506	11	517	517
17-Chicago (IL)	551	140	691	691
18-Columbus (OH)	532	44	576	576
19-Denver (CO)	501	84	585	585
20-Detroit (MI)	525	98	623	623
21-Greensboro (NC)	471	20	491	491
22-Houston (TX)	520	105	625	625
23-Huntington (WV/KY/OH)	556	19	575	575
24-Killeen (TX)	561	4	565	565
25-Knoxville (TN)	545	17	562	562
26-Las Vegas (NV/AZ)	510	24	534	534
27-Los Angeles (CA)	516	203	719	719
28-Middlesex (NJ)	555	41	596	596
29-Milwaukee (WI)	487	47	534	534
30-Minneapolis (MN/WI)	607	70	677	677

TABLE 2.7  
NUMBER OF PERSONS INTERVIEWED, BY SITE AND SAMPLE  
(Continued)

Site/Geographic Area	Sample			
	Site	Supplemental	Augmented Site	Combined
31-Modesto (CA)	615	14	629	629
32-Nassau (NY)	620	69	689	689
33-New York City (NY)	491	91	582	582
34-Philadelphia (PA/NJ)	530	95	625	625
35-Pittsburgh (PA)	512	54	566	566
36-Portland (OR/WA)	619	39	658	658
37-Riverside (CA)	621	58	679	679
38-Rochester (NY)	705	18	723	723
39-San Antonio (TX)	540	49	589	589
40-San Francisco (CA)	402	41	443	443
41-Santa Rosa (CA)	512	6	518	518
42-Shreveport (LA)	557	12	569	569
43-St. Louis (MO/IL)	627	34	661	661
44-Tampa (FL)	437	58	495	495
45-Tulsa (OK)	638	15	653	653
46-Washington (DC/MD)	558	129	687	687
47-W Palm Beach (FL)	434	20	454	454
48-Worcester (MA)	583	5	588	588
49-Dothan (AL)	619	4	623	623
50-Terre Haute (IN)	493	3	496	496
51-Wilmington (NC)	498	8	506	506
52-W-Cen Alabama	593	4	597	597
53-Cen Arkansas	723	22	745	745
54-N Georgia	498	20	518	518
55-NE Illinois	545	4	549	549
56-NE Indiana	558	13	571	571
57-E Maine	605	15	620	620
58-E North Carolina	540	18	558	558
59-N Utah	853	9	862	862
60-NW Washington	590	3	593	593
Areas other than CTS Sites	---	3,539	---	3,539

## 2.6. CONDUCTING THE FOLLOWBACK SURVEY

The Followback Survey collects information from health plans and other organizations that offered or administered the private health insurance policies covering respondents to the CTS Household Survey. The Followback Survey was not designed as a representative sample of health plans but rather as a mechanism for obtaining detailed and accurate information about Household Survey respondents' health insurance.

Please note in the following discussion that there are a number of minor differences in the Followback Survey between Round One and Round Two (question wording, data collection, weighting). These differences should be taken into account when deciding whether it makes sense to use both rounds of data together for a particular analysis.

### 2.6.1. Overview

In the Household Survey, respondents were asked to identify and describe the private comprehensive health insurance policy or policies under which they received health care services.<sup>23</sup> The purpose of the Followback Survey was to obtain more detailed information on all of the private policies covering the 37,486 privately insured people in the 60 CTS sites.<sup>24</sup> Using the names of health insurance plans and employers that Household Survey respondents provided, we contacted health plans and other organizations (generically referred to as "entities") to ask about some of the attributes of the health insurance products that they offer.<sup>25</sup>

Although in both rounds of the Followback Survey we relied primarily on health insurance plans to provide information on product attributes, we did make some minor changes in data collection methods for Round Two. The principal change was the way in which we established that the health plan name provided by the Household Survey respondent was correct (or in cases where the Household Survey response was vague or incorrect, what the actual plan name was). In Round One, we had relied on the health insurance plans for this. Specifically, we showed them the plan name (and employer name for employer-sponsored plans) that had been provided in the Household Survey and asked them to indicate which of their products it corresponded to. In Round Two, we decided to use health plans only for reporting product attributes and not for matching the Household Survey information with specific products. Instead, we added a data base of known insurance plan and product names to the Household Survey CATI system to aid respondent memory and interviewer coding. If the plan name reported in the Household Survey matched an item in the data base, we considered the plan name to be correct (a "hard match" as defined in Section 2.6.2). Otherwise, we called the employer that the Household Survey respondent reported as the sponsor of the plan to confirm or obtain the correct plan name.

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<sup>23</sup> These policies are referred to as "plans" in the Household Survey. For example, respondents are asked, "Are you covered by a health insurance plan from your current or former employers or unions?" (Question b1a).

<sup>24</sup> These people are identified by the Followback variable FBACK.

<sup>25</sup> Most organizations contacted for product attributes in the Followback Survey were health plans. Other types of respondents included managed care organizations, third-party administrators, employer or union plans, and employers. See the variable ENTTYPEX.

Other changes in survey methods for Round Two were the use of a CATI system and the use of secondary sources (health plan web sites and plan booklets) to fill in product attributes for some cases where we could not get a response from a health plan. Details about the Round One survey methods can be found on the HSC web site in HSC Technical Publication 30. Details about Round Two will be available in a similar forthcoming HSC technical publication.

The Round Two employer interviews were conducted December 1998 to May 2000, and the respondents were usually human resources staff. Interviews with insurers were conducted March 2000 to October 2000, typically with health plan marketing staff. Section 2.7 describes the types of information collected from the health plans and other entities in the Followback Survey, and Section 2.8 discusses the differences between the Round One and Round Two questionnaires and data files. For more detailed information on the questionnaire, see Appendix F.

Data processing steps included editing and imputation of product-level data (see Chapter 5), “statistical matching” (see Section 2.6.2), and nonresponse adjustment (see Section 2.6.3). Because we were not able to match all of the policies to products, the Household Survey Restricted Use File contains Followback information for 22,235 people, which represents 59 percent of the original person-level sample of 37,486. This final Followback sample of 22,235 can be used to generate estimates that are nationally representative of the privately insured in the United States.<sup>26</sup>

The Round Two match rate of 59 percent is lower than the Round One rate of 75 percent mostly because of a change in survey methodology that made it more difficult to resolve cases where we knew the name of the insurance plan for a Household Survey respondent but did not know the name of the specific product. This problem is discussed in Section 2.6.2. Part of the decline in the match rate is also due to a lower entity response rate in Round Two than Round One.

There were also some changes in the nonresponse adjustments used in Round One and Round Two, which limits the comparability of the two rounds. Those changes are discussed in Section 2.6.3.

Note that there are many cases in which a single product in a site is matched with multiple private policies, and consequently there are many cases in which multiple people have the same values for their Followback variables. This means that intra-cluster correlation tends to be high, resulting in large design effects for some Followback variables. (See Chapter 4 for a discussion of design effects.) The problem of large Followback design effects applies primarily to univariate analyses of Followback variables; it should not significantly affect multivariate analyses that include Followback variables just as explanatory variables.

## **2.6.2. Match Status**

As discussed above, the Round Two Followback Survey data collection had two parts: obtaining the correct names of the health insurance products in which the Household Survey respondents are enrolled and then contacting health plans and other entities for information on the health insurance product attributes. When the name provided by a Household Survey respondent matched our data base, the case was called a “hard match.”<sup>27</sup> Similarly, cases where the Household Survey report did

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<sup>26</sup> The final Followback person-level sample can be identified using the Followback variable MATCH=1.

<sup>27</sup> People covered by hard-matched policies have MATCHTYP=1.

not match the data base but the employer was able to provide the exact product name were also called hard matches. Hard matches linking Household Survey respondents to specific products for which we also obtained product attributes were made for 18,943 people in our data (51 percent of the original person-level sample of 37,486).<sup>28</sup>

There were other cases, called “soft matches,” in which we knew the name of the health insurance entity from either the Household Survey respondent or his/her employer but we did not know the product name. In these cases, the products offered by the entity were considered the “candidate” products with which the policy might actually be matched. For these policies, we used a statistical matching procedure to match each policy to a single product chosen from the policy’s candidate products. The first part of the statistical matching procedure involved using the sample of hard-matched policies to estimate a model that described on average the relationship between the Followback insurance characteristics and the Household Survey demographic and health insurance characteristics. With this model and the Household Survey data on the soft-matched policies, we calculated predicted Followback insurance characteristics for the soft-matched policies. The predicted insurance characteristics for each soft-matched policy were then compared with the characteristics of its candidate products, and a match was established between the policy and the one product with characteristics that most closely matched the predicted characteristics. These soft-matched policies cover 3,292 people in our data (9 percent of the original person-level sample of 37,486).<sup>29</sup>

This soft-match rate of 9 percent is lower than the Round One rate of 20 percent, and the difference is largely the result of a change in the survey design between the two rounds. In Round Two, we did not attempt to obtain an inventory of all products offered by each health plan under the assumption that the data base of product names constructed from Round One and Round Two responses was complete. However, a comparison of the data base to other data sources indicated that there were some products missing. Because we wanted to use statistical matching to resolve soft matches only in those cases where we were confident that the candidate products contained the actual product in which someone was enrolled, we were not able to do statistical matching for as large a proportion of cases as in Round One.

Policies that are neither hard-matched nor soft-matched policies are called “nonmatched” policies, and they cover 15,251 people in our data (41 percent of the original sample of 37,486).<sup>30</sup> Because nonmatched policies are not matched to a product, the people covered by nonmatched policies have “inapplicable” as the value for all of the Followback variables.

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<sup>28</sup> This matching was possible because Household Survey respondents had been asked whether each private policy was employer-sponsored, and, if so, the name of the employer. For employer-sponsored policies, the health plan was asked to confirm that it had a contract for that specific insurance product with that specific employer during the period in which the Household Survey interviews were conducted. Similarly, for individually purchased policies, the health plan was asked to confirm that the product was available for individual purchase.

<sup>29</sup> People covered by soft-matched policies have MATCHTYP=2.

<sup>30</sup> People covered by non-matched policies have MATCHTYP=3.

### 2.6.3. Followback Weights

As described above, there is no Followback information for people covered by nonmatched policies. So that the Followback data can be used to make estimates that are representative of everyone with private insurance, not just of those people covered by matched policies, the Followback weights were calculated by making a standard nonresponse adjustment to the Household Survey weights. This adjustment was based on the demographic characteristics and health plan type reported in the Household Survey. The demographic characteristics used were age, race, ethnicity, gender, and education. The information on health plan type came from the Household Survey question about whether the person was enrolled in an HMO.

There were some minor differences in the nonresponse adjustment between Round One and Round Two. In Round One, the weights for the matched sample (MATCH=1) were adjusted to make that sample reflect the entire sample of people who reported private insurance in the Household Survey (FBACK=1). In other words, the Followback Survey weights for the sample MATCH=1 sum to the same total as the Household Survey weights for the sample FBACK=1. What this approach did not take into account was the fact that some of the Household Survey respondents were mistaken in the policies that they reported as private comprehensive health insurance. For example, a dental policy or a Medicaid policy would not qualify as the private comprehensive health insurance that was of interest for the Followback Survey. In other words, the estimate of the number of privately insured from the Household Survey (the sample FBACK) is probably an over-estimate of the actual number who are privately insured. The nonresponse adjustment for the Round Two Followback Survey was modified in an attempt to address this, although the modified approach required identifying the misreported policies, which was an uncertain process. The change in methodology is the reason that, unlike Round One, the Round Two Followback Survey weights for the sample MATCH=1 sum to less than the Household Survey weights for the sample FBACK=1. Details are provided in the Round Two Followback Survey methods report (a forthcoming HSC technical publication).

The most important implication of this methodological difference between rounds is that the counts for the two rounds are not comparable. This means that the Followback Survey data **cannot** be used to calculate estimates of the change in number of people. For example, it is not possible to estimate the difference between the two rounds in the number of privately insured people who are enrolled in PPOs. In addition, because the weighted counts are not comparable (specifically, the Round One weights are likely to be an overcount), users who are trying to pool the data from the two rounds should be careful that the observations from Round One are not being over-represented compared to the observations from Round Two.

#### **2.6.4. People Covered by Multiple Private Policies**

For each person in the final Followback sample, the Followback variables describe a single policy. In cases where the Household Survey respondent reported enrollment in more than one private policy, a hierarchical selection algorithm was used to choose the one policy that would be represented in the Followback variables. The selection algorithm used a combination of criteria: whether the person was the policyholder for the policy, the policy's match status (that is, hard-matched, soft-matched, or nonmatched), and the order in which the policy was reported by the Household Survey respondent. For each person, the Followback variable POL\_NUM identifies which policy is that person's single Followback policy from among the three possible private policies reported in the Household Survey for the person's FIU.

### **2.7. FOLLOWBACK SURVEY QUESTIONS**

The Followback variables on this data file address respondent type and the following product characteristics: product type, gatekeeping, consumer cost sharing, provider payment methods, and mental health (and/or substance abuse) services. Table 2.6 lists the Followback Survey items related to those variables, Table 2.7 lists the Followback variables available in each round, and Appendix F provides the survey questions and associated variable names. Not all of the items in the survey are included in the data file. Items were omitted due to low item response rates or other factors that suggested quality problems and confidentiality considerations.

As shown in Table 2.6, the questions about consumer cost sharing and provider payment methods ask that the Followback Survey respondents report *typical* product characteristics rather than focus on the product characteristics that are specific to the people in our data who are matched to the product.<sup>31</sup> Note that responses describing simply what is typical for a product cannot be assumed to apply to all enrollees in that product. Thus, Followback data indicating that someone's insurance has a typical copayment of \$10 does not necessarily mean that the copayment faced by that particular person is \$10.

### **2.8. DIFFERENCES BETWEEN THE ROUND ONE AND ROUND TWO FOLLOWBACK SURVEY QUESTIONS AND DATA FILES**

#### **2.8.1. Questionnaire Changes**

The questions in the CTS Followback Survey differed slightly between Round One and Round Two. The differences result from changes to the wording of existing questions and from the addition of new questions.

*Changes to existing questions.* Most of the changes to existing questions were minor. However, please note as a general point that changes in questions may impact the comparability of Round One and Round Two responses, and so researchers are urged to carefully review the questions before making comparisons between the two rounds or pooling the data from the two rounds. These are the changes that are relevant for the variables on this data file:

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<sup>31</sup> This approach was adopted in recognition of the large respondent burden that could result from asking for more detailed information.

- Round Two has two questions (a3a and a3) to determine entity type, whereas Round One has only one question (a3). This affects the variable ENTYPEX.
- The question b2a was asked in a way that was different enough to justify a slightly different variable name (MODEL2 instead of MODEL).
- A new response category was added for question b6 (out-of-network coverage without a referral). The new response (“there is no network in this sense”) is used to construct NETWORK, which is then used to define the universe for OUTNET. This differs only slightly from Round One, in which OUTNET came directly from the responses to question b6.
- Question b8 in Round Two asks whether a referral is ever required for maximum coverage of visits to in-network specialists, whereas the Round One question asked whether there was any coverage for such visits. The fact that these questions are so different is reflected in the fact that we assigned a new variable name to that question (MAXINET instead of INNET).
- The order of some of the questions in Section B changed for Round Two (b6, b8, b10, b12).
- There were also minor wording changes in these questions: b2, b2a, b10, b13 series, b14 series.

**New questions:** This is a list of the new questions that are relevant for the variables on this data file:

- As mentioned above, the wording of question b8 changed so that it represents a new question. The new variable is MAXINET instead of INNET.
- Question b91a is a follow-up question to b8. The new variable for that is ANYINET.
- Questions on out-of-network consumer cost sharing were added to the b13 and b14 series of questions. The new variables, all referring to out-of-network, are OUTCO (whether there is copayment or coinsurance), OUTCOIN (coinsurance rate), OUTDREQ (whether there is a deductible), and OUTDAMT (deductible amount). A variable for the new question on out-of-network copayment amount is not included on the file because the response rate was too low to allow imputation.

## 2.8.2. Data File Changes

Changes in the questionnaire and in response rates between Round One and Round Two affected which variables we decided to include on the Round Two data file. See Table 2.7 for lists of the Followback variables available from each round.

The variables that are new since Round One represent new questionnaire items. The decision to exclude most of the provider payment variables for Round Two was made because of high missing data rates for those variables.



TABLE 2.6

**FOLLOWBACK SURVEY ITEMS INCLUDED ON THE  
HOUSEHOLD SURVEY RESTRICTED USE FILE**

	<b>Followback Survey Items (Questionnaire Sections A – C)</b>
Survey administration	Respondent ("entity") type <i>ENTYPEX</i>
Product type and gatekeeping	Product type (HMO, POS, PPO, FFS) <i>PRODTYP</i> Network model type (staff or group, network or IPA, or other) <i>MODEL2</i> Whether the product has a network of providers <i>NETWORK</i> Coverage of out-of-network costs without a referral <i>OUTNET</i> Requirement that members have a primary care doctor, group of doctors, or clinic for all routine care <i>REQPCP</i> Types of providers who can serve as primary care physicians <i>PCPTYPE</i> Whether referral is ever required to obtain maximum coverage in-network <i>MAXINET</i> If it is required, whether there are any types of specialists for which there is some coverage for self-referrals <i>ANYINET</i>
Consumer cost sharing	In-network: Copayment* <i>COPAY</i> Coinsurance* <i>COINS</i> Deductible* <i>DEDUCT</i> Out-of-network: Copayment (whether required – no information on amount)* <i>OUTCO</i> Coinsurance* <i>OUTCOIN</i> Deductible* <i>OUTDAMT</i>
Provider payment arrangements	Primary care payment method* <i>PAYPCP</i>
Mental health and/or substance abuse services	Inclusion of mental health and/or substance abuse services <i>MHSERV</i> Provision or management of services by a specialty managed behavioral health organization <i>MHSPEC</i>

\* Denotes that the Followback Survey respondent was asked about what is typical for the product, and therefore the response doesn't necessarily apply to all enrollees in the product. See discussion in Section 2.7.

TABLE 2.7

**FOLLOWBACK VARIABLES ON THE ROUND ONE AND ROUND TWO  
HOUSEHOLD SURVEY DATA FILES**

Round One Followback Variables	Round Two Followback Variables
<b>Survey administration</b>	
ENTYPEX	ENTYPEX
<b>Product type and gatekeeping</b>	
PRODTYP MODEL NETWORK OUTNET INNET REQPCP GENLPCP, OBGYP, OTHRPCP, PCPTYPE	PRODTYP MODEL2 NETWORK OUTNET  REQPCP GENLPCP, OBGYP, OTHRPCP, PCPTYPE MAXINET ANYINET
<b>Consumer cost sharing</b>	
COPCOIN, COPAY, COINS  DEDUCT  CODEDCT	COPCOIN, COPAY, COINS OUTCO, OUTCOIN DEDUCT OUTDREQ, OUTDAMT CODEDCT
<b>Provider payment arrangements</b>	
PAYPCP, PAYPDTL PCPCAPS, PCPCAPH, PCPCAPO PAYSPEC, PAYSDDL PAYHOSP, PAYHDDL	PAYPCP
<b>Mental health and/or substance abuse services</b>	
MHSERV, MHSPEC	MHSERV, MHSPEC

## CHAPTER 3

### USING THE HOUSEHOLD SURVEY RESTRICTED USE FILE

The Household Survey Restricted Use File is made up of several samples, each of which is appropriate for certain types of analyses. This chapter explains how to choose the appropriate sample and weight variable according to the various “analytic scenarios” possible under each unit of analysis.<sup>32</sup> In addition, there is a discussion of the confidentiality issues.

#### 3.1. CHOOSING A SAMPLE AND WEIGHT VARIABLE

The first factor relevant to choosing which sample and weight variable to use is the unit of analysis. The Household Survey Restricted Use File contains two units of analysis: the person and the FIU. Person-level analyses are discussed in Section 3.1.1 and FIU-level analyses in Section 3.1.2.

##### 3.1.1. Person-Level Analyses

Most researchers will probably use the person, or individual, as the unit of analysis. The Household Survey Restricted Use File is a person-level file, consisting of one data record for each person in the Household Survey sample.

For person-level analyses, there are three determinants of which sample and weight variable to use: the population of interest (site or national) and the type of model (with or without site characteristics), and whether Followback variables are used in the analysis. Note that unlike Round One, the presence of Self-Response Module (SRM) variables in the model is not a determinant of which weight variable to use.<sup>33</sup> Table 3.1 lists the relevant person-level samples, and Table 3.2 summarizes how these factors determine the appropriate sample and weight for an analysis. Weights were computed to make the sample look like the population to which the results will be applied. The site-specific weights make the sample look like the population in our 60 sampled sites; the national weights make the sample look like the population in the [contiguous] United States.<sup>34</sup>

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<sup>32</sup>For more details on the definitions and construction of the Household Survey weight variables, refer to Strouse et al. (2002).

<sup>33</sup> During the Round One survey, we were concerned that response rates for the Self Response Module (SRM) questions would be substantially different than those for the non-SRM questions. As a result, we developed special “SRM” person weights for use in models that incorporated non-imputed SRM questions. After the Round One processing was completed, we observed that the response levels for the SRM and non-SRM questions were not markedly different and thus elected not to develop SRM weights for Round Two.

<sup>34</sup>When using the CTS data to make national estimates, or to generalize findings to the nation, the sites are the primary sampling units. Because of this, one needs to account for the probability of selection of each site. Doing so accounts for those sites that could have been selected as primary sampling units but were not. If you use the site-specific weight, you are not accounting for the fact that the sites were sampled with probability proportional to size, in which case the larger sites would be over-represented in your model.

TABLE 3.1  
PERSON-LEVEL SAMPLES IN THE  
ROUND TWO HOUSEHOLD SURVEY RESTRICTED USE FILE

Sample	Description	File Definition
<b>Full samples:</b> Maximum analytic samples		
Site sample	Individuals in households randomly selected for the site sample from 60 high- and low-intensity sites	All records with SITE > 0 (N=52,974 persons)
Supplemental sample	A sample, separate from the site sample, that consists of individuals in households randomly selected from the 48 states in the continental United States	All records with SITE = 0 (N=5,982 persons)
Augmented site sample	Individuals from the site sample plus individuals in households in the supplemental sample located in CTS sites	All records with SITEID > 0 (N=55,417 persons)
Combined sample	All individuals from the site and supplemental samples	All records (N=58,956 persons)
<b>Followback sample:</b> Maximum analytic sample for analyses that require all records in the sample to have complete information for the Followback variables*		
Augmented site sample	Individuals in the augmented site sample who are covered by a private health insurance policy that was matched to a product in the Followback process	All records with MATCH=1 (N=22,235 persons)

\*Note that the Round One Followback Survey has a site sample weight, and therefore a site sample, but the Round Two Followback Survey does not. It was not worthwhile to develop Round Two weights for national estimates using the Followback site sample because such estimates would be needed only very rarely if ever (specifically, only when trying to add these data to an existing analysis that uses the Round One site sample).

TABLE 3.2

## APPROPRIATE SAMPLES AND WEIGHTS FOR PERSON-LEVEL ANALYSES

Type of Model	Recommended Sample	Weight Variables	
		Analysis does not include Followback variables	Analysis includes Followback variables <sup>35</sup>
Population of Interest: Site Population			
Any model	Augmented site sample	WTPER1	FBWTPER1
Population of Interest: National Population			
Model includes site characteristics	Site sample <sup>a</sup>	WTPER2	Not applicable <sup>b</sup>
	Augmented site sample	WTPER5	FBWTPER5
Model does not include site characteristics	Supplemental sample <sup>c</sup>	WTPER3	Not applicable
	Combined sample	WTPER4	Not applicable
	Augmented site sample <sup>d</sup>	WTPER5	FBWTPER5

Note: See Table 3.1 for details on the samples that correspond to each set of weights.

<sup>a</sup> Site sample is useful only for compatibility with Round One data, which had no WTPER5 (weight for national estimates from the augmented site sample).

<sup>b</sup> See note below Table 3.1.

<sup>c</sup> Supplemental sample is recommended only for specific purposes discussed in Section 3.1.1.

<sup>d</sup> For models that do not include site characteristics, the augmented site sample is recommended only if Followback data are being used.

<sup>35</sup> For use in analyses requiring the entire sample to have full information for the Followback variables.

If your objective is to contrast the **specific sites** in our sample, without regard to what other (non-sampled) sites they represent, you should use the site-specific weight. However, if your objective is to contrast the **types of sites** in the sample (looking at these 60 sites as representative of all sites in the [contiguous] United States) or to use CTS sites to represent non-sampled sites, then you should use one of the national weights. For example, if you want to evaluate a specific CTS site (say Boston or Miami), you should use the site-specific weight. If you want to compare CTS sites (for example compare Boston with Miami), you should use the site-specific weight. If you want to expand your results beyond the CTS sites (for example, compare Boston-like sites with Miami-like sites), you should use a national weight.

If your population of interest is the CTS site, we provide a weight for the augmented site sample. The augmented site sample was formed by taking the respondents in a given site and adding respondents from the supplemental sample who live in that CTS site. In general, we recommend reporting site-level population characteristics for high-intensity sites only; samples for the low-intensity sites are too small to allow for precise estimates.

If your population of interest is the national population (including subgroups such as the privately insured, children, or residents of large cities), the recommended sample depends upon whether your estimation model includes site characteristics. If the model does not include site characteristics, we recommend using the combined sample.<sup>36</sup> This sample has the greatest number of observations and hence will produce the most precise estimates. If your estimation model does contain explanatory variables that are site characteristics (for example, site-level means or site information from sources other than the CTS), use the augmented site sample instead of the combined sample, because the combined sample includes the supplemental sample, and location is not provided for all members of the supplemental sample.<sup>37</sup> We recommend using the augmented site sample instead of the site sample, for analyses that contain site characteristics, because the augmented sample is larger, allowing more precise estimates. A weight variable for the site sample is provided for compatibility with the Round One files.<sup>38</sup> We also do not generally recommend using the supplemental sample to make national estimates, except in situations discussed below.

Because of its smaller size (10 percent of the combined sample), the supplemental sample alone should not typically be used for analysis. The supplemental sample also should not be used alone in analyses incorporating Followback Survey data because the Followback was conducted only within the 60 CTS sites. However, the researcher may wish to use this sample alone to prepare national estimates in the following situations:

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<sup>36</sup> As Table 3.2 shows, similar analyses using Followback data are an exception. They should be based on the augmented site sample because the Followback Survey was not carried on outside the 60 sites.

<sup>37</sup> Note that models containing site dummy variables as explanatory variables can be estimated using either the site or the combined samples. If the site sample is used, one site is typically dropped from the model and is used as a reference group. If the combined sample is used, cases from the supplemental sample would constitute a “61” site. If this “61” site is used as the excluded reference group, coefficients on site dummy variables can be interpreted as deviations from a national mean. This is a convenient way, though perhaps not the most precise way, to test whether a characteristic of a given site differs from a national average. More precise site and national means can be obtained from the augmented site and combined samples, respectively.

<sup>38</sup> However, there is no corresponding weight variable for the Followback site sample.

- ***To Perform Exploratory Analyses.*** Because the supplemental and site samples are independent national samples, a researcher might want to use the supplemental sample to perform exploratory data analysis and use the site sample to confirm the results.
- ***To Take Advantage of the Supplemental Sample's Smaller Design Effects.*** The relatively straightforward design of the supplemental sample results in smaller design effects than those associated with the site sample. This reduces the risk of severely understating the variance inherent in not using more complex statistical packages like SUDAAN to develop variance estimates. (Chapter 4 includes a discussion of how to derive appropriate variance estimates.)

### 3.1.2. Types of Variables in the Analysis

Table 3.2 identifies the recommended weight variable for each analytic scenario. Different weights should be used depending on whether Followback variables are used in the analysis. This is because of differences in the way Household and Followback data were collected.

As described in Chapter 2, the Followback Survey obtained information on private health insurance policies from health plans and other organizations. Because of nonresponse to the Followback Survey, not everyone in the Household Survey sample with private insurance has Followback information. We therefore developed Followback weights that incorporate a nonresponse adjustment.<sup>39</sup> If the researcher uses the Followback weights and the Followback sample, the resulting estimates for the Followback variables will be representative of everyone with private insurance in the population of interest (site or national). Table 3.2 lists the Followback weights that go along with each analytic scenario, and Table 3.1 describes the Followback sample associated with those weights.

Note that the Followback weights are person-level, not plan-level, weights. Thus, the Followback data can be used to make estimates only of the number and proportion of individuals with health insurance of a certain type or with a particular characteristic. (For example, the number of people enrolled in HMOs, the percentage of people who have coverage for out-of-network visits without a referral.) The Followback data cannot be used to make estimates about health plans.

If the analysis does not include Followback variables, use the regular person- or FIU-level weights.

### 3.1.3. FIU-Level Analyses

In addition to the individual, the FIU can also be the unit of analysis because the Household Survey collects information *on* the FIU and *about* multiple people in the FIU. Information that pertains to the family as a whole (for example, family income) is assigned to each member of the family. (Chapter 5 explains how to prepare a FIU-level data file from the person-level Restricted Use File.)

For FIU-level analyses, there are two determinants of which sample and weight variable to use: the population of interest (site or national) and the type of model (with or without site characteristics).

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<sup>39</sup> There is no Round Two Followback information for 41 percent of the people with private insurance in the Round Two Household Survey.

Table 3.3 summarizes how these two factors determine the sample and weight variable for an analysis. For a discussion of population and model type, see Section 3.1.1. Note, however, that the specific samples and weights discussed in that section do not apply directly to FIU-level analyses.

As shown in Table 3.3, we provide a weight for the augmented site sample for FIU-level analyses in which the population of interest is the site population, regardless of your estimation model. If your population of interest is the national population, we recommend either the augmented site sample or the combined sample, depending on your estimation model. Only one weight variable is recommended for each scenario. The augmented site sample is preferred for estimation models incorporating site characteristics because this sample has a larger number of observations than the site sample alone and will produce more precise estimates. For national estimates, the combined sample is preferred over the supplemental sample, for models without site characteristics, for the same reason.<sup>40</sup> The supplemental sample should generally not be used alone for analyses because of its smaller size, but, as described above in the section on person-level analyses, a researcher may wish to use this sample alone to perform exploratory analyses or take advantage of the supplemental sample's smaller design effects relative to the site sample.

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<sup>40</sup> A weight for the site sample is also provided for compatibility with the Round One files.



TABLE 3.3

## APPROPRIATE SAMPLES AND WEIGHTS FOR FIU-LEVEL ANALYSES

Type of Model	Recommended Sample	Weight Variable
<b>Population of Interest: Site Population</b>		
Any model	Augmented site sample	WTFAM1
<b>Population of Interest: National Population</b>		
Model includes site characteristics	Site sample <sup>a</sup>	WTFAM2
	Augmented site sample	WTFAM5
Model does not include site characteristics	Supplemental sample <sup>b</sup>	WTFAM3
	Combined Sample	WTFAM4

<sup>a</sup> Site sample is useful only for compatibility with Round One data, which had no WTFAM5 (weight for national estimates from the augmented site sample).

<sup>b</sup> Supplemental sample is recommended only for specific purposes discussed in Section 3.1.1.

### 3.2. Using Data From the Two Rounds

As discussed earlier (in Chapter 2), some persons and households that were part of the Round One sample are also part of the Round Two sample. Even the less detailed version of this file (the Public Use File), which would not allow you to identify these persons or households, would allow you to take some advantage of the linkage between the two rounds. Specifically, you could use the information on which observations come from the same sites and strata in order to potentially get more efficient estimates. One advantage of the Round Two Restricted Use File over the Public Use File is that it contains information that allows you to identify specific linkages between the two rounds. There are two ways in which those linkages can be useful: (1) they may provide information that would be helpful if you were to edit or impute variables on your own, and (2) you may be able to realize some additional efficiencies in the variance of the estimates that are calculated using both rounds of data. (In general, any information on linkages between the two rounds may help control for more random noise, and so the estimates that are generated are likely to be more precise.)

You should note that, although some people and households appear in both rounds of data, a longitudinal “panel” is not defined in any useful way. We do not provide a “panel” weight that would allow you to analyze changes associated with individual persons or families between Round One and Round Two. The reason for this comes from the definition of the sampling unit for the surveys. The sampling unit in both rounds was the telephone number (or the address, for the in-person sample), and so we did not attempt to follow the people associated with Round One sampling units in Round Two if they changed telephone numbers or moved. In addition, we supplemented the Round Two sample with new telephone numbers and addresses. Therefore, you can analyze changes over time only through comparison of cross-sectional estimates from the separate rounds of data.

You should also note that the two rounds of the Followback Survey had minor differences in question wording, data collection methods, and nonresponse adjustment. You should read about those differences in Section 2.6 before deciding whether it makes sense to use both rounds of data together for your particular analysis. As explained in that section, the followback data should **not** be used to calculate any changes in number of people across rounds. In addition, simply pooling the data from both rounds will cause Round One to be over-represented in your analysis.

#### 3.2.1. Linking Data Between Round One and Round Two

What you need to do in order to benefit from the linkage of the data between the two rounds depends on the situation. For some analytic purposes, the linkage is automatically taken into account by the SUDAAN parameters. For other purposes, you need to be able to identify specifically the subsample of persons and households that are represented in both rounds of data.

In the situations where you are using the recommended approach discussed below (for calculating estimates of change and pooled means), the SUDAAN parameters in the Restricted Use File automatically account for some linkages between the two rounds of data, which can potentially yield more efficient estimates. Specifically, we have ensured that, for the Restricted Use File only, the values of SUDAAN parameters NFSUX and FSUX<sup>41</sup> (see Chapter 4 Section 4) have the same

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<sup>41</sup> The variables are NFSUFY and FSUFY for the Followback Survey.

values for both rounds when the same phone number was contacted for the two surveys.<sup>42</sup> Note that the fact that the values of the parameters are the same does not necessarily mean that a particular person was in the sample in both rounds.

There are two situations in which you will want to be able to identify specifically those households and persons who are represented in both rounds of data. First, you might want to use information from one round of data to edit or impute values in the other round of data. Second, to explain even more of the variance beyond what is achieved by using the basic models discussed below, you might also want to include a variable in your models that indicates whether the person (or family) is somehow represented in both rounds of data.<sup>43</sup> Because household and person identifiers were assigned independently in the two rounds, you should look at the variables R1HHIDX and R1PID in order to identify linkages between the two rounds for either of these purposes. The first variable gives the Round One household identifier for those households with at least one person in common between the two rounds. So if the Round Two variable R1HHIDX has a non-missing value (say, 1234567), there is a household on the Round One file with HHIDX=1234567 containing at least one person common to both rounds. To identify the person or persons in common within the household, the Round Two variable R1PID (used in conjunction with R1HHIDX) corresponds to a record on the Round One file with PID equal to that value.<sup>44</sup>

### 3.2.2. Estimating Changes Between Rounds

To estimate changes in an attribute between the two rounds, you could of course calculate separate means for each round of data and then compare them. However, that approach does not allow you to use the information on the linkages between the two rounds of data in order to get more precise estimates. Therefore, we recommend combining the data from the two rounds in order to estimate change. Specifically, combine the two rounds of data into a single data set, with a separate observation for each person (or family) in each round of data. Let  $Y_i$  represent the analytical variable of interest for each observation  $i$ , and let the variable  $ROUND2_i$  indicate whether the observation comes from Round Two ( $ROUND2_i = 0$  if observation  $i$  comes from Round One,  $ROUND2_i = 1$  if observation  $i$  comes from Round Two). Then run the following weighted regression model.<sup>45</sup>

$$Y_i = a + b(ROUND2_i) + e_i$$

The resulting estimate of  $a$  represents the Round One mean, and the sum  $(a + b)$  represents the Round Two mean. Therefore, the estimate of change in  $Y$  between the two rounds is  $b$ , which will generally have lower variance than the change estimate that you would get from calculating the

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<sup>42</sup> The exceptions to this are the non-metropolitan sites (sites 52 – 60) which are automatically taken into account by SUDAAN.

<sup>43</sup> There are a number of possibilities for what exactly such an indicator variable could represent. Perhaps the most obvious example is a person-level analysis in which the variable indicates whether the same person appears in both rounds of data. For a family-level analysis, one possibility is a variable to indicate whether all family members appear in both rounds of data.

<sup>44</sup> To determine whether someone who appears in both rounds of the Household Survey has Followback data for both rounds, check whether MATCH=1 for that person in both rounds.

<sup>45</sup> If the analytical variable  $Y$  is continuous, you would run a linear regression model. If dichotomous, you would run a logistic regression model. If the variable has three or more categories, you would run a multinomial logistic regression model.

means for the two rounds separately and then estimating the variance of the change estimate from the sum of the sampling variances for the respective rounds.

Note that this approach to calculating change allows you the option to include whatever additional independent variables you think are appropriate. For example, you could add to the right hand side of the equation other explanatory variables and interactions among those variables, as well as interactions of *ROUND2* with those explanatory variables. You could also include a dummy variable indicating whether the observation is somehow represented in both rounds of data (as discussed in Section 3.2.1), in order to potentially decrease further the variance of the change estimate. With additional independent variables in the model, *b* should be interpreted as an estimate of the difference between the two rounds after accounting for those additional factors.

### 3.2.3. Pooling Data to Increase Sample Size

The purpose of combining or “pooling” data from Round One and Round Two is to increase sample size and therefore the precision of a cross-sectional estimate, which is especially desirable for analyses of certain smaller subgroups. This approach is appropriate only if you can assume that the variable of interest either did not change substantially between the two rounds or exhibited a clear pattern of change between the two rounds (that is, a change that can be controlled for by simple main or interaction effects).

Suppose that you would like to estimate the pooled mean of a variable *Y*. Combine the two rounds of data into a single data set, with a separate observation for each person (or family) in each round of data.<sup>46</sup> Let  $Y_i$  represent the analytical variable of interest for each observation *i*, and let the variable  $ROUND_i$  indicate whether the observation comes from Round Two ( $ROUND_i = 1$  if observation *i* comes from Round One,  $ROUND_i = -1$  if observation *i* comes from Round Two.) Note that, with this approach, the variable that indicates the round of data has values of  $-1$  and  $1$ , as opposed to the model that we recommend for change estimates, in which the indicator variable for the round of data has values of  $0$  and  $1$ . Run the following weighted regression model.<sup>47</sup>

$$Y_i = a + b(ROUND_i) + e_i$$

The resulting coefficient *a* represents the estimate of the mean of *Y*, with an estimated difference between the two rounds represented by  $2b$ . Note that this approach is most appropriate when the weighted population size from the two rounds is approximately the same, which is likely to be true in most cases, since the sampling designs were nearly the same for both rounds.

Note that this approach to calculating the mean of *Y* allows you the option to include whatever control variables you think are appropriate. For example, you could add to the right hand side of the equation other explanatory variables and interactions among those variables, as well as interactions of *ROUND* with those explanatory variables. You could also include a dummy variable

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<sup>46</sup> At this point, after combining the two rounds of data, you could of course calculate a simple pooled mean over all observations. However, that approach does not allow the possibility of getting a more precise estimate of the mean by controlling for which observations are from Round One and which are from Round Two.

<sup>47</sup> If the analytical variable *Y* is continuous, you would run a linear regression model. If dichotomous, you would run a logistic regression model. If the variable has three or more categories, you would run a multinomial logistic regression model.

indicating whether the observation is somehow represented in both rounds of data (as discussed in Section 3.2.1), which may help decrease the variance of the estimated mean.

#### **3.2.4. Variance Estimation**

You should run all of your regression models in SUDAAN, using the parameters appropriate to the type of estimate and model being run (see Chapter 4 and Appendix D). Because the underlying design is the same for each round, the SUDAAN parameters are identical and were given identical variable names in the two rounds.

### **3.3. CONFIDENTIALITY**

The Restricted Data Use Agreement provides details on the obligations that face users of the Household Survey restricted use data, including the Followback Survey data. **Special care must be taken to avoid publication or other dissemination of tables or analytic results that might permit the identification of individual health insurance plans, entities or products. In particular, tabulations of persons or families by plan characteristics for identified or easily identified sites or counties must not be released.** Researchers should refer to the *Data Use Agreement* for more details.

## CHAPTER 4

### DERIVING APPROPRIATE VARIANCE ESTIMATES

Some element of uncertainty is always associated with sample-based estimates of population characteristics because the estimate is not based on the full population. This sampling error is generally measured in terms of the standard error of estimate, or its sampling variance.<sup>48</sup> Estimates of the standard errors are necessary to construct confidence intervals around estimates and to conduct hypothesis tests.

Like many other large national surveys, the Household Survey sample design employs stratification, clustering, and oversampling to provide the basis for making national and high-intensity site estimates.<sup>49</sup> These data therefore require specialized techniques for estimating sampling variances. This chapter explains how to estimate standard errors that account for the sample design. We discuss why standard errors resulting from commonly used statistical software packages should not be used to make estimates from this survey. For those who do not have access to specialized statistical software designed to estimate variances for survey data estimates, we provide standard error look-up tables and formulas to approximate standard errors for some variables. These tables and formulas can be used to obtain, for some types of estimates, approximate standard errors that account for the survey design. We also describe various methods for directly calculating standard errors using specialized software, and we explain how to use one such package (SUDAAN) with the Household Survey Restricted Use File.

The standard error look-up tables presented here are relevant for analyses using variables from the Household Survey only. Analyses that use Followback variables should use SUDAAN to obtain correct variance estimates.

#### 4.1. THE LIMITATION OF STANDARD STATISTICAL SOFTWARE

Some standard statistical packages compute variances using formulas that are based on the assumption that the data are from a simple random sample of an infinite population. Although the simple random sample variance may approximate the sampling variance in some surveys, it is likely

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<sup>48</sup>The sampling variance, which is the square of the standard error, is a measure of the variation of an estimator attributable to having sampled a portion of the full population of interest using a specific probability-based sampling design. The classic population variance is a measure of the variation among the population, whereas a sampling variance is a measure of the variation of the *estimate* of a population parameter (for example, a population mean or proportion) over repeated samples. While the population variance is a constant, independent of any sampling issues, the sampling variance becomes smaller as the sample size increases. The sampling variance is zero when the full population is observed, as in a census.

<sup>49</sup>We do not recommend that Household Survey data be used to produce national estimates of age, sex, race, Hispanic ethnicity, or educational level, as these were the variables used in the poststratification adjustments of the weights; therefore, they represent population counts from external sources (the Bureau of the Census) and not the survey itself.

to substantially underestimate the sampling variance in a survey designed like the Household Survey. The Household Survey has a design-based sampling variance, meaning the sampling variance estimate is a function of the sampling design and the population parameter being estimated.

Departures from a simple random sample design result in a “design effect,” which is defined as the ratio of the sampling variance (*Var*) given the actual survey design to the sampling variance of a hypothetical simple random sample (*SRS*) with the same number of observations. Thus:

$$Deff = \frac{Var(\text{actual design with } n \text{ cases})}{Var(SRS \text{ with } n \text{ cases})}.$$

A design effect equal to one means that the design did not increase or decrease the sampling variance relative to a simple random sample. A design effect of greater than one means that the design increased the sampling variance; that is, it caused the estimate to be less precise. The standard error of an estimate can be expressed as the standard error from a simple random sample with the same number of observations, multiplied by the square root of the design effect.

For Household Survey person-level combined national estimates, the average design effect over a representative set of variables is 2.6.<sup>50</sup> This means that the standard error is, on average, about 60 percent higher than what it would have been if the same number of cases had been selected using a simple random sample. With a design effect of 2.6, the Household Survey (with 58,956 observations) has the equivalent precision of a simple random sample with a size of about 22,675. Note that the design effect is generally lower for subclasses of the population because there is less clustering of observations.

Because most, if not all, of the variables in the Household Survey have a design effect greater than one, we present two options for obtaining appropriate standard errors. We provide standard error look-up tables and formulas, which give approximate standard errors that account for the survey design. In addition, we explain how you can use specialized software (SUDAAN) to calculate standard errors. The former option does not apply to the Followback variables.

#### **4.2. TABLES OF STANDARD ERRORS AND DESIGN EFFECTS FOR HOUSEHOLD SURVEY VARIABLES**

Tables C.1 through C.15 in Appendix C give approximate standard errors for various types of estimates and sample sizes. The standard error will vary, depending on which variable is used and the precise characteristics of the subgroup (if any). Appendix B explains how these standard errors were derived.<sup>51</sup> Because they were derived using only variables from the Household Survey, they are not applicable to the Followback Survey variables. It is assumed that researchers who would

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<sup>50</sup> This does not apply to Followback variables, which tend to have higher design effects.

<sup>51</sup> As explained in Appendix B, certain estimates with too small a sample size or too small or too large a design effect were excluded from the regression models upon which these tables are based. These outliers are listed at the end of Appendix B. Before using one of the tables, check that your estimate is not included among these outliers.

like to use the Followback variables will have access to specialized software and can therefore calculate their own variance estimates (as described in Section 4.3 below).

#### **4.2.1. Person-Level Percentages**

The first 11 tables (C.1 through C.11) are for person-level percentage estimates: five tables for combined national estimates, five tables for high-intensity site-specific estimates, and one table for low-intensity site-specific estimates. Each set of five tables contains standard errors for estimates involving all persons, all adults, all children, all Hispanics, and all non-Hispanic blacks.

To use these tables, you must have produced estimates using any standard statistical package and the appropriate weight variable. From each table, you can obtain standard error estimates for percentages based on the population, or subgroup of the population, represented in the table. (For subgroups involving adults, children, Hispanics, and non-Hispanic blacks, you should use tables specific to them.) Using the row associated with the unweighted sample size of the subgroup, you can obtain approximate standard errors for any weighted percentage estimate for that subgroup.<sup>52</sup>

For example, suppose you are interested in the standard error for the percentage of adults with employer-sponsored health insurance in the Boston area. We know that the unweighted number of adults in the Boston site is 1,748 and that the estimated (weighted) percentage of adults with employer-sponsored insurance (and no Medicare) in Boston is about 61.1 percent. So, you would go to the high-intensity site table for adults (Table C.7) and find the row with sample size equal to 1,500 and the column for percentages near 40 or 60 percent. The approximate standard error of this estimate would be 1.61 percent.

Alternatively, suppose you are interested in the national percentage of Hispanic females who have no usual source of care. We know that the unweighted number of Hispanic females in the combined sample is 3,081 and that the estimated percentage (weighted) of Hispanic females with no usual source of care nationally is about 20.6 percent. So, you would go to the national table for Hispanics (Table C.4) and find the row with sample size equal to 3,000 and the column for percentages near 20 or 80 percent. The approximate standard error of this estimate would be 1.08 percent. Although the table is based on all Hispanics, you can determine standard errors for a subgroup of Hispanics (in this case, females) by using the row corresponding to the number of records for the Hispanic subgroup of interest.

If you are interested in doing an analysis of Hispanic adults or Hispanic children, we suggest that you use the appropriate Hispanic subgroup table and find the row corresponding to the sample size of the subgroup. Similarly, for an analysis of black adults or black children, we suggest that you use the appropriate black subgroup table.

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<sup>52</sup> If estimates are expressed in terms of proportions rather than percentages, simply move the decimal place for the estimate and the standard error two digits to the left.



#### 4.2.2. FIU-Level Percentages

Tables C.12 and C.13 present standard errors for FIU-level percentage estimates: one for combined national estimates and one for high-intensity site-specific estimates. After producing weighted estimates on a FIU-level file, use Tables C.1 through C.11 as described above. The tables accommodate estimates based on subgroups of FIUs. Using the row associated with the unweighted sample size of the subgroup, you can obtain approximate standard errors for any weighted percentage estimates for that subgroup.

#### 4.2.3. Continuous Variables

Tables C.14 and C.15 present weighted means, standard errors, and design effects for the handful of continuous variables on the Household Survey. Unlike the tables for percentage estimates, these Household Survey tables contain variable-specific estimates. Table C.14 pertains to combined national mean estimates at the person level, overall, and for four specific subgroups. For any subgroup not specifically represented by one of the four listed in the table head (for example, females), use the following formula to first estimate the logarithm of the relative standard error:<sup>53</sup>

$$\hat{R}_{person-natl} = \log_{10}(RSE) = 0.575804 - 0.310094 \log_{10}(n_w)$$

where  $n_w$  is the weighted size of the subgroup. The standard error can then be approximated as:

$$\hat{SE}_{person-natl} = \text{weighted mean} \cdot 10^{\hat{R}_{person-natl}}.$$

For high-intensity site-specific mean estimates at the person level, either overall or by subgroup, developing a model was not feasible. Standard errors for such estimates should be made using specialized software, which is discussed in the next section.

Table C.15 pertains to combined national mean estimates at the FIU level overall and for two specific subgroups: Hispanic FIUs and non-Hispanic black FIUs. For other subgroups of FIUs, there were too few variables to develop a model for predicting the relative standard error. In these cases, use the overall table. For high-intensity site-specific mean estimates at the FIU level, either overall or by subgroup, developing a model was not feasible. Standard errors for such estimates should be made using specialized software, which is discussed in the next section.

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<sup>53</sup>The “relative standard error” is the standard error of an estimate divided by the estimate itself.

### 4.3. OPTIONS FOR CALCULATING VARIANCES FOR HOUSEHOLD SURVEY AND FOLLOWBACK SURVEY VARIABLES

The tables discussed in the previous section are appropriate for obtaining approximate estimates of standard errors for percents, proportions, and means for Household Survey variables. But because design effects vary by variable and population subgroup, these tables do not provide optimal estimates of standard errors. Furthermore, they cannot be used for other kinds of estimates, such as regression coefficients, ratios, and weighted totals.<sup>54</sup> The preferred alternative is to obtain standard errors for such estimates using specialized software. This kind of software is designed especially to handle estimators specific to survey data; that is, to accommodate the sampling weights and sampling design features such as stratification and clustering.

Survey estimators tend to be nonlinear in nature. These estimators include means and proportions in the case where the denominator is estimated from the survey, as well as ratios, correlation and regression coefficients. In general, the variances of nonlinear statistics cannot be expressed in a closed form. Woodruff (1971) suggested a procedure in which a nonlinear estimator is linearized by a Taylor series expansion.<sup>55</sup>

Most common statistical estimates and analysis tools (such as percentages, percentiles, and linear and logistic regression) can be implemented using Taylor series approximation methods. Survey data software, such as SUDAAN, uses the Taylor series linearization procedure and can handle the multistage design and joint inclusion probabilities in the CTS.

A major advantage of SUDAAN is that its estimation algorithm can incorporate a finite population correction factor that takes advantage of the high sampling rate of the site selection for the Household Survey, by accounting for unequal selection probabilities and without replacement sampling.<sup>56</sup> Using survey packages that do not account for the finite population correction will produce somewhat higher variance estimates and require a different set of parameters. Currently, we do not provide support for packages other than SUDAAN. Using packages other than SUDAAN with the design parameters provided here for use with SUDAAN may produce variance estimates that are artificially small.

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<sup>54</sup>See Appendix B for a discussion of the circumstances under which it might be possible to use the tables to estimate the standard error of a weighted total.

<sup>55</sup>Woodruff, 1971.

<sup>56</sup>Other software packages (Stata and the SAS SURVEYMEANS and SURVEYREG procedures, for example) use the Taylor series approximations but do not account for the Household Survey design as completely as does SUDAAN. Software packages are always expanding their capabilities in subsequent releases. Readers should check to see if their preferred package has added new features that might better accommodate the CTS sample design.

#### 4.4. HOW TO SPECIFY THE SAMPLE DESIGN FOR SPECIALIZED SURVEY SOFTWARE

The Household Survey data file contains a set of fully adjusted sampling weights and information on analysis parameters (that is, stratification and analysis clusters) necessary for estimating the sampling variance for a statistic. When you run one of the specialized software programs, you should specify the appropriate analysis weight (see Chapter 3) as well as the stratification and clustering variables. (Chapter 3 also includes a discussion of how to estimate changes between Round One and Round Two). Table 4.1 at the end of this chapter provides guidelines for the design variables to specify in SUDAAN statements for different types of estimates. Sample SUDAAN code is included in Appendix D.

The following paragraphs explain what is contained in each of the design variables so that they can be used in other specialized software.

The DESIGN statement, found in the first row of Table 4.1, tells the program the nature of the sampling strategy; that is, whether the sample was selected with replacement (where units can be selected more than once) or without replacement; and whether the selection probabilities were equal across all sampling units. Specifying a with-replacement design (DESIGN=WR) implies that with-replacement sampling can be assumed at the first stage of selection. This design is appropriate for site-specific estimates and for estimates based on only the national supplement; for these estimates, the first stage of selection was (in most cases) households within stratum.<sup>57</sup> Specifying a without-replacement design and unequal probabilities of selection (DESIGN=UNEQWOR) assumes that the first stage units were selected without replacement and with unequal probabilities. The UNEQWOR specification also assumes equal probabilities of selection at subsequent stages in the sampling process. This design specification is appropriate for national estimates based on the combined sample, the site sample, or the augmented site sample because the first stage of selection in these samples was generally the site and the second stage was the household.

The NEST statement, found in the second row of Table 4.1, tells the program which variables contain the sampling structure; that is, the stratification and clustering variables. For site-specific estimates, the stratification variable is SITE\_STR. This variable specifies the geographical substratum or the supplemental sample type (national supplement or in-person) within the site for the high-intensity sites, and has a constant value within site for all other sites. For estimates based on only the national supplement, the stratification variable is STRATUM, which has five values: one for all nonmetropolitan areas, and four metropolitan strata defined by census region.

For national estimates based on the combined sample or the site sample only, the first stage sampling stratum variable (PSTRATA) has 21 values: one for each of the nine certainty sites, 9 for the remaining large metropolitan sites (grouped geographically), one to classify the small metropolitan sites, one to classify the nonmetropolitan sites, and one to classify the supplemental cases. For these national estimates, it is also necessary to specify a second-stage sampling stratum

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<sup>57</sup>In the case of the field sample, the first stage was geographical interviewing areas.

variable: SECSTRA. For metropolitan sites in the site sample, SECSTRA is equivalent to (although not coded the same as) SITE\_STR as defined above. For nonmetropolitan sites in the site sample and for the field sample, SECSTRA is set to a constant. For the national supplement cases, SECSTRA is equivalent to STRATUM as defined above.

For national estimates based on the augmented site sample, when no Followback variables are involved, you would specify the primary and secondary strata as PSTRATAH and SECSTRAH, respectively. When using Followback variables, the strata variables to specify would be PSTRATAF and SECSTRAF. In most cases, these parameters have the same value as those used for national estimates based on the combined or site sample (PSTRATA and SECSTRA); however, for certain cases from the supplemental sample, these parameters have different values, and reflect the site characteristics for those supplemental cases falling within the boundaries of the sites.

As stated above, you must also specify the clustering variable(s) in the NEST statement. For site-specific estimates, the clustering or primary sampling unit (PSU) variable is FSUX, which represents the household in the telephone sample and the geographical interviewing area (or “segment”) for the in-person sample. For estimates based only on the national supplement, the PSU variable NFSUX represents the household. This accounts for clusters of families and persons within selected households.

In the NEST statement, the first stage PSU variable is specified between the first- and second-stage stratification variables. For national estimates based on the combined sample or the site sample only, the first-stage PSU variable is PPSU. For metropolitan sites, PPSU represents the site. For nonmetropolitan sites and supplement cases, PPSU is set to a constant. For these national estimates, it is also necessary to specify in the NEST statement a second-stage clustering variable (NFSUX) after the second-stage stratification variable. For metropolitan sites in the telephone sample, NFSUX represents the household; for nonmetropolitan sites it represents the site. For the in-person sample, NFSUX represents the interviewing area, and for the supplement cases, it represents the household.

As described above for the stratum variables, the parameter specifications for national estimates based on the augmented site sample would be slightly different than those for the combined or site sample. For national estimates based on the augmented site sample, when no Followback variables are involved, you would specify the primary and secondary sampling units as PPSUH and NFSUHX, respectively. When using Followback variables, the variables to specify would be PPSUF and NFSUFH. Again, in most cases, these parameters have the same value as those used for national estimates based on the combined or site sample (PPSU and NFSUX); however, for certain cases from the supplemental sample, these parameters have different values, and reflect the site characteristics for those supplemental cases falling within the boundaries of the sites.

In order for the program to account for the without-replacement design in its variance estimates, two more statements must be specified: the TOTCNT statement and the JOINTPROB statement. The TOTCNT statement provides the frame counts (or indicates stratification) at each stage of the sample design specified in the NEST statement. The JOINTPROB statement names the variables that contain single-inclusion probabilities for each site and joint-inclusion probabilities for each

possible pair of sites in each first-stage stratum.<sup>58</sup> (This is expressed in the form of an  $n \times n$  matrix, where  $n$  is the number of PSUs in each stratum.) Because the site-specific and national supplement estimates assume with-replacement sampling, the TOTCNT and JOINTPROB statements are not specified when making those estimates. For the national estimates based on the combined sample or the site sample, the TOTCNT statement is specified as: PSTRTOT3 \_ZERO\_ \_MINUS1\_ \_ZERO\_. These last three terms are reserved SUDAAN keywords. The variable \_ZERO\_ means either that the corresponding NEST variable (in this case SECSTRA) is a stratification variable, or that it is a final level of sampling and therefore has no variance contribution. The variable \_MINUS1\_ means that the corresponding NEST variable (in this case NFSUX) should be treated as with-replacement sampling. For national estimates based on the combined sample or the site sample only, PSTRTOT3 specifies the variable containing population counts (in this case the number of sites in the sampling stratum for non-certainty metropolitan sites) at the first stage of selection.

For national estimates based on the augmented site sample, you would use PSTRTOTH as the first TOTCNT parameter if no Followback variables were involved, and PSTRTOTF for analyses including those variables. These parameters have the same value as PSTRTOT3 for most cases, but have adjusted values for those supplemental cases falling within the boundaries of the sites.

For the national estimates based on the combined sample or the site sample only, the JOINTPROB statement is specified as the variables: P1X P2X P3X P4X P5X P6X P7X, which together represent the matrix containing single and joint inclusion probabilities as described above. For national estimates based on the augmented site sample, you would use the joint probability parameters P1H through P7H for analyses not using Followback variables, and P1F through P7F for analyses including Followback variables.

In SUDAAN, the default denominator degrees of freedom can be overridden using the DDF option. We recommend that you use this option (setting DDF to 6500) when running significance tests on national estimates based on the site sample, the combined sample, or the augmented site sample. In SUDAAN, the default denominator degrees of freedom is the difference between the number of PSUs and the number of first stage strata, which is appropriate for most surveys. Because the CTS design includes some sites with certainty, the SUDAAN default count is substantially smaller than the actual count for these national estimates. This undercount would result in significance tests that would be too conservative. See Appendix D for examples using the DDF option.

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<sup>58</sup>The joint inclusion probability for a pair of sites is the probability that those two sites will occur in the same sample.

TABLE 4.1

GUIDELINES FOR SPECIFICATION  
OF DESIGN VARIABLES IN SUDAAN

SUDAAN Statements	Site-Specific Estimates	National Estimates (Site Sample Only)	National Estimates (National Supplement Only)	National Estimates (Combined Sample)	National Estimates (Augmented Site Sample)	
					Analysis with Household variables only	Analysis includes Followback variables
DESIGN=	WR	UNEQWOR	WR	UNEQWOR	UNEQWOR	UNEQWOR
NEST	SITE_STR FSUX	PSTRATA PPSU SECSTRA NFSUX	STRATUM NFSUX	PSTRATA PPSU SECSTRA NFSUX	PSTRATAH PPSUH SECSTRAH NFSUHX	PSTRATAF PPSUF SECSTRAF NFSUFH
TOTCNT	Not Applicable	PSTRTOT3 _ZERO_ _MINUS1_ _ZERO_	Not Applicable	PSTRTOT3 _ZERO_ _MINUS1_ _ZERO_	PSTRTOT3 _ZERO_ _MINUS1_ _ZERO_	PSTRTOT3 _ZERO_ _MINUS1_ _ZERO_
JOINTPROB	Not Applicable	P1X P2X P3X P4X P5X P6X P7X	Not Applicable	P1X P2X P3X P4X P5X P6X P7X	P1H P2H P3H P4H P5H P6H P7H	P1F P2F P3F P4F P5F P6F P7F
WEIGHT	WTPER1 WTFAM1 FBWTPER1	WTPER2 WTFAM2	WTPER3 WTFAM3	WTPER4 WTFAM4	WTPER5 WTFAM5	FBWTPER5
DDF=	Not Applicable	6500	Not Applicable	6500	6500	6500

## CHAPTER 5

### VARIABLE CONSTRUCTION AND EDITING

The CTS Restricted Use File contains three types of variables: unedited variables, edited variables, and constructed variables created from edited or unedited variables.<sup>59</sup> This chapter provides a general description of the types of constructed and edited variables in the file as well as additional details on selected variables. The chapter also explains how to manipulate the person-level file to construct analytical variables at other levels, such as the family level.

The information in this chapter supplements the information provided in the “Description” and “Universe” fields of the file’s codebook. Users are encouraged to review this information along with the information provided in Appendices A, E, and F of this manual for a better understanding of the questionnaire structure, skip patterns, and other characteristics of the variables reported on the file.

#### 5.1. EDITED VARIABLES

The Household Survey data were collected via computer-assisted telephone interviewing (CATI). The CATI editing functions included consistency checks and editing of some skip patterns and outlier values. The Followback Survey data were also collected by CATI. This section describes the editing that followed the Household Survey and Followback Survey data collection, which included logical editing, imputation of missing values, and editing for confidentiality. Verbatim text responses were also reviewed and edited.

##### 5.1.1. Logical Editing

Logical editing was performed to resolve inconsistencies among related variables and skip patterns. For example, Question c411(SURGNX), pertaining to number of surgeries, was not asked if a person had no provider visits. If the survey respondent had no provider visits, the value for SURGNX was changed from missing to “0” to indicate that the respondent did not have any surgical procedures. In another example, employment-related questions like f101(HAVEBUS, did the respondent have a business) and f111(WRKPAY, did the respondent work for pay), should have been asked only of respondents age 18 or over. If this information was included for individuals under 18, the responses were changed to “logical skip.” Logical editing also included review and resolution of outlier values by recoding either to an appropriate valid value or to a value of “-9 Not Ascertained.”

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<sup>59</sup>In general, unedited variables are those which contain the original response to a single questionnaire item.

### 5.1.2. Imputation of Missing Values

Missing values for selected variables were imputed using unweighted and weighted sequential hot-deck imputation.<sup>60</sup> Variables were selected for imputation according to their level of missing data and analytic importance. Table 5.1 lists the variables selected for imputation.

Most Household Survey variables had few incidences of missing values (under 8 percent, except for income-related variables, like FAMINCX, which had nonresponse rates as high as 23 percent). Followback Survey variables tended to have somewhat higher nonresponse. Except for selected Household Survey Section C variables and two Section G variables, an imputation flag is included for all variables with imputed values. A value of “1 Yes” for the imputation flag indicates that the value of the corresponding variable was imputed. The imputation flags for most of the Household Survey Section C and Section G variables have not been provided on the file for confidentiality reasons. The variables without flags are:

- Race (RACEREX)
- Income (FAMINCX)
- Total number of hospital stays (HSPNODX)
- Total number of admissions through the emergency room (HSPERX)
- Total number of nights in the hospital (HSPNITX)
- Total number of visits to doctor (DRVISNX) and to other medical providers (MPVISNX)
- Total number of surgeries (SURGNX)
- Number of inpatient and outpatient surgeries (SURGNTX and SURGOPX)

Between 0.1 percent to 1.0 percent of the values for these variables, other than FAMINCX, were imputed.

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<sup>60</sup>In sequential hot-deck imputation, persons with missing values, or “recipients,” are linked to persons with available values, or “donors,” to fill in the missing data. The donors and recipients are first grouped into strata and then sorted within each strata using classification/sort variables such as age, gender, and education. The number of strata is limited by a minimum donor to recipient ratio that must be satisfied within each stratum. Donors are then sequentially linked to recipients based on their proximity within the stratum as determined by the sort variables. In weighted hot-decking, donor and recipient weights are used to help determine the assignment of donors to recipients so that means and proportions calculated using the imputed data will equal means and proportions obtained using only donor data.



TABLE 5.1  
VARIABLES SELECTED FOR IMPUTATION

Description	Variable Name
<b>Household Survey Variables</b>	
<b>Section A:</b> Education	HIGRADX
<b>Section B:</b> Characteristics of private health insurance plans	PRVSIG1, PRVREF1, PRVPAY1, PRVLST1, PRVHMO1 PRVSIG2, PRVREF2, PRVPAY2, PRVLST2, PRVHMO2 PRVSIG3, PRVREF3, PRVPAY3, PRVLST3, PRVHMO3
Medicaid and state insurance plans (imputation performed at the plan-level)	MCDHMO, STHMO
Characteristics of Medicare (imputation performed at the person-level)	MCRSIGP, MCRREFP, MCRLSTP, MCRHMOP, and MCRPAYP
<b>Section C:</b> Hospital use	HSPNODX, HSPERX, and HSPNITX
Emergency room visits	ERUSENX
Doctor and other medical practitioner visits	DRVISNX and MPVISNX
Inpatient and outpatient surgeries	SURGNX, SURGNTX, and SURGOPX
Treatment by mental health professional	MENTAL
<b>Section E:</b> General health condition	GENHLH, EMOACT, EMOLESS, ENERGY, FLCALM, FLDOWN, LMTMACT, LMTSOC, LMTSTR, PAININT, MCS12, PHYACT, PHYLESS, and PCS12
Component variables for the SF-12	
Summary variables (PCS-12 and MCS-12)	
<b>Section F:</b> Hours worked, type of employer, firm size, hourly wage	HRSWKX, EMPTYPX, FIRMSZX, and WAGEHRX
Whether employer offers insurance, whether person is eligible, and types of plan(s) offered (HMO vs. non-HMO)	EMPOFER, ELIGIB, EMPBOTH, EMPMULT, EMPHMO, OFFERED, OFRBOTH, OFRHMO, OFRMULT, and OFRNHMO
<b>Section G:</b> Family income and race	FAMINCX and RACEREX
<b>Followback Survey Variables</b>	
<b>Section B:</b> Network model type, primary care doctor sign- up requirements, types of providers that can serve as primary care providers, need for referrals, and cost sharing	MODEL2, REQPCP, OBGYPGP, OTHRPGP, MAXINET, ANYINET, COPCOIN, COPAY, COINS, OUTCO, OUTCOIN, DEDUCT, OUTDREQ, OUTDAMT
<b>Section C:</b> PCP payment method	PAYPCP

### **5.1.3. Editing for Confidentiality**

Data in the Restricted Use File have been manipulated or edited to ensure the confidentiality of survey respondents while maximizing the scope of data released to the user. This type of editing consisted of such steps as excluding variables and constructing new variables based on the original ones. All cases of editing for confidentiality are described in the file's codebook either in the "Format" field (which indicates the top- and/or bottom code values) or the "Description" field. Variables subjected to confidentiality editing have been assigned names ending with "X."

#### **5.1.3.1. Variable Exclusion**

In constructing this data set, we were careful to remove the obvious direct identifiers such as names and addresses.

#### **5.1.3.2. Masking of Minimum and Maximum Values**

Extreme and relatively rare cases that fell at the top or bottom of a distribution were recoded to a lower/higher value, referred to as "top-" or "bottom-coding." For example, the variable corresponding to question grd1 (HIGRADX, highest grade completed) reflects the use of both top- and bottom-coding. Reported values greater than 18 have been combined into a single category, "19: (top code)." Values less than 7 have been combined into another category, "6: (bottom code)."

#### **5.1.3.3. Constructing New Variables**

New variables were constructed from several original variables and by collapsing values for a categorical variable. When survey questions identified relatively rare populations, a new variable was constructed, combining the cases into one or more broad groups. For a single categorical variable, one or more values were combined. For example, the variables FOTHPUB and OTHPUBX, which indicate coverage by either a state insurance plan or the Indian Health Service, were constructed by combining the responses to questions b1g and b1h. Similarly, the variable UNINPLX, which corresponds to question b81, was constructed by combining the categories of Medicaid, state, and military coverage into category 2, "Medicaid/State/Military." The variable PREINSX, which corresponds to question b851, was constructed by combining the categories of Medicaid, state, military, IHS, and Medicare into category 2, "Public."

#### **5.1.4. Editing Verbatim Responses**

For several questionnaire items, interviewers and/or respondents were allowed to provide "other" verbatim responses when none of the existing response categories seemed to apply. These verbatim responses are excluded from the Restricted Use File. They were reviewed and coded into an appropriate existing or new categorical value. For example, for question b84 (reason uninsured), additional categories were created to describe some of the verbatim responses to that question. For insurance plan information, multiple variables may have been recoded on the basis of verbatim response information. For example, if the name of a private insurance plan was reported as "Virginia Medicaid," then the corresponding private insurance variables were set to "-1 Inapplicable," and the corresponding Medicaid variables were coded appropriately.

## **5.2. CONSTRUCTED VARIABLES**

Constructed variables include the following:

- Household Survey administration variables, such as identifiers, counters, and family/household composition variables
- Weights and other sampling variables
- Other variables constructed for analytical value. These range from relatively straightforward variables that combine one or more original question items for the convenience of analysts (for example, the wait/travel times associated with the last doctor visit, which were converted from various time units to days and minutes), to more complex variables such as hierarchical ones describing current and previous insurance coverage.

Constructed variables are indicated in the file's codebook by a value of "N/A" in the "Question" field. Information on how they were constructed appears in the "Description" field.

## **5.3. IDENTIFICATION, COUNTER, AND SITE VARIABLES**

Not all variables on the Restricted Use File were obtained directly from survey respondents via the Household Survey CATI questions or Followback Survey interviews. Additional variables include identifiers (person, family, household, and other identifiers), household composition variables, geographic indicators (including the site identifiers), and other survey administration variables.

### **5.3.1. Identification Variables**

The identifier and related flag variables are described in Table 5.2. Table 5.3 shows persons in a hypothetical household to illustrate the relationship between the identifier and flag variables on the Restricted Use File. In this example, the head of household's spouse is the family informant for the first FIU, the head of household's father is the family informant for the second FIU, and the unrelated boarder is the informant for the third FIU, of which he/she is the only member.

### 5.3.2. Counter Variables

Counter variables are included in the file to make it easier to understand the file structure and sample population. The variable NSFAM indicates the total number of eligible responding FIUs in the household -- in other words, the number of unique values of CSIDX that share the record's HHIDX. NSPER indicates the total number of eligible/selected responding persons in the record's FIU (unique values of PERSIDX on the file for the CSIDX identified on that record). Likewise, the variables NADULT and NAGE65 indicate, respectively, the total number of eligible responding adults and the total number of eligible responding persons age 65 or over in the family.

Additional counter variables provide information on all persons, including non-respondents and ineligible, in responding households. These variables -- NFAM, NPERX and NKID -- indicate the total number of families within the household, persons within the family, and children within the family, respectively, for responding households. The difference between NSPER and NPERX, for example, is that the latter includes nonrespondents, nonselected children (including children with no parent or guardian in the household), and full-time military personnel, who are not included on the file and therefore not reflected in the value for NSPER.

### 5.3.3. Site Variables

The Household Survey Restricted Use File contains two variables for identifying individual sites. SITE is the site identifier for households in the original 60-site sample. A total of 52,974 persons are included in this sample. To enhance site-specific estimates, a second site identifier, SITEID, was constructed and added to the file. This variable identifies households from the original 60-site sample plus those from the supplemental sample that fall within the geographic boundaries of the 60 sites. A total of 55,417 people are included in this augmented site sample. (See Chapter 2 for discussion of the CTS site sample and Figure 2.1 for a graphical view of the site, augmented site, and supplemental samples.)

### 5.3.4. Linking Variables

There are several variables on the Household Survey Restricted Use File for identifying linkages between Round One and Round Two. The SUDAAN variables NFSUX and FSUX have the same values for both rounds when the same phone number was contacted for the two surveys.<sup>61</sup> Variable R1HHIDX gives the Round One household identifier for households with at least one person in common between the two rounds. Variable R1PID (used in conjunction with R1HHIDX) can be used to identify the person or persons in common within a household. This occurs when Round Two R1PID corresponds to a record on the Round One file with PID equal to that value.

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<sup>61</sup> The exceptions to this are the nonmetropolitan sites (sites 52-60), which are automatically taken into account by SUDAAN.

TABLE 5.2  
ADDITIONAL INFORMATION ON IDENTIFICATION VARIABLES

Variable	Additional Information
<b>Household Survey Variables</b>	
HHIDX	HHIDX is the 7-digit identifier for the household. There are 26,537 unique values of HHIDX on the file. Values for HHIDX are randomly assigned.
CSIDX	CSIDX is the 8-digit identifier for the family insurance unit, or FIU. The first 7 digits of CSIDX are equal to HHIDX. There are 32,047 unique values of CSIDX on the file.
PID	PID is the 1-digit number assigned to each person within the household. Its values range from 1 to 8.
PERSIDX	PERSIDX is the unique 9-digit identifier assigned to each person. There are 58,956 unique values of PERSIDX, which identify the 58,956 records on the file. PERSIDX was constructed by concatenating the variables CSIDX and PID.
KIDID	KIDID is the 1-digit person number (PID) of the randomly selected child in each FIU. The variable KIDID is equal to the variable PID on the record corresponding to the randomly selected child. The flag variable KIDFLAG, which indicates the randomly selected child, has a value of 1 on the record of the randomly selected child and a value of 0 for all other persons in the FIU. A person could have been chosen as the randomly selected child if he/she was under age 18 and not married or the head of the household, defined as the person who owns or rents the home.
RESPID	RESPID is the 1-digit person number (PID) of the informant for each FIU. The variable RESPID is equal to the variable PID on the record corresponding to the family informant.
RSPFLAG	The flag variable RSPFLAG, which indicates the family informant, has a value of 1 on the record of the family informant and a value of 0 for all other persons in the FIU. Note that there are a small number of families without a record for the family informant. These cases are typically families where the informant was full-time military and thus excluded from the Restricted Use File population.
CENSID	CENSID is the 1-digit number assigned to each "census-defined" family within a household. The variable was constructed on the basis of the commonly used U.S. Census Bureau definition of a family, which is generally a broader definition than that used to define the CTS FIU. Specifically, a census family includes all people in the household related by blood or marriage. A unique census family on the file is defined by the combination of the variables HHIDX + CENSID. There are 28,385 unique census families (i.e., unique values of HHIDX + CENSID) on the file. <i>Unless otherwise indicated, the term "family" used in this document or in the file's codebook refers to the FIU rather than the census-defined family.</i>

TABLE 5.2

ADDITIONAL INFORMATION ON IDENTIFICATION VARIABLES  
(continued)

Variable	Additional Information
<b>Followback Survey Variables</b>	
FBACK	The flag variable FBACK indicates which people were part of the initial person-level Followback sample; that is, the people in the 60 sites (SITEID>0) covered by any private comprehensive insurance policy (PRVINS <sub>i</sub> = 1 for i = 1, 2, or 3).
MATCH	The flag variable MATCH indicates which people are part of the final person-level Followback sample, i.e., the people in the initial sample (FBACK=1) who are covered by hard- or soft-matched policy (MATCHTYP = 1 or 2).
MATCHTYP	MATCHTYP identifies the type of match between a person's policy and health insurance product(s). A policy matched to a specific product is a "hard match" (MATCHTYP=1). A policy initially matched to multiple products offered by an entity prior to being statistically matched to a single product is a "soft match" (MATCHTYP=2). A policy not matched to any products is a "non-match" (MATCHTYP=3). Refer to Section 2.6.2 for a more thorough discussion of the Followback matching process.
POL_NUM	POL_NUM is the variable that indicates whether the Followback data for that person correspond to the first, second, or third private policy in the person's FIU. This variable is especially useful when a person is covered by multiple private policies. For example, if someone is covered by the first and second policies in the FIU (PRVINS1=1 and PRVINS2=1) and POL_NUM=2, then the Followback information corresponds to the second policy in the FIU. In other words, the Followback information comes from the product with which the FIU's second policy was matched.

TABLE 5.3

## PERSONS IN A HYPOTHETICAL HOUSEHOLD WITH IDENTIFIER AND FLAG VARIABLES

Record Corresponding to Person	Value of Identifier/Flag Variable							
	HHIDX	CSIDX	PID	CENSID	RESPID	RSPFLAG	KIDID	KIDFLAG
<b>FIU # 1</b>								
Head of Household	1000001	10000010	1	1	2	0	3	0
Head of Household's Spouse	1000001	10000010	2	1	2	1	3	0
Head of Household's Daughter: Randomly Selected Child	1000001	10000010	3	1	2	0	3	1
Head of Household's Son: Not Included in Survey	-	-	-	-	-	-	-	-
<b>FIU # 2</b>								
Head of Household's Father	1000001	10000011	5	1	5	1	-1	0
Head of Household's Mother	1000001	10000011	6	1	5	0	-1	0
<b>FIU # 3</b>								
Unrelated Boarder	1000001	10000012	7	2	7	1	-1	0

## 5.4. FAMILY AS THE UNIT OF ANALYSIS

Survey questions solicited information at the person-, family-, and household-level. Rather than providing a hierarchical file, we have chosen to provide the survey data as a simple, rectangular file with person-level data only. We anticipate little interest in household-level analysis and so do not include household-level weights with the Restricted Use File. However, because some researchers want to conduct analyses at the FIU level, the following section explains how a family-level file can be easily extracted from the person-level file.

### 5.4.1. Preparing a Family-Level Data File

The variable CSIDX is the eight-digit identifier for the FIU. The first seven digits are equal to the household id (HHIDX), while the last digit is a unique number assigned to each family within the household. There are a total of 32,047 family insurance units on the Restricted Use File.

Table 5.4 displays two hypothetical family insurance units. The first, CSIDX 10000010, contains three persons, a father, a mother, and a randomly selected 14-year-old daughter. The second, CSIDX 10000020, consists of a married couple. Family-level variables in the example include the family identifier (CSIDX), a counter for the number of persons in the family (NPERX), and total family income (FAMINCX). Person-level variables include the person identifier (PID), age (AGEX), general health status (GENHLH), gender (SEX), relationship to the head of household (RELATEX), and a FIU flag variable (FIUFLAG). Note that there are a total of five persons in the first family (NPERX=5), two of which were nonselected children excluded from the Restricted Use File.

TABLE 5.4  
TWO HYPOTHETICAL FAMILY INSURANCE UNITS

FIU Member	CSIDX	PID	NPERX	AGEX	GENHLH	FAMINCX	SEX	RELATEX	FIUFLAG
<b>Family Informant</b>	10000010	1	5	43	1	64885	1	0	1
<b>Spouse</b>	10000010	2	5	41	4	64885	2	2	0
<b>Daughter</b>	10000010	3	5	14	5	64885	2	3	0
<b>Family Informant</b>	10000020	1	2	57	2	46500	2	0	1
<b>Spouse</b>	10000020	2	2	56	3	46500	1	1	0

#### 5.4.1.1. Example 1: Creating a Family-Level File

To analyze a family-level characteristic such as total family income (FAMINCX), you would need to select one record from each family or, one unique value of CSIDX. As with all family-level variables, all members of the family are assigned the same value. Thus, the first, the last, or any record of a single family member is suitable to create a subset of records to represent families. The variable FIUFLAG was constructed specifically for this purpose. Selecting records with



FIUFLAG=1 will produce a family-level file consisting of either the family informant's record or, for families whose informant is not part of the survey, the record of the eldest family member.

#### 5.4.1.2. Example 2: Summarizing Person-Level Responses to the Family-Level

An alternate method of producing a family-level file is to summarize person-level responses and produce a single family record. In this example, a variable is produced that counts the number of persons in the family in fair or poor health (FAIRPOOR) by using the general health status variable, GENHLH, which has the following values: 1=Excellent, 2=Very Good, 3=Good, 4=Fair, and 5=Poor. The variable is constructed by 1) reading the person-level Restricted Use File, 2) testing each family member's response to the general health status indicator GENHLH, and 3) keeping one record for the family after processing the last person's record. The family-level file and the FAIRPOOR variable produced from the person records of the two hypothetical families are displayed in Table 5.5.

TABLE 5.5  
FAMILY-LEVEL FILE

CSIDX	NPERX	FAMINCX	FIUFLAG	<i>FAIRPOOR</i>
10000010	5	64885	1	2
10000020	2	46500	1	0

### 5.5. ADDITIONAL DETAILS ON SELECTED SURVEY VARIABLES

Table 5.6, organized by survey and questionnaire section, provides “helpful hints” about variables (singly or in sets), discusses a variable's relationship with other variables, and suggests when to use a specific variable. This information supplements the variable-specific details contained in the file's codebook.

TABLE 5.6

ADDITIONAL INFORMATION ON VARIABLES  
BY SURVEY AND QUESTIONNAIRE SECTION

Variable	Additional Information
<b>Household Survey, Section A Variables: Demographic Characteristics and Household Composition</b>	
AGEX	The variable AGEX indicates the person's age. There are 10,236 persons on the file with AGEX less than 18. This includes the 10,232 randomly selected children (indicated by KIDFLAG=1) plus 4 others who are 17 but categorized as adults in the survey because they are either married or the head of the household (defined as the person who owns or rents the home).
RELATEX	The variable RELATEX indicates the relationship of the person on this record to the head of the household, for whom RELATEX has a value of 0. The head of the household is defined as the person who owns or rents the home.
<b>Household Survey, Section B Variables: Health Insurance Coverage</b>	
INSTYPE	<p>The variable INSTYPE is a constructed variable that summarizes the person's insurance coverage status as of the interview date. This variable was constructed hierarchically by assigning a person to the first applicable category in the following sequence:</p> <ol style="list-style-type: none"> <li>1 Medicare</li> <li>2 Medicare and Medigap</li> <li>3 Medicare and other public</li> <li>4 Private, employment-related</li> <li>5 Private, direct purchase</li> <li>6 Private, coverage provided by someone outside the family</li> <li>7 Military insurance (e.g., CHAMPUS, CHAMP-VA, TRICARE, VA, etc.)</li> <li>8 Medicaid</li> <li>9 Other public coverage</li> <li>10 Uninsured</li> </ol> <p>Note that all persons with Medicare have INSTYPE = 1, 2 or 3, including those who also have private insurance. Category 1 excludes those who have Medicare and Medigap. Categories 1 and 2 exclude those with Medicare and other public insurance. Category 9, Other public coverage, includes state and HIS programs.</p>

TABLE 5.6

ADDITIONAL INFORMATION ON VARIABLES  
BY SURVEY AND QUESTIONNAIRE SECTION  
(continued)

Variable	Additional Information
INSTYPE (continued)	Because of its hierarchical structure, INSTYPE understates the number of persons with certain types of insurance. For instance, INSTYPE=8 (Medicaid) includes those who have both Medicaid and other public insurance but does not include those with Medicaid and private insurance. Other insurance indicators on the file can be used to obtain more accurate population estimates of the number of persons with a certain type of insurance; for example, for non-elderly Medicaid population estimates, the variable MCAID should be used rather than INSTYPE. Population estimates for the elderly with Medicare and Medicaid should use MCRMCD.
PRVSIG1-3 PRVREF1-3 PRVLST1-3 PRVHMO1-3 PRVPAY1-3 MCDHMO MCDPAY STHMO MCRSIGP MCRREFP MCRLSTP MCRHMOP MCRPAYP MCRSIGN MCRREF MCRLST MCRHMO MCRPAY	<p>A number of variables identify aspects of the respondents' insurance plans (for example, whether the person must sign up with a primary care doctor, whether a referral is needed for a specialist, etc.). With the exception of the variables describing Medicare, those that describe the characteristics of an insurance plan were imputed at the plan level; this group includes the variables PRVSIG1-3, PRVREF1-3, PRVLST1-3, PRVHMO1-3, PRVPAY1-3, MCDHMO, MCDPAY, and STHMO. The person-level variables describing the characteristics of the Medicare plan (MCRSIGP, MCRREFP, MCRLSTP, MCRHMOP, MCRPAYP) were imputed at the person level; the family-level variables describing characteristics of the Medicare plan (MCRSIGN, MCRREF, MCRLST, MCRHMO and MCRPAY) were not imputed. (See Chapter 6 for additional information on imputation of variables on the Restricted Use File.)</p> <p>The respondent error in questions on plan characteristics is believed to be considerable. In particular, a large number of responses for the variables PRVPAY1-3 were missing and required imputation. Each family could report up to three private insurance plans. All verbatim responses for insurance plan names were reviewed (b211-b213 for private plans and b1i1 for other plans), and all related insurance variables were then recoded if necessary. For example, review of some of the verbatim information on the name of the private plan indicated that the plan was actually a public plan (e.g., Medicaid, CHAMPUS, etc.). For these cases, the corresponding public plan variables were recoded as appropriate, and the private plan variables were recoded to "-1 Inapplicable." The private plans were not renumbered, so some persons may have values of "-1" for the private plan 1 variables but nonmissing values for the private plan 2 variables.</p> <p>Since some persons in the FIU may not be included in the Restricted Use File population, there may be cases where the policyholder of a plan providing coverage for one or more of the family members is not represented on the Restricted Use File.</p>

TABLE 5.6

ADDITIONAL INFORMATION ON VARIABLES  
BY SURVEY AND QUESTIONNAIRE SECTION  
(continued)

Variable	Additional Information
UNINR12- UNINR14	The variables UNINR12-UNINR14 were constructed after reviewing the verbatim responses to question b84, for which respondents could specify other reasons why health insurance stopped.
PREINSX	The variable PREINSX was constructed only for currently insured persons whose coverage began within the past 12 months. It indicates the person's coverage just prior to the current coverage. All other persons have a value of "-1 Inapplicable" for this variable. Category 2 includes persons with Medicare, Medicaid, military, and any other public insurance coverage including state or HIS plans.
PRECOVX	The variable PRECOVX was constructed for all persons (except newborns or persons with health insurance from a foreign source) and indicates the person's coverage just prior to the current coverage (or the most recent coverage if the person is currently uninsured). Persons were assigned hierarchically to PRECOVX categories. Category 1 includes persons with Medicare, Medicaid, military, and any other public insurance coverage including state or IHS plans.
CHGINS6 CHGINS7	The variables CHGINS6 and CHGINS7 were constructed after reviewing verbatim responses to question b881, in which other reasons for changing insurance plan were reported. Persons answered question b881 only if they responded that they had enrolled in their health plan within the past 12 months. Persons with CHGINS7=1 said they stayed with the same plan but are required to re-enroll annually. For analytic purposes, these persons should not be considered to have undergone an actual change in insurance coverage.
MCHOICE	Question b951 (MCHOICE) asks whether the person would be willing to accept a limited choice of physicians/hospitals in order to save out-of-pocket costs. This question was answered by the family informant and other adult family members who completed the SRM (question b932). It was not asked of the randomly selected child.

TABLE 5.6

ADDITIONAL INFORMATION ON VARIABLES  
BY SURVEY AND QUESTIONNAIRE SECTION  
(continued)

Variable	Additional Information
<b>Household Survey, Section C Variables: Health Care Resource Use</b>	
Many of the questions on use of health care resources are reported as continuous variables. In order to protect confidentiality of respondents, all of these continuous variables were top-coded, collapsing the top 2 to 3 percent of values for each variable. The file's codebook indicates the level at which each variable was top-coded. As described in Section 5.1, the related flag variable indicating whether the value was imputed has not been provided on the Restricted Use File for confidentiality reasons.	
UNMET PUTOFF PUFOFR1- PUTOF21	Questions c811-c831, describing unmet medical need and reasons (UNMET, PUTOFF, PUFOFR1-PUTOF21), were answered by the family informant and other adults who completed the SRM. For the randomly selected child, these questions were answered in the SRM by the family informant.
PUTOFR8- PUTOF21	The variables PUTOFR8-PUTOF21 were constructed after reviewing the verbatim responses to question c831, for which respondents could specify other reasons for postponing or not receiving medical care.
MEDCSTX	The variable MEDCSTX, constructed from responses to questions c92 and c93, indicates the total out-of-pocket medical costs for the family and reflects minimal editing of the original responses to the questions. Researchers who use this variable may want to review it for possible outliers and additional editing.
<b>Household Survey, Section D Variables: Usual Source of Care and Patient Trust Information</b>	
USCRCHG	For the variable USCRCHG, values 4-7 were constructed after reviewing the verbatim response to question d151, for which respondents could specify other reasons for the change in the usual source of care.
DRNOREF- DRUNNEC	Questions d311-d341 (DRNOREF—DRUNNEC) were asked only of the family informant and other adult family members who completed the SRM, and who reported either at least one doctor visit in the past 12 months (question c311 or c321) or a usual source of care who is a physician (d121). All other records, including the randomly selected child records, have a value of “-1 Inapplicable” for these variables.

TABLE 5.6

ADDITIONAL INFORMATION ON VARIABLES  
BY SURVEY AND QUESTIONNAIRE SECTION  
(continued)

Variable	Additional Information
<b>Household Survey, Section E Variables: Satisfaction with Care, Characteristics of Last Physician Visit, and Activity Limitations</b>	
CRSAFX	The variable CRSAFX was constructed from questions e101 and e111 and describes satisfaction with health care received during the past 12 months. These two family-level questions were only asked of the family informant and were not included in the SRM.
DRCHOCX SPNEED SPCHOCX	Questions e121-e15c, describing satisfaction with the choice of primary care doctor and specialist (DRCHOCX, SPNEED and SPCHOCX), were asked of the family informant and other adults who completed the SRM. The family informant answered for the randomly selected child.
SICKCR- LSTYPE LSTUSC- LSTEXPL	Questions e161-e321, describing the person's last physician visit (SICKCR-LSTYPE, LSTUSC-LSTEXPL), were asked of the family informant and in the SRM for other adult family members. For the randomly selected child, the questions were answered in the SRM by the adult family member who accompanied the child on the last physician visit. When someone else accompanied the child, these variables have a value of "-9 Not Ascertained" on the child's record (or "-1 Inapplicable" if affected by a skip pattern). For all other randomly selected child records, i.e., when an adult family member accompanied the child but did not complete a SRM for the child, or the child did not have a physician visit in the last 12 months, these variables have a value of "-1 Inapplicable."
VISCUR	The variable VISCUR was constructed to indicate whether the person had a doctor visit while covered under his or her current insurance plan. To construct VISCUR, we used the variable INSTYPE to define the person's current insurance coverage in combination with the variables indicating the month of the last doctor visit and the insurance enrollment month. For confidentiality reasons, the variables indicating the month of the last doctor visit and enrollment month are not included on the Restricted Use File. VISCUR was constructed for all persons (including the randomly selected child) who had a physician visit in the past 12 months.

TABLE 5.6

ADDITIONAL INFORMATION ON VARIABLES  
BY SURVEY AND QUESTIONNAIRE SECTION  
(continued)

Variable	Additional Information
GENHLH	The variable GENHLH indicates the person's general health status. Questions e401, e40c, e801 and SRM question e402 were asked for all adults. If the randomly selected child had a physician visit in the last 12 months and was accompanied on the visit by an adult family member, the questions were asked of that adult family member.
LMTACT-FLDOWN	The variables corresponding to questions e411-e511, LMTACT-FLDOWN, were originally answered only by the family informant and by other adult family members who completed the SRM. However, as part of the editing process, missing values were imputed for all adults (persons with KIDFLAG=0).
PCS12 MCS12	The person's Physical Component and Mental Component Summary score, based on the SF-12 Physical and Mental Health Summary Scale, are indicated by variables PCS12 and MCS12, respectively. PCS12 and MCS12 were constructed from the variable describing general health (GENHLH) and from the variables for questions e411-e511 describing physical and mental limitations (LMTACT-FLDOWN). Questions e411-e511 were only asked of adults (family informant and other adults in the family who answered them in the SRM); on records of randomly selected children these variables all have a value of "-1 Inapplicable." Imputation flag variables are included for GENHLH and for each of the physical and mental limitation variables; also, the variables _PCS12 and _MCS12 indicate that one or more of the variables used to construct PCS12 and MCS12 was imputed. For more information see Ware, Kosinski, and Keller (1995).
TAKRISK-SMKADV	Questions e521-e671 (TAKRISK-SMKADV), on risk-taking and smoking behavior, were asked only of the family informant and other adult family members who completed the SRM. They were not asked for the randomly selected child.

TABLE 5.6

ADDITIONAL INFORMATION ON VARIABLES  
BY SURVEY AND QUESTIONNAIRE SECTION  
(continued)

Variable	Additional Information
<b>Household Survey, Section F Variables: Employment</b>	
Questions in this section were asked of all persons in the household who were 18 years of age or older.	
WAGFEHRX	The variable WAGEHRX was constructed using the responses to questions f131, f301, f321, f331. These questions, which are not included on the Restricted Use File, were only minimally edited. A sizable number of cases had either extremely large or small values. Users should be cautious in using this variable and may want to reconstruct WAGEHRX as a categorical range variable rather than as a continuous variable. WAGEHRX only has a positive value for adults who responded yes to question f111, which asks if the person did any work last week for pay (or profit); for all other cases, it has a value of “-1 Inapplicable.”
EMPOFER-EMPBOTH	Questions f501-f561 (EMPOFER-EMPBOTH), on insurance offered by employers, were asked only of persons who were employed (excluding self-employed), who were not policyholders of employer/union-based plans, and who were less than 65, even if they did not use the health insurance benefits offered by their employer. All other persons were assigned a value of “-1 Inapplicable.”
ELUNISN	For the variable ELUNINS, categories 4-6 were constructed after reviewing the verbatim response to question f521, for which respondents could specify other reasons for not participating in the employer’s health insurance plan.
INELIGR	For the variable INELIGR, categories 11-13 were constructed after reviewing the verbatim response to question f531, for which respondents could specify other reasons why they were ineligible for employer’s health insurance plan.
OFFERED-OFRBOTH	The constructed variables OFFERED-OFRBOTH can be used for analyses of employment related insurance for the entire employed population. The variables were constructed using variables from Sections B and F for all persons age 18 and over, including self-employed persons and the working elderly.



TABLE 5.6

ADDITIONAL INFORMATION ON VARIABLES  
BY SURVEY AND QUESTIONNAIRE SECTION  
(continued)

Variable	Additional Information
<b>Household Survey, Section G Variables: Family Income and Race</b>	
FAMINCX CENSINX	There are two income variables on the Restricted Use File. The first, FAMINCX, represents the total income reported for the FIU, which is the entity identified by the variable CSIDX. The second income variable, CENSINX, represents the total income reported for the census family, which is the entity identified by the variables HHIDX + CENSID. For confidentiality reasons, cases with CENSINX values greater than \$150,000 were masked by top-coding to a value of \$150,000. Because values of FAMINCX for these FIUs could be combined to obtain a value of more than \$150,000 and thus violate the confidentiality masking, FAMINCX for these FIUs was assigned a value of “-5.” Both of these income variables may reflect data for person(s) in the FIU who are not represented on the Restricted Use File.
POVLEV	The variable POVLEV is a constructed variable that indicates the U.S. Census Bureau 1996 family income poverty threshold for the size of the census family on this record (identified by HHIDX + CENSID). A poverty index variable can be constructed as the ratio of the census family income, CENSINX, to the census poverty threshold, POVLEV.
RACEX RACEREX	The variable RACEX was constructed from the original (unedited) response to question g221; the categories of Native American or Alaska Native, Asian or Pacific Islander, and Other were collapsed into category 3 for confidentiality reasons due to small sample sizes. RACEREX was constructed from the variables HISPAN (question g20), and RACEX and reflects imputation of missing values. A response of Hispanic ethnicity combined with any other category was coded as RACEREX = 4 Hispanic, i.e., categories 1-3 are all non-Hispanic.
<b>Household Survey, Section H Variables: Interview Closing</b>	
Variables in this section reflect information from the interview closing questions, including the household’s telephone availability and service history. Responses to these questions were used to construct the survey weights.	
<b>Followback Survey, Section A Variables: Site and Entity Screener</b>	
ENTYPEX	This variable is a recoded version of questions A3a and A3, collapsed for confidentiality reasons. Responses of “yes” to question A3a and “licensed insurer or HMO” to question A3 have been combined into one category. In addition, the two A3a responses “third party administrator” and “employer, union or trust plan administrator” have been combined into one category.
<b>Followback Survey, Section B Variables: Product Attributes</b>	
MODEL2	This is a renamed version of the Round One variable MODEL. Although it’s a constructed variable, it has an imputation flag because the data file does not include

TABLE 5.6

ADDITIONAL INFORMATION ON VARIABLES  
BY SURVEY AND QUESTIONNAIRE SECTION  
(continued)

	the variables and imputation flags used in constructing it. Its value is “staff or group” if the responses to question B2a were “staff model” and/or “group model” but not “network and/or IPA.” Its value is “network or IPA” if the responses to question B2a were “network and/or IPA” and neither “staff model” nor “group model.” Its value is “mixed model” if the responses to question B2a were “network and/or IPA” and either “staff model” or “group model.”
NETWORK	This variable identifies "network products" as defined in the survey instrument. In that context, a product is considered a network product if the response to survey question B6 was not “there is no network in this sense” and either of the following was true: it's an HMO, POS, or PPO product (according to question B2, i.e., PRODTYP), or it's an indemnity product (according to question B2) that has a "book, directory or list of doctors" (according to question B5). NETWORK is essentially a constructed variable, based on questions B2, B5, and B6. Whether a product is a network product determines some of the skip patterns in the questionnaire.
OUTNET	In Round One, the values for the variable OUTNET came directly from question B6. In Round Two, OUTNET is considered a constructed variable because it reflects the new B6 response category “there is no network in this sense.”
<b>Weights and Sampling Variables</b>	
Weights and sampling variables are described in Chapters 2, 3, and 4.	

## CHAPTER 6

### FILE DETAILS

This chapter provides an overview of the file content and technical specifications for programmers. It also describes the variable naming and coding conventions that were used on the file and that appear in the file's codebook.

#### 6.1. FILE CONTENT AND TECHNICAL SPECIFICATIONS

The CTS Round Two Household Survey Restricted Use File contains 58,956 person records. The unique record identifier and sort key is the variable PERSIDX. Variables are positioned on the file in the following order:

- Survey administration variables: this group includes identifiers, geographic indicators, and other variables associated with conducting the Household Survey
- Variables from Sections A-H of the Household Survey questionnaire: Variables are ordered within each section by related questionnaire item number
- Variables from the Followback Survey
- Weights and sampling variables

The Restricted Use File is provided as an ASCII-formatted file with the following technical specifications:

Data set name:	CTSR2HR2.TXT
Number of observations:	58,956
Number of variables:	518
Logical record length:	1435

The file contains a two-byte carriage return/line feed at the end of each record. When you are converting to a PC-SAS file, use the LRECL option to specify the record length to avoid the default PC-SAS record length. If the RECFM=V option is used, the LRECL option must be specified as the logical record length (1435). If RECFM=F is used, the LRECL value must be specified as the logical record length plus two (1437). Note that if the RECFM option is omitted, then the default option of RECFM=V will be used, and LRECL must be specified as the logical record length (1435).

The record layout for this file is provided in the file's codebook.

## 6.2. VARIABLE NAMING CONVENTIONS

In general, a variable name reflects the content of the variable. Names were limited to seven characters so that additional indicators could be used in subsequent Restricted Use File releases. For the following groups of variables, a naming convention was used to provide additional information on variable content:

- ***Imputation Flags.*** These flags indicate whether a record has an imputed value for the corresponding variable. The flag variable has the same name as the variable it describes, and includes the prefix “\_.” For example, \_HIGRADX is the imputation flag corresponding to the variable HIGRADX. Refer to Chapter 5 for more information on imputation and other types of editing procedures used on the file.
- ***Private Insurance Plan Variables.*** Each family could report up to three private insurance plans, which are described by a series of variables, PRVHLDi through PRVBOTi, which correspond to questions b231-b393. The same questions were asked for each of the plans, so there is one set of these variables for each plan, and the variable name suffix “i” has a value of 1-3 indicating the plan number. (See Chapter 5 for information on coding of these variables when fewer than three plans were reported.)
- ***Medicare and Medicaid Coverage Variables.*** These variables, MCRSIGN-MCD12M, correspond to questions b51-b67. All include the string “MCR” and “MCD,” respectively, in the name.
- ***State Insurance Coverage Variables.*** The variables that correspond to questions b71-b77 (STPHD-ST12M) all have the variable name prefix “ST” (preceded by “\_” on imputation flag variables).
- ***Uninsured Variables.*** The variables that correspond to questions b80-b84 (UNINCOV-UNINR14) all have the prefix “UN” in the name.
- ***Reasons for Not Getting or Postponing Medical Care.*** Variables for question c821 and c831 (PUTOFF, PUTOFR0-PUTOF21), which describe the reason(s) for not getting or for postponing medical care, all have the variable name prefix “PUTOF.”
- ***Description of Last Doctor Visit.*** Variables for questions e241-e321 (LSTUSC-LSTEXPL), which describe characteristics of the last doctor visit, all have the prefix “LST” in the name.
- ***Weights.*** The prefix “WT” is present for all Household Survey weight variables. The prefix “FBWT” is used for both of the Followback Survey weight variables.
- ***Masked Variables.*** All variables which were masked for confidentiality reasons end with the value “X.” The variable descriptions contained in the file’s codebook indicate whether the variable was masked and provide brief details as to the type of masking performed. There are several exceptions to this rule: NPERX, CRSAFX, DRCHOCX, LSTAPPX, LSTRAVX, LSTWATX, SPCHOCX, P1X-P7X, and a number of adult and child chronic condition variables (“if saw doctor or other health care professionals for condition during the past two years”). These variables end in “X” for reasons other than masking.

A copy of the Household Survey data collection instrument, annotated with the names of only the variables that directly correspond to a single question, is provided in Appendix A (with an annotated summary in Appendix E). Appendix F contains an annotated summary of the Followback Survey instrument.

### **6.3. VARIABLE CODING CONVENTIONS**

The following coding conventions are used on the file:

- |    |                                 |  |
|----|---------------------------------|--|
| -1 | Inapplicable:                   | Question was not asked due to skip pattern.                |
| -5 | Suppressed for Confidentiality: | Value suppressed to preserve confidentiality.              |
| -7 | Refused:                        | Question was asked and respondent refused to answer        |
| -8 | Don't Know:                     | Question was asked and respondent did not know the answer. |
| -9 | Not Ascertained:                | Value was not assigned for any other reason.               |

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## **Appendix A**

### **The CTS Household Survey Instrument**

#### **Round Two**



## CTS-2 HOUSEHOLD SURVEY

### INTRODUCTIONS

#### REINTERVIEW SAMPLE

>pA0<     *Hello, this is NAME with the Community Tracking Survey, the health care study that your household participated in [fill MO/YR]. [IF ADM, USE DATE OF THAT INTERVIEW]. [IF LETTER/BROCHURE SENT: We recently mailed you a brochure describing some of our findings, which we hope you found interesting.] Now, we are conducting a follow-up study to understand how managed care and other changes are affecting the quality of care people receive. As a token of appreciation for your help, we'll send your family a check for \$[INCENTIVE].*

*Since the survey is about health issues, I would like to speak with an adult who lives here and is familiar with the health care of family members.*

*[IF LETTER/BROCHURE NOT SENT: IF R WANTS TO KNOW MORE, SUMMARIZE FINDINGS FROM BROCHURE.]*

*IF NECESSARY, ADD: Your household's participation in this followup survey, which has the support of state health departments throughout the country [IF STATE SUPPORT: including fill NAME] will make a real contribution toward efforts to provide high quality and affordable health care. Let's begin...*

TYPE <g> TO CONTINUE [goto A2]

<b> TO BREAKOFF/ADDITIONAL INFORMATION [goto A2]

<x> R CLAIMS HOUSEHOLD NOT IN ROUND 1 [goto DEL2]

===>

#### FOR NEW SAMPLE (VERSION 1 — LETTER)

>paa2<     *Hello, this is NAME, with the Community Tracking Study, a project to see how managed care and other health care changes are affecting people in your community. We recently sent your household a brochure describing our project. Did you receive it?*

<1> YES [goto paa3]

<0> NO [goto paa4]

===>

>paa3<     *As we pointed out in the brochure, the purpose of the Community Tracking Study is to see how the shift to managed care and other health care changes are affecting people in your community. As a token of appreciation for your help, we'll send you or your family \$25 for helping us with the project. May I speak with an adult who lives here and is familiar with the health care of family members.*

*MORE IF NEEDED: We're doing the study because we don't know how the shift to managed care and other changes are affecting people's lives. The questions are very basic - things like "Are you satisfied with your health care? Do you have health insurance? How long does it take you to get to the doctor? Have you had a flu shot in the last 12 months?" The interview is strictly confidential and you don't have to answer any questions you don't want to.*

TYPE <g> TO CONTINUE ==> [goto a2]

>paa4<    *The purpose of the Community Tracking Study is to see how the shift to managed care and other health care changes are affecting people in your community. We're not selling anything or asking for money. This is a study for a private foundation on health issues, and it is supported by [fill NAME OF ENDORSING AGENCY/state health departments throughout the country.]. As a token of appreciation for your help, we'll send your family \$25 for helping us with the project. May I speak with an adult who lives here and is familiar with the health care of family members.*  
*MORE IF NEEDED: We're doing the study because we don't know how the shift to managed care and other changes are affecting people's lives. The questions are very basic - things like "Are you satisfied with your health care? Do you have health insurance? How long does it take you to get to the doctor? Have you had a flu shot in the last 12 months?" The interview is strictly confidential and you don't have to answer any questions you don't want to.*

TYPE <g> TO CONTINUE ==> [goto a2]

**FOR NEW SAMPLE (VERSION 2-- NO LETTER):**

>paa0<    *Hello, this is NAME, with the Community Tracking Study, a project to see how managed care and other health care changes are affecting people in your community. We're not selling anything or asking for money. This is a study for a private foundation on health issues, and it is supported by [fill NAME OF ENDORSING AGENCY/state health departments throughout the country.]. As a token of appreciation for your help, we'll send your family \$25 for helping us with the study. May I speak with an adult who lives here and is familiar with the health care of family members.*  
*ADDITIONAL TEXT IF NEEDED: We're doing the study because we don't know how the shift to managed care and other changes are affecting people. The questions are very basic - things like "Are you satisfied with your health care and choice of doctors? Do you have health insurance? Have you had a flu shot in the last 12 months?" The interview is strictly confidential and you don't have to answer any questions you don't want to.*

TYPE <g> TO CONTINUE ==> [goto a2]

>a2<    **INTERVIEWER: PERSONS WHO LIVE IN A VACATION RESIDENCE, THAT IS NOT THEIR USUAL RESIDENCE, IN INSTITUTIONS (SEE MANUAL) OR IN OTHER GROUP QUARTERS (10 OR MORE UNRELATED PERSONS LIVING TOGETHER) ARE INELIGIBLE FOR THIS SURVEY**

<1>    **CONTINUE, PERSON WHO KNOWS IS ON PHONE**

<2>    **WANTS MORE INFORMATION**

<3>    **BUSINESS/NON-RESIDENCE/GROUP QUARTERS/INSTITUTION/VACATION HOME**

<4>    **RESPONDENT WANTS LETTER/BROCHURE**

<5>    **HUNG UP DURING INTRODUCTION**

<6>    **CELL PHONE/PAGER**

<7>    **CALLBACK**

<8>    **PROBLEMS--LANGUAGE, SUPERVISOR REVIEW**

<9> REFUSED

===>

**FOLLOW UP RESPONSES FOR ALL SAMPLES**

>a3< SPONSOR: The project is sponsored by the Robert Wood Johnson Foundation, a non-profit organization whose sole purpose is to improve health care. It is not associated with any political party or private company.

LENGTH: For most families the interview averages about 30 to 40 minutes; it is about 15 to 20 minutes for single persons.

CONTACT: If you would like to find out more about the study or the foundation, you can call [Maureen Michael] at [fill phone number].

MORE ON PURPOSE IF NEEDED: We are doing this study because fundamental changes are taking place in health care today, but little information is available on how these changes are affecting people. For example, the project will help us understand whether people are getting the health care they need, their satisfaction with choice of physicians and quality of care, and how we can help children and adults who don't have health insurance or may lose it.

SELECTION: Your telephone number was randomly generated by a computer to represent many others in your community. For our results to be accurate, it is very important that we interview the households we select.

CONFIDENTIALITY: All of your answers are confidential. The answers you give will be combined with answers from other people in your community. Your name will not be linked with the answers.

TYPE <g> TO CONTINUE ===>

>a4< INTERVIEWER: PERSONS WHO LIVE IN A VACATION RESIDENCE, THAT IS NOT THEIR USUAL RESIDENCE, IN INSTITUTIONS (SEE MANUAL) OR IN OTHER GROUP QUARTERS (10 OR MORE UNRELATED PERSONS LIVING TOGETHER) ARE INELIGIBLE FOR THIS SURVEY

<1> CONTINUE, PERSON WHO KNOWS IS ON PHONE

<2> WANTS MORE INFORMATION

<3> BUSINESS/NON-RESIDENCE/GROUP QUARTERS/INSTITUTION/VACATION HOME

<6> CELL PHONE/PAGER

<7> CALLBACK

<8> PROBLEMS--LANGUAGE, SUPERVISOR REVIEW

<9> REFUSED

===>

**a. DEMOGRAPHICS AND SCREENING**

>test<      *If new sample go to >hhld<; if reinterview continue with >DEL<*

## HOUSEHOLD COMPOSITION

### **IF RE-INTERVIEW SAMPLE:**

>DEL<      *To begin, I'm going to list the people who were part of this household when we interviewed you in [FILL MO/YR ]. As I read, tell me if any of them no longer live here.*

*INTERVIEWER: DO NOT READ IF HOUSEHOLDER TO RESPONDENT. READ GENDER AND AGE AT LAST INTERVIEW IF NAME AND RELATIONSHIP ARE INSUFFICIENT.*

*DELETE?   NAME      RELATION      SEX   AGE AT LAST INTERVIEWER*

*<1> [FILL NAME][RELATIONSHIP] [Sex][AGE AT R1]*

*<2> [FILL NAME][RELATIONSHIP] [Sex][AGE AT R1]*

*<3> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]*

*<4> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]*

*<5> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]*

*<6> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]*

*<7> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]*

*<8> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]*

*<g> ALL PREVIOUS HOUSEHOLD MEMBERS CONFIRMED OR DELETED*

*<x> R CLAIMS Household Not in R1 — NO MEMBERS  
FROM ROUND 1 REMAIN [reflag household as new sample][goto A210]*

*<u> UNDELETE A PERSON*

*<e> UNDELETE THE ENTIRE HH*

*==> [goto ADD]*

### **NOTES TO >DEL<:**

- 1) *Entering a <x> response runs the existing deletion routine from the R1 instrument, with a \*DELETED\* notation appearing in the relationship column. Lines marked as deleted are then available for the interviewer to add "new" members (below). This same \*DELETED\* notation should appear in all household and FIU review screens in the relationship column (whether for new sample or re-interview sample) unless a "new" person is added to that "line."*
- 2) *Data on relationship, sex and age at R1 are offered in the table only to aid the interviewer in verifying the household composition relative to round 1. If the respondent offers corrections, the interviewer should say, "I'll take that information from you in a moment," and continue to verify household composition.*

>a202< upon <g> (review complete) in >DEL<, each person still in the table should be flagged to indicate an R1 household member.

>DEL2< Can I take a minute to verify that the people we interviewed at this phone number a couple of years ago are no longer here?

*INTERVIEWER DO NOT READ HOUSEHOLDER TO RESPONDENT. READ GENDER AND AGE AT LAST INTERVIEW IF NAME AND RELATIONSHIP ARE INSUFFICIENT*

*DELETE? NAME RELATION SEX AGE AT R1*

<1> [FILL NAME][RELATIONSHIP] [Sex][AGE AT R1]

<2> [FILL NAME][RELATIONSHIP] [Sex][AGE AT R1]

<3> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]

<4> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]

<5> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]

<6> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]

<7> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]

<8> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]

<g> ALL PREVIOUS HOUSEHOLD MEMBERS CONFIRMED

<x> RESPONDENT CLAIMS HOUSEHOLD NOT IN ROUND 1 - NO MEMBERS  
FROM ROUND 1 REMAIN [goto A210]

<u> UNDELETE

<e> UNDELETE THE ENTIRE HH

==> [goto ADD]

>A210< We would still like to include your household in our study. Our goal is to see how managed care and other health care changes are affecting people in your community. The project is sponsored by a private foundation and is endorsed by state health departments throughout the country. As a token of appreciation for your help, we'll send your family \$25 for helping us with the project. Since the survey is about health issues, I would like to speak with an adult who lives here and is familiar with the health care of family members.

*MORE IF NEEDED: We're doing the study because we don't know how the shift to managed care and other changes are affecting people's lives. The questions are very basic--things like "Are you satisfied with your health care? Do you have health insurance? How long does it take you to get to the doctor? Have you had a flu shot in the last 12 months? The interview is strictly confidential and you don't have to answer any questions you don't want to*

*TYPE <g> TO CONTINUE [goto hhld]*

<r> REFUSAL [goto Ref]

===>

>ref< INTERVIEWER ENTER <g> TO ENTER THE REASON FOR THE REFUSAL. CODE THE MAIN REASON ON THE NEXT SCREEN.

===>

>Ref1< INTERVIEWER: CODE MAIN REASON FOR REFUSAL

<10> CONFIDENTIALITY

<11> ACCESS TO TELEPHONE NUMBER

<20> SKEPTICAL ABOUT OR DOESN'T UNDERSTAND FOUNDATION'S ROLE

<21> THINKS FOUNDATION IS A FRONT FOR POLITICAL GROUPS

<40> DOESN'T LIKE STUDY'S PURPOSE (UNSPECIFIED REASON)

<41> DOESN'T THINK STUDY WILL HELP OR MAKE A DIFFERENCE

<43> CONFUSED ABOUT STUDY'S PURPOSE

<50> NOT INTERESTED (UNSPECIFIED REASON)

<51> NOT INTERESTED IN HEALTH ISSUES/NOT IMPORTANT

<53> FAMILY/INFORMANT SATISFIED WITH OR HAS GOOD INSURANCE

<54> SPOUSE WOULD NOT WANT INFORMANT TO PARTICIPATE

<61> INTERVIEW IS TOO LONG

<62> DOESN'T HAVE TIME FOR SURVEYS (LENGTH NOT DISCUSSED)

<70> NO REASON GIVEN

<82> INCENTIVE TOO SMALL

<83> SKEPTICAL ABOUT WHETHER WE WILL PAY INCENTIVE

<90> HOUSEHOLD REFUSED PRIOR TO THIS CALL

<0> OTHER

===> [END INTERVIEW]

>ADD< Is there anyone that I have not mentioned who lives or stays here or who is away at college? REREAD NAMES FROM LIST IF NECESSARY.

{THEN}: Have I missed any babies or small children, anyone who usually lives here but is away at present traveling, in school, or in a hospital, or any foster children, lodgers, boarders and roommates?

*PROBE IF R. ASKS ABOUT STUDENTS: Include household members less than 23 years old who are away at school or college, regardless of whether they live in a dorm or off-campus apartment.*

*IF NO: CODE "n"*

*IF YES: What are their first names?*

*IF R. IS RELUCTANT TO GIVE FIRST NAMES: We are asking for first names because the survey includes questions about the health care of family members. The only reason we need first names is so we'll have some way to tell family members apart. If you'd rather not give names, we can take *relationships* or some other way to tell family members apart.*

*IF YES: ENTER CODE FOR NEXT AVAILABLE PERSON, WITH A MAXIMUM OF 8 PER HOUSEHOLD. (PROGRAM WILL PROMPT FOR NAMES)*

*NAME*

*<1> [FILL NAME]*

*<2> [FILL NAME]*

*<3> [FILL NAME]*

*<4> [FILL NAME]*

*<5> [FILL NAME]*

*<6> [FILL NAME]*

*<7> [FILL NAME]*

*<8> [FILL NAME]*

*<n> NO OTHER HOUSEHOLD MEMBERS*

*<e> 8 OR MORE HOUSEHOLD MEMBERS [goto emol]*

*===>*

*>test head<      If Householder from Round 1 is confirmed as a current household member, goto >bmol<; else go to >head<*

*>head<      Who owns or pays most of the rent on this house? (READ LIST IF NECESSARY; ENTER CODE FOR PERSON MENTIONED FIRST).*

*NAME            RELATION            SEX            AGE*

*<1> [FILL NAME][RELATIONSHIP] [Sex][AGE AT R1]*

*<2> [FILL NAME][RELATIONSHIP] [Sex][AGE AT R1]*

*<3> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]*

*<4> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]*

*<5> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]*

<6> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]

<7> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]

<8> [FILL NAME][RELATIONSHIP][Sex][AGE AT R1]

==> [reassign selected person and their demographic data to the <1> householder slot] [goto bmo1]

**IF NEW SAMPLE:**

>hhld< What are the first names of the people who live or stay here, or who are students away at college? Begin with one of the people who owns or pays most of the rent for this house, and then other people in the household. Be sure to include yourself.

**INTERVIEWER:** 1) IF R. IS RELUCTANT TO GIVE FIRST NAMES: We are asking for first names because the survey includes questions about the health care of family members. The only reason we need first names is *so we'll* have some way to tell family members apart. If you'd rather not give names, we can take *relationships* or some other way to tell family members apart.

2) Persons who reside at a vacation residence, that is not their usual residence, in institutions (see help screen for definitions), or in other group quarters (10 or more unrelated persons living together) are not eligible.

<h> **HELP SCREENS: DEFINITIONS FOR RESIDENCES [GOTO HELP SCREEN; TEXT TO BE PROVIDED].**

<v>VACATION RESIDENCE, INSTITUTION, GROUP QUARTERS

<1> [fill NAME] [HOUSEHOLDER GOES HERE]

<2> [fill NAME]

<3> [fill NAME]

<4> [fill NAME]

<5> [fill NAME]

<6> [fill NAME]

<7> [fill NAME]

<8> [fill NAME]

<v>VACATION HOME, INSTITUTION, GROUP QUART [Ineligible]

<n> NO OTHER HOUSEHOLD MEMBERS

<x> DELETE A HOUSEHOLD MEMBER

<u> UNDELETE A HOUSEHOLD MEMBER

<e> 8 OR MORE HOUSEHOLD MEMBERS [goto emo1]



==> [goto more]

>more< Have I missed any babies or small children, anyone who usually lives here but is away at present traveling, in school, or in a hospital, or any foster children, lodgers, boarders, and roommates?

IF YES: What are their first names?

IF NO: CODE "n"

ENTER TEXT FOR ADDITIONAL PERSONS, WITH A MAXIMUM OF 8 PER HOUSEHOLD

PROBE IF R. ASKS ABOUT STUDENTS: Include household members less than 23 years old who are away at school or college, regardless of whether they are living in a dorm or off-campus apartment.

<1> [fill NAME]

<2> [fill NAME]

<3> [fill NAME]

<4> [fill NAME]

<5> [fill NAME]

<6> [fill NAME]

<7> [fill NAME]

<8> [fill NAME]

<n> NO OTHER HOUSEHOLD MEMBERS

<x> DELETE A HOUSEHOLD MEMBER

<u> UNDELETE A HOUSEHOLD MEMBER

<e> 8 OR MORE HOUSEHOLD MEMBERS [goto emo1]

==> [goto bmo1]

**FOR ALL SAMPLE:**

>emo1< You've told me about eight people in this household. Do any other people live in this household?

<1> YES

<n> NO OTHER PEOPLE IN HOUSEHOLD [if reinterview sample goto test head; if new sample goto bmo1]

==>

>emo2< How many of those additional people are 18 years old or older?

<0-99>

====>

>emo3< How many of those additional people are under 18?

<0-99>

====> [if reinterview sample goto test head; if new sample goto bmo1]

>bmo1< In what month and year was [fill HOUSEHOLDER] born?

**INTERVIEWER: (1) REMEMBER THAT THIS IS THE HOUSEHOLDER.**

**(2) R. IS UNCERTAIN, PROBE FOR BEST ESTIMATE.**

**(3) IF R. IS RELUCTANT: This information is needed only to understand differences in health care for people in different age groups.**

<1> JAN

<7> JULY

<2> FEB

<8> AUG

<3> MARCH

<9> SEPT

<4> APRIL

<10> OCT

<5> MAY

<11> NOV

<6> JUNE

<12> DEC

<d> DON'T KNOW [goto age1]

====>

>byr1< [no erase]

<1880-1982>

<00-84> (year)

====> [goto SEX1]

>age1< What is (his/her/your) age?

**AGEX - P**

**INTERVIEWER: (1) REMEMBER THAT THIS IS THE HOUSEHOLDER.**

**(2) R. IS UNCERTAIN, PROBE FOR BEST ESTIMATE.**

**(3) IF R. IS RELUCTANT: This information is needed only to understand differences in health care for people in different age groups.**

**(4) If R. STILL REFUSES OR DOESN'T KNOW, ASK IF 18 OR OLDER OR UNDER 18 BECAUSE QUESTIONS ARE DIFFERENT FOR ADULTS AND CHILDREN.**

<16-120>

<a>18 OR OLDER

<c> LESS THAN 18

====>

>SEX1< ... and is [fill HOUSEHOLDER] male or female?

**SEX - P**

**INTERVIEWER: CODE WITHOUT ASKING IF KNOWN**

<m> MALE

<f> FEMALE

==> [If age1 lt 23 goto col1; else goto grd1]

>col1< [Is HOUSEHOLDER/are you] a full-time student?

**FTSTUD - P**

**PROBE:** The definition of a full-time student should be based on [fill NAME's] school.

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

==>

>grd1< What is the highest grade or year of school [fill HOUSEHOLDER/you] completed?

**HIGRADX - P**

**PROBE FOR REFUSALS:** I understand that these questions may be sensitive. We are asking these questions to help understand differences in health care problems and needs.

**INTERVIEWER:** IF R. GIVES DEGREE, CODE AS FOLLOWS:

HIGH SCHOOL/GED = 12

JUNIOR COLLEGE/ASSOCIATES DEGREE = 14

B.A./B.S. = 16

M.A./M.S. = 17

M.P.H./M.B.A/M.P.A. = 18

JD/LAW = 19

MD/PHD = 20

<0-20>

<d> DON'T KNOW

<r> REFUSED

==>

>mil1< [IF age ge 18 and lt 65] [Is fill HOUSEHOLDER/Are you] on active duty in the military at this time?

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

==>

>bmo2< In what month and year was [SECOND PERSON'S NAME] born?

IF R. IS UNCERTAIN PROBE FOR BEST ESTIMATE.

PROBE IF R. IS RELUCTANT: This information is needed only to understand differences in health care for people in different age groups.

<1> JAN	<7> JULY
<2> FEB	<8> AUG
<3> MARCH	<9> SEPT
<4> APRIL	<10> OCT
<5> MAY	<11> NOV
<6> JUNE	<12> DEC

<d> DON'T KNOW [goto age2]

==>

>byr2< [no erase]

<1880-1998>

<00-84> (year)

<d> Don't know [goto age2]

==> [goto SEX2]

>age2< What is [SECOND PERSON'S NAME'S] age?

**AGEX - P**

**INTERVIEWER:** (1) CODE "0" IF LESS THAN SIX MONTHS. (2) CODE "1" IF LESS THAN ONE YEAR BUT MORE THAN SIX MONTHS

(3) IF RESPONDENT IS UNCERTAIN, PROBE FOR BEST ESTIMATE

(4) IF RESPONDENT IS RELUCTANT: This information is needed only to understand differences in health care for people in different age groups.

(5) IF R. STILL REFUSES OR DOESN'T KNOW, ASK IF 18 OR OLDER OR UNDER 18 BECAUSE QUESTIONS ARE DIFFERENT FOR ADULTS AND CHILDREN.

<0-120>

<a> 18 OR OLDER

<c> LESS THAN 18

==>

>SEX2< ... and is [SECOND PERSON'S NAME] male or female?

**SEX - P**

**INTERVIEWER:** CODE WITHOUT ASKING IF KNOWN

<m> MALE

<f> FEMALE

====>

**test:** [if age2 ge 16 and lt 23 goto col2; else goto test grd2]

>col2< Is [fill NAME] a full-time student?

**FTSTUD - P**

**PROBE:** The definition of a full-time student should be based on [fill NAME's] school.

<1> YES

<0> NO

<d> DON'T KNOW

====>

>test grd2< [if age2 lt 18 goto rel2]

>grd2< What is the highest grade or year of school [fill NAME] completed?

**HIGRADX - P**

**PROBE FOR REFUSALS:** I understand that these questions may be sensitive. We are asking these questions to help understand differences in health care problems and needs.

**INTERVIEWER:** IF R. GIVES DEGREE, CODE AS FOLLOWS:

HIGH SCHOOL/GED = 12

JUNIOR COLLEGE/ASSOCIATES DEGREE = 14

B.A./B.S. = 16

M.A./M.S. = 17

M.P.H./M.B.A/M.P.A. = 18

JD/LAW = 19

MD/PHD = 20

<0-20>

<d> DON'T KNOW

<r> REFUSED

====>

>mil2< [IF age2 ge 18 and lt 65] Is [fill NAME] on active duty in the military at this time?

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

===>

>rel2< How is [fill NAME] related to [fill HOUSEHOLDER]?

**RELATEX - P**

<1> HUSBAND

<2> WIFE

<3> OWN SON/DAUGHTER

<13> ADOPTED SON/DAUGHTER<sup>1</sup>

<4> STEP SON/DAUGHTER

<5> GRAND SON/DAUGHTER

<6> PARENT

<7> BROTHER/SISTER

<8> SON/DAUGHTER-IN-LAW

<9> MOTHER/FATHER-IN-LAW

<10> OTHER RELATIVE

<11> FOSTER CHILD

<12> NON RELATIVE/UNMARRIED PARTNER

<0> HEAD OF THE HOUSEHOLD (value has been added)

===>

**Repeat bmo2-rel2 for each person.**

**test:** [if any person is  $\geq 18$  and relationship to householder is <7> *[note check for this code is new to round 2]*, <8>, <9>, <10> or <12> and at least one person, other than householder or spouse, is  $\geq 14$  and different sex from (this/these) persons; goto mar2; else goto test after sps2.

>mar2< Is [fill NAME] married to anyone who currently lives here?

---

<sup>1</sup>Adopted child is treated the same as child for all questions, except ethnicity (which is skipped for own child).

**INTERVIEWER:** CODE "NO" FOR COHABITEE

<1> YES

<0> NO [goto next person or next test]

===>

>sps2< To whom is [fill NAME] married?

**SPSID - P**

<1> [fill NAME]

<2> [fill NAME]

<3> [fill NAME]

<4> [fill NAME]

<5> [fill NAME]

<6> [fill NAME]

<7> [fill NAME]

<8> [fill NAME]

===>

**tests: (1) Verify that spouses are opposite sexes and at least 14 years of age.**

**(2) Repeat for each person ge 18 and relationship to householder is <7>, <8>, <9>, <10> or <12>.**

**(3) If any person lt 18 and relationship to householder is not equal to <3>, <4>, <11>, or <13> then goto par2; else goto family formation.**

>par2< Is anyone who lives here the parent or guardian of [fill NAME]?

<1> YES

<0> NO [goto next child or next test]

===>

>who2< Who is [fill NAME]'s parent or guardian?

**PARENT - P**

CODE ONLY ONE

**INTERVIEWER:** IF CHILD HAS TWO PARENTS/GUARDIANS CODE MOTHER OR FEMALE GUARDIAN.

<1> [fill NAME]

<2> [fill NAME]

<3> [fill NAME]

<4> [fill NAME]

<5> [fill NAME]

<6> [fill NAME]

<7> [fill NAME]

<8> [fill NAME]

==>

Repeat for others meeting test before par2.

>snow< Do/Does (READ NAMES FROM TABLE) have another residence where (they he/she) lives more than half the year?

ENTER THE PERSON NUMBER OF PERSONS HAVING ANOTHER RESIDENCE.

**NOTE: STUDENTS 16-22 ARE NOT DISPLAYED IN THE TABLE. THEY ARE PART OF THE HOUSEHOLD EVEN IF AWAY AT SCHOOL MORE THAN HALF THE YEAR.**

NAME	RELATION	SEX	AGE
------	----------	-----	-----

<1> [FILL NAME][RELATIONSHIP] [Sex][AGE]

<2>[FILL NAME][RELATIONSHIP] [Sex][AGE]

<3> [FILL NAME][RELATIONSHIP][Sex][AGE]

<4> [FILL NAME][RELATIONSHIP][Sex][AGE]

<5> [FILL NAME][RELATIONSHIP][Sex][AGE]

<6> [FILL NAME][RELATIONSHIP][Sex][AGE]

<7> [FILL NAME][RELATIONSHIP][Sex][AGE]

<8> [FILL NAME][RELATIONSHIP][Sex][AGE]

<x> DELETE A CODE

<n> REVIEW COMPLETE

==>

**NOTE: PERSONS WHO HAVE OTHER RESIDENCES WILL BE INCLUDED IN R2 TO TEST IMPACT ON ESTIMATES, WILL BE DELETED FOR R3.**



Form interviewing units using the following rules:<sup>2</sup>

- (1) If no one other than householder or householder and spouse is 18 and older, then the household consists of one family.
- (2) Assign persons whose relationship to householder is parent, and any children linked to them, to a separate family.
- (3) Assign persons whose relationship to householder is mother/father-in-law, and any children linked to them, to a separate family.
- (4) Assign additional married persons, and any children linked to them, to a separate family.
- (5) If any remaining (unmarried) person's relationship to householder is child or step-child, he or she is 18 to 22, and a full time student, assign that person, and any children linked to that person, to householder's family.
- (6) Assign any remaining, unmarried persons 18 and older who are not full time students (and any children linked to them) to separate family units.
- (7) If householder or householder's spouse is under 18 and not a student, then he or she and his or her spouse and/or children are eligible. The householder and spouse (if under 18) should be treated as adult(s) during the interview.
- (8) Exclude a person as ineligible if:
  - (1) Person is unmarried fulltime student, 16-22 years of age, and is not a child or ward of householder.
  - (2) Person is under 18, not a householder, relationship to householder is not equal to spouse or child, and no one in household is parent or guardian.
  - (3) Person is active military; however that person can act as survey informant for family interview, and his or her income should be included in income module.
- (9) Exclude interviewing unit as ineligible if all persons 18 and older assigned to the unit are active military.

---

<sup>2</sup>The interviewing unit is defined to reflect an insurance unit, including the household head, spouse, and their dependent children up to but not including age 18, or up to but not including age 23 if they are in school. This definition represents conventional practice in the private insurance market and is similar to the filing unit used by Medicaid and state subsidized insurance programs. The census family (U.S. Bureau of the Census, 1992) sometimes comprises more people than the insurance family. Examples of people typically included in the same census unit, but in different insurance units, are adult children and their families living in the homes of their parents; adult siblings living together; and parents living in the home of their adult children. These persons will form separate interviewing units.

***Child Random Selection by the following rules:***

1) *Determine if sampled R1 child has been identified as an R2 FIU member and is under age 18.*

*IF YES: Select R1 child as R2 child and go to >resp<*

*IF > 1 R1 sampled child (due to FIU reformation), set a flag and pick one child of the flagged children at random.*

*IF NO: Sample new R2 child (demographics collected above) and go to >kdc1<*

*note: NATIONAL SAMPLE WITHIN PSU SITES ARE CODED FOR PSU; OTHERWISE PSU FOR NATIONAL SAMPLE =0*

*>test1< If PSU > 0 goto kdck Else goto kdck3*

*>kdck< Was [FILL NAME] living in the [PSU NAME] area at any time from August 1996 THROUGH July 1997?*

*PROBE: We need to ask this question to know whether children selected for this survey also had a chance to be selected in the first survey.*

*<1> YES*

*<2> NOT YET BORN*

*<3> ALIVE, BUT LIVING OUTSIDE AREA [goto kdck2]*

*<d> DON'T KNOW*

*<r> REFUSED*

*==> [goto fiu formation]*

*>kdck2< Was [FILL NAME] living in the continental United States at any time from August 1996 through July 1997?*

*<1> YES*

*<2> NO*

*<d> DON'T KNOW*

*<r> REFUSED*

*==> [goto fiu formation]*

*>kdck3< Was [FILL NAME] living in the continental United States at any time from August 1996 THROUGH July 1997?*

*PROBE: We need to ask this question to know whether children selected for this survey also had a chance to be selected in the first survey.*

*<1> YES*

*<2> NOT YET BORN*

<3> ALIVE, BUT LIVING OUTSIDE CONTINENTAL US

<d> DONT KNOW

<r> REFUSED

===> [goto fiu formation]

**NOTE:** (1) THE PROGRAM WILL FORM INTERVIEWING UNITS AND THE INTERVIEWER WILL BEGIN WITH THE HOUSEHOLDER'S UNIT.

**NOTE:** *The review of household composition is done on screens organized by Family Insurance Units (FIUs). This was already coded into Section A, although the question text has not been added:*

>resp<      **INTERVIEWER:** ENTER THE [r]HIGHLIGHTED[n] NUMBER OF PERSON WITH WHOM YOU'RE SPEAKING(I.E. "BEST RESPONDENT").

IF RESPONDENT NOT KNOWN ASK: With whom am I speaking?

A PERSON WITH AN \* IN FRONT OF THEIR NAME IS NOT ELIGIBLE.

IF YOU ARE TALKING TO A HOUSEHOLD MEMBER WHO IS NOT ELIGIBLE TO BE INTERVIEWED, ASK FOR AN ELIGIBLE HOUSEHOLD MEMBER.

INTERVIEWER: REVIEW NAME, RELATIONSHIP TO HOUSEHOLDER, SEX, AND AGE OF ALL HH MEMBERS WITH RESPONDENT

#	NAME	RELATION	SEX	AGE
---	------	----------	-----	-----

<1> [FILL NAME][RELATIONSHIP] [Sex][AGE]

<2>[FILL NAME][RELATIONSHIP] [Sex][AGE]

<3> [FILL NAME][RELATIONSHIP][Sex][AGE]

<4> [FILL NAME][RELATIONSHIP][Sex][AGE]

<5> [FILL NAME][RELATIONSHIP][Sex][AGE]

<6> [FILL NAME][RELATIONSHIP][Sex][AGE]

<7> [FILL NAME][RELATIONSHIP][Sex][AGE]

<8> [FILL NAME][RELATIONSHIP][Sex][AGE]

===>

## **b. HEALTH INSURANCE**

>bbeg<      *We would like to conduct the rest of the interview with you. (We will also be asking questions about READ NAMES...) and we will be sending you a check for \$25 for completing the interview.*

**INTERVIEWER: NOTE ONLY ONE CHILD IS SELECTED PER FAMILY**

$\Rightarrow$ 
$$>test\ b<$$
$$>b<$$
 $\Rightarrow$

>b1<           Next, I will list several types of health insurance or health coverage obtained through jobs, purchased directly, or from government programs. For each one, please tell me if (you/either of you/any of you) are currently covered by that type of plan.

>b1a<           Are READ NAMES covered by a health insurance plan from (your/any of your/either of your) current or *former* employers or unions. [CPS]  
IF YES: Who is covered?

**FPRVJOB - F   PRIVJOB - P**

**INTERVIEWER:** DO NOT INCLUDE MILITARY COVERAGE.

**PROBES:**       (1)     Do not include plans that only provide extra cash while in the hospital or plans that pay for only one type of service, such as dental care, vision care, nursing home care, or accidents.  
                  (2)     Include health insurance plans provided by colleges and universities to students.

CODE ALL THAT APPLY

<1>   [fill NAME]

<2>   [fill NAME]

<3>   [fill NAME]

<4>   [fill NAME]

<5>   [fill NAME]

<6>   [fill NAME]

<7>   [fill NAME]

<8>   [fill NAME]

<n>   NONE/NO ONE/NO OTHER RESPONSES

<x>   NEED TO DELETE A RESPONSE

<d>   DON'T KNOW

< r>   REFUSED

====>

>b1b<           (Are READ NAMES) covered by a health insurance plan bought on your or their own.  
[BRFQ]

**FPRVDIR - F   PRIVDIR - P**

IF YES: Who is covered?

**INTERVIEWER:** DO NOT INCLUDE MILITARY COVERAGE.

**PROBES:**       (1)     Include insurance plans purchased through a professional association or trade groups.

- (2) Do not include plans that only provide extra cash while in the hospital or plans that pay for only one type of service, such as dental care, vision care, nursing home care or accident.

CODE ALL THAT APPLY

- <1> [fill NAME]  
<2> [fill NAME]  
<3> [fill NAME]  
<4> [fill NAME]  
<5> [fill NAME]  
<6> [fill NAME]  
<7> [fill NAME]  
<8> [fill NAME]  
<n> NONE/NO ONE/NO OTHER RESPONSES  
<x> NEED TO DELETE A RESPONSE  
<d> DON'T KNOW  
< r> REFUSED  
==>

>b1c< Are READ NAMES covered by a health insurance plan provided by someone who does not live in this household. [CPS]

**FPRVOTH - F PRIVOTH - P**

IF YES: Who is covered?

**INTERVIEWER:** DO NOT INCLUDE MILITARY COVERAGE.

**PROBE:** Do not include plans that only provide extra cash while in the hospital or plans that pay for only one type of service, such as dental care, vision care, nursing home care or accidents.

CODE ALL THAT APPLY

- <1> [fill NAME]  
<2> [fill NAME]  
<3> [fill NAME]  
<4> [fill NAME]  
<5> [fill NAME]  
<6> [fill NAME]

<7> [fill NAME]

<8> [fill NAME]

<n> NONE/NO ONE/NO OTHER RESPONSES

<x> NEED TO DELETE A RESPONSE

<d> DON'T KNOW

< r> REFUSED

===>

>b1d< Are READ NAMES covered by Medicare, the health insurance plan for people 65 years old and older or persons with certain disabilities. [CPS]

**FM CARE - F MCARE - P**

IF YES: Who is covered?

**PROBE:** Include HMO plans, as well as the traditional Medicare plan.

**INTERVIEWER:** INCLUDE IF COVERED BY PART A OR PART B.

CODE ALL THAT APPLY

<1> [fill NAME]

<2> [fill NAME]

<3> [fill NAME]

<4> [fill NAME]

<5> [fill NAME]

<6> [fill NAME]

<7> [fill NAME]

<8> [fill NAME]

<n> NONE/NO ONE/NO OTHER RESPONSES

<x> NEED TO DELETE A RESPONSE

<d> DON'T KNOW

< r> REFUSED

===>

>test bld< **[IF PERSON IS GE 65 AND NOT COVERED BY MEDICARE GOTO b1d1; ELSE GOTO ble]**

>b1d1< PERSON AGE 65 AND **NOT** COVERED BY MEDICARE ASK: I noted that [fill NAME] is [fill AGE], but is not covered by Medicare. Is that correct or did I make a mistake?

<1> CORRECT  
:jb b1d TO CORRECT MEDICARE  
:jb [INSERT AGE FIELD] TO CORRECT AGE

====>

**REVISED TEXT PERMIT PERSONS TO REPORT MEDICAID/STATE COVERAGE AND PRIVATE COVERAGE; DUAL MEDICARE/MEDICAID OBTAINED IN b60, AVOIDING STATE COVERAGE QUESTION FOR MEDICARE BENEFICIARIES.**

>blex< IF STATE ONLY OFFERS MEDICAID: Are READ NAMES covered by [Medicaid/fill STATE NAME], the government assistance program that pays for health care?  
NOTE: WE REPLACED "for people in need" with "that pays for health care."

<1> YES [goto b1e]

<2> NO

<d> DON'T KNOW

<r> REFUSED

====> [goto test b1f]

>bley< IF STATE OFFERS OTHER SUBSIDIZED PROGRAMS AS WELL AS MEDICAID: Are READ NAMES covered by any of the following government assistance programs that help pay for health care: [Medicaid/fill STATE NAME; FILL STATE SPECIFIC PLANS, INCLUDING CHIP], IF YES; Which program is that?

CODE ALL THAT APPLY

<1> Medicaid/fill STATE NAME [goto b1e]

<2> FILL STATE SPECIFIC PLANS, INCLUDING CHIP [BLANK IF NO STATE PROGRAM] [goto b1h]

<n> NO ONE COVERED/NO MORE CODES [goto test b1f]

<d> SOMEONE COVERED, DON'T KNOW WHICH PLAN [goto b1e]; FOLLOW MEDICAID ATTRIBUTE SEQUENCE IF CAN'T IDENTIFY PROGRAM NAME, fill Medicaid.

<r> REFUSED [goto test b1f]

<x> DELETE A CODE

====>

>ble< Are READ NAMES covered by [Medicaid/fill STATE NAME]?

**FMCAID - F MCAID - P**

CODE ALL THAT APPLY



<1>    *[fill NAME]*  
 <2>    *[fill NAME]*  
 <3>    *[fill NAME]*  
 <4>    *[fill NAME]*  
 <5>    *[fill NAME]*  
 <6>    *[fill NAME]*  
 <7>    *[fill NAME]*  
 <8>    *[fill NAME]*  
 <n>    *NONE/NO ONE/NO OTHER RESPONSES*  
 <x>    *NEED TO DELETE A RESPONSE*  
 <d>    *DON'T KNOW*  
 < r>    *REFUSED*  
 ===>

>b1h<    *Are READ NAMES covered by FILL STATE SPECIFIC PLANS, INCLUDING CHIP?*

*CODE ALL THAT APPLY*

<1>    *[fill NAME]*  
 <2>    *[fill NAME]*  
 <3>    *[fill NAME]*  
 <4>    *[fill NAME]*  
 <5>    *[fill NAME]*  
 <6>    *[fill NAME]*  
 <7>    *[fill NAME]*  
 <8>    *[fill NAME]*  
 <n>    *NONE/NO ONE/NO OTHER RESPONSES*  
 <x>    *NEED TO DELETE A RESPONSE*  
 <d>    *DON'T KNOW*  
 < r>    *REFUSED*  
 ===>

**PERMITS MEDICAID AND MILITARY REPORTING, WHICH WAS NOT ALLOWED IN R1**

>b1f<        Are READ NAMES covered by CHAMPUS, CHAMP-VA, TRICARE, VA, or some other military health care. [NHIS]  
IF YES: Who is covered?

**FMILINS - F    MILINS - P**

CODE ALL THAT APPLY

<1>    [fill NAME]

<2>    [fill NAME]

<3>    [fill NAME]

<4>    [fill NAME]

<5>    [fill NAME]

<6>    [fill NAME]

<7>    [fill NAME]

<8>    [fill NAME]

<n>    NONE/NO ONE/NO OTHER RESPONSES

<x>    NEED TO DELETE A RESPONSE

<d>    DON'T KNOW

< r>    REFUSED

====>

>test b1f1<    [IF b1f = NO ONE, GOTO b1g; ELSE GOTO b1f1]

>b1f1<        Which plan is that — CHAMPUS, CHAMP-VA, TRICARE STANDARD, TRICARE PRIME, TRICARE EXTRA, VA, or some other military health plan?

**INTERVIEWER:** CODE ALL THAT APPLY

**INTERVIEWER:**    IF R IS UNSURE TRICARE STANDARD AND PRIME,  
CODE "3" STANDARD.

<1>    CHAMPUS

<2>    CHAMP-VA

<3>    TRICARE STANDARD

<4>    TRICARE PRIME

<5>    TRICARE EXTRA

<6> VA  
<7> OTHER [SPECIFY]  
<d> DON'T KNOW TYPE  
<r> REFUSED  
==>

***PERMITS IHS AND OTHER PLANS TO BE REPORTED.***

>b1g< Are READ NAMES covered by the Indian Health Service. IF YES: Who is covered?

CODE ALL THAT APPLY

<1> [fill NAME]  
<2> [fill NAME]  
<3> [fill NAME]  
<4> [fill NAME]  
<5> [fill NAME]  
<6> [fill NAME]  
<7> [fill NAME]  
<8> [fill NAME]  
<n> NONE/NO ONE/NO OTHER RESPONSES  
<x> NEED TO DELETE A RESPONSE  
<d> DON'T KNOW  
< r> REFUSED  
==>

>test b1i1< **If all family members covered by some type of health insurance goto test b2, else goto b1i1.**

>b1i1< Are READ NAMES covered by a health insurance plan that I have not mentioned. IF YES: What is the name of the plan?

<1> YES [SPECIFY]  
<0> NO [goto test blj]  
<d> DON'T KNOW  
< r> REFUSED

==>

>bli2< Who is covered by [fill NAME SPECIFIED]?

**FOTHINS - F OTHINS - P**

CODE ALL THAT APPLY

<1> [fill NAME]

<2> [fill NAME]

<3> [fill NAME]

<4> [fill NAME]

<5> [fill NAME]

<6> [fill NAME]

<7> [fill NAME]

<8> [fill NAME]

<0> NONE/NO ONE/NO OTHER RESPONSES

<x> NEED TO DELETE A RESPONSE

<d> DON'T KNOW

< r> REFUSED

==>

>test b1j< **[IF A FAMILY MEMBER WAS NOT COVERED UNDER SOME PLAN,  
GOTO bij; ELSE GOTO TEST blk]**

>bij< **INTERVIEWER:** READ FOR FIRST PERSON ONLY (According to the  
information we have, [Fill NAME] does not have health care coverage of any kind).  
Does (he/she) have health insurance or coverage through a plan I might have missed?  
**INTERVIEWER:** REVIEW PLANS IF INFORMANT IS UNSURE.

**UNINSUR - P**

<0> NO/NOT COVERED BY ANY PLAN

<1> HEALTH INSURANCE PLAN FROM A CURRENT OR PAST  
EMPLOYER/UNION/SCHOOL

<2> A HEALTH INSURANCE PLAN BOUGHT ON HIS/HER OWN/PROF.  
ASSN.

<3> A PLAN BOUGHT BY SOMEONE WHO DOES NOT LIVE IN THIS  
HOUSEHOLD

<4> MEDICARE

<5> MEDICAID/STATE NAME

<6> CHAMPUS/CHAMP-VA, TRICARE, VA, OTHER MILITARY

<7> INDIAN HEALTH SERVICE

<8> [fill STATE PLAN]

<9> OTHER PLAN [SPECIFY]

<d> DON'T KNOW

<r> REFUSED

====> [GOTO NEXT UNINSURED PERSON OR GOTO test b2]

>test b2< **IF AT LEAST ONE FAMILY MEMBER IS PRIVATELY INSURED (b1a, b1b, or b1c ge1) AND IS NOT COVERED BY MEDICARE (b1d) GO TO b2; ELSE, GOTO Test b401].**

>b2000< *Set calln = 0 # initialize variable to keep track of which call (that is, within the three private plan "grid," which plan are we on when we make the call) to the external program.*

>b2< In how many different health plans (obtained through current or past employers/(or) that you purchased directly/(or) were provided by someone who does not live in your household) are [fill NAMES OF FAMILY MEMBERS LISTED IN b1a, b1b or b1c EXCEPT FOR THOSE GE 65 AND NOT COVERED BY MEDICARE] enrolled?

***NPRIV - F***

**PROBE:** Do not include plans that only provide extra cash while in the hospital or plans that pay for only one type of service, such as dental care, vision care, nursing home care, or accidents.

<1-3>

<0> [go back to b1 and correct]

<d> DON'T KNOW

<r> REFUSED

====>

>b2001< **if ppc1=ppc2=ppc3=blank goto b2101 [ppc1,2,3 are hard matches from round one.]  
(#either not reinterview sample or no hard match from followback study;  
variables with "p" prefix are round 1 preloads (see preloads.xls; # ppcode1-3  
represents the entity+plan code)**

**pb2=b2=1? If no goto b2101 [check if one plan at R1 and R2 for reinterview sample]  
(#the next three statements test for the same type of plan between R1 and R2)  
coverage shown for both pb1a and b1a? if yes go to b2002**

**coverage shown for both pb2a and b2a? if yes go to b2002  
coverage shown for both pb3a and b3a? if yes go to b2002; else goto b2101**

>b2002< **search for the first non-blank value from ppc1 or ppc2 or ppc3.**

**store the first non-blank value to ppc9**

>b2003a<      **store <hcpdb 2+ppc9> to cvar1**

>b2003b<      **call cvar1 into fptext**

**#matching program returns entity+plan text string (fptext) to use for entity+plan confirmation**

>b204<      [IF HARD MATCH AND ONE PRIVATE PLAN AT R1 AND R2] When we last interviewed (you/your family) on [FILL MO/YR OF R1 INTERVIEW], we recorded your health insurance plan as [FILL fptext]. Do you still have this plan?

<1> Yes [goto b2005]

<0> No

<d> DON'T NOW

<r> REFUSED

====> [goto b205]

>b205<      Did your plan change since [fill MO/YR of R1 INTERVIEW] or is [FILL fptext] incorrect?

<1> PLAN CHANGED

<2> INCORRECT NAME

<d> DON'T KNOW

<r> [goto b231]

====> [goto b2101]

>b2005<      (**#r1 entity+product confirmed for r2 without need to call external lookup**)  
**store ppc9 to pcode1 (#pcode1 is a length = 6 text variable); store fptext to**  
**>b211< goto b231 [Skip data base matching and return to CASES]**

>b2101<      **Set calln=calln+1 (#increment the counter tracking which call it is to the external program)**

>b2102a<      **store <hcpdb 1+caseid+psu+calln+state> to cvar2**

>b2102a<      **call cvar2 into b211**

**INSURER DATABASE MATCHING PROGRAM BEGINS HERE**

>zb211< { SCREEN #1 } What is the complete name of [IF calln=1: the] [IF calln=2: the SECOND][IF call\_n=3: the THIRD] plan?

**PROBE:** IF R. HAS DIFFICULTY RECALLING NAME, ASK: Do you have an insurance card or something else with the (first) plan name on it?

{ DISPLAY: Read-Only List Of 12 entity names

TEXT BOX: [ALLOW 72 CHARACTERS]

<d> DON'T KNOW [fill "this plan" in subsequent questions][goto tb2220]

<r> REFUSED [fill "this plan" in subsequent questions][goto tb2220]

==>

>zb221< **INTERVIEWER:** CODE WHETHER DOCUMENT USED. [NO ERASE]

<1> INSURANCE CARD [Assign unique (Current Entities\_EntityKey + Current Products\_faxCol] code nnnnnn to string, store as plan\_code, store orig\_string to plan\_name][store 5 to match\_type][goto zmb2232]

<2> CLAIMS FORM [Assign unique (Current Entities\_EntityKey + Current Products\_faxCol] code nnnnnn to string, store as plan\_code, store orig\_string to plan\_name][store 5 to match\_type][goto zmb2232]

<3> INSURANCE POLICY [Assign unique (Current Entities\_EntityKey + Current Products\_faxCol] code nnnnnn to string, store as plan\_code, store orig\_string to plan\_name][store 5 to match\_type][goto zmb2232]

<0> NO DOCUMENT USED [goto zmb2232]

<9> INSURANCE COMPANY NAME INCORRECT, BACKUP AND CORRECT

==>

>zTb2220< **If b211 = <d> return to CASES with b211= 999800, b221=" ", ptext = "(72) "**

**If b211 = <r> return to CASES with b211= 999900, b221=" ", ptext = "(72) "**

>zMb2232< ***Based on respondent's answer in zb211, search for insurance plan as follows:***

- 1) *User enters input string.*
- 2) *String is broken into words, which are matched against a good word dictionary. Non-matches are thrown away.*
- 3) *With the matched words, one at a time, look for companies or plans in the state (where state may equal more than one state for some PSUs) that match the word.*
- 4) *"Or" these lists together to get a master list of entities.*
- 5) *For each of these entities, get a list of **plans offered nationally**.*
- 6) *If company not matched goto zb2240.*

**Result = List2.**

>zb2233<     **{SCREEN #3: Company or plan match within state}** *I'm going to read a list of plans offered by that company. Tell me if one of them is the name of [IF call\_n=1: YOUR] [IF call\_n=2: YOUR SECOND][IF call\_n=3: YOUR THIRD] plan (read from list of products:)*

{DISPLAY: scrollable List2 in format ENTITY PRODUCT. "Product Not Specified" included as a response. Entity+Products NOT in List1 are marked with an asterisk. Interviewer highlights proper product item and enters <1>}

<1>     Confirm highlighted entry **To Informix: [store caseid][store 2 to match\_type][store entity+faxCol to plan\_code] [store orig\_string as plan\_name][store code from >b221< as doc\_used][goto zb2261]**

<0>     No match — accept text string and continue **[goto zb2240]**

<9>     Insurance company name incorrect, backup and correct

>zb2240<     **{SCREEN #4}** Was this insurance plan obtained in a state other than (fill STATE)?

<1> Yes

<0> No **[goto zb2260]**

<d> Don't Know **[goto zb2260]**

====>

>zb2241<     What state is that? [NO ERASE]

{DISPLAY: Code list for states}

====>

>zMb2250<     **resubmit string to matching algorithm in Mb2232 with state from zb2241 and products for site = all PSUs. Result = List3.**

>zb2251<     **[Company or plan match within another state]** {SCREEN #5} Here's a list of additional plans in [FILL STATE]. Tell me if one of them is the name of [IF call\_n=1: YOUR] [IF call\_n=2: YOUR SECOND][IF call\_n=3: YOUR THIRD]] plan. (read from list of products:)

{DISPLAY: scrollable List3 in format ENTITY PRODUCT. "Product Not Known" IS included as a response. No need to display [Current Entities\_EntityKey + Current Products\_faxCol] code.. Interviewer highlights proper product item and enters <1>}

<1>     Confirm highlighted entry **To Informix: [store caseid] [store 3 to match\_type][store entity+faxCol to plan\_code] [store orig\_string as plan\_name][store code from >zb221< as doc\_used][goto zb2261]**

<2>     Edit Text String **[goto zb211]**



<3> No match — accept text string and continue [goto zb2260]

>zb2260< **To Informix: [store 4 to match\_type][Assign unique [Current Entities\_EntityKey +  
Current Products\_faxCol] code nnnnnn to string, store as plan\_code] [store  
orig\_string as plan\_name] [store caseid][store code from >b221< as doc\_used]**

>zb2261< {RETURN TO CASES WITH plan\_name}

CASES:

>b2103a<     **store <hcpdb 3+caseid+psu+calln+state> to cvar3**

>b2103b<     **call cvar3 into hcpdbv (1-3)**

INSURER DATABASE MATCHING PROGRAM:

>zb2262<     {RETURN TO CASES WITH plan\_code, doc\_used, match\_type}

CASES:

>b2104<       {break hcpdbv into pcode(1-3) +b221(1-3)+mtchtype(1-3)}

>b231<        Health insurance plans are usually obtained in one person's name even if other family members are covered. That person is called the policyholder. [NHIS]  
              In whose name is this plan?<sup>3</sup>

***PRVHLD1, PRVHLD2, PRVHLD3 - P***

**INTERVIEWER:** CODE NON-SPECIFIED POLICY HOLDER IN "OTHER."

<1>   [fill NAME]

<2>   [fill NAME]

<3>   [fill NAME]

<4>   [fill NAME]

<5>   [fill NAME]

<6>   [fill NAME]

<7>   [fill NAME]

<8>   [fill NAME]

<9>   OTHER [SPECIFY]

<d>   DON'T KNOW

<r>   REFUSED

====>

>test b24<     **[if b2 gt <1>, goto b241; else goto test b25]. It is unnecessary to ask b241 if the family has only one plan because coverage was obtained in b1a, b1b, or b1c.**

---

<sup>3</sup>The program only permits family members with private coverage and persons GE 65 to be coded as policy holders; the program also lists adults in other family units within the household for policy holder questions.

>b241< Who is covered by [fill PLAN NAME]?

**PRVINS1, PRVINS2, PRVINS3 - P**

[READ ASTERISKED NAMES IF NECESSARY.]

CODE ALL THAT APPLY

<1> [fill NAME]

<2> [fill NAME]

<3> [fill NAME]

<4> [fill NAME]

<5> [fill NAME]

<6> [fill NAME]

<7> [fill NAME]

<8> [fill NAME]

<n> NONE/NO ONE/NO OTHER RESPONSES

<x> NEED TO DELETE A RESPONSE

<d> DON'T KNOW

< r> REFUSED

==>

>test b25< [if b1b ge <1> or b1c ge <1> goto b251; else store <1> in b251 and goto b261].  
This question does not need to be asked if the only private plans are employer-based.

>b251< Was this plan originally obtained through a current or past employer or union?

**PRVJOB1, PRVJOB2, PRVJOB3 - F**

<1> YES [goto b261]

<0> NO

<d> DON'T KNOW

<r> REFUSED

==> [goto b271]

>b261< And what is the name of the employer or union who provides this plan?

**DISPLAY IF REINTERVIEW: INTERVIEWER:** The (employer/union) listed when we last interviewed you was [fill NAME].

**PROBE IF RESPONDENT ASKS WHY WE WANT EMPLOYER/UNION NAME:** We are trying to understand differences in insurance plans and how the benefits offered by a particular insurance company vary by employer/union.

**INTERVIEWER NOTE:** BE AS SPECIFIC AS POSSIBLE. SPELL OUT INITIALS AND INCLUDE UNION CHAPTER NUMBERS.

<1> [72 CHARACTERS] [goto b291]

<d> DON'T KNOW [goto b271]

<r> REFUSED [goto b291]

==>

**NOTE:** Deleted test b27 and *old b27(1) and b28(1); included new b271 and b281.*

>b271< *Was this plan obtained through a state or federal government program that helps pay for health insurance coverage?*

<1> YES [goto b281]

<d> NO [goto b291]

<r> DON'T KNOW [goto b281]

<R> REFUSED

==> [goto b291]

>b281< *Do you recall the name of the program?*

**PROBE:** *Some programs that help provide health insurance include [fill STATE PROGRAMS].*

<1> [FILL STATE PROGRAMS]

<9> OTHER [SPECIFY]

<d> DON'T KNOW

<r> REFUSED

==>

>b291< Did READ ASTERISKED NAMES enroll in [NAME OF PLAN] in the past 12 months, that is after [FILL DATE]?

IF MORE THAN ONE PERSON, ASK: Who enrolled in [FILL PLAN] in the past 12 months?

**PRVIY1, PRVIY2, PRVIY3 - F PRV12M1, PRV12M2, PRV12M3 - P**

**INTERVIEWER:** DO NOT INCLUDE BABIES UNDER ONE YEAR IF THEY WERE COVERED BY PLAN SINCE BIRTH.

IF RESPONDENT SAYS HE/SHE STAYED WITH THE SAME PLAN DURING OPEN ENROLLMENT, CODE NO.

CODE ALL THAT APPLY

<1> [Fill NAME] [goto b301]

<2> [Fill NAME] [goto b301]

<n> NO ONE

<x> NEED TO DELETE A RESPONSE

<d> DON'T KNOW

<r> REFUSED

====> [goto test b311]

>b301< How many months ago did [fill NAME] enroll in [fill PLAN NAME]?

**INTERVIEWER:** IF MORE THAN 11 MONTHS, BACK UP TO PREVIOUS QUESTION AND DELETE PERSON.

<0-11> MONTHS

<d> DON'T KNOW

<r> REFUSED

====> [REPEAT b301 FOR EACH PERSON ENROLLED IN PAST 12 MONTHS]

>test b311< [if b251 ne <1> goto b311; else goto b331]

>b311< NON-EMPLOYER AND NON-UNION PLANS:

How much is the insurance premium for this policy?

<0> NONE

\$<10-9997> [goto b321]

<d> DON'T KNOW

<r> REFUSED

====> [goto b331]

>b321< **INTERVIEWER:** CODE TIME PERIOD.

<1> WEEK

<2> EVERY OTHER WEEK

<3> TWICE A MONTH

<4> MONTH

<5> QUARTER

<6> SEMI-ANNUAL

<7> ANNUAL

==>

>b331< Does (PLAN NAME) require (you/members)<sup>4</sup> to sign up with a certain primary care doctor, group of doctors, or clinic, which (you/they) must go to for all of your routine care?

**PRVSIG1, PRVSIG2, PRVSIG3 - F**

**PROBE:** Do not include emergency care or care from a specialist you were referred to.

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

==>

>b341< *[NOTE: BASED ON CAHPS] In order to see a specialist under [fill PLAN NAME], do (you/members) need to get a referral, that is, approval or permission, from your doctor or health plan?*

**PRVREF1, PRVREF2, PRVREF3 - F**

**PROBE:** Do not include emergency care.

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

==>

>b351< Is there a book, directory, or list of doctors associated with the plan?

**PRVLST1, PRVLST2, PRVLST3 - F**

<1> YES

<0> NO

---

<sup>4</sup>Substitute "members" if informant is not covered.

<d> DON'T KNOW

<r> REFUSED

====>

>b361< Is (PLAN NAME) an HMO, that is, a Health Maintenance Organization?

**PRVHMO1, PRVHMO2, PRVHMO3 - F**

**PROBE:** With an HMO, you must generally receive care from HMO doctors; otherwise, the expense is not covered unless you were referred by the HMO or there was a medical emergency. [NHIS DEF]

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>test b371< [IF b351 eq <1> OR b361 eq <1> GOTO b371; ELSE GOTO test b381] FILL

>b371< If (you/members) do not have a referral, will [fill PLAN NAME] pay for any of the costs of visits to doctors who are not [associated with the plan (b351 = 1)]/part of the HMO (b361 = 1)]?

**PRVPAY1, PRVPAY2, PRVPAY3 - F**

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>test b381< [IF b251 = <0>, <d> or <r>, goto test b40; Else, goto, b381]

>b381< Does [EMPLOYER NAME/this employer] offer more than one health insurance plan to its employees?

**PRVMOR1, PRVMOR2, PRVMOR3 - F**

<1> YES [goto b391]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====> [goto test b40]

>b391< Does [EMPLOYER NAME/this employer] offer (any HMO plans/any health insurance plans other than HMO plans)?

**PRVBOT1, PRVBOT2, PRVBOT3 - F**

**NOTE:** IF THIS IS AN HMO PLAN, WE ASK IF EMPLOYER OFFERS NON-HMO PLAN. IF THIS IS A NON-HMO PLAN, WE ASK IF EMPLOYER OFFERS AN HMO PLAN.

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

==>

>test b40< IF b2>1 (MORE THAN ONE PRIVATE PLAN), ASK b212-b392 FOR SECOND PLAN; IF b2=3, ASK b213-b393 FOR THIRD PLAN; ELSE, IF ANY FAMILY MEMBER HAS MILITARY COVERAGE (b1f ge<1>) AND AT LEAST ONE PERSON WITH MILITARY COVERAGE IS NOT COVERED BY SOME OTHER HEALTH PLAN, GOTO b40; ELSE GOTO test b51]

>b40< Next, we have some questions about military health plans.

In whose name is this [fill b1f1] plan?

**NOTE:** If b1f1 = <7>, <d>, or <r>, fill "military health."

<1> [fill NAME]

<2> [fill NAME]

<3> [fill NAME]

<4> [fill NAME]

<5> [fill NAME]

<6> [fill NAME]

<7> [fill NAME]

<8> [fill NAME]

<9> NON-FAMILY MEMBER

<0> OTHER [SPECIFY]

==>

>b41< Did [fill NAMES OF POLICY-HOLDER (b40) AND PERSONS COVERED (b1f1)] enroll in [NAME OF PLAN] in the past 12 months, that is after [FILL DATE]?

**MILINIY - F MILI2M - P**

IF MORE THAN ONE PERSON, ASK: Who enrolled in [FILL PLAN] after [FILL DATE]?



**INTERVIEWER:** DO NOT INCLUDE BABIES UNDER ONE YEAR IF THEY WERE COVERED BY PLAN SINCE BIRTH.

<1> [Fill NAME] [goto b421]

<2> [Fill NAME] [goto b421]

<n> NO ONE

<x> NEED TO DELETE A RESPONSE

<d> DON'T KNOW

<r> REFUSED

==> [goto test b51]

>b421< How many months ago did [fill NAME] enroll in [fill PLAN NAME]?

<0-11> MONTHS AGO

==> [REPEAT b42a FOR EACH PERSON COVERED, THEN GOTO test b51.]

**NOTE:** Deleted b431, b441, b451, b461, b471

>test b51< Medicare [if b1d ge <1> goto b54; else goto test b61]

>b54< Does [fill NAMES] use [his/her] coverage at an HMO?

**MCRHMO - F**

**INTERVIEWER:** IF HUSBAND AND WIFE ARE BOTH ON MEDICARE, AND ONLY ONE IS IN AN HMO, CODE <2> or <3>.

**PROBE:** With an HMO, you must generally receive care from HMO doctors; otherwise, the expense is not covered unless you were referred by the HMO or there was a medical emergency. [NHIS DEF]

<1> YES--MEDICARE BENEFICIARIES IN HMO [goto b55a]

<2> YES--TWO BENEFICIARIES AND ONLY HUSBAND SIGNED UP WITH HMO [goto b55a]

<3> YES - TWO BENEFICIARIES AND ONLY WIFE SIGNED UP WITH HMO [goto b55a]

<0> NO/NONE

<d> DON'T KNOW

<r> REFUSED

==> [goto b51]

>b55a<

What is the name of the HMO plan?

**PROBE:** IF R. HAS DIFFICULTY RECALLING NAME, ASK: Do you have an insurance card or something else with the plan name on it?

<1> TO ENTER PLAN NAME

[PLAN NAME - 72 CHARACTERS]

<d> DON'T KNOW [fill "this plan"]

<r> REFUSED [fill "this plan"]

===>

>b55b<

**INTERVIEWER:** CODE TYPE OF DOCUMENT USED. [NO ERASE]

<1> INSURANCE CARD

<2> CLAIMS FORM

<3> INSURANCE POLICY

<0> NO DOCUMENT USED

===>

>b55c<

Was this HMO plan obtained through a current or past employer or union?

**MCRHJOB - F**

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

===>

>b51<

[Under the HMO plan,] (are you/are they/is he/is she) required to sign up with a certain primary care doctor, group of doctors, or clinic, which (you/they) must go to for all of (your/their/his/her) routine care?

**MCRSIGN - F**

**PROBE:** (1) Do not include emergency care or care from a specialist you were referred to.

(2) If husband and wife have different Medicare plans with one in an HMO and one in an indemnity plan, ask for characteristics of HMO plan.

**NOTE:** IF b54 eq <2> OR <3> PROGRAM STATEMENT IN BRACKETS.

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

==>

>b52< [Under the HMO plan,] in order to see a specialist, (do(es) ( you/they/he/she) need to get a referral, that is, approval or permission, from (your/their/his/her) doctor **or health plan?**

**MCRREF - F**

**PROBE:** Do not include emergency care.

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

==>

>b53< [Under the HMO plan], can [fill NAME] go to any doctor or clinic who will accept Medicare or MUST (he/she/you/they) choose from a book, directory, or list of doctors?

**MCRLST - F**

<1> ANY DOCTOR/CLINIC

<2> BOOK/DIRECTORY/LIST

<d> DON'T KNOW

<r> REFUSED

==>

>test b56< [IF b53 eq <2> OR b54 eq <1> GOTO b56; ELSE GOTO b57]

>b56< If (you/he/she) do not have a referral, will [fill PLAN NAME] pay for any of the costs of visits to doctors who are not [associated with the plan /part of the HMO]?

**MCRPAY - F**

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

==>

>b57< Did [fill NAMES OF MEDICARE ENROLLEES] enroll in [Medicare] in the past 12 months, that is, after [fill DATE]?

**MCRINIY - F MCR12M - P**

IF MORE THAN ONE PERSON, ASK: Who enrolled in [Medicare] in the past 12 months?

CODE ALL THAT APPLY

<1> [fill NAME] [goto b58]

<2> [fill NAME] [goto b58]

<3> [fill NAME] [goto b58]

<4> [fill NAME] [goto b58]

<5> [fill NAME] [goto b58]

<6> [fill NAME] [goto b58]

<7> [fill NAME] [goto b58]

<8> [fill NAME] [goto b58]

<n> NONE/NO ONE/NO OTHER RESPONSES

<x> NEED TO DELETE A RESPONSE

<d> DON'T KNOW

< r> REFUSED

==> [goto b59]

>b58<      How many months ago did [fill NAME] enroll in Medicare?

**INTERVIEWER:** IF MORE THAN 11 MONTHS, BACK UP TO PREVIOUS QUESTION AND DELETE PERSON.

<0-11> MONTHS

<d>      DON'T KNOW

< r>      REFUSED

==>      [REPEAT FOR EACH MEDICARE BENEFICIARY ENROLLED IN PAST 12 MONTHS]

>b59<      (Are/Is) [fill NAMES OF MEDICARE ENROLLEES] covered by Medicare supplemental or Medigap policies? These policies are designed to cover the costs of health care that are not covered by Medicare.

**FMCRSUP - F    MCRSUP - P**

IF MORE THAN ONE PERSON, ASK: Who is covered by these policies.

CODE ALL THAT APPLY

<1> [fill NAME] [goto b59a]

<2> [fill NAME] [goto b59a]

<n> NONE

<x> NEED TO DELETE A RESPONSE

<d> DON'T KNOW

<r> REFUSED

==> [goto test b60]

>59a1< FOR EACH PERSON CODED IN b59, ASK: Was [fill NAME]'s policy obtained through a current or past employer or union?

**MCRSUPJ - P**

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

==>

**NOTE:** Deleted b59b, b59c, and b60.

>test b61< **ALL MEDICAID RECIPIENTS GOTO b64 [If bley eq <1> or <d>) goto b64; else goto test b70.]**

**NOTE:** Deleted b61, b62 and b63.

>b64< Under (Medicaid/STATE NAME) (are/is) [fill NAMES] signed up with an HMO, that is, a Health Maintenance Organization?

**MCDHMO - F**

**PROBE:** With an HMO, you must generally receive care from HMO doctors; otherwise, the expense is not covered unless you were referred by the HMO or there was a medical emergency. [NHIS DEF]

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

==>

**NOTE:** Deleted b65a, b65b, and b66.

>b67< Did [fill NAMES OF MEDICAID BENEFICIARIES] enroll in [STATE NAME/Medicaid] in the past 12 months, that is, after [fill DATE]?

**MCDINIY - F MCD12M - P**

IF MORE THAN ONE PERSON, ASK: Who enrolled in (STATE NAME/Medicaid) in the past 12 months?

**INTERVIEWER:** DO NOT INCLUDE BABIES UNDER ONE YEAR IF THEY WERE COVERED BY PLAN SINCE BIRTH.

<1> [fill NAME] [goto b68]  
<2> [fill NAME] [goto b68]  
<3> [fill NAME] [goto b68]  
<4> [fill NAME] [goto b68]  
<5> [fill NAME] [goto b68]  
<6> [fill NAME] [goto b68]  
<7> [fill NAME] [goto b68]  
<8> [fill NAME] [goto b68]  
<n> NONE/NO ONE/NO OTHER RESPONSES  
<x> NEED TO DELETE A RESPONSE  
<d> DON'T KNOW  
< r> REFUSED  
==> [goto test b70]

>b68<      How many months ago did [fill NAME] enroll in [STATE NAME/Medicaid]?

**INTERVIEWER:** IF MORE THAN 11 MONTHS, BACK UP TO PREVIOUS QUESTION AND DELETE PERSON.

<0-11> MONTHS

<d>      DON'T KNOW

< r>      REFUSED

==>    [REPEAT b68 FOR EACH MEDICAID BENEFICIARY ENROLLED IN PAST 12 MONTHS]

>test b70<    ***ATTRIBUTES ASKED IF STATE PLAN, INCLUDING CHIP, AND NO PRIVATE PLANS. [If (b2<1) and (b1e eq <2> or b1i1 eq <1>) goto b71; else goto testb80]***

>b71<

Health insurance plans are usually obtained in one person's name even if other family members are covered. That person is called the policyholder.

**STPHD - F**

In whose name is [fill NAME OF STATE PROGRAM]?

**INTERVIEWER:** CODE NON-SPECIFIC POLICY HOLDER IN "OTHER."

<1> [fill NAME]

<2> [fill NAME]

<3> [fill NAME]

<4> [fill NAME]

<5> [fill NAME]

<6> [fill NAME]

<7> [fill NAME]

<8> [fill NAME]

<9> OTHER [SPECIFY]

==>

**NOTE:** Deleted b72, b73, and b74.

>b75<

Is this plan an HMO, that is, a Health Maintenance Organization?

**STHMO - F**

**PROBE:** WITH an HMO, you must generally receive care from HMO doctors; otherwise, the expense is not covered unless you were referred by the HMO or there was a medical emergency. [NHIS DEF]

<1> YES

<0> NO

<D> DON'T KNOW

<R> REFUSED

==>

**NOTE:** Deleted b75a, b75b, and b76.

>b77<

Did [fill NAMES OF PLAN MEMBERS] enroll in [NAME OF STATE PROGRAM] in the past 12 months, that is, after [fill DATE]?

**STINIY - F STI2M - P**

IF MORE THAN ONE PERSON, ASK: Who enrolled in the past 12 months?

**INTERVIEWER:** DO NOT INCLUDE BABIES UNDER ONE YEAR IF THEY WERE COVERED BY PLAN SINCE BIRTH.

<1> [fill NAME] [goto b78]

<2> [fill NAME] [goto b78]

<3> [fill NAME] [goto b78]

<4> [fill NAME] [goto b78]

<5> [fill NAME] [goto b78]

<6> [fill NAME] [goto b78]

<7> [fill NAME] [goto b78]

<8> [fill NAME] [goto b78]

<n> NO ONE AFTER [fill DATE]/NO ONE ELSE

<d> DON'T KNOW

<r> REFUSED

==> [goto test b80]

>b78< How many months ago did [fill NAME] enroll in [NAME OF STATE PROGRAM]?

**INTERVIEWER:** IF MORE THAN 11 MONTHS, BACK UP TO PREVIOUS QUESTION AND DELETE PERSON.

<0-11> MONTHS

==> [REPEAT b78 FOR PERSON ENROLLED IN PAST 12 MONTHS]

### **CURRENTLY UNINSURED**

>test b80< ***[IF ONE OR MORE FAMILY MEMBERS IS CURRENTLY UNINSURED BUT AT LEAST ONE MEMBER IS PRIVATELY INSURED, GOTO b79 ELSE, IF ALL FAMILY MEMBERS ARE UNINSURED, GO TO b80 FOR FIRST PERSON; ELSE GOTO TEST b85]***

>b79< *Is family coverage offered under [POLICY HOLDER'S] health insurance plan?*

<1> YES [goto b791]

<0> NO

<d> DON'T KNOW

<r> REFUSED

==> [goto b801 FOR FIRST UNINSURED PERSON]

>b791< *(Is/Are) [fill NAMES OF UNINSURED FAMILY MEMBERS] not covered by [fill POLICY HOLDERS] plan because health insurance costs too much or was there some other reason?*



<1> COSTS TOO MUCH

<2> OTHER [SPECIFY]

==> [goto b801 FOR FIRST UNINSURED PERSON]

>b801< At any time during the past 12 months [was fill NAME/were you] covered by [Medicaid/fill STATE NAME], [fill STATE PROGRAM], or a health insurance plan obtained through work, a union, or purchased directly?

**UNINCOV - P**

<1> YES [goto b81]

<0> NO

<d> DON'T KNOW

<r> REFUSED

==> [goto next uncovered person or test b85]

>b81< Just before becoming uninsured, what type of health insurance coverage did ([fill NAME]/you) have? Was it...

**UNINPLX - P**

**INTERVIEWER: CODE ONLY ONE.**

<1> a health insurance from an employer or union or purchased directly from an insurance company [goto b82]

<2> Medicaid/fill state name [goto b82]

<3> [fill state plan] [goto b82]

<4> Champus, Champ-VA, Tricare, VA, or other military coverage  
<5> Indian health service

<0> NONE

<d> DON'T KNOW

<r> REFUSED

==> [goto next uncovered person or test b85]

>b82< Was this plan an HMO, that is, a Health Maintenance Organization?

**UNINHMO - P**

**PROBE:** WITH an HMO, you must generally receive care from HMO doctors; otherwise, the expense is not covered unless you were referred by the HMO or there was a medical emergency. [NHIS DEF]

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>b83< In what month did [fill NAME'S/your] health insurance coverage under this plan stop?

<1> JAN	<7> JULY	<d> DON'T KNOW
<2> FEB	<8> AUG	<r> REFUSED
<3> MAR	<9> SEPT	
<4> APR	<10> OCT	
<5> MAY	<11> NOV	
<6> JUNE	<12> DEC	

====>

>b84< Why did [fill NAME]'s health insurance coverage stop?

**INTERVIEWER:** CODE ALL THAT APPLY; READ RESPONSES IF NECESSARY.

**UNINSR1 - P** <1> LOST JOB OR CHANGED EMPLOYERS

**UNINSR2 - P** <2> SPOUSE/PARENT LOST JOB OR CHANGED EMPLOYERS

**UNINSR3 - P** <3> GOT DIVORCED OR SEPARATED/DEATH OF SPOUSE OR PARENT

**UNINSR4 - P** <4> BECAME INELIGIBLE BECAUSE OF AGE/LEFT SCHOOL

**UNINSR5 - P** <5> EMPLOYER STOPPED OFFERING COVERAGE

**UNINSR6 - P** <6> CUT BACK TO PART TIME/BECAME TEMPORARY EMPLOYEE

**UNINSR7 - P** <7> BENEFITS FROM EMPLOYER/FORMER EMPLOYER RAN OUT

**UNINSR8 - P** <8> COULDN'T AFFORD TO PAY THE PREMIUMS

**UNINSR9 - P** <9> INSURANCE PLAN RAISED COST OF PREMIUMS

**UNINR10 - P** <10> INSURANCE COMPANY REFUSED COVERAGE

**UNINR11 - P** <11> OR SOMETHING ELSE [SPECIFY]

**UNINR12 - P** <12> *(INELIGIBLE/LOST) PUBLIC ASSISTANCE*

**UNINR13 - P** <13> *FAILED TO RE-ENROLL*

**UNINR14 - P** <14> *UNHAPPY WITH PLAN/DROPPED PRIVATE PLAN*

<n> NONE/NO ONE/NO OTHER RESPONSES

<x> NEED TO DELETE A RESPONSE

<d> DON'T KNOW

<r> REFUSED

====>

REPEAT b80 - b84 FOR EACH CURRENTLY UNINSURED PERSON.

**CURRENTLY INSURED**

>test b85<      **[IF ONE OR MORE FAMILY MEMBERS ARE CURRENTLY INSURED AND COVERAGE BEGAN LESS THAN 12 MONTHS AGO, GOTO b851; ELSE GOTO TEST b90]**

>b851<      During the month just before [fill NAME]'s coverage with [fill CURRENT PLAN NAME] began, what type of health insurance coverage did [you/he/she] have? Was it..

**PREINSX - P**

**INTERVIEWER: CODE ONLY ONE.**

<1> health insurance from an employer or union or directly purchased from an insurance company

<2> [Medicaid/fill state name]

<3> [fill state plan]

<4> Champus, Champ-VA, Tricare or other military coverage

<5> Indian health service

<6> a different Medicare plan<sup>5</sup> [SUPPRESS IF PERSON LT 65]

<0> or did (he/she/you) not have any health insurance coverage [goto test 852]

<7> NOT APPLICABLE [NEWBORN/FOREIGN COVERAGE][goto test 852]

<d> DON'T KNOW [goto test 852]

<r> REFUSED [goto test 852]

====>

>test b861<      **[IF THERE ARE OTHER CURRENTLY INSURED FAMILY MEMBERS WHOSE COVERAGE BEGAN LESS THAN 12 MONTHS AGO, GOTO b861; ELSE GO TO TEST b871]**

>b861<      Were [fill NAMES OF OTHER CURRENTLY INSURED FAMILY MEMBERS WHOSE COVERAGE BEGAN LESS THAN 12 MONTHS AGO] covered under this plan?

CODE ALL THAT APPLY

<1> [fill NAME]

<2> [fill NAME]

---

<sup>5a</sup> Can capture prior coverage of Medicare beneficiaries who had changes in last 12 months here.

<3> [fill NAME]

<4> [fill NAME]

<5> [fill NAME]

<6> [fill NAME]

<7> [fill NAME]

<8> [fill NAME]

<n> NONE/NO ONE/NO OTHER RESPONSES

<x> NEED TO DELETE A RESPONSE

<d> DON'T KNOW

<r> REFUSED

====>

>test b871< [b851 le <4> or b851 eq <6>, GOTO b871; ELSE GO TO TEST b852]

>b871< Was [fill NAME]'s last health insurance plan before [fill CURRENT PLAN NAME] an HMO, that is, a Health Maintenance Organization?

**PREHMO - P**

**PROBE:** With an HMO, you must generally receive care from HMO doctors; otherwise, the expense is not covered unless you were referred by the HMO or there was a medical emergency. [NHIS DEF]

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>test b881< [If b851 eq <1> and current coverage is private (bla, blb or blc) go to b881; ELSE GOTO test b852]

>b881< Why did [fill NAME/you] change insurance plans at that time?

CODE ALL THAT APPLY.

**CHGINS1 - P** <1> OWN/SPOUSE/PARENT CHANGE JOB

**CHGINS2 - P** <2> EMPLOYER OFFERINGS CHANGED

**CHGINS3 - P** <3> CURRENT PLAN IS LESS EXPENSIVE

**CHGINS4 - P** <4> CURRENT PLAN HAS BETTER SERVICES: PREFERRED DOCTORS, BETTER QUALITY, CONVENIENT LOCATION, ETC.

**CHGINS5 - P** <5> OTHER [SPECIFY]

**CHGINS6 - P** <6> **ELIGIBILITY STATUS CHANGED** (*age, martial status, etc*)

**CHGINS7 - P** <7> **NOT AN ACTUAL CHANGE**

<n> NONE/NO ONE/NO OTHER RESPONSES

<x> NEED TO DELETE A RESPONSE

<d> DON'T KNOW

<r> REFUSED

====>

>test b852< **[IF THERE ARE OTHER CURRENTLY INSURED FAMILY MEMBERS WHOSE COVERAGE BEGAN LESS THAN 12 MONTHS AGO, AND WHO WERE NOT CITED IN b851 or b861, ASK b852; ELSE GO TO TEST b90].**

>b852< During the month just before [fill NAME]'s coverage with [fill CURRENT PLAN NAME] began, what type of health insurance coverage did [you/he/she] have? Was it..

**PREINSX - P**

**INTERVIEWER: CODE ONLY ONE.**

<1> health insurance from an employer or union or directly purchased from an insurance company

<2> [Medicaid/fill state name]

<3> [fill state plan]

<4> CHAMPUS, CHAMP-VA, TRICARE or other military coverage

<5> Indian health service

<6> a different Medicare plan [SUPPRESS IF PERSON LT 65]

<0> or did (he/she/you) not have any health insurance coverage [goto next insured person whose coverage began LT 12 months ago or test b90]

<d> DON'T KNOW [goto next insured person whose coverage began LT 12 months ago or test b90]

<r> REFUSED [goto next insured person whose coverage began LT 12 months ago or test b90]

====>

>test b872< **[b852 le <4> or b852 eq <6>, GOTO b872; ELSE GOTO TEST b882]**

>b872< Was [fill NAME]'s last health insurance plan before [fill CURRENT PLAN NAME] an HMO, that is, a Health Maintenance Organization?

**PREHMO - P**

**PROBE:** With an HMO, you must generally receive care from HMO doctors; otherwise, the expense is not covered unless you were referred by the HMO or there was a medical emergency. [NHIS DEF]

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>test b882< [If b852 eq <1> and current coverage is private (bla, blb or blc)  
go to b882; ELSE GOTO test b90]

>b882< Why did [fill NAME/you] change insurance plans at that time?

CODE ALL THAT APPLY.

**CHGINS1 - P** <1> OWN/SPOUSE/PARENT CHANGED JOB

**CHGINS2 - P** <2> EMPLOYER OFFERINGS CHANGED

**CHGINS3 - P** <3> CURRENT PLAN IS LESS EXPENSIVE

**CHGINS4 - P** <4> CURRENT PLAN HAS BETTER SERVICES: PREFERRED DOCTORS,  
BETTER QUALITY, CONVENIENT LOCATION, ETC. <sup>6</sup>

**CHGINS5 - P** <5> OTHER [SPECIFY]

**CHGINS6 - P** <6> **ELIGIBILITY STATUS CHANGED** (*age, martial status, etc*)

**CHGINS7 - P** <7> **NOT AN ACTUAL CHANGE**

<d> DON'T KNOW

<r> REFUSED

====>

>test b90< [IF INFORMANT HAS BEEN IN HMO IN LAST YEAR GOTO b911; ELSE  
GOTO b901]

>b901< Have you ever been enrolled in an HMO?

**HMOEVR - P**

<1> YES

<0> NO

<d> DON'T KNOW

---

<sup>6</sup>Frequency for particular services is too low to justify burden and cost of separate coding.

<r> REFUSED

====>

>b911< [INFORMANT ONLY] Altogether, for about how many years have you been enrolled in HMO plans?

**PROBE:** Your best estimate is fine.

<0> LESS THAN SIX MONTHS

<1-20> YEARS

<d> DON'T KNOW [goto b921]

<r> REFUSED

====> [goto test b902]

>b921< Would that be less than two years, two to five years, or more than five years?

<1> LESS THAN TWO YEARS

<2> TWO TO FIVE YEARS

<3> MORE THAN FIVE YEARS

<D> DON'T KNOW

<R> REFUSED

====> [goto test b902]

>test b902< **[IF INFORMANT IS MARRIED, GOTO test b90 AND ASK b902... b922 FOR SPOUSE, SUBSTITUTING [Fill NAME] FOR [YOU], ELSE, IF NO SPOUSE, GOTO b951.]**

>b951< In choosing among alternative health plans, some people have concerns that are especially important to them.

***MCHOICE - P***

Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the following statement: I would be willing to accept a limited choice of physicians and hospitals if I could save money on my out-of-pocket costs for health care.<sup>7</sup>

**PROBE:** CODE "7" IF R. SAYS THE STATEMENT DOES NOT APPLY.

<1> STRONGLY AGREE

<2> SOMEWHAT AGREE

<3> NEITHER AGREE NOR DISAGREE

---

<sup>7</sup> Source: Royal, Kenneth, et al, **The Gallup Arizona Health Care Poll**. P.18, The Gallup Organization, 1995. Distributions by coverage available.

<4> SOMEWHAT DISAGREE

<5> STRONGLY DISAGREE

<7> NOT APPLICABLE

<d> DON'T KNOW

<r> REFUSED

====>

**NOTE:** Deleted b98 and b99.

**c. RESOURCE USE DURING THE LAST 12 MONTHS**

>c101<        Since [DATE 12 MONTHS AGO], were [fill NAMES OF FAMILY MEMBERS] a patient in a hospital overnight?

**PROBE:** DO NOT INCLUDE ANY OVERNIGHT STAYS IN THE EMERGENCY ROOM.

<1>    YES [goto c11]

<0>    NO

<d>    DON'T KNOW

<r>    REFUSED

====> [goto test c20]

>c11<        Who was in a hospital overnight? (Anyone else?)

<1> [fill NAME]

<2> [fill NAME]

<3> [fill NAME]

<4> [fill NAME]

<5> [fill NAME]

<6> [fill NAME]

<7> [fill NAME]

<8> [fill NAME]

<n> NONE/NO ONE/NO OTHER RESPONSES

<x> NEED TO DELETE A RESPONSE

<d> DON'T KNOW



<r> REFUSED

====>

>test c121< [ASK FOR EACH PERSON WITH A HOSPITAL STAY]

>c121< How many different times did [fill NAME] stay in any hospital overnight or longer during the past 12 months?

**HSPSTYN - P**

**PROBE:** Your best estimate is fine.

<1-20> TIMES

<d> DON'T KNOW

<r> REFUSED

====>

>test c131< [if (FEMALE AND GE 12 AND LE 45) or (CHILD LE 1) goto c131; else goto c151]

>c131< FEMALE, 12-45 YEARS OLD: [Were any of these hospital stays/was this hospital stay] for delivery of a baby?

CHILD: Did [fill CHILD LE 1] stay in the hospital overnight at birth?

<1> YES [goto c141]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====> [goto c151]

>c141< Have you included this hospitalization in the number of hospital stays you gave me for [fill NAME]?

**PROBE:** Was [fill NAME's] stay in the hospital overnight for delivery.

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>c151< [For how many of the [fill c121] times [fill NAME] stayed in the hospital] (was/were) (he/she/you) admitted through the emergency room?

**HSPERX - P**

<0-20>TIMES

<d> DON'T KNOW

<r> REFUSED

**NOTE:** NUMBER MUST BE LE # ADMISSIONS IN c121.

====>

>c161< [For [fill NAME]'s [fill c121] hospital stay(s) during the past 12 months,] how many nights was (he/she) in the hospital altogether?

**HSPNITX - P**

<1-366> NIGHTS

<d> DON'T KNOW

<r> REFUSED

====>

**NOTE:** c161 MUST BE GE c121; ELSE VERIFY. (Z161)

**REPEAT FOR OTHER FAMILY MEMBERS WITH HOSPITAL STAYS. THEN ASK REMAINING RESOURCE USE QUESTIONS FOR EACH FAMILY MEMBER, BEGINNING WITH INFORMANT.**

>test c20< **[SELECT WORDING BASED ON WHETHER PERSON HAD ER VISIT RESULTING IN HOSPITAL ADMISSION]**

>c211< ER/HOSPITAL ADMISSION: [The next questions are about [fill NAME]<sup>8</sup>. Not counting [fill NAME]'s [fill c151] emergency room visits you told me about, [have/has] [fill NAME] gone to a hospital emergency room in the past 12 months to get medical treatment?

NO ER/HOSPITAL ADMISSION: [The next questions are about [fill NAME]].<sup>1</sup> During the past 12 months, [have/has] [fill NAME] gone to a hospital emergency room to get medical treatment?

**PROBE:** Count all visits to the ER, including visits where you received a brief exam, but were sent elsewhere.

<1> YES [goto c221]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====> [goto c311]

---

<sup>8</sup>Delete phrase for one person family.

>c221< [Again, not counting the [fill 151] emergency room visits you told me about,]  
During the past 12 months, how many times has [fill NAME] gone to a hospital  
emergency room?

**ERUSENX - P**

**PROBE:** Count all visits to the ER, including visits where [fill NAME] received a  
brief exam, but were sent elsewhere.

**PROBE:** Your best estimate is fine.

<1-20>TIMES

<d> DON'T KNOW [goto c231]

<r> REFUSED

====> [goto c311]

>c231< Would you say one, two or three, four to nine, ten to twelve, or thirteen or more?

<1>1

<2>2-3

<3>4-9

<4>10 - 12

<5>13 OR MORE

<d> DON'T KNOW

<r> REFUSED

====>

>c311< Since [insert MONTH/YEAR 12 months ago], about how many times has [fill  
NAME] seen a doctor? Do not count doctors seen while an overnight patient in a  
hospital or in the emergency room.

**DRVISNX - P**

**PROBES:** (1) Include osteopathic doctors and psychiatrists.  
(2) Include outpatient visits.  
(3) Exclude dentists visits, chiropractor visits, and telephone calls  
to doctors.  
(4) Your best estimate is fine.

<0> [goto c331]

<1-96> [goto c3p1]

<d> DON'T KNOW [goto c321]

<r> REFUSED [goto test c411]

====>

>c321< Would you say one, two or three, four to nine, ten to twelve, or thirteen or more?

<1> 1

<2> 2-3

<3> 4-9

<4> 10 - 12

<5> 13 OR MORE

<d> DON'T KNOW [goto test c411]

<r> REFUSED [goto test c411]

====>

>c3p1< *[ASK OF ALL PERSONS] (Were any of these visits/Was this visit) for routine preventive care such as a physical examination (well-child if child <5) or check up?*

**DPHYEXM - P**

<1> YES [goto c331]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>[goto c3c1]

>c3c1< *(Were any of these visits/Was this visit) for a routine check up for an ongoing health problem?*

**DRTNPRM - P**

**PROBE:** *Examples of ongoing health problems include asthma, diabetes, heart conditions, hypertension, cancer, etc.*

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>c331< [Not counting [fill NAME'S] [fill c311] doctor visits you already told me about,] has [fill NAME] seen a nurse practitioner, physician assistant, [or midwife] during the last 12 months?

IF YES: How many times has [fill NAME] seen a nurse practitioner, physician's assistant [or midwife] during the last 12 months?

**MPVISNX - P**

**PROBES:** (1) Your best estimate will be fine.

- (2) Include times you got a shot, but did not see the doctor.  
(3) Do not include visits where [FILL NAME] saw only a registered nurse.

<0> NO/NONE [goto test c411]

<1-96> VISITS [goto test c351]

<d> DON'T KNOW

<r> REFUSED [goto test c411]

====>

>c341< Would you say one, two or three, four to nine, ten to twelve, or thirteen or more?

<1> 1

<2> 2-3

<3> 4-9

<4> 10 - 12

<5> 13 OR MORE

<d> DON'T KNOW

<r> REFUSED

====>

>test c351< [if c3p1 ne <1> and c3c1 ne <1> goto c351; else go to test c411]

>c351< [ASK OF ALL PERSONS] (Were any of these visits/Was this visit) for routine preventive care such as a physical examination (well-child if child <5) or check up?

<1> YES [goto test c411]

<0> NO

<d> DON'T KNOW

<r> REFUSED [goto test c411]

====>

>c361< (Were any of these visits/Was this visit) a routine check up for an ongoing health problem?

**PROBE:** Examples of ongoing health problems include asthma, diabetes, heart conditions, hypertension, cancer, etc.

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

===>

>test c411< [IF NO HOSP/ER/PHYS./OTHER PROVIDER VISITS, GOTO c511]<sup>9</sup>

>c411< During the past 12 months has [fill NAME] had **surgery** or other surgical procedures either in the hospital or in a doctor's office?

**PROBE:** This includes both major surgery and minor surgery and procedures such as setting broken bones, stitches, or removing growths.

<1> YES [goto c421]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====> [goto c511]

>c421< Altogether, **how many different times** has [fill NAME] had surgery during the past 12 months?

**SURGNX - P**

<1-96> TIMES [goto test c431]

<d> DON'T KNOW

<r> REFUSED

====> [goto c511]

>test c431< [IF PERSON HAS HAD AT LEAST ONE HOSPITAL STAY GOTO c431;  
ELSE GOTO c511]

>c431< And how many of these [fill c411] surgeries were in the hospital when [fill NAME] stayed overnight or longer?

**SURGNTX - P**

<0-96> TIMES

<97> ALL

<d> DON'T KNOW

<r> REFUSED

---

<sup>9</sup>Even if respondent recalled no encounters with health system, he or she could have obtained a flu shot and not considered it an a visit with medical personnel.

====>

>c511< During the past 12 months, that is since [fill 12-MONTH DATE], has [fill NAME] seen or talked to a mental health professional, such as a psychiatrist, psychologist, psychiatric nurse, or clinical social worker?

**MENTAL - P**

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

*NOTE: c521 deleted.*

>test c530< [IF PERSON GE 18 GOTO c531; ELSE GOTO TEST c600]

>c531< During the past 12 months, has [fill NAME] had a flu shot? A flu shot is usually given in the fall and protects against influenza for the flu season.

**FLUSHOT - P**

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>test c600< [IF PERSON IS FEMALE AND GE 40 GOTO c611; ELSE GOTO c811]

>c611< A mammogram is an x-ray of the breast to look for breast cancer. Has [fill NAME] ever had a mammogram?

**MAMMGM - P**

<1> YES [goto c621]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====> [goto c811]

>c621< How long has it been since [fill NAME] had (her/your) last mammogram?

**MAMLASX - P**

<1> WITHIN THE PAST YEAR (1 TO 12 MONTHS AGO)

<2> WITHIN THE PAST 2 YEARS (1 TO 2 YEARS AGO)

<3> WITHIN THE PAST 3 YEARS (2 TO 3 YEARS AGO)

<4> WITHIN THE PAST 5 YEARS (3 TO 5 YEARS AGO)

<5> 5 OR MORE YEARS AGO

<d> DON'T KNOW

<r> REFUSED

===>

**c. UNMET NEED**

>c811< [INFORMANT SELF RESPONSE] Next, during the past 12 months, was there any time when you didn't get the medical care you needed?

**UNMET - P**

INTERVIEWER: THIS QUESTION IS LIMITED TO MEDICAL CARE. DO NOT INCLUDE DENTAL CARE R DID NOT GET

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

===>

>c821< [INFORMANT SELF RESPONSE] And was there any time during the past 12 months when you put off or postponed getting medical care you thought you needed?

**PUTOFF - P**

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

===>

>test c831< [IF c811 EQ <1> OR <8> OR c821 EQ <1> OR <8> GOTO c831; ELSE GOTO c21..., NEXT PERSON; ELSE GO TO C92]

>c831< [INFORMANT SELF RESPONSE] Did you not get or postpone getting medical care for any of the following reasons?

CODE ALL THAT APPLY.

**INTERVIEWER:** READ RESPONSE CATEGORIES SLOWLY TO RESPONDENT, ENTERING RESPONSES AS THEY ARE GIVEN.

**PUTOFR1 - P** <1> Worry about the cost

**PUTOFR2 - P** <2> The doctor or hospital wouldn't accept your health insurance

**PUTOFR3 - P** <3> Your health plan wouldn't pay for the treatment



**PUTOFR4 - P** <4> You couldn't get an appointment soon enough

**PUTOFR5 - P** <5> You couldn't get there when the doctor's office or clinic was open

**PUTOFR6 - P** <6> It takes too long to get to the doctor's office or clinic from your house or work

**PUTOFR7 - P** <7> You couldn't get through on the telephone

**PUTOF14 - P** <8> *You were too busy with work or other commitments to take the time*

**PUTOF20 - P** <9> *You didn't think the problem was serious enough*

**PUTOFR0 - P** <n> Or any other reason I haven't mentioned [SPECIFY]

**PUTOFR8 - P** <8> *Had to wait in the office or clinic too long*

**PUTOFR9 - P** <9> *Do not know where to go/can't find doctor/can't use doctor of choice*

**PUTOF10 - P** <10> *Can't get referral from doctor*

**PUTOF11 - P** <11> *Other problems related to health system*

**PUTOF12 - P** <12> *Change in health insurance*

**PUTOF13 - P** <13> *Other insurance-related problems*

**PUTOF15 - P** <15> *Can't get off work*

**PUTOF16 - P** <16> *Transportation problems*

**PUTOF17 - P** <17> *Caring for family members*

**PUTOF18 - P** <18> *Too sick*

**PUTOF19 - P** <19> *Negative attitudes with doctors, or bad experiences in getting care*

**PUTOF21 - P** <21> *Too lazy, procrastinated, didn't feel like it, don't like to go to doctors*

<0> NONE CITED/NO OTHER RESPONSES

<x> NEED TO DELETE A RESPONSE

<d> DON'T KNOW

<r> REFUSED

====>

>test c93< [ASK c21...c62...FOR NEXT PERSON<sup>10</sup>; THEN GOTO c92]

NOTE: c90 deleted.

---

<sup>10</sup>Include unmet need (k811...k831) for child, substituting child's home for second person.

>c92<

During the past 12 months, about how much did (you/your family) spend out-of-pocket for medical care? Do not include the cost of dental care, health insurance premiums, or any costs that are paid by your health insurance.

**PROBES:** (1) Your best estimate is fine.

(2) Include out-of-pocket expenses for prescription drugs, co-payments, and deductibles, but do not include health insurance premiums, dental costs, or any other costs paid by your health insurance.

READ CATEGORIES IF NECESSARY.

<0> NONE

\$<10-96,000>

<d>DON'T KNOW [goto c93]

<r> REFUSED

==> [goto d101]

>c93< Would that be less than \$500, \$500 to \$2,000, \$2,000 to \$3,000, \$3,000 to \$5,000, or \$5,000 or more?

READ CATEGORIES IF NECESSARY.

<0>NONE

<1>LESS THAN \$500

<2>\$500 TO \$1,999

<3>\$2,000 TO \$2,999

<4>\$3,000 TO \$4,999

<5>\$5,000 OR MORE

<d>DON'T KNOW

<r> REFUSED

===>

#### d. USUAL SOURCE OF CARE/PATIENT TRUST

BEGIN WITH FAMILY INFORMANT

>d< The next questions are about places people go to for their health problems.

>d101< Is there a place that [fill NAME] **usually** goes to when (you/he/she) (is/are) sick or need(s) advice about your health?

**USCARE - P**

**PROBE:** IF R. IS UNSURE IF ONE PLACE OR MORE THAN ONE PLACE:  
When [fill NAME] is sick or needs advice about (his/her/you) health, does (he/she/you) go to one place or more than one place?

<1>YES [goto d111]

<0>NO, THERE IS NO PLACE [goto test d301]

<3>NO, THERE IS MORE THAN ONE PLACE [goto d111]

<d>DON'T KNOW [goto test d301]

<r> REFUSED [goto test d301]

===>

>d111< If (d101 = 1) then read:  
What kind of place is it - a doctor's office, an HMO, a hospital outpatient clinic, some other clinic or health center, an emergency room, or some other place?

Else (d101 = 3) read:  
What kind of place (do/does) [fill NAME] go to most often - a doctor's office, an HMO, a hospital outpatient clinic, some other clinic or health center, an emergency room, or some other place?

**USCTYPE - P**

<1> DOCTOR'S OFFICE

<2> HMO

<3> HOSPITAL OUTPATIENT CLINIC

<4> OTHER CLINIC OR HEALTH CENTER

<5> HOSPITAL EMERGENCY ROOM

<6> SOME OTHER PLACE

<d> DON'T KNOW

<r> REFUSED

====>

>d121<      When (you/fill [NAME]) go(es) there, do(es) (you/he/she) usually see a doctor, a nurse, or some other type of health professional?

**USCPROF - P**

INSTRUCTION: IF R. SAYS DOCTOR AND NURSE, CODE DOCTOR.

<1>    DOCTOR

<2> NURSE

<3> OTHER (SPECIFY)

<d> DON'T KNOW [goto d141]

<r> REFUSED [goto d141]

====>

>d131<      Do(es) [you/fill NAME] usually see the same (doctor/nurse/provider) each time (you/he/she) go(es) there?

**USCSAME - P**

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>d141<      At any time in the past 12 months did [fill NAME] change the [fill PROVIDER/PLACE]<sup>11</sup> you/he/she) **usually** go(es) to for health care?

---

<sup>11</sup>Fill hierarchically: if d121 answered and d131=1 - (1)doctor,(2) nurse,(3) health professional; else fill (continued...)

**USCCHG - P**

<1> YES [goto d151]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====> [goto test d301]

>d151< Was this change **mainly** related to health insurance, the quality of care [fill NAME] received, or was it for some other reason?

**USCRCHG - P**

<1>HEALTH INSURANCE [goto d161]

<2>QUALITY OF CARE

<3>OTHER [goto d171]

<d>DON'T KNOW

<r> REFUSED

====> [goto test d301]

>d161< Did [fill NAME] change the [fill PROVIDER/PLACE] (you/he/she) usually (go/goes) for health care because [fill NAME] or [fill NAME]'S employer changed health plans, because [fill NAME]'s [fill PROVIDER/PLACE] was not covered by the health plan, or for some other reason?

**USCRHLH - P**

INTERVIEWER CODE ONE RESPONSE

<1> **RESPONDENT OR EMPLOYER CHANGED HEALTH PLANS**

<2> [PROVIDER/PLACE] NO LONGER COVERED

<3> OTHER [SPECIFY]

<d> DON'T KNOW

<r> REFUSED

====> [goto test d301]

>d171< Which of the following reasons best describes why [fill NAME] changed the place (you/he/she) usually go(es) for health care? NOTE: Use second person for child and informant.

**USCROTH - P**

<1> ([Fill NAME]/you/your) [PROVIDER/PLACE] was no longer available

<2> ([Fill NAME]/you/your) needed to see a particular type of doctor

---

<sup>11</sup>(...continued)  
d111 if d111 LE 5; else place.

<3> ([Fill NAME]/you/your) recently moved

<4> ([Fill NAME]/you/your) felt that it was more convenient to go to another doctor

<5> or some other reason I haven't mentioned? [specify]

<d> DON'T KNOW

<r> REFUSED

====>

NOTE: d201 deleted.

END ROTATION

>test d301< [IF MORE THAN ONE PERSON; REPEAT d10n...-d20n... FOR EACH PERSON.]

>test d302< [IF INFORMANT HAS USUAL SOURCE OF CARE WHO IS A PHYSICIAN (d121 eq <1>) OR HAD GE ONE PHYSICIAN VISITS IN THE LAST 12 MONTHS (1 ≤ C311 ≤ 96 OR 1 ≤ c321 ≤ 5) GOTO d311; ELSE GOTO test e10.]

>d3i1< Please think about the doctor you usually see when you are sick or need advice about your health. For each of the following statements, tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree. [NOTE, NEITHER AGREE NOR DISAGREE IS CODED AS SCALE MIDPOINT BUT IS NOT READ. ROTATE d311-341.]<sup>12</sup>

>d311< I think my doctor may not refer me to a specialist when needed.  
**DRNOREF - P**

**INTERVIEWER:** REPEAT IF NECESSARY. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?

(1) CODE "7" IF R. SAYS THE STATEMENT DOES NOT APPLY.

(2) IF RESPONDENT IS CONFUSED OR HAS DIFFICULTY RESPONDING, RE-READ QUESTION; IF R. IS STILL CONFUSED OR UNCERTAIN AFTER YOU RE-READ QUESTION, CODE "8."

<1> STRONGLY AGREE

<2> SOMEWHAT AGREE

<3> NEITHER AGREE NOR DISAGREE

<4> SOMEWHAT DISAGREE

<5> STRONGLY DISAGREE

<7> NOT APPLICABLE

<D> DON'T KNOW

---

<sup>12</sup> The next four questions (d311-d341) concerning patient's trust in their physicians were selected from an instrument developed by Dr. Paul Cleary of Harvard University.

<R> REFUSED

===>

>d321<

...I trust my doctor to put my medical needs above all other considerations when treating my medical problems.

**DRMETND - P**

**INTERVIEWER:** REPEAT IF NECESSARY. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?

(1) CODE "7" IF R. SAYS THE STATEMENT DOES NOT APPLY.

(2) IF RESPONDENT IS CONFUSED OR HAS DIFFICULTY RESPONDING, RE-READ QUESTION; IF R. IS STILL CONFUSED OR UNCERTAIN AFTER YOU RE-READ QUESTION, CODE "d."

<1> STRONGLY AGREE

<2> SOMEWHAT AGREE

<3> NEITHER AGREE NOR DISAGREE

<4> SOMEWHAT DISAGREE

<5> STRONGLY DISAGREE

<7> NOT APPLICABLE

<d> DON'T KNOW

<r> REFUSED

===>

>d331<

...I think my doctor is strongly influenced by health insurance company rules when making decisions about my medical care.

**DRINFLU - P**

**INTERVIEWER:** REPEAT IF NECESSARY. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?

(1) CODE "7" IF R. SAYS THE STATEMENT DOES NOT APPLY.

(2) IF RESPONDENT IS CONFUSED OR HAS DIFFICULTY RESPONDING, RE-READ QUESTION; IF R. IS STILL CONFUSED OR UNCERTAIN AFTER YOU RE-READ QUESTION, CODE "8."

<1> STRONGLY AGREE

<2> SOMEWHAT AGREE

<3> NEITHER AGREE NOR DISAGREE

<4> SOMEWHAT DISAGREE

<5> STRONGLY DISAGREE

<7> NOT APPLICABLE

<d> DON'T KNOW

<r> REFUSED

====>

>d341< ...I sometimes think that my doctor might perform unnecessary tests or procedures.  
**DRUNNEC - P**

**INTERVIEWER:** REPEAT IF NECESSARY. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?

(1) CODE "7" IF R. SAYS THE STATEMENT DOES NOT APPLY.

(2) IF RESPONDENT IS CONFUSED OR HAS DIFFICULTY RESPONDING, RE-READ QUESTION; IF R. IS STILL CONFUSED OR UNCERTAIN AFTER YOU RE-READ QUESTION, CODE "8."

<1> STRONGLY AGREE

<2> SOMEWHAT AGREE

<3> NEITHER AGREE NOR DISAGREE

<4> SOMEWHAT DISAGREE

<5> STRONGLY DISAGREE

<7> NOT APPLICABLE

<d> DON'T KNOW

<r> REFUSED

====>

**e. FAMILY LEVEL SATISFACTION/LAST VISIT PROCESS AND SATISFACTION/SF12/RISK BEHAVIORS**

**THIS SECTION WILL BE COMPLETED FOR INFORMANT AND CHILD AND (EXCEPT FOR FAMILY LEVEL QUESTIONS) IS INCLUDED IN SELF-RESPONSE MODULE FOR OTHER ADULTS.**

>test e10< [IF FAMILY HAS HAD ANY PROVIDER, OR HOSPITAL VISITS IN LAST 12 MONTHS (c101 = 1, or c211 = 1, or  $1 \leq c311 \leq 96$ , or  $1 \leq c321 \leq 5$ , or  $1 \leq c331 \leq 96$ , or  $1 \leq c341 \leq 5$ ) GOTO e101, ELSE GOTO e121]

>e100< The next questions are about your satisfaction with health care.

ENTER <g> TO CONTINUE -->

>e101< All things considered, have you been satisfied **or** dissatisfied with [(the health care you have received/the health care you and your family have received)] **during the last 12 months?**

**PROBE:** If you did not receive services that you felt you needed, please consider that too.



<1> SATISFIED [goto e111]  
<2> DISSATISFIED [goto e111]  
<3> NEITHER SATISFIED NOR DISSATISFIED  
<d> DON'T KNOW  
<r> REFUSED  
====> [goto e121]

>e111< Would that be very (dis)satisfied or somewhat (dis)satisfied?

<1> VERY  
<2> SOMEWHAT  
<d> DON'T KNOW  
<r> REFUSED  
====>

>e121< Now I would like to ask you about satisfaction with your choice of doctors.

First primary care doctors, such as family doctors, [pediatricians],<sup>13</sup> or general practitioners, who treat a variety of illnesses and give preventive care.

Are you satisfied or dissatisfied with the choice you personally have for primary care doctors?

**PROBE:** Most people go to a primary care doctor first when they have a sickness or injury they have not had before.

<1> SATISFIED [goto e131]  
<2> DISSATISFIED [goto e131]  
<3> NEITHER SATISFIED NOR DISSATISFIED  
<d> DON'T KNOW  
<r> REFUSED  
====> [goto e141]

>e131< Would that be very (dis)satisfied or somewhat (dis)satisfied?

<1> VERY  
<2> SOMEWHAT

---

<sup>13</sup>Exclude for adults.

<d> DON'T KNOW

<r> REFUSED

====>

>e141<

**SPNEED - P**

During the past 12 months, have you personally needed or seen a specialist?

**PROBE:** Specialists include such doctors as surgeons, allergists, (obstetricians,) (gynecologists,) orthopedists, cardiologists, and dermatologists. Specialists mainly treat just one type of problem.

<1> YES [goto e151]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====> [goto test e161]

>e151<

Are you satisfied or dissatisfied with the **choice** you have for specialists?

<1> SATISFIED [goto E151]

<2> DISSATISFIED [goto E151]

<3> NEITHER SATISFIED NOR DISSATISFIED

<d> DON'T KNOW

<r> REFUSED

====> [goto test e16]

>E151<

Would that be very (dis)satisfied or somewhat (dis)satisfied?

<1> VERY

<2> SOMEWHAT

<d> DON'T KNOW

<r> REFUSED

====>

>test e161<

**[IF PERSON HAS HAD ANY PHYSICIAN VISITS IN LAST 12 MONTHS (1 ≤ C311 ≤ 96 OR 1 ≤ C321 ≤ 5), GOTO e161; ELSE, GOTO SF12 (e401)]**

>e161<

Since [fill DATE 12 MONTHS AGO], did [fill NAME] visit a doctor for care of sickness, injury, or other health problems?

**SICKCR - P**

**PROBE:** (1) Other health problems include follow up or check up visits for chronic problems, such as asthma, diabetes, hypertension, heart conditions, etc.

(2) Do not include visits to physicians' assistants, nurse practitioners, alternative medicine specialists, or other providers who are not medical doctors.

<1> YES [goto e171]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====> [goto e201]

>e171< In what month was (fill NAME)'s **most recent** visit for sickness, injury, or other health problem?<sup>14</sup>

**INTERVIEWER:** THE LAST 12 MONTHS ARE SHOWN BELOW WITH AN ASTERISK. SICK VISIT DATE MUST BE WITHIN LAST 12 MONTHS (SINCE [fill DATE]).

<1> JUNE/97	<8> JAN/98	<15> AUG/98	<22> MAR/99
<2> JULY/97	<9> FEB/98	<16> SEPT/98	<23> APR/99
<3> AUG/97	<10> MAR/98	<17> OCT/98	<24> MAY/99
<4> SEPT/97	<11> APR/98	<18> NOV/98	<25> JUNE/99
<5> OCT/97	<12> MAY/98	<19> DEC/98	<26> JULY/99
<6> NOV/97	<13> JUNE/98	<20> JAN/99	<d> DON'T KNOW
<7> DEC/97	<14> JULY/98	<21> FEB/99	<r> REFUSED

<27>Aug/99, <28>Sept/99, <29>Oct/99, <30>Nov/99  
====>

>e181< Since that visit in MONTH, did [fill NAME] visit a doctor for a general check up, physical examination, [FEMALES OVER 12 - gynecological [or pregnancy]<sup>15</sup> check up, or other preventive care not related to a health problem?

**CHKASIK - P**

**PROBE:** (1) Do not include visits to physicians' assistants, nurse practitioners, alternative medicine specialists, or other providers who are not medical doctors.

<1> YES [goto e191]

<0> NO

<d> DON'T KNOW

<r> REFUSED

<sup>14</sup>In this and related questions with 12 month recall, the last 12 months are asterisked. The interviewer cannot enter a value outside of the recall period.

<sup>15</sup>Limit "or pregnancy" to women between 12 and 50.

====> [goto test e221]

>e191< In what month was [fill NAME]'s **most recent** visit for a check-up or physical exam?

**INTERVIEWER:** THE LAST 12 MONTHS ARE SHOWN BELOW WITH AN ASTERISK. PREVENTIVE CARE VISIT MUST BE LATER THAN SICK VISIT [fill DATE].

<1> JUNE/97	<8> JAN/98	<15> AUG/98	<22> MAR/99
<2> JULY/97	<9> FEB/98	<16> SEPT/98	<23> APR/99
<3> AUG/97	<10> MAR/98	<17> OCT/98	<24> MAY/99
<4> SEPT/97	<11> APR/98	<18> NOV/98	<25> JUNE/99
<5> OCT/97	<12> MAY/98	<19> DEC/98	<26> JULY/99
<6> NOV/97	<13> JUNE/98	<20> JAN/99	<d> DON'T KNOW
<7> DEC/97	<14> JULY/98	<21> FEB/99	<r> REFUSED

<27>Aug/99, <28>Sept/99, <29>Oct/99, <30>Nov/99

====>  
>test e191< [VERIFY THAT MONTH IN e191 IS SAME MONTH OR FOLLOWS MONTH IN e171; THEN GOTO test e221]

>e201< ASKED IF PERSON HAS NOT HAD A SICK VISIT.

**CHECKUP - P**

During the last 12 months, did [fill NAME] visit a doctor for a general check up, physical examination, [FEMALES OVER 12 - gynecological or pregnancy check up], or other preventive care not related to a health problem?

<1> YES [goto e211]

<0> NO [goto e901]

<d> DON'T KNOW

<r> REFUSED

====> [goto SF12 (e401)]

>e211< In what month was [fill NAME]'s **most recent** visit?

**INTERVIEWER:** THE LAST 12 MONTHS ARE SHOWN WITH AN ASTERISK.

<1> JUNE/97	<8> JAN/98	<15> AUG/98	<22> MAR/99
<2> JULY/97	<9> FEB/98	<16> SEPT/98	<23> APR/99
<3> AUG/97	<10> MAR/98	<17> OCT/98	<24> MAY/99
<4> SEPT/97	<11> APR/98	<18> NOV/98	<25> JUNE/99
<5> OCT/97	<12> MAY/98	<19> DEC/98	<26> JULY/99
<6> NOV/97	<13> JUNE/98	<20> JAN/99	<d> DON'T KNOW
<7> DEC/97	<14> JULY/98	<21> FEB/99	<r> REFUSED

<27>Aug/99, <28>Sept/99, <29>Oct/99, <30>Nov/99

====> [goto test e221]

>e901< Earlier I noted that you had [fill # IN c311 OR c321] doctor visit(s) in the last 12 months. Is that correct or incorrect?

CORRECT [jb e161 TO OBTAIN LAST DOCTOR VISIT]

<1> INCORRECT [goto e911]

====>

>e911< Since [fill DATE], about how many times [have/has] [fill NAME] seen a doctor? Do not count doctors seen while an overnight patient in a hospital or emergency room.  
PROBES: (1) Include osteopathic doctors and psychiatrist, (2) Include outpatient visits. (3) Exclude dentist visits,, chiropractor visits, and telephone calls to doctors. (4) Your best estimate is fine

<0>

<1-96> [goto e161]

<d> DON'T KNOW

<r> REFUSED

====> [goto e401, SF12]

>test e221< [IF PERSON HAD SICK AND WELL VISIT (e161 = 1 and e181 = 1),  
SELECT MOST RECENT FOR e221. IF SAME MONTH FOR BOTH, FILL  
WELL VISIT (e181) SINCE IT WAS MORE RECENT]

>e221< Please think about [fill NAME]'s visit [for preventive care or a check up/for care of  
sickness or injury] in [fill MONTH].

**DRORSP - P**

Was the doctor [fill NAME] saw a family doctor, who treats a variety of illnesses and gives preventive care, or was he or she a specialist who mainly treats just one type of problem?

**PROBE:** Family doctors usually are in general or family practices or are internists or pediatricians who treat a variety of illnesses and problems.

<1> FAMILY DOCTOR

<2> SPECIALIST, INCLUDING OB/GYN

<d> DON'T KNOW

<r> REFUSED

====>

>test e241< [IF PERSON HAS USC (d101 = 1) GOTO e241; ELSE GOTO E241]

>e241< Was this visit in [fill MONTH] to the place you USUALLY go to when you are sick or need advice about your health?

**LSTUSC - P**

<1> YES [goto e251]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>E241<  
**LSTOER - P** Was this visit to an emergency room?

<1> YES [goto e281]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>e251<  
**LSTAPP - P** For this visit in [fill MONTH], did you have an appointment ahead of time or did (you/he/she) just walk in?

<1> APPOINTMENT [goto e261]

<2> WALK IN

<d> DON'T KNOW

<r> REFUSED

====> [goto e281]

>e261<  
For this visit, how long did you have to wait between the time you made the appointment and the day you actually saw the doctor?

**INTERVIEWER:** (1) CODE "O" FOR SAME DAY.  
(2) ACCEPT MOST CONVENIENT TIME PERIOD. ENTER TIME PERIOD ON NEXT SCREEN

<0> SAME DAY

<1-30> [goto e271]

<d> DON'T KNOW

<r> REFUSED

====> [goto e281]

>e271<  
ENTER TIME PERIOD. [DISPLAY ON SAME SCREEN AS e261].

<1> DAYS

<2> WEEKS

<3> MONTHS

====>

*TEST: VERIFY VALUES GT 12 MONTHS; COPY FOR CHILD AND OTHER ADULTS*

>e281<           How long did you have to wait in the waiting room before seeing a medical person for this visit in [fill MONTH]?

**INTERVIEWER:** ACCEPT MOST CONVENIENT TIME PERIOD. ENTER TIME PERIOD ON NEXT SCREEN

<1-240> [goto E281]

<d>   DON'T KNOW

<r>   REFUSED

====> [goto e291]

>E281<           ENTER TIME PERIOD. [DISPLAY ON SAME SCREEN AS e281]

<1>       MINUTES

<2>       HOURS

====>

*TEST: VERIFY VALUES GT 8 HOURS; REPEAT FOR CHILD AND OTHER ADULTS*

>e291<           For this visit, how long did it take [fill NAME] to get to the (doctor's office/emergency room)?

**INTERVIEWER:** ACCEPT MOST CONVENIENT TIME PERIOD. ENTER TIME PERIOD ON NEXT SCREEN

<1-90> [goto E291]

<d>       DON'T KNOW

<r>       REFUSED

====> [goto e301]

>E291<           ENTER TIME PERIOD. [DISPLAY ON SAME SCREEN AS e291]

<1>       MINUTES

<2>       HOURS

====>

*TEST: VERIFY VALUES GT 8 HOURS; REPEAT FOR CHILD AND OTHER ADULTS.*

>e301<           Still thinking about this visit in [fill MONTH], how would you rate the thoroughness and carefulness of the examination and treatment you received? Would you say it was....

**LSTHOR - P**

<1>       poor

<2>       fair

<3>       good

<4> very good  
 <5> excellent  
 <7> DOES NOT APPLY (NOT EXAMINED OR TREATED)  
 <d> DON'T KNOW  
 <r> REFUSED

===>

>e311<  
**LSTLISN - P** How would you rate how well your doctor listened to you? Would you say it was...

<1> poor  
 <2> fair  
 <3> good  
 <4> very good  
 <5> excellent  
 <7> DOES NOT APPLY (NOT EXAMINED OR TREATED)  
 <d> DON'T KNOW  
 <r> REFUSED

===>

>e321<  
**LSTEXPL - P** How would you rate how well the doctor explained things in a way you could understand. Would you say it was....

<1> poor  
 <2> fair  
 <3> good  
 <4> very good  
 <5> excellent  
 <7> DOES NOT APPLY (NOT EXAMINED OR TREATED)  
 <d> DON'T KNOW  
 <r> REFUSED

===>

>e401< Now, I have a few questions about (your/his/her) health. <sup>16</sup>

---

<sup>16</sup> SF-12™ Standard US Version 1.0, Copyright 1994 The Health Institute; New England Medical Center. Distributed by: Medical Outcomes Trust. For Spanish speaking respondents, an interviewer-administered version of the U.S.-Spanish SF-12 was reviewed and approved by the New England Medical



In general, would you say your health is:

- <1>      Excellent
- <2>      Very Good
- <3>      Good
- <4>      Fair or
- <5>      Poor
- <d>      DON'T KNOW
- <r>      REFUSED

====>

>e411<      Next, I'm going to read a list of activities that you might do during a typical day. As I read each item, please tell me if your health now limits you a lot, limits you a little, or does not limit you at all in these activities. [NOTE: WE USED WORDING FOR INTERVIEWER-ADMINISTERED VERSION PROVIDED BY MEDICAL OUTCOMES TRUST]

***LMTMACT - P***

Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf?

Does your health now limit you a lot, limit you a little, or not limit you at all?

**PROBE:** [IF R SAYS S/HE DOES NOT DO ACTIVITY]: Is that because of your health?

- <1>      YES, LIMITED A LOT
- <2>      YES, LIMITED A LITTLE
- <0>      NO, NOT LIMITED AT ALL
- <d>      DON'T KNOW
- <r>      REFUSED

====>

>e421<      Climbing **several** flights of stairs?

***LMTSTR - P***

Does your health now limit you a lot, limit you a little, or not limit you at all?

**PROBE:** If R says s/he does not do activity: Is that because of your health? AND REPEAT QUESTION.

- <1>      YES, LIMITED A LOT

- <2> YES, LIMITED A LITTLE
- <0> NO, NOT LIMITED AT ALL
- <d> DON'T KNOW
- <r> REFUSED

===>

>e431<  
**PHYLESS - P**

The next two questions ask about your physical health and your daily activities.

During the past 4 weeks, have you accomplished less than you would like as a result of your physical health?

- <1> YES
- <0> NO
- <d> DON'T KNOW
- <r> REFUSED

===>

>e441<  
**PHYACT - P**

During the past 4 weeks, were you limited in the kind of work or other regular daily activities you do as a result of your physical health?

- <1> YES
- <0> NO
- <d> DON'T KNOW
- <r> REFUSED

===>

>e451<  
**EMOLESS - P**

The next two questions ask about your emotions and your daily activities.

During the past 4 weeks, have you accomplished less than you would like as a result of any emotional problems, such as feeling depressed or anxious?

- <1> YES
- <0> NO
- <d> DON'T KNOW
- <r> REFUSED

===>

>e461<  
**EMOACT - P**

During the past 4 weeks, did you not do work or other regular activities as carefully as usual as a result of any emotional problems, such as feeling depressed or anxious?

<1> YES  
<0> NO  
<d> DON'T KNOW  
<r> REFUSED

===>

>e471< During the past 4 weeks, how much did pain interfere with your normal work, including both work outside the home and housework? Did it interfere...

**PAININT - P**

<1> not at all  
<2> a little bit  
<3> moderately  
<4> quite a bit  
<5> extremely  
<d> DON'T KNOW  
<r> REFUSED

===>

>e481< During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities like visiting with friends or relatives? Has it interfered...

**LMTSOC - P**

<1> all of the time  
<2> most  
<3> some  
<4> a little  
<5> or none of the time  
<d> DON'T KNOW  
<r> REFUSED

===>

>e4I1< The next questions are about how you feel and how things have been with you during the past 4 weeks. As I read each question, please give me the one answer that comes closest to the way you have been feeling; is it all of the time, most, some, a little, or none of the time?

TYPE <g> TO CONTINUE -->

>e491<  
**FLCALM - P**

How much of the time during the past 4 weeks have you felt calm and peaceful?

READ CATEGORIES SLOWLY.

- <1> all of the time
- <2> most
- <3> some
- <4> a little, or
- <5> none of the time
- <d> DON'T KNOW
- <r> REFUSED
- ===>

>e501<  
**ENERGY - P**

How much of the time during the past 4 weeks did you have a lot of energy?

READ CATEGORIES SLOWLY.

- <1> all of the time
- <2> most
- <3> some
- <4> a little, or
- <5> none of the time
- <d> DON'T KNOW
- <r> REFUSED
- ===>

>e511<  
**FLDOWN - P**

How much of the time during the past 4 weeks have you felt downhearted and blue?

READ CATEGORIES SLOWLY.

- <1> all of the time
- <2> most
- <3> some
- <4> a little, or
- <5> none of the time
- <d> DON'T KNOW

<r> REFUSED

====>

**ADULT CHRONIC CONDITIONS FOR FIU INFORMANT.**

>cc1< [if sex ne <2> goto cc2a][if age gt <50> goto cc2a]

The next questions are about your health during the past two years.  
During the past two years, have you had a baby?

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>cc2< During the past two years, have you seen a doctor or health care professional for:

**INTERVIEWER:** ENTER A RESPONSE FOR EACH CONDITION

<1> = YES <0> = NO <d> = DK <r> = RF <x> CHANGE AN ANSWER <h> HELP

**NOTE:** TEXT OF HELP SCREENS IS APPENDED TO THE INSTRUMENT.

[r][fill cc2a:1][n] acne?

[r][fill cc2b:1][n] very frequent or severe headaches, including migranes?

[r][fill cc2c:1][n] [fill cc2f] **IF FEMALE:** abnormal uterine bleeding?

[r][fill cc2d:1][n] alcohol related problems?

IF ALL RESPONSES ARE CORRECT ENTER <g> TO CONTINUE

====>

>cc3< Has a doctor or health professional ever told you that you had:

**INTERVIEWER:** ENTER A RESPONSE FOR EACH CONDITION

<1> = YES <0> = NO <d> = DK <r> = RF <x> CHANGE AN ANSWER <h> HELP

FOR EACH "YES" RESPONSE, THE PROGRAM PROMPTS WITH: "During the  
past two years, have you seen a doctor or other health care professional for [fill  
CONDITION]?"

[r][fill cc3a:1][n] [IF OVER 50 YEARS] cataracts?

[r][fill cc3b:1][n] diabetes or high blood sugar?

[r][fill cc3c:1][n] arthritis? [IF YES: GOTO c3AC AND RETURN]

[c3AC] Did the doctor tell you that you have a special kind of arthritis called Rheumatoid Arthritis?

<1> = YES <0> = NO <d> = DK <r> = RF [goto cc3d:1 - asthma]

====> [goto cc3d:1]

[r][fill cc3d:1][n] asthma?

[CC3E] TO ASTHMA: chronic obstructive pulmonary disease]

[r][fill cc3f:1][n] atrial fibrillation?

[r][fill cc3g:1][n] hypertension or high blood pressure?

[r][fill cc3h:1][n] high cholesterol?

IF ALL RESPONSES ARE CORRECT ENTER <g> TO CONTINUE

====>

>cc4<

Has a doctor or health professional ever told you that you had:

**INTERVIEWER: ENTER A RESPONSE FOR EACH CONDITION**

<1> = YES <0> = NO <d> = DK <r> = RF <x> CHANGE AN ANSWER <h> HELP

FOR EACH "YES" RESPONSE, THE PROGRAM PROMPTS WITH: "During the past two years, have you seen a doctor or other health care professional for [fill CONDITION]?"

[r][fill cc4a:1][n] hardening of the arteries, also called atherosclerosis or arteriosclerosis?

[r][fill cc4b:1][n] [fill cf1] IF NO TO HARDENING OF THE ARTERIES: ischemic heart disease?

[r][fill cc4c:1][n] [fill cf2] IF NO TO ISCHEMIC HEART DISEASE: anGINA OR ANgina? IF NO TO ANGINA GOTO C4AE AND RETURN.

====>

[c4ae] Have you ever had angioplasty - or heart bypass surgery?

====>

[r][fill cc4d:1][n] congestive heart failure? [IF NO GOTO c4af AND RETURN.]

[c4af] Have you ever taken water pills, called diuretics, to treat a heart condition?

[r][fill cc4e:1][n] a stroke?

====>

>cc5<

Has a doctor or health professional ever told you that you had:

**INTERVIEWER: ENTER A RESPONSE FOR EACH CONDITION**

<1> = YES <0> = NO <d> = DK <r> = RF <x> CHANGE AN ANSWER <h> HELP

FOR EACH "YES" RESPONSE, THE PROGRAM PROMPTS WITH: "During the past two years, have you seen a doctor or other health care professional for [fill CONDITION]?"

[r][fill cc5b:l][n] [fill c5f1] IF FEMALE: breast cancer.

[r][fill cc5c:l][n] skin cancer?

[r][fill cc5d:l][n] lung cancer?

[r][fill cc5e:l][n] cancer of the colon or rectum?

[r][fill cc5f:l][n] [fill c5f2] IF MALE, OVER 50: cancer of the prostate.

[r][fill cc5g:l][n] [fill c5f3]

[fill c5f4] IF MALE OVER 50: benign prostate disease or a large prostate that was not prostate cancer.

IF ALL RESPONSES ARE CORRECT ENTER <g> TO CONTINUE

====>

>cc6 <

Has a doctor or health professional ever told you that you had:

**INTERVIEWER:** ENTER A RESPONSE FOR EACH CONDITION

<1> = YES <0> = NO <d> = DK <r> = RF <x> CHANGE AN ANSWER <h> HELP

FOR EACH "YES" RESPONSE, THE PROGRAM PROMPTS WITH: "During the past two years, have you seen a doctor or other health care professional for [fill CONDITION]?"

[r][fill cc6a:l][n] a hernia in the groin area?

[r][fill cc6b:l][n] an ulcer?

[r][fill cc6c:l][n] [fill cc6f] IF NO TO ULCER: gastritis?

[r][fill cc6d:l][n] HIV or AIDS?

[r][fill cc6e:l][n] depression?

IF ALL RESPONSES ARE CORRECT ENTER <g> TO CONTINUE

====>

>e521<

Now, please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the following statement. I'm more likely to take risks than the average person.

**TAKRISK - P**

**INTERVIEWER:** (1) NEITHER AGREE NOR DISAGREE IS NOT READ, BUT IS CODED IF OFFERED.

(2) PROBE BY ASKING: In general, ..... OR Whatever you think of as risks....

- <1> STRONGLY AGREE
- <2> SOMEWHAT AGREE
- <3> NEITHER AGREE NOR DISAGREE
- <4> SOMEWHAT DISAGREE
- <5> STRONGLY DISAGREE
- <d> DON'T KNOW
- <r> REFUSED

====>

>e601< These next questions are about cigarette smoking. Have you smoked at least 100 cigarettes in your entire life?

**SMKEVR - P**

- <1> YES
- <0> NO [goto test e12c]
- <d> DON'T KNOW [goto test e12c]
- <r> REFUSED [goto test e12c]

====>

>e611< Do you now smoke cigarettes every day, some days or not at all?

**SMKNOW - P**

- <1> EVERYDAY [goto e621]
- <2> SOME DAYS [goto e631]
- <3> NOT AT ALL [goto e651]
- <d> DON'T KNOW
- <r> REFUSED

====> [goto test e12c]

>e621< On the average, how many cigarettes do you now smoke a day?

**SMKNUM - P**

**INTERVIEWER:** IF R. GIVES ANSWER IN PACKS, CHECK TABLE FOR CORRESPONDING # CIGS. AND ENTER NUMBER.

<1-96> NUMBER OF CIGARETTES



1 PACK = 20 cigarettes  
1.5 PACKS = 30 cigarettes  
2 PACKS = 40 cigarettes  
2.5 PACKS = 50 cigarettes  
3 PACKS = 60 cigarettes  
3.5 PACKS = 70 cigarettes  
4 PACKS = 80 cigarettes

<d> DON'T KNOW  
<r> REFUSED

====> [goto e661]

>e631<  
**SMKDAY - P** On how many of the past 30 days did you smoke a cigarette?

<0> NONE [goto e651]

<1-31> DAYS [goto e641]

<d> DON'T KNOW [goto e661]

<r> REFUSED [goto e661]

====>

>e641<  
**SMKNDAX - P** On the average, when you smoked during the past 30 days, about how many cigarettes did you smoke a day?

**INTERVIEWER:** IF R. GIVES ANSWER IN PACKS, CHECK TABLE FOR CORRESPONDING # CIGS. AND ENTER NUMBER.

<1-96> NUMBER OF CIGARETTES

1 PACK = 20 cigarettes  
1.5 PACKS = 30 cigarettes  
2 PACKS = 40 cigarettes  
2.5 PACKS = 50 cigarettes  
3 PACKS = 60 cigarettes  
3.5 PACKS = 70 cigarettes  
4 PACKS = 80 cigarettes

<d> DON'T KNOW

<r> REFUSED

====> [goto e661]

>e651<  
**SMKQUIT - P** How long has it been since you quit smoking cigarettes?  
READ IF NECESSARY.

<1> WITHIN THE PAST MONTH [goto test e671]

- <2> MORE THAN ONE MONTH BUT WITHIN THE PAST 3 MONTHS  
[goto test e671]
- <3> MORE THAN 3 MONTHS BUT WITHIN THE PAST 6 MONTHS  
[goto test e671]
- <4> MORE THAN 6 MONTHS BUT WITHIN THE PAST YEAR [goto test e671]
- <5> MORE THAN ONE YEAR BUT WITHIN THE PAST 5 YEARS
- <6> MORE THAN 5 YEARS BUT WITHIN THE PAST 15 YEARS
- <7> MORE THAN 15 YEARS AGO
- <d> DON'T KNOW
- <r> REFUSED

====> [goto test e12c]

>e661< During the past 12 months, have you stopped smoking for one day or longer, because you were trying to quit smoking?

**SMKTRYQ - P**

- <1> YES
  - <0> NO
  - <d> DON'T KNOW
  - <r> REFUSED
- ====>

>test e671< **[IF PERSON HAS HAD ONE OR MORE PHYSICIAN VISITS IN LAST 12 MONTHS ( $1 \leq c311 \leq 96$  or  $1 \leq c321 \leq 5$ ), GOTO e671; ELSE GOTO test e16c]**

>e671< During the past 12 months, did any medical doctor advise you to stop smoking?

**SMKADV - P**

PROBE: In your opinion, REPEAT QUESTION.

- <1> YES
  - <0> NO
  - <d> DON'T KNOW
  - <r> REFUSED
- ====>

>test e12c< **[IF FAMILY HAS CHILD GOTO k12I, ELSE GOTO test e801]**

>k12I< Next, I would like to ask you about satisfaction with your choice of doctors for [fill CHILD'S NAME].

First primary care doctors, such as pediatricians, family doctors, or general practitioners, who treat a variety of illnesses and give preventive care.

Are you satisfied or dissatisfied with your choice of primary care doctors for [fill CHILD'S NAME]?

**PROBE:** Most people go to a primary care doctor first when they have a sickness or injury they have not had before.

<1> SATISFIED [goto k13I]

<2> DISSATISFIED [goto k13I]

<3> NEITHER SATISFIED NOR DISSATISFIED

<d> DON'T KNOW

<r> REFUSED

==> [goto k14I]

>k13I< Would that be very (dis)satisfied or somewhat (dis)satisfied?

<1> VERY

<2> SOMEWHAT

<d> DON'T KNOW

<r> REFUSED

==>

>k14I< During the past 12 months, has [fill CHILD'S NAME] needed or seen a specialist?  
**SPNEED - P**

**PROBE::** Specialists include such doctors as surgeons, allergists, (obstetricians,) (gynecologists,) orthopedists, cardiologists, and dermatologists? Specialists mainly treat just one type of problem.

<1> YES [goto k15I]

<0> NO

<d> DON'T KNOW

<r> REFUSED

==> [goto test k16I]

>k15I< Are you satisfied or dissatisfied with your choice of specialists for [fill CHILD'S NAME]?

<1> SATISFIED [goto K15I]

<2> DISSATISFIED [goto K15I]

<3> NEITHER SATISFIED NOR DISSATISFIED

<d> DON'T KNOW

<r> REFUSED

==> [goto test k16I]

>K15I< Would that be very (dis)satisfied or somewhat (dis)satisfied?

<1> VERY

<2> SOMEWHAT

<d> DON'T KNOW

<r> REFUSED

==>

>test k16I< [IF CHILD HAD GE ONE PHYSICIAN VISIT(S) IN LAST 12 MONTHS ( $1 \leq c\ 31... \leq 96$  or  $1 \leq c\ 32.. \leq 96$ ), GOTO e16x; ELSE GOTO k40I]

>e16x< Who went with [fill NAME] to the doctor on (his/her) most recent visit?

**TAKEID - F**

**INTERVIEWER:** CODE "you," IF RESPONDENT AND SPOUSE TOOK CHILD TO DOCTORS.

<1> RESPONDENT [goto k16I]

<2> [FILL NAME]

<3> [FILL NAME]

<4> [FILL NAME]

<0> NON-FAMILY MEMBER/NO ONE

<d> DON'T KNOW

<r> REFUSED

==> [goto k40I]

**IF PERSON ACCOMPANYING CHILD IS OTHER ADULT FAMILY MEMBER, QUESTIONS WILL BE ADDED TO HIS/HER SELF-RESPONSE MODULE. IF NON-FAMILY MEMBER ACCOMPANIED CHILD, WE WILL ONLY ASK FOR GENERAL HEALTH STATUS AND CHRONIC CONDITIONS.**

>k16I< Since [fill DATE 12 MONTHS AGO], did [fill NAME] visit a doctor for care of sickness, injury, or other health problems?

**SICKCR - P**

**PROBE:** (1) Other health problems include follow up visits or check ups for chronic problems such as asthma, diabetes, etc.

(2) Do not include visits to physicians' assistants, nurse practitioners, alternative medicine specialists, or other providers who are not medical doctors.

<1> YES [goto k17I]  
 <0> NO  
 <d> DON'T KNOW  
 <r> REFUSED  
 ==> [goto k20I]

>k17I< In what month was (fill NAME)'s **most recent** visit for sickness or injury?

<1> JUNE/97	<8> JAN/98	<15> AUG/98	<22> MAR/99
<2> JULY/97	<9> FEB/98	<16> SEPT/98	<23> APR/99
<3> AUG/97	<10> MAR/98	<17> OCT/98	<24> MAY/99
<4> SEPT/97	<11> APR/98	<18> NOV/98	<25> JUNE/99
<5> OCT/97	<12> MAY/98	<19> DEC/98	<26> JULY/99
<6> NOV/97	<13> JUNE/98	<20> JAN/99	<d> DON'T KNOW
<7> DEC/97	<14> JULY/98	<21> FEB/99	<r> REFUSED

<27>Aug/99, <28>Sept/99, <29>Oct/99, <30>Nov/99  
 ==>

>k18I< Since that visit in MONTH, has [fill NAME] visited a doctor for a general check up, physical examination, [FEMALES OVER 12 - gynecological check up] or other preventive care not related to a health problem?

**CHKASIK - P**

**PROBE:** (1) Do not include visits to physicians' assistants, nurse practitioners, alternative medicine specialists, or other providers who are not medical doctors.

<1> YES [goto k19I]  
 <0> NO  
 <d> DON'T KNOW  
 <r> REFUSED  
 ==> [goto test k22I]

>k19I< In what month was [fill NAME]'s **most recent** visit for a check up or physical exam?

<1> JUNE/97	<8> JAN/98	<15> AUG/98	<22> MAR/99
<2> JULY/97	<9> FEB/98	<16> SEPT/98	<23> APR/99
<3> AUG/97	<10> MAR/98	<17> OCT/98	<24> MAY/99
<4> SEPT/97	<11> APR/98	<18> NOV/98	<25> JUNE/99
<5> OCT/97	<12> MAY/98	<19> DEC/98	<26> JULY/99
<6> NOV/97	<13> JUNE/98	<20> JAN/99	<d> DON'T KNOW
<7> DEC/97	<14> JULY/98	<21> FEB/99	<r> REFUSED

<27>Aug/99, <28>Sept/99, <29>Oct/99, <30>Nov/99  
 ==>

>test k19I< [VERIFY THAT MONTH IN k19I IS SAME MONTH OR AFTER MONTH IN k17I; THEN GOTO test k22I.]

>k20I< During the last 12 months, did [fill NAME]'s visit a doctor for a general check up, physical examination [FEMALES OVER 12 - gynecological check up] or other preventive care not related to a health problem?

**CHECKUP - P**

**PROBE:** (1) Do not include visits to physicians' assistants, nurse practitioners, alternative medicine specialists, or other providers who are not medical doctors.

<1> YES [goto k21I]

<0> NO [goto k90I]

<d> DON'T KNOW

<r> REFUSED

====> [goto k40I]

>k21I< In what month was [fill NAME]'s **most recent** visit?

<1> JUNE/97	<8> JAN/98	<15> AUG/98	<22> MAR/99
<2> JULY/97	<9> FEB/98	<16> SEPT/98	<23> APR/99
<3> AUG/97	<10> MAR/98	<17> OCT/98	<24> MAY/99
<4> SEPT/97	<11> APR/98	<18> NOV/98	<25> JUNE/99
<5> OCT/97	<12> MAY/98	<19> DEC/98	<26> JULY/99
<6> NOV/97	<13> JUNE/98	<20> JAN/99	<d> DON'T KNOW
<7> DEC/97	<14> JULY/98	<21> FEB/99	<r> REFUSED

<27>Aug/99, <28>Sept/99, <29>Oct/99, <30>Nov/99  
====> [goto test k22I]

>k90I< Earlier I noted that [fill NAME] had [fill #] doctor visits in the last 12 months. Is that correct or incorrect?

CORRECT [jb kl6I]

<1> INCORRECT [goto k40I]

====>

>test k22I< **[IF CHILD HAD SICK AND WELL VISIT, SELECT MOST RECENT FOR k22I. IF SAME MONTH, FILL WELL VISIT IN k22I]**

>k22I< Please think about [fill NAME]'s visit for [preventive care or a check up/care of sickness or injury] in [fill MONTH].

**DRORSP - P**

Was the doctor [fill NAME] saw a family doctor or pediatrician who treats a variety of illnesses and gives preventive care, or was he or she a specialist who mainly treats just one type of problem?

**PROBE:** Family doctors usually are in general or family practices or are pediatricians who treat a variety of illnesses and problems.

<1> FAMILY DOCTOR/PEDIATRICIAN

<2> SPECIALIST

<d> DON'T KNOW

<r> REFUSED

====>

>test k24I< **[IF CHILD HAS USC (d10... = 1), GOTO k24I; ELSE GOTO K24I]**

>k24I< Was this visit to the place you usually take [FILL NAME] when (he/she) is sick or you need advice about (his/her) health?

**LSTUSC - P**

<1> YES [goto k25I]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>K24I< Was this visit to a hospital emergency room?

**LSTOER - P**

<1> YES [goto k28I]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>k25I< For this visit in [fill MONTH], did you have an appointment ahead of time or did you just walk in?

**LSTAPP - P**

<1> APPOINTMENT [goto k26I]

<2> WALK IN

<d> DON'T KNOW

<r> REFUSED

====> [goto k28I]

>k26I< For this visit, how long did you have to wait between the time you made the appointment and the day you actually saw the doctor?

**INTERVIEWER:** CODE "0" FOR SAME DAY.

**INTERVIEWER:** ACCEPT MOST CONVENIENT TIME PERIOD. ENTER TIME PERIOD ON NEXT SCREEN

<0> SAME DAY

<0-30> [goto k27I]

<d> DON'T KNOW

<r> REFUSED

====> [goto k28I]

>k27I< ENTER TIME PERIOD. [DISPLAY ON SAME SCREEN AS k26I]

<1> DAYS

<2> WEEKS

<3> MONTHS

====>

>k28I< How long did you have to wait in the waiting room before seeing a medical person for this visit in [fill MONTH]?

**INTERVIEWER:** ACCEPT MOST CONVENIENT TIME PERIOD. ENTER TIME PERIOD ON NEXT SCREEN

<1-240> [goto K28I]

<d> DON'T KNOW

<r> REFUSED

====> [goto k29I]

>K28I< ENTER TIME PERIOD. [DISPLAY ON SAME SCREEN AS e28c]

<1> MINUTES

<2> HOURS

====>

>k29I< For this visit, how long did it take you to get to the (doctor's office/emergency room)?

**INTERVIEWER:** ACCEPT MOST CONVENIENT TIME PERIOD. ENTER TIME PERIOD ON NEXT SCREEN

<1-90> [goto K29I]

<d> DON'T KNOW

<r> REFUSED

====> [goto k30I]

>K29I< ENTER TIME PERIOD. [DISPLAY ON SAME SCREEN AS k29I]

<1> MINUTES

<2> HOURS

====>

>k30I< Still thinking about this visit, how would you rate the thoroughness and carefulness of the examination and treatment (fill CHILD) received? Would you say it was....

**LSTHOR - P**

<1> poor

<2> fair

<3> good



- <4> very good
- <5> excellent
- <7> DOES NOT APPLY (NOT EXAMINED OR TREATED)
- <d> DON'T KNOW
- <r> REFUSED

===>

>k31I< How would you rate how well the doctor listened to you? Would you say it was...  
**LSTLISN - P**

- <1> poor
- <2> fair
- <3> good
- <4> very good
- <5> excellent
- <7> DOES NOT APPLY (NOT EXAMINED OR TREATED)
- <d> DON'T KNOW
- <r> REFUSED

===>

>k32I< How would you rate how well the doctor explained things in a way you could understand? Would you say it was....  
**LSTEXPL - P**

- <1> poor
- <2> fair
- <3> good
- <4> very good
- <5> excellent
- <7> DOES NOT APPLY (NOT EXAMINED OR TREATED)
- <d> DON'T KNOW
- <r> REFUSED

===>

>k40I< In general, would you say [fill NAME]'s health is:

- <1> Excellent
- <2> Very Good

<3> Good  
<4> Fair  
<5> Poor  
<d> DON'T KNOW  
<r> REFUSED

====>

**CHILD'S CHRONIC CONDITION QUESTIONS [AGE 0-17]**

>ee2< Has [fill NAME] ever seen a doctor or health care professional for:

**INTERVIEWER:** ENTER A RESPONSE FOR EACH CONDITION

<1> = YES <0> = NO <d> = DK <r> = RF <x> CHANGE AN ANSWER <h> HELP

[r][fill ee2a:l][n] acne?

[r][fill ee2b:l][n] very frequent or severe headaches, including migranes?

[r][fill ee2c:l][n] four or more ear infections in any one year?

IF ALL RESPONSES ARE CORRECT ENTER <g> TO CONTINUE

====>

>ee3< Has [fill NAME] ever had tubes placed in [fill his] ears?

<1> = YES <0> = NO <d> = DK <r> = RF

====>

>ee4< Has a doctor or health professional ever told you that [fill NAME] had:

**INTERVIEWER:** ENTER A RESPONSE FOR EACH CONDITION

<1> = YES <0> = NO <d> = DK <r> = RF <x> CHANGE AN ANSWER <h> HELP

FOR EACH "YES" RESPONSE, THE PROGRAM PROMPTS WITH: "During the past two years, has [fill NAME] seen a doctor or other health care professional for [fill CONDITION]?"

[r][fill ee4a:l][n] sickle cell disease?

[r][fill ee4b:l][n] tested positive for tuberculosis?

[r][fill ee4c:l][n] asthma?

[r][fill ee4d:l][n] Attention Deficit Hyperactivity Disorder, which is also called ADHD or ADD?

[r][fill ee4e:l][n] diabetes or high blood sugar?

====>

>test e801<      **[IF THERE ARE OTHER ADULTS ( $\geq 18$ ) IN FAMILY BESIDES  
INFORMANT GOTO e80t; ELSE GOTO f10]**

>e80t<      Now, I have one question about the health of ([fill NAME]/other adults in your family). NOTE: SUBSTITUTE "Other adults in your family" IF TWO OR MORE OTHER ADULTS.

>e802<      In general, would you say [fill NAME]'s health is:

<1>      Excellent

<2>      Very Good

<3>      Good

<4>      Fair

<5>      Poor

<d>      DON'T KNOW

<r>      REFUSED

====> [REPEAT FOR EACH ADULT; THEN GOTO f10]

**f.      EMPLOYMENT (ASKED FOR EACH ADULT 18 YEARS OF AGE AND OLDER)**

>f10<      This next series of questions is about jobs and earnings. Answers to these questions are particularly important to our survey because they help explain whether people can afford the health care they need.

====>

>f101<      (Next), Do(es) [fill NAME] have a business or farm?

**HAVEBUS - P**

**INTERVIEWER:** CODE "YES" IF R. SAYS HE/SHE IS SELF-EMPLOYED.

<1>      YES

<0>      NO

<d>      DON'T KNOW

<r>      REFUSED

====>

>f111<      Last week, did [fill NAME] do any work (either) for pay (or profit)?<sup>17</sup>

**WRKPAY - P**

**INTERVIEWER:** CODE "YES" IF R. WAS ON VACATION FROM HIS/HER JOB.

<1>      YES [goto f121]

<0>      NO

---

<sup>17</sup> Include parenthetical phrases if f101=1.

<d> DON'T KNOW

<r> REFUSED

====> [goto NEXT PERSON or g10]

>f121< Last week did [fill NAME] have more than one job (or business), including part time, evening, or weekend work?

**WORK2ND - P**

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>f131< **ONE JOB (F121 = 0):** How many hours per week (do you/do(es) [fill NAME]) usually work at this job?<sup>18</sup>

**HRSWKX - P**

**MORE THAN ONE JOB (F121 ne 0):** On (your [fill NAME]'s) main job, that is, the job where (he/she/you) work(s) the most hours, how many hours per week (do you/do(es) [fill NAME]) usually work?

**PROBE:** If (you/[fill NAME]) usually works overtime hours include them.

<0-96> HOURS WORKED

<97> HOURS VARY [goto 13x1]

<d> DON'T KNOW

<r> REFUSED

====> [goto test f141]

**NOTE:** Test will verify values less than 20 hours.

>13x1< (Do you/Does [fill NAME]) usually work more than 35 hours per week or less than 35 hours per week (at this job/at the job where (he/she/you) work(s) the most hours)?

<1> MORE

<2> LESS

<d> DON'T KNOW

<r> REFUSED

====>

>testf141< **[IF f121 eq <1> GOTO f141; ELSE GOTO f201]**

>f141< How many hours per week (do you/do(es) [fill NAME]) usually work at (his/her/your) other jobs?

**HRWK2NX - P**

---

<sup>18</sup> Note shift from last week to usual week for hours and earnings; (memo from Joy Grossman and discussion with Peter Cunningham.) Also note that Long/Marquis included usual hours and earnings and last week's hours in SI Family Survey. I don't recall reason for last week's hours.

**PROBE:** If [fill NAME] worked overtime hours include them.

<0-96> HOURS WORKED AT OTHER JOBS

<97> HOURS VARY/CAN'T ESTIMATE

<d> DON'T KNOW

<r> REFUSED

====>

>f201< [On (his/her/your) main job], (is/are) [fill NAME/you] employed by a private company, is (is/are) (you/he/she) a federal, state, or local government employee, self-employed, or working without pay in a family business or farm?

**EMPTYPX - P**

**INTERVIEWER: CODE NOT-FOR-PROFIT/FOUNDATION AS PRIVATE COMPANY.**

**NOTE: PARENTHETICAL PHRASE USED IF MORE THAN ONE JOB**

<1> PRIVATE COMPANY

<2> FEDERAL GOVERNMENT

<3> STATE GOVERNMENT

<4> LOCAL GOVERNMENT

<5> SELF-EMPLOYED

<6> FAMILY BUSINESS OR FARM

<d> DON'T KNOW

<r> REFUSED

====>

>f211< [On (your/his/her) main job], about how many people are employed at the location where [fill NAME] work(s)?

**PROBES:** (1) How many people work for your employer in the building or buildings in the factory, store, or office complex where you work?

(2) Your best estimate is fine.

<1> ONE

<2> 2-4

<3> 5-9

<4> 10-24

<5> 25-49

<6> 50-99

<7> 100-249

<8> 250-499

<9> 500-999

<10> 1000 OR MORE

<d> DON'T KNOW

<r> REFUSED

====>

**test f221:** [if f201 eq 2, 3, or 4 goto f241] TEST SKIPS f221 FOR GOVERNMENT EMPLOYEES.

>f221< (Does your employer/Do(es) fill NAME) operate in more than one location?

**NOTE: Fill is for self-employed and farmers.**

<1> YES [goto f231]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====> [goto f241]

>f231< About how many people are employed by (fill NAME/your employer) at all locations?

**PROBE:** Your best estimate is fine.

<1> ONE

<2> 2-4

<3> 5-9

<4> 10-24

<5> 25-49

<6> 50-99

<7> 100-249

<8> 250-499

<9> 500-999

<10> 1000 OR MORE

<d> DON'T KNOW

<r> REFUSED

====>

>f241< What kind of business or industry is this?

**PROBE:** What do they make or do there?

<1> SPECIFY

<d> DON'T KNOW

<r> REFUSED

===>

>f301<

For (your/his/her) (main) job, what is the easiest way for you to report (his/her/your) total earnings: hourly, per week, every two weeks, twice a month, monthly, or annually?

**PROBES:** (1) I understand these questions may be sensitive. We are asking them to help understand differences in people's health care problems and needs.

(2) **INTERVIEWER:** IF R. RESPONDS IN A NON-SPECIFIED PAY PERIOD, CONVERT TO MONTHLY OR ANNUAL.

<1> HOURLY

<2> PER WEEK

<3> BI-WEEKLY/EVERY TWO WEEKS

<4> TWICE MONTHLY

<5> MONTHLY

<6> ANNUAL

<d> DON'T KNOW [goto f331]

<r> REFUSED [goto test f401]

===>

>f321<

**Hourly:** What is [fill NAME]'s hourly rate of pay on this job?

**Weekly, Monthly:** What are [fill NAME]'s usual [fill f301 RATE] earnings on this job, before taxes or other deductions?

**Bi-Weekly, Twice Monthly:** What are [fill NAME]'s usual earnings per pay period on this job, before taxes or other deductions?

**Annual:** What is [fill NAME]'s annual salary in this job, before taxes and other deductions?

**PROBE:** (1) I understand that these questions may be sensitive. We are asking these questions to help understand differences in people's health care problems and needs.

(2) **IF RESPONDENT ASKS:** Include overtime pay, tips, or commissions that you usually receive on this job.

\$ <3.00 to 300.00> HOURLY

\$ <20-500,000> OTHER PAY PERIODS

<d> DON'T KNOW [goto f331]

<r> REFUSED [goto test f401]

===> [goto test f341]

>f331< Which of the following ranges is closest to ([fill NAME'S]/your) annual salary, before taxes and other deductions? -- less than \$10,000, \$10,000 to \$14,000, \$14,000 to \$20,000, \$20,000 to \$30,000, or more than \$30,000?

<1> LESS THAN \$10,000

<2> \$10,000 - \$14,000

<3> \$14,001 - \$20,000

<4> \$20,001 - \$30,000

<5> MORE THAN \$30,000

<d> DON'T KNOW

<r> REFUSED

====>

>test f341< [TEST FOR OUTLIERS:]

HOURLY:	LE 5.00; GE 100.00
WEEKLY:	LE 50; GE 500.00
BI-WEEKLY:	LE 100; GE 10,000
TWICE MONTHLY:	LE 100; GE 10,000
MONTHLY:	LE 200; GE 20,000
ANNUALLY:	LE 3,000; GE 200,000]

>f341< I recorded that your usual earnings on this job are  
\$[INSERT f321] per [INSERT f301]. Is that correct?

<1> YES [goto test f401]

NO :jb f321

====>

test f401: [IF PERSON IS POLICY HOLDER FOR EMPLOYER-BASED PLAN  
[PERSON LISTED IN b231 AND b251 = 1] AND HAS MORE THAN ONE  
JOB [f121=1], GOTO f401; ELSE GOTO TEST f50]

>f401< Is [fill PERSON NAME]'s insurance with [fill INSURANCE PLAN NAME] from  
(his/her/your) main job or business?

**INSMJOB - P**

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>test f50< [IF PERSON IS NOT SELF-EMPLOYED (f201 = 1, 2, 3 or 4) AND IS NOT A  
POLICY HOLDER FOR AN EMPLOYER/UNION BASED PLAN (PERSON  
NOT LISTED IN b231, OR IF LISTED, b251 NE 1) AND IS LT 65 YEARS  
OLD, GOTO f501; ELSE GOTO NEXT PERSON OR g10]<sup>19</sup>

---

<sup>19</sup>Skipped self-employed.



>f501< Does [fill NAME]'s employer or union offer a health insurance plan to any of its employees?

**EMPOFER - P**

**INTERVIEWER:** THIS QUESTION APPLIES TO [fill NAME'S] LOCATION.

<1> YES [goto f511]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====> [goto next person or g10]

>f511< Is [fill NAME] eligible to participate in (his/her/your) employer's health insurance plan?

**ELIGIB - P**

<1> YES [goto test f521]

<0> NO [goto f531]

<d> DON'T KNOW [goto next person or g10]

<r> REFUSED [goto next person or g10]

====>

>test f521< **[IF PERSON HAS INSURANCE COVERAGE UNDER ANY OTHER PLANS, GOTO f541; IF UNINSURED GOTO f521].**

>f521< Is [fill NAME] not participating in (his/her/your) employer's health insurance plan because the plan costs too much, because (he/she/you) do(es) not need health insurance, or for some other reason? (CODE MAIN REASON.)

**ELUNINS - P**

<1> COSTS TOO MUCH

<2> DON'T NEED HEALTH INSURANCE

<3> OTHER (SPECIFY)

<4> **WAITING PERIOD**

<5> **DON'T WANT IT**

<6> **HASN'T SIGN UP**

<d> DON'T KNOW

<r> REFUSED

====> [goto f541]

>f531< Is [fill NAME] ineligible because (you/he/she) (have/has) not worked long enough, because (you/he/she) (don't/doesn't) work enough hours, because (you/he/she) (are/is) on-call, because of medical problems, or for some other reason? [CODE ONLY ONE]

**INELIGR - P**

<1> HAVEN'T WORKED LONG ENOUGH

<2> DON'T WORK ENOUGH HOURS

<3> ON-CALL

<4> MEDICAL PROBLEM

<5> OTHER [SPECIFY]

<11> **ON ANOTHER PLAN**

<12> **COMPANY WON'T OFFER**

<13> **STUDENT**

<d> DON'T KNOW

<r> REFUSED

====>

>f541< Does [fill NAME]'s employer offer only one health insurance plan or more than one health insurance plan to its employees?

**EMPMULT - P**

<1> ONE PLAN

<2> MORE THAN ONE PLAN

<d> DON'T KNOW [goto NEXT PERSON or g10]

<r> REFUSED [goto NEXT PERSON or g10]

====>

>f551< Does [fill NAME]'s employer offer an HMO plan to its employees?

**EMPHMO - P**

**PROBE:** With an HMO, you must generally receive care from HMO doctors; otherwise, the expense is not covered unless you were referred by the HMO or there was a medical emergency. [NHIS DEF].

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>test 561< **[IF f541 eq <2> AND f551 eq <1> GOTO f561; ELSE GOTO NEXT PERSON OR g10]**

>f561< And does [fill NAME]'s employer also offer a non-HMO health insurance plan to its employees?

**EMPBOTH - P**

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====> [goto NEXT PERSON or g10]

## **g. FAMILY INCOME**

>g10<

The next questions are about income that (your family [insert names if multiple family household]) received during 1997. During 1997, what was your family's total income from all sources, before taxes and other deductions?

*NOTE: CHANGE IN YEAR.*

### **PROBES:**

- (1) We are asking these questions to find out whether people can afford the health care they need.
- (2) Total income includes wages and salaries from jobs, net income from farms or businesses, interest or dividends, pensions or social security, income from rental property, estates, or trusts, public assistance or welfare, social security, child support, and other sources.
- (3) Your best estimate would be fine.
- (4) Include the 1997 income of all current family members, (including active military), even if you weren't living together then.

<0> NONE

\$ <10 - 999999>

<7> \$1,000,000 OR MORE

<d> DON'T KNOW [goto g11]

<r> REFUSED

====> [goto test g20]

>g11<

Which of the following income ranges is closest to your family's 1997 total income from all sources?

**PROBE:** Your best estimate would be fine.

<1>Less than \$5,000

<2>\$5,000 to less than \$10,000

<3>\$10,000 to less than \$20,000

<4>\$20,000 to less than \$30,000

<5>\$30,000 to less than \$40,000

<6>\$40,000 to less than \$50,000

<7>\$50,000 to less than \$100,000

<8>Over \$100,000

<d> DON'T KNOW

<r> REFUSED

====>

>test g20< [REPEAT g20-g221 FOR EACH PERSON; HOWEVER, SKIP FOR  
INFORMANT'S OWN CHILD OR GRANDCHILD.]

>g20< (Do you/Does [fill NAME] consider (yourself/himself/herself) to be of Hispanic origin,  
such as Mexican, Puerto Rican, Cuban, or other Spanish background?

**HISPAN - P**

**PROBE FOR REFUSALS:** I understand that these questions may be sensitive. We are  
asking these questions to help understand different health care problems and needs  
people have.

<1>YES

<0>NO

<d>DON'T KNOW

<r> REFUSED

====>

>g221< What race (does/do) [fill NAME] consider (himself/herself/yourself) to be?

**RACEX - P**

**PROBE FOR REFUSALS:** I understand that these questions may be sensitive. We are  
asking these questions to help understand different health care problems and needs  
people have.

**INTERVIEWER:** (1) READ CATEGORIES IF NECESSARY; CODE  
RESPONDENT-OFFERED CATEGORIES IN "OTHER".

(2) CODE MIXED RACE IN OTHER.

<1> WHITE

<2> AFRICAN AMERICAN OR BLACK

<3> NATIVE AMERICAN (AMERICAN INDIAN) OR ALASKA NATIVE

<4> ASIAN OR PACIFIC ISLANDER

<5> OTHER [SPECIFY]

<d> DON'T KNOW

<r> REFUSED

====>

>test g23< [IF FAMILY HAS MORE THAN ONE ADULT, GO TO g23; ELSE GOTO test h10]

>g23< INTERVIEWER: THERE WILL BE A SELF RESPONSE MODULE FOR THIS CASE

<g> CONTINUE

====>

## h. CLOSING (FIU)

>test h10< *[IF DID NOT RECEIVE PRE-PAYMENT, GOTO h10; IF RECEIVED PRE-PAYMENT AND REINTERVIEW, GOTO h20; ELSE, GOTO h30]*

>h10< As a token of our appreciation for your help, we would like to send you a check for (\$25). Could you please give me your (and your (husband/wife))'s<sup>20</sup> and your full name and address?

**READ AFTER NAME AND ADDRESS OBTAINED:** Your name and address are confidential and will only be used if we call you for another interview. You should receive your check in about 4 weeks.

<Enter First and Last Name><sup>21</sup>

<Enter Street Address>

<Enter City/State>

<Enter Zip Code>

<d> DON'T KNOW

<r> REFUSED

====> [goto test h30]

>h20< *[REINTERVIEW ONLY] Did you or any other persons living here have [fill phone number] as your phone number on [fill DATE OF LAST INTERVIEW]?*

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>h30< Do you have any other telephone numbers in your household besides [fill phone number]? IF YES: How many?

**PHNOTHX - F**

**PROBE:** We need this information so that households are correctly represented in our sample.

PROBE: How many additional phone numbers do you have?

<0> [goto h32]

<1-4> OTHER TELEPHONE NUMBERS

---

<sup>20</sup> Use husband/wife if informant is married.

<sup>21</sup> Enter first name before last name.

<r> REFUSED [goto end]

====>

>h31< (Is this/Are these) other phone numbers for...

**PHNOTHR - F**

<1> home use

<2> business and home use, or

<3> business use only

<d> DON'T KNOW

<r> REFUSED

====>

>h32< During the past 12 months, was there any time when you did not have a working telephone in your household for two weeks or more?

**NOPHN - F**

<1> YES [goto h33]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====> [goto end]

>h33< For how many of the past 12 months did you not have a working telephone?

**NOPHNMX - F**

<0-12> MONTHS

<d> DON'T KNOW [goto end]

<r> REFUSED [goto end]

====>

>h34< What was the main reason you did not have telephone services? [Keeter, POQ, Summer 1995, P. 203]

<1> COST

<2> MOVED [COST NOT MENTIONED]

<3> PERSONAL PREFERENCE

<4> SERVICE NOT AVAILABLE

<d> DON'T KNOW

<r> REFUSED

====>

>test< **[IF NO SELF RESPONSE MODULE, GOTO fin; ELSE GOTO h23]**

>h23<

[SELF RESPONSE MODULE] Now, I would like to speak with [fill NAME] for about five to ten minutes. I need to ask (him/her) a few questions about (his/her) health and opinions. Can I speak with [fill NAME] now or would it be more convenient to set up an appointment?

**IF NECESSARY, ADD:** I need to speak with(him/her) because it is hard to get opinions on how people feel about their own health, even from a family member.

<1> [Fill NAME] COMES TO PHONE [THANK INF. FOR HIS/HER TIME;  
GOTO SELF RESPONSE MODULE]

<0> [Fill NAME] IS NOT AVAILABLE [THANK INF. AND GOTO  
CALLBACK]<sup>22</sup>

**INFORMANT WILL ACT AS PROXY FOR [Fill NAME].**

<2> [Fill NAME] IS CHRONICALLY ILL

<3> [Fill NAME] IS AWAY AT SCHOOL

<4> [Fill NAME] SPEAKS NEITHER ENGLISH NOR SPANISH

**INFORMANT WILL NOT ACT AS PROXY FOR [Fill NAME].**

<U> [Fill NAME] IS UNABLE (CHRONIC ILLNESS, AWAY AT SCHOOL, OR  
LANGUAGE BARRIER); INFORMANT REFUSES TO PROXY [GOTO  
REFUSAL ITEMS]<sup>22</sup>

<R> [Fill NAME] REFUSES; INFORMANT REFUSES TO PROXY [GOTO  
REFUSAL ITEMS]<sup>22</sup>

==>

<fin>

Thank you again for your time and interest in this important survey.

[IF CHRONIC CONDITIONS SUBSAMPLE<sup>23</sup>: I also want to let you know that you may be contacted in the next few weeks for a follow-up study on the quality of health care in your community. Participating in this study will only take about 5 to 10 minutes of your time, and you will receive additional compensation. The quality of care study is being conducted by RAND, a research organization that is working with us on this project. Thank you again for helping us.]

This concludes the survey unless you have a brief comment you would like to add.

<c> comments [specify]

<g> interview complete

==>

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<sup>22</sup> THESE QUESTION SEQUENCES ARE ONLY SHOWN IN THE CATI PROGRAM.

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<sup>23</sup> Includes all completed interviews in high intensity sites.



## SELF RESPONSE MODULE

>slf2<

The main part of the interview has already been completed by [fill NAME]. I have only a few questions about your health and opinions, [and [fill CHILD'S NAME] last visit to the doctor]. I need to ask you these questions because it is hard to ask other people, even family members, about how you feel about your health. (I am asking you about [fill CHILD NAME] last doctor visit because [fill SPOUSE NAME] mentioned that you took [fill CHILD NAME] to the doctor on (his/her) last visit.)

**IF NECESSARY READ PROBE:** Our goal is to see how managed care and other health care changes are affecting people in your community. The project is sponsored by a private foundation and is endorsed by state health departments throughout the country.

**IF INCENTIVE REMINDER NEEDED:** Because (your/your family's) participation is very important to our study, we will send (you/your family) \$AMOUNT.

<g> [fill NAME] / PROXY WILL CONTINUE WITH SELF-RESPONSE NOW

<U> [fill NAME] IS UNABLE TO COMPLETE SELF-RESP MODULE  
(ILLNESS, DISABILITY, LANGUAGE)

<R> [fill NAME] REFUSES TO COMPLETE SELF-RESP MODULE

INTERVIEWER: IF [fill NAME] / PROXY CANNOT DO SELF-RESP AT THIS TIME skcb AND SETUP AN APPOINTMENT

====>

test b94<

**[IF PERSON IS FAMILY INFORMANT'S SPOUSE GOTO b932<sup>24</sup> else goto c812]**

>b932<<sup>1</sup>

In choosing among alternative health plans, some people have concerns that are especially important to them.

### ***MCHOICE - P***

Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the following statement: I would be willing to accept a limited choice of physicians and hospitals if I could save money on my out-of-pocket costs for health care.<sup>25</sup>

**PROBE:** CODE "7" IF R. SAYS THE STATEMENT DOES NOT APPLY.

- <1> STRONGLY AGREE
- <2> SOMEWHAT AGREE
- <3> NEITHER AGREE NOR DISAGREE
- <4> SOMEWHAT DISAGREE
- <5> STRONGLY DISAGREE
- <7> NOT APPLICABLE
- <d> DON'T KNOW

---

<sup>24</sup>Note that this question is parallel to b951 in the main interview, we will use b95n as the variable name in the analysis file.

<sup>25</sup> Source: Royal, Kenneth, et al., **The Gallup Arizona Health Care Poll**. P.18, The Gallup Organization, 1995. Distributions by coverage available.

<r> REFUSED  
 ==>

>c812< Next, during the past 12 months, was there any time when you didn't get the medical care you needed?  
**UNMET - P**

<1> YES  
 <0> NO  
 <d> DON'T KNOW  
 <r> REFUSED  
 ==>

>c822< And was there any time during the past 12 months when you put off or postponed getting medical care you thought you needed?  
**PUTOFF - P**

<1> YES  
 <0> NO  
 <d> DON'T KNOW  
 <r> REFUSED  
 ==>

>test c832< [IF c812 EQ <1> OR <d> OR c822 EQ <1> OR <d> GOTO c832; ELSE GOTO test 302]

>c832< Did you not get the medical care you needed or have delays in getting the medical care you needed for any of the following reasons?  
 CODE ALL THAT APPLY.

**PUTOFR1 - P** <1> Worry about the cost

**PUTOFR2 - P** <2> The doctor or hospital wouldn't accept your health insurance

**PUTOFR3 - P** <3> Your health plan wouldn't pay for the treatment

**PUTOFR4 - P** <4> You couldn't get an appointment soon enough

**PUTOFR5 - P** <5> You couldn't get there when the doctor's office or clinic was open

**PUTOFR6 - P** <6> It takes too long to get to the doctor's office or clinic from your house or work

**PUTOFR7 - P** <7> You couldn't get through on the telephone

**PUTOFR14 - P** <14> You were too busy with work or other commitments to take the time

**PUTOFR20 - P** <20> You didn't think the problem was serious enough

**PUTOFR0 - P** <0> Or any other reason I haven't mentioned [SPECIFY]

**PUTOFR8 - P** <8> *Had to wait in the office or clinic too long*

**PUTOFR9 - P** <9> *Do not know where to go/can't find doctor/can't use doctor of choice*

**PUTOF10 - P** <10> *Can't get referral from doctor*

**PUTOF11 - P** <11> *Other problems related to health system*

**PUTOF12 - P** <12> *Change in health insurance*

**PUTOF13 - P** <13> *Other insurance-related problems*

**PUTOF15 - P** <15> *Can't get off work*

**PUTOF16 - P** <16> *Transportation problems*

**PUTOF17 - P** <17> *Caring for family members*

**PUTOF18 - P** <18> *Too sick*

**PUTOF19 - P** <19> *Negative attitudes with doctors, or bad experiences in getting care*

**PUTOF21 - P** <21> *Too lazy, procrastinated, didn't feel like it, don't like to go to doctors*

<n> NONE CITED/NO OTHER RESPONSES

<x> NEED TO DELETE A RESPONSE

<d> DON'T KNOW

<r> REFUSED

====>

>test d302< [IF d122 eq <1> OR PERSON HAS HAD GE 1 PHYSICIAN VISITS IN THE  
LAST 12 MONTHS ( $1 \leq C312 \leq 96$  OR  $1 \leq C322 \leq 5$ ) GOTO d312; ELSE GOTO  
e122.]

>d312< Please think about the doctor you usually see when you are sick or need advice about  
your health. For each of the following statements, tell me whether you strongly agree,  
somewhat agree, somewhat disagree, or strongly disagree. [NOTE, NEITHER  
AGREE NOR DISAGREE IS CODED AS SCALE MIDPOINT BUT IS NOT  
READ].<sup>26</sup>

**DRNOREF - P**

ROTATE d312...d342.

I think my doctor may not refer me to a specialist when needed.

**INTERVIEWER:** (1) CODE "7" IF R. SAYS THE STATEMENT DOES NOT  
APPLY. (2) IF RESPONDENT IS CONFUSED OR HAS DIFFICULTY  
RESPONDING, RE-READ QUESTION; IF R. IS STILL CONFUSED OR  
UNCERTAIN AFTER YOU REREAD QUESTION, CODE "8."

<1> STRONGLY AGREE

---

<sup>26</sup> The next four questions (d312-d342) concerning patient's trust in their physicians were selected from an instrument developed by Dr. Paul Cleary of Harvard University.

- <2> SOMEWHAT AGREE
- <3> NEITHER AGREE NOR DISAGREE
- <4> SOMEWHAT DISAGREE
- <5> STRONGLY DISAGREE
- <7> NOT APPLICABLE
- <d> DON'T KNOW
- <r> REFUSED

====>

>d322<

I trust my doctor to put my medical needs above all other considerations when treating my medical problems.

**DRMETND - P**

REPEAT IF NECESSARY: Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the statement ...

INTERVIEWER:

- (1) CODE "7" IF R. SAYS THE STATEMENT DOES NOT APPLY.
- (2) IF RESPONDENT IS CONFUSED OR HAS DIFFICULTY RESPONDING, RE-READ QUESTION; IF R. IS STILL CONFUSED OR UNCERTAIN AFTER YOU RE-READ QUESTION, CODE "d".

- <1> STRONGLY AGREE
- <2> SOMEWHAT AGREE
- <3> NEITHER AGREE NOR DISAGREE
- <4> SOMEWHAT DISAGREE
- <5> STRONGLY DISAGREE
- <7> NOT APPLICABLE
- <d> DON'T KNOW
- <r> REFUSED

====>

>d332<

I think my doctor is strongly influenced by health insurance company rules when making decisions about my medical care.

**DRINFLU - P**

REPEAT IF NECESSARY: Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?

INTERVIEWER:

- (1) CODE "7" IF R. SAYS THE STATEMENT DOES NOT APPLY.
- (2) IF RESPONDENT IS CONFUSED OR HAS DIFFICULTY RESPONDING, RE-READ QUESTION; IF R. IS STILL CONFUSED OR UNCERTAIN AFTER YOU RE-READ QUESTION, CODE "d".

- <1> STRONGLY AGREE

<2> SOMEWHAT AGREE  
 <3> NEITHER AGREE NOR DISAGREE  
 <4> SOMEWHAT DISAGREE  
 <5> STRONGLY DISAGREE  
 <7> NOT APPLICABLE  
 <d> DON'T KNOW  
 <r> REFUSED  
 ===>

>d342< I sometimes think that my doctor might perform unnecessary tests or procedures.

REPEAT IF NECESSARY: Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the statement ...

**DRUNNEC - P**

INTERVIEWER:

(1) CODE "7" IF R. SAYS THE STATEMENT DOES NOT APPLY.  
 (2) IF RESPONDENT IS CONFUSED OR HAS DIFFICULTY RESPONDING, RE-READ QUESTION; IF R. IS STILL CONFUSED OR UNCERTAIN AFTER YOU RE-READ QUESTION, CODE "d".

<1> STRONGLY AGREE  
 <2> SOMEWHAT AGREE  
 <3> NEITHER AGREE NOR DISAGREE  
 <4> SOMEWHAT DISAGREE  
 <5> STRONGLY DISAGREE  
 <7> NOT APPLICABLE  
 <d> DON'T KNOW  
 <r> REFUSED  
 ===>

>e122< Now I would like to ask you about satisfaction with your choice of doctors.

First, primary care doctors, such as family doctors, [pediatricians,]<sup>27</sup> or general practitioners, who treat a variety of illnesses and give preventive care.

Are you satisfied or dissatisfied with the choice you personally have for primary care doctors?

**PROBE:** Most people go to a primary care doctor first when they have a sickness or injury they have not had before.

---

<sup>27</sup>Exclude for adults.

<1> SATISFIED [goto e132]  
<2> DISSATISFIED [goto e132]  
<3> NEITHER SATISFIED NOR DISSATISFIED  
<d> DON'T KNOW  
<r> REFUSED  
====> [goto e142]

>e132< Would that be very (dis)satisfied or somewhat (dis)satisfied?

<1> VERY  
<2> SOMEWHAT  
<d> DON'T KNOW  
<r> REFUSED  
====>

>e142< **SPNEED - P** During the past 12 months, have you personally needed or seen a specialist?

**PROBE::** Specialists include such doctors as surgeons, allergists, (obstetricians,) (gynecologists,) orthopedists, cardiologists, and dermatologists? Specialists mainly treat just one type of problem.

<1> YES [goto e152]  
<0> NO  
<d> DON'T KNOW  
<r> REFUSED  
====> [goto test e162]

>e152< Are you satisfied or dissatisfied with the choice you have for specialists?

<1> SATISFIED [goto e15b]  
<2> DISSATISFIED [goto e15b]  
<d> DON'T KNOW  
<r> REFUSED  
====> [goto test e162]

>e15b< Would that be very (dis)satisfied or somewhat (dis)satisfied?

<1> VERY  
<2> SOMEWHAT  
<d> DON'T KNOW

<r> REFUSED

====>

>test e162< [IF PERSON HAS HAD PHYSICIAN VISITS IN LAST 12 MONTHS ( $1 \leq c312 \leq 96$  OR  $1 \leq c321 \leq 5$ ), GOTO e162; ELSE GOTO e402]

>e162< Since [fill DATE 12 MONTHS AGO], did you visit a doctor for care of sickness, injury, or other health problems?

**SICKCR - P**

**PROBE:** (1) Other health problems include follow up or check up visits for chronic problems, such as asthma, diabetes, hypertension, heart conditions, etc.

(2) Do not include visits to physicians' assistants, nurse practitioners, alternative medicine specialists, or other providers who are not medical doctors.

<1> YES [goto e172]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====> [goto e202]

>e172< In what month was (fill NAME)'s **most recent** visit for sickness or injury or other health problem?

INTERVIEWER: THE LAST 12 MONTHS ARE SHOWN BELOW WITH AN \*  
SICK VISIT DATE MUST BE WITHIN LAST 12 MONTHS (SINCE [fill DATE]).

<1> JUNE/97	<8> JAN/98	<15> AUG/98	<22> MAR/99
<2> JULY/97	<9> FEB/98	<16> SEPT/98	<23> APR/99
<3> AUG/97	<10> MAR/98	<17> OCT/98	<d> DON'T KNOW
<4> SEPT/97	<11> APR/98	<18> NOV/98	<r> REFUSED
<5> OCT/97	<12> MAY/98	<19> DEC/98	====>
<6> NOV/97	<13> JUNE/98	<20> JAN/99	
<7> DEC/97	<14> JULY/98	<21> FEB/99	

>e182< Since that visit in month, did you visit a doctor for a general check-up, physical examination, gynecological or pregnancy check-up, or other preventive care not related to a specific health problem?

**CHKASIK - P**

**PROBE:** Do not include visits to physicians' assistants, nurse practitioners, alternative medicine specialists or other providers who are not medical doctors.

<1> YES [goto e192]

<0> NO

<d> DON'T KNOW

<r> REFUSED

====> [goto test e222]

>e192< In what month was [fill NAME]'s **most recent** visit for a check up or physical exam?

INTERVIEWER: THE LAST 12 MONTHS ARE SHOWN BELOW WITH AN \*

NOTE: PREVENTIVE CARE VISIT MUST BE LATER THAN SICK VISIT [fill DATE].

<1> JUNE/97	<8> JAN/98	<15> AUG/98	<22> MAR/99
<2> JULY/97	<9> FEB/98	<16> SEPT/98	<23> APR/99
<3> AUG/97	<10> MAR/98	<17> OCT/98	<d> DON'T KNOW
<4> SEPT/97	<11> APR/98	<18> NOV/98	<r> REFUSED
<5> OCT/97	<12> MAY/98	<19> DEC/98	====>
<6> NOV/97	<13> JUNE/98	<20> JAN/99	
<7> DEC/97	<14> JULY/98	<21> FEB/99	

>test e192< [VERIFY THAT MONTH IN e192 IS SAME MONTH OR FOLLOWS e172;  
THEN GOTO test e222]

>e202< During the last 12 months, did you visit a doctor for a general check-up, physical examination, or other preventive care not related to a specific health problem?

**CHECKUP - P**

PROBE: Do not include visits to physicians' assistants, nurse practitioners, alternative medicine specialists or other providers who are not medical doctors.

<1> YES [goto e212]

<0> NO [goto e902]

<d> DON'T KNOW

<r> REFUSED

====> [goto SF12-e402]

>e212< In what month was [fill NAME]'s **most recent** visit?

INTERVIEWER: THE LAST 12 MONTHS ARE SHOWN BELOW WITH AN \*  
NOTE: PREV CARE VISIT DATE MUST BE WITHIN LAST 12 MONTHS

<1> JUNE/97	<8> JAN/98	<15> AUG/98	<22> MAR/99
<2> JULY/97	<9> FEB/98	<16> SEPT/98	<23> APR/99
<3> AUG/97	<10> MAR/98	<17> OCT/98	<d> DON'T KNOW
<4> SEPT/97	<11> APR/98	<18> NOV/98	<r> REFUSED
<5> OCT/97	<12> MAY/98	<19> DEC/98	====> [goto test 222]
<6> NOV/97	<13> JUNE/98	<20> JAN/99	
<7> DEC/97	<14> JULY/96	<21> FEB/99	

>e902< [Fill INFORMANT] noted that you had [fill # IN c311 or c321] doctor visits in the last 12 months. Was that correct or incorrect?

CORRECT: [jb e162 TO OBTAIN LAST DOCTOR VISIT]

<1> INCORRECT [ goto SF12 (e402)]

====>

>test e222< [IF PERSON HAD WELL AND SICK VISIT (e162=1 and e182=1), SELECT MOST RECENT FOR e222. IF SAME MONTH FOR BOTH, FILL SICK VISIT SINCE IT WAS MORE RECENT]

>e222< Please think about your visit for preventive care or a check-up in [fill MONTH].

**DRORSP - P**



Was the doctor you saw a family doctor, who treats a variety of illnesses and gives preventive care, or was he or she a specialist who mainly treats just one type of problem?

PROBE: Family doctors usually are in general or family practices or are internists or pediatricians who treat a variety of illnesses and problems.

- <1> FAMILY DOCTOR
- <2> SPECIALIST, INCLUDING OB/GYN
- <d> DON'T KNOW
- <r> REFUSED
- ====>

>test e242< [IF PERSON HAS USC (d102=1) GOTO e242; ELSE GOTO e24e]

>e242< Was this visit in [fill MONTH] to the place you USUALLY go to when you are sick or need advice about your health?

**LSTUSC - P**

- <1> YES [goto e252]
- <0> NO
- <d> DON'T KNOW
- <r> REFUSED
- ====>

>e24e< Was this visit to an emergency room?

**LSTOER - P**

- <1> YES [goto e282]
- <0> NO
- <d> DON'T KNOW
- <r> REFUSED
- ====>

>e252< For this visit in [fill MONTH], did you have an appointment ahead of time or did you just walk in?

**LSTAPP - P**

- <1> APPOINTMENT [goto e262]
- <0> WALK IN
- <d> DON'T KNOW
- <r> REFUSED
- ====> [goto e282]

>e262< For this visit, how long did you have to wait between the time you made the appointment and the day you actually saw the doctor?

INTERVIEWER: (1) CODE "0" FOR SAME DAY  
(2) ACCEPT MOST CONVENIENT TIME PERIOD. ENTER TIME PERIOD ON  
NEXT SCREEN.

<0> SAME DAY  
<1-30>  
<d> DON'T KNOW  
<r> REFUSED ==>

>e272< ENTER TIME PERIOD. [DISPLAY ON SAME SCREEN AS e262].

<1> DAYS  
<2> WEEKS  
<3> MONTHS

==>

>e282< How long did you have to wait in the waiting room before seeing a medical person  
for this visit in [fill MONTH]?

<1-240> [goto E282]  
<998> DON'T KNOW  
<999> REFUSED  
==> [goto e292]

>E282< ENTER TIME PERIOD. [DISPLAY ON SAME SCREEN AS e282]

<1> MINUTES  
<2> HOURS  
==>

>e292< For this visit, how long did it take you to get to the doctor's office?

INTERVIEWER: ACCEPT MOST CONVENIENT TIME PERIOD.  
ENTER TIME PERIOD ON NEXT SCREEN.

<1-90> [goto E292]  
<d> DON'T KNOW  
<r> REFUSED  
==> [goto e302]

>E292< ENTER TIME PERIOD. [DISPLAY ON SAME SCREEN AS e292]

<1> MINUTES  
<2> HOURS  
==>

>e302<

Still thinking about this visit in [fill MONTH], how would you rate the thoroughness and carefulness of the examination and treatment you received?

**LSTHOR - P**

Would you say it was....

<1> poor

<2> fair

<3> good

<4> very good

<5> excellent

<7> DOES NOT APPLY (NOT EXAMINED OR TREATED)

<d> DON'T KNOW

<r> REFUSED

====>

>e312<

How would you rate how well your doctor listened to you?

Would you say it was...

**LSTLISN - P**

<1> poor

<2> fair

<3> good

<4> very good

<5> excellent

<7> DOES NOT APPLY (NOT EXAMINED OR TREATED)

<d> DON'T KNOW

<r> REFUSED

====>

>e322<

How would you rate how well the doctor explained things in a way you could understand.

**LSTEXPL - P**

Would you say it was....

<1> poor

<2> fair

<3> good

<4> very good

<5> excellent

<7> DOES NOT APPLY (NOT EXAMINED OR TREATED)

<d> DON'T KNOW

<r> REFUSED

===>

>e402< Now, I have a few questions about (your/his/her) health.

In general, would you say your health is:

<1> Excellent

<2> Very Good

<3> Good

<4> Fair or

<5> Poor

<d> DON'T KNOW

<r> REFUSED

===>

>e412< Next, I'm going to read a list of activities that you might do during a typical day. As I read each item, please tell me if your health now limits you a lot, limits you a little, or does not limit you at all in these activities.

**LMTMACT - P**

Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf?

Does your health now limit you a lot, limit you a little, or not limit you at all?

**PROBE:** If R says s/he does not do activity: Is that because of your health? AND REPEAT QUESTION

<1> YES, LIMITED A LOT

<2> YES, LIMITED A LITTLE

<0> NO, NOT LIMITED AT ALL

<d> DON'T KNOW

<r> REFUSED

===>

>e422< Climbing **several** flights of stairs?

**LMTSTR - P**

Does your health now limit you a lot, limit you a little, or not limit you at all?

**PROBE:** If R says s/he does not do activity: Is that because of your health? AND REPEAT QUESTION.

- <1> YES, LIMITED A LOT
- <2> YES, LIMITED A LITTLE
- <0> NO, NOT LIMITED AT ALL
- <d> DON'T KNOW
- <r> REFUSED

===>

>e432<

**PHYLESS - P**

The next two questions ask about your physical health and daily activities.

During the past 4 weeks, have you accomplished less than you would like as a result of your physical health?

- <1> YES
- <0> NO
- <d> DON'T KNOW
- <r> REFUSED

===>

>e442<

**PHYACT - P**

During the past 4 weeks, were you limited in the kind of work or other regular daily activities you do as a result of your physical health?

- <1> YES
- <0> NO
- <d> DON'T KNOW
- <r> REFUSED

===>

>e452<

**EMOLESS - P**

The next two questions ask about your emotions and your daily activities.

During the past 4 weeks, have you accomplished less than you would like as a result of any emotional problems, such as feeling depressed or anxious?

- <1> YES
- <0> NO
- <d> DON'T KNOW
- <r> REFUSED

===>

>e462< During the past 4 weeks, did you not do work or other regular activities as carefully as usual as a result of any emotional problems, such as feeling depressed or anxious?

**EMOACT - P**

- <1> YES
- <0> NO
- <d> DON'T KNOW
- <r> REFUSED

===>

>e472< During the past 4 weeks, how much did pain interfere with your normal work, including both work outside the home and housework? Did it interfere...

**PAININT - P**

- <1> not at all
- <2> a little bit
- <3> moderately
- <4> quite a bit
- <5> extremely
- <d> DON'T KNOW
- <r> REFUSED

===>

>e482< During the past 4 weeks, how much of the time has your physical health or emotional problems interfered with your social activities like visiting with friends or relatives? Has it interfered...

**LMTSOC - P**

- <1> all of the time
- <2> most
- <3> some
- <4> a little
- <5> or none of the time
- <d> DON'T KNOW
- <r> REFUSED

===>

>e492< The next questions are about how you feel and how things have been with you during the past 4 weeks. As I read each question, please give the one answer that comes closest to the way you have been feeling; is it all of the time, most, some, a little, or none of the time?

**FLCALM - P**

How much of the time during the past 4 weeks have you felt calm and peaceful?

REPEAT CATEGORIES SLOWLY.

- <1> All of the time
- <2> most
- <3> some
- <4> a little, or
- <5> none of the time
- <d> DON'T KNOW
- <r> REFUSED

====>

>e502<

**ENERGY - P**

How much of the time during the past 4 weeks did you have a lot of energy?

READ CATEGORIES SLOWLY.

- <1> All of the time
- <2> most
- <3> some
- <4> a little, or
- <5> none of the time
- <d> DON'T KNOW
- <r> REFUSED

====>

>e512<

**FLDOWN - P**

How much of the time during the past 4 weeks have you felt downhearted and blue?

READ CATEGORIES SLOWLY.

- <1> All of the time
- <2> most
- <3> some
- <4> a little, or
- <5> none of the time
- <d> DON'T KNOW
- <r> REFUSED

====>

>n1a< [if sex ne <2> goto nn2a][if age gt <50> goto nn2a]

The next questions are about your health during the past two years.  
During the past two years, have you had a baby?

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====>

>nn2< During the past two years, have you seen a doctor or health care professional for:

**INTERVIEWER: ENTER A RESPONSE FOR EACH CONDITION**

<1> = YES <0> = NO <d> = DK <r> = RF <x> CHANGE AN ANSWER <h> HELP

NOTE TEXT OF HELP SCREENS IS APPENDED TO THE INSTRUMENT.

[r][fill nn2a:1][n] acne?

[r][fill nn2b:1][n] very frequent or severe headaches, including migranes?

[r][fill nn2c:1][n] [fill nn2f] **IF FEMALE:** abnormal uterine bleeding?

[r][fill nn2d:1][n] alcohol related problems?

IF ALL RESPONSES ARE CORRECT ENTER <g> TO CONTINUE

====>

>nn3< Has a doctor or health professional ever told you that you had:

**INTERVIEWER ENTER A RESPONSE FOR EACH CONDITION**

<1> = YES <0> = NO <d> = DK <r> = RF <x> CHANGE AN ANSWER <h> HELP

FOR EACH "YES" RESPONSE, THE PROGRAM PROMPTS WITH: "During the  
past two years, have you seen a doctor or other health care professional for [fill  
CONDITION]?"

[r][fill nn3a:1][n] [IF OVER 50 YEARS] cataracts?

[r][fill nn3b:1][n] diabetes or high blood sugar?

[r][fill nn3c:1][n] arthritis? [IF YES: GOTO c3AC AND RETURN]



[n3c] Did the doctor tell you that you have a special kind of arthritis called Rheumatoid Arthritis?

<1> = YES <0> = NO <d> = DK <r> = RF [goto nn3d:1 - asthma]

====> [goto nn3d:1]

[r][fill nn3d:1][n] asthma?

[IF NO TO ASTHMA: chronic obstructive pulmonary disease]

[r][fill nn3f:1][n] atrial fibrillation?

[r][fill nn3g:1][n] hypertension or high blood pressure?

[r][fill nn3h:1][n] high cholesterol?

IF ALL RESPONSES ARE CORRECT ENTER <g> TO CONTINUE

====>

>nn4<

Has a doctor or health professional ever told you that you had:

**INTERVIEWER:** ENTER A RESPONSE FOR EACH CONDITION

<1> = YES <0> = NO <d> = DK <r> = RF <x> CHANGE AN ANSWER <h> HELP

FOR EACH "YES" RESPONSE, THE PROGRAM PROMPTS WITH: "During the past two years, have you seen a doctor or other health care professional for [fill CONDITION]?"

[r][fill nn4a:1][n] hardening of the arteries, also called atherosclerosis or arteriosclerosis?

[r][fill nn4b:1][n] [fill cf1] IF NO TO HARDENING OF THE ARTERIES: ischemic heart disease?

[r][fill nn4c:1][n] [fill cf2] IF NO TO ISCHEMIC HEART DISEASE: anGINA OR ANgina? IF NO TO ANGINA GOTO C4AE AND RETURN.

====>

[n4ae] Have you every had angioplasty or heart bypass surgery?

====>

[r][fill nn4d:1][n] congestive heart failure? [IF NO GOTO c4af AND RETURN.]

[n4af] Have you ever taken water pills, called diuretics, to treat a heart condition?

[r][fill nn4e:1][n] a stroke?

====>

>nn5<

Has a doctor or health professional ever told you that you had:

INTERVIEWER ENTER A RESPONSE FOR EACH CONDITION

<1> = YES <0> = NO <d> = DK <r> = RF <x> CHANGE AN ANSWER <h> HELP

[r][fill nn5b:l][n] [fill c5f1] IF FEMALE: breast cancer.

[r][fill nn5c:l][n] skin cancer?

[r][fill nn5d:l][n] lung cancer?

[r][fill nn5e:l][n] cancer of the colon or rectum?

[r][fill nn5f:l][n] [fill c5f2] IF MALE, OVER 50: cancer of the prostate.

[r][fill nn5g:l][n] [fill c5f3]

[fill n5f4] IF MALE OVER 50: benign prostate disease or a large prostate that was not prostate cancer.

IF ALL RESPONSES ARE CORRECT ENTER <g> TO CONTINUE

====>

>nn6<

Has a doctor or health professional ever told you that you had:

**INTERVIEWER:** ENTER A RESPONSE FOR EACH CONDITION

<1> = YES <0> = NO <d> = DK <r> = RF <x> CHANGE AN ANSWER <h> HELP

FOR EACH "YES" RESPONSE, THE PROGRAM PROMPTS WITH: "During the past two years, have you seen a doctor or other health care professional for [fill CONDITION]?"

[r][fill nn6a:l][n] a hernia in the groin area?

[r][fill nn6b:l][n] an ulcer?

[r][fill nn6c:l][n] [fill nn6f] IF NO TO ULCER: gastritis?

[r][fill nn6d:l][n] HIV or AIDS?

[r][fill nn6e:l][n] depression?

IF ALL RESPONSES ARE CORRECT ENTER <g> TO CONTINUE

====>

>e522<

Now, please tell me whether you strongly agree, somewhat agree, somewhat disagree, or strongly disagree with the following statement. I'm more likely to take risks than the average person.

**TAKRISK - P**

INTERVIEWER: (1) NEITHER AGREE NOR DISAGREE IS NOT READ, BUT

IS CODED IF OFFERED (2) PROBE BY ASKING: In general, ...  
OR: Whatever you think of as risks...

- <1> STRONGLY AGREE
- <2> SOMEWHAT AGREE
- <3> NEITHER AGREE NOR DISAGREE
- <4> SOMEWHAT DISAGREE
- <5> STRONGLY DISAGREE
- <d> DON'T KNOW
- <r> REFUSED

====>

>e602< These next questions are about cigarette smoking. Have you smoked  
at least 100 cigarettes in your entire life?

**SMKEVR - P**

- <1> YES
- <2> NO [goto test e16c]
- <d> DON'T KNOW [goto test e16c]
- <r> REFUSED [goto test e16c]

====>

>e612< Do you now smoke cigarettes every day, some days or not at all?

**SMKNOW - P**

- <1> EVERYDAY [goto e622]
- <2> SOME DAYS [goto e632]
- <3> NOT AT ALL [goto e652]
- <d> DON'T KNOW
- <r> REFUSED

====> [goto test e16c]

>e622< On the average, how many cigarettes do you now smoke a day?

**SMKNUM - P**

**INTERVIEWER:** IF R GIVES ANSWER IN PACKS, CHECK TABLE FOR  
CORRESPONDING # CIGS. AND ENTER #.

<1-96> Cigarettes

- 1    PACK    = 20 cigarettes
- 1.5 PACKS = 30 cigarettes
- 2    PACKS = 40 cigarettes
- 2.5 PACKS = 50 cigarettes
- 3    PACKS = 60 cigarettes
- 3.5 PACKS = 70 cigarettes
- 4    PACKS = 80 cigarettes

<d>        DON'T KNOW

<r>        REFUSED

====> [goto e662]

>e632<

**SMKDAY5 - P**

On how many of the past 30 days did you smoke a cigarette?

<0>    NONE [goto e652]

<1-31>    DAYS [goto e642]

<d>    DON'T KNOW

<r>    REFUSED

====> [goto e662]

>e642<

**SMKNDAX - P**

On the average, when you smoked during the past 30 days, about how many cigarettes did you smoke a day?

INTERVIEWER: IF RESPONDENT GIVES ANSWER IN PACKS, CHECK  
TABLE FOR CORRESP #CIGS & ENTER NUMBER.

- 1    PACK    = 20 cigarettes
- 1.5 PACKS = 30 cigarettes
- 2    PACKS = 40 cigarettes
- 2.5 PACKS = 50 cigarettes
- 3    PACKS = 60 cigarettes
- 3.5 PACKS = 70 cigarettes
- 4    PACKS = 80 cigarettes

<1-96>    NUMBER OF CIGARETTES

<d>    DON'T KNOW

<r>    REFUSED

====> [goto e662]

>e652<

**SMKQUIT - P**

How long has it been since you quit smoking cigarettes?

READ IF NECESSARY.

<1>        WITHIN THE PAST MONTH [goto test e672]

<2> MORE THAN ONE MONTH BUT WITHIN THE PAST 3 MONTHS  
[goto test e672]

<3> MORE THAN 3 MONTHS BUT WITHIN THE PAST 6 MONTHS  
[goto test e672]

<4> MORE THAN 6 MONTHS BUT WITHIN THE PAST YEAR [goto test e672]

<5> MORE THAN ONE YEAR BUT WITHIN THE PAST 5 YEARS

<6> MORE THAN 5 YEARS BUT WITHIN THE PAST 15 YEARS

<7> MORE THAN 15 YEARS AGO

<d> DON'T KNOW

<r> REFUSED

====> [goto test e16c]

>e662< During the past 12 months, have you stopped smoking for one day or longer,  
because you were trying to quit smoking?

**SMKTRYQ - P**

<1> YES

<2> NO

<d> DON'T KNOW

<r> REFUSED

====>

>test e672< **[IF PERSON HAD PHYSICIAN VISIT IN LAST 12 MONTHS ( $1 \leq C312 \text{ LE} \leq 96$  OR  $1 \leq C322 \leq 5$ ) GOTO e672; ELSE GOTO test e16c]**

>e672< During the past 12 months, did any medical doctor advise you to stop smoking?

**SMKADV - P**

PROBE: In your opinion, REPEAT QUESTION.

<1> YES

<0> NO

<d> DON'T KNOW

<r> REFUSED

====> [goto test e16c]

>test e16c< **[IF THIS PERSON ACCOMPANIED CHILD ON LAST VISIT INCLUDE CHILD'S LAST VISIT QUESTIONS.] [e16c-e40c]**

## **Appendix B**

### **Derivation of Standard Error Look-Up Tables**

This appendix explains how the standard errors in the tables in Appendix C were derived.<sup>1</sup>

## 1. Person-Level Percentages

To calculate standard errors for percentages at the person level (Tables C.1 through C.11), a representative set of person-level categorical variables from the CTS Household Survey was selected. Each variable listed below could be characterized as one of the following six types:

- Patient trust, satisfaction, and risk-taking variables: MCHOICE, DRMETND, DRCHOCX, SPCHOCX, CRSAFX, LSTEXPL, TAKRISK
- Employment variables: EMPTYPX, FIRMSZX, INDSTRY, WRKPAY, WAGEHRX
- General health status variables: GENHLH, PCS12
- Health care access and utilization variables: USCARE, USCTYPE, LSTYPE, HSPSTAY, MENTAL, MAMMG, FLUSHOT, PUTOFF, SMKADV, ERUSENX, DRVISNX, MPVISNX, LSTWATX
- Demographic and economic variables: SEX, RACEREX, AGEX, MSACAT, HIGRADX, NSPER, NSDULT, NAGE65, FAMINCX, CENSINX, POVLEV
- Health insurance variables: OFFERED, OFRMULT, PRIVJOB, PRIVDIR, PRIVOTH, MCARE, MCRESUP, MCAID, HMOEVR, INSTYPE, PRECOVX, PVLSTIP

These variable names can be cross-referenced in the file's codebook<sup>2</sup>.

For each categorical variable with more than two possible values, we created a series of dichotomous variables--one for each possible response. Each dichotomous variable indicates whether the respondent chose that category (value set to one) or one of the other categories (value set to zero).

Weighted percentages and associated standard errors and design effects were produced for these variables using SUDAAN software (release 7.5, SAS-callable for Windows 95 and NT, Taylor series default option for variance estimation) for 10 different combinations of estimate types and population subgroups:

---

<sup>1</sup>The methods used were based on those described in National Center for Health Statistics, "Sample Design, Sampling Weights, Imputation, and Variance Estimation in the 1995 National Survey of Family Growth." In *Vital and Health Statistics*, series 2, no. 124, Hyattsville, MD: NCHS, February 1998.

<sup>2</sup> We used the final, edited version of these variables, as provided in the data file.

- Estimate types
  - Site-specific estimates, augmented sample
  - National estimates, site sample and supplemental sample combined
- Population subgroups
  - All persons
  - Adults (age 18 or older)<sup>3</sup>
  - Children (age 0 to 17)
  - Hispanics (all races)
  - Non-Hispanic Blacks

The output from the SUDAAN runs was saved in several data files, which were used to derive regression models in SAS. The goal here was to derive a generalized function to predict design effects, given the size of the estimate and the unweighted sample size.

Before these models were run, estimates with an unweighted sample size of less than 100 or a particularly small or large design effect (greater than 20 or less than 0.8) were flagged as outliers and excluded from the regression runs.<sup>4</sup> For the remaining estimates, a  $\log_{10}$  transform was used for the point estimate ( $p$ ), for its complement ( $q = 1 - p$ ), for the design effect ( $DEFF$ ), and for the unweighted sample size ( $n_u$ ).

A series of linear regression models (SAS's PROC REG) was fit, using the variables specified above. If the model was not significant (at  $\alpha=.10$ ) with all three independent variables, or if the model was significant but any of the three coefficients was not significant (at  $\alpha=.15$ ), the best model was fit.<sup>5</sup> The models were specified as:

$$\hat{D} = \log_{10}(DEFF) = b_0 + b_1 \log_{10}(n_u) + b_2 \log_{10}(p) + b_3 \log_{10}(q)$$

These models were run for categorical variables (excluding outliers) for the 10 combinations of estimate types and population subgroups described above.

For site-specific estimates, the estimated regression coefficients resulting from these runs were used

---

<sup>3</sup>This also included a few persons under age 18 who were classified as adults because they were either the householder or the spouse of the householder. Such persons were excluded from the "children" category.

<sup>4</sup>See the end of this section for a list of outliers.

<sup>5</sup>These models predict design effects with less error than simply using a mean or median design effect; however, their predictive power is relatively low. The  $R^2$  for these models ranged from 0.0385 to 0.2361 for national estimates and from 0.01016 to 0.2051 for site-specific estimates. To estimate design effects with greater confidence you will need to use specialized software to calculate them directly.



to predict design effects for various values of  $p$  and various sample sizes. Tables were produced by calculating the standard error for each combination of  $p$  and sample size as follows:

$$S.E.(p) = \sqrt{\frac{p \cdot q \cdot \hat{DEFF}}{n_u}}$$

where  $\hat{DEFF} = 10^{\hat{D}}$  is the anti-log of the predicted  $\log_{10}$  design effect  $\hat{D}$  based on the associated regression model.

Design effects for Round Two estimates using the combined national sample were derived directly from estimated design effects for the combined sample. This differs from the approach used for Round One, where the procedure involved combining the predicted design effects for national estimates from the site sample and from the supplemental sample (based on the model above) in a linear fashion<sup>6</sup>.

---

<sup>6</sup>Refer to HSC Technical Publication No. 7 for details on the Round One procedure. The reason for the change in procedure for Round Two was that there is little interest in making estimates using only the supplemental sample. Since the combined national estimates of DEFF are made using linear combinations of the two samples, any differences in the two approaches are trivial.

## 1.1 National Estimates for Persons Based on the Combined National Sample

Estimates based on all persons (including subgroups not elsewhere classified):

$$\hat{D} = -2.287024 + 0.580724 \log_{10}(n_u) - 0.693382 \log_{10}(q)$$

Estimates based on adults (including subgroups other than Hispanics or blacks):

$$\hat{D} = -1.108837 + 0.319961 \log_{10}(n_u) - 0.66495 \log_{10}(q)$$

Estimates based on children (including subgroups other than Hispanics or blacks):

$$\hat{D} = -0.791738 + 0.312287 \log_{10}(n_u) + 0.085633 \log_{10}(p)$$

Estimates based on Hispanics (any race) (including all subgroups):

$$\hat{D} = -0.325947 + 0.208084 \log_{10}(n_u) + 0.087396 \log_{10}(p)$$

Estimates based on non-Hispanic blacks (including all subgroups):

$$\hat{D} = -1.33014 + 0.454982 \log_{10}(n_u) + 0.0665505 \log_{10}(p) - 0.29203 \log_{10}(q)$$

## 2. Family-Level Percentages

To calculate standard errors for percentages at the family level (Tables C.12 and C.13), a set of four family-level categorical variables from the CTS Household Survey was selected:

- Number of persons in family (NSPER)
- Number of adults in family (NADULT)
- Number of persons age 65 and older in family (NAGE65)
- Metropolitan status (MSACAT)

Weighted percentages and associated standard errors and design effects were produced for these variables using SUDAAN software for two different estimate types:

- Site-specific estimates, augmented sample
- National estimates, site sample and supplemental sample combined

The same series of steps as were carried out for the person-level percentage estimates were carried out at the family level.

We present here the formulas (rather than tables) for predicting design effects for family-level percentage estimates resulting from the combined site sample and national supplemental sample. You can use these formulas to obtain a design effect that can be inserted into the formula for the standard error of a percentage,  $S.E.(p)$ , above.

## 2.1 National Estimates for the Site Sample and Supplemental Sample Combined

Estimates based on all families (including all subgroups):

$$\hat{D} = 0.412482 + 0.124512 \log_{10}(p)$$

## 3. Person-Level Means

To calculate standard errors for means at the person level (Table 4.14 and formulas in Chapter 4), the following person-level continuous variables from the CTS Household Survey were selected:

- Health care access and utilization variables: ERUSENX, DRVISNX, MPVISNX, LSTWATX, PCS12)
- Demographic and economic variables: WAGEHRX, FAMINCX,<sup>7</sup> AGEX, HIGRADX

Weighted means and associated standard errors and design effects were produced for these variables using SUDAAN software for six different combinations of estimate types and population subgroups:

- High-intensity site-specific estimates, augmented sample
  - All persons
- National estimates, combined sample
  - All persons
  - Adults (age 18 or older)
  - Children (age 0 to 17)
  - Hispanics (all races)
  - Non-Hispanic Blacks

The output from the SUDAAN runs was saved into a data file, which was used to derive regression models in SAS.<sup>8</sup> The goal here was to derive a generalized function to predict relative standard errors, given the unweighted and weighted sample sizes.

---

<sup>7</sup>Family income is actually a family-level variable that is being treated as a person-level characteristic here.

<sup>8</sup> The results for the combined national estimates are shown in Table C.14.

Before these models were run, estimates with an unweighted sample size of less than 100 or a particularly small or large design effect (greater than 20 or less than 0.8) were flagged as outliers and excluded from the regression runs. For these variables, a  $\log_{10}$  transform was used for the relative standard error ( $RSE$ ), the unweighted sample size ( $n_u$ ), and for the weighted sample size ( $n_w$ ).

A series of linear regression models was run, specified as:

$$\hat{R} = \log_{10}(RSE) = b_0 + b_1 \log_{10}(n_u) + b_2 \log_{10}(n_w)$$

These models were run for continuous variables (excluding outliers) for the six combinations of estimate types and population subgroups described above. As discussed in Chapter 4, relative standard errors for estimates using the combined national sample can then be used to estimate standard errors using the following formula:

$$\hat{SE} = \text{weighted mean} \cdot 10^{\hat{R}}.$$

## 1. Family-Level Means

To calculate standard errors for means at the family level (Table C.15), a set of three family-level continuous variables from the CTS Household Survey was selected:

- Family income (FAMINCX)
- Census family income (CENSINX)
- Census family poverty level (POVLEV)

Weighted means and associated standard errors and design effects were produced for these variables using SUDAAN software for combined national estimates for the following three population subgroups:

- All families
- Hispanic families
- Non-Hispanic black families

The same series of steps as were carried out for the person-level mean estimates were carried out at the family level.

## 2. Estimating Totals

In some cases, you can use the standard error tables for percentages to estimate the standard error for an estimate of a population total. This can be done in two cases:

- When the estimate is based on one of the national totals to which the CTS

was post-stratified (see Strouse et al. [1998] for a discussion of the variables and external sources used for post-stratification), or

- When there is an external estimate of a larger population total (for example, a published Census estimate).

In either case, it must be reasonable to assume that the estimate of the larger population total is made without error. If your situation does not fit either of the two cases above, or the no-error assumption does not hold, then the method below cannot be used to approximate standard errors.

To use the standard error tables for percentages to estimate the standard error of a population count, let  $\hat{N}$  be the estimate of the total population of interest (for example, all persons, all adults) and  $\hat{M}$  be the estimate of a population subgroup. Estimate  $\hat{M}$  may be derived either as:

$$\hat{M} = \frac{\hat{p} \cdot \hat{N}}{100}$$

where  $\hat{p}$  is the CTS estimate of the percentage of the population having the subgroup characteristic or where  $\hat{M}$  is a weighted total from CTS, based on a category used in post-stratification. The standard error of  $\hat{M}$  can be approximated as:

$$s.e.(\hat{M}) = \frac{\hat{N} \cdot s.e.(\hat{p})}{100}$$

For example, the combined sample estimate of the number of persons who rate their health status as very good (GENHLH=2) is 33.38 percent, or 89,214,809 out of a total 1998 population of 267,270,250. The CTS was post-stratified to the total 1998 population, so the above approximation can be used. The estimate of GENHLH was based on a sample size of 58,956. Table C.1 indicates that the standard error of  $\hat{p}$  close to 20 percent with  $n$  near 59,000 is 0.37 percent, so the standard error of  $\hat{M}$  (where  $\hat{M}$  is the estimated number of persons rating their health as very good) is:

$$s.e.(\hat{M}) = \frac{\hat{N} \cdot s.e.(\hat{p})}{100} = \frac{267,270,250 \cdot 0.37}{100} = 988,899.93$$

## 5. Outliers

The following tables list various estimates that were excluded from the set of observations used in developing the design effect and relative standard error formulas presented in this section. Reasons for exclusion included: unweighted sample sizes that were too small, relative standard errors that were too large, and particularly small or large design effects. For example, the national estimate

(based on the site sample) of the percent of all persons who are uninsured has a design effect of 21 and was therefore excluded from the model estimation process. Table B.1 presents a list of person-level variables, subgroups, and sample types that were outliers for national estimates. Table B.2 lists family-level outliers for national estimates. Table B.3 lists person-level outliers for high-intensity site-specific estimates.

**TABLE B.1****OUTLIERS FOR NATIONAL PERSON-LEVEL ESTIMATES,  
OVERALL AND FOR SUBGROUPS**

Description of the variable	Subgroup
INSTYPE=3, Medicare and other public	Hispanic
LSTEXPL=7, N/A	Black
LSTEXPL=7, N/A	Hispanic
MCARE=1, Yes, covered by Medicare	Hispanic
MCHOICE=7, N/A	Hispanic
MCRSUP=1, Yes, covered by supplemental policy	Children
OFFERED=6, Working Elderly	Hispanic
OFRMULT=6, Working Elderly	Hispanic
RACEREX=2, African American	Overall
RACEREX=4, Hispanic	Overall
RACEREX=2, African American	Adults
RACEREX=4, Hispanic	Adults
RACEREX=4, Hispanic	Children

Note: Outliers were those with very large or very small design effects, very small unweighted sample sizes or large relative standard errors. Users of the data are cautioned against using tables or formulas in this report to estimate standard errors for the variables listed above.

**TABLE B.2**

**OUTLIERS FOR NATIONAL FAMILY-LEVEL ESTIMATES,  
OVERALL AND FOR SUBGROUPS**

Description of the variable	Subgroup
MSACAT=3, Non-metropolitan area	All families
NADULT=5, 5 adults	All families
NADULT=6, 6 adults	All families
NSPER=7, 7 persons	All families
NSPER=6, 6 persons	All families

Note: Outliers were those with very large or very small design effects, very small unweighted sample sizes or large relative standard errors. Users of the data are cautioned against using tables or formulas in this report to estimate standard errors for the variables listed above.



**TABLE B.3**

**OUTLIERS FOR PERSON-LEVEL HIGH-INTENSITY  
SITE-SPECIFIC ESTIMATES**

Description of the variable	Subgroup
CRSAFX=3, Neither satisfied/dissatisfied	Black
DRMETND=3, Neither agree/disagree	Black
DRMETND=7, N/A	Hispanic
DRMETND=7, N/A	Black
INSTYPE=2, Medicare and private	Children
INSTYPE=3, Medicare and other public	Children
INSTYPE=7, Military insurance	Hispanic
LSTEXPL=7, N/A	Children
LSTEXPL=7, N/A	Hispanic
LSTEXPL=7, N/A	Black
MCHOICE=3, Neither agree/disagree	Black
MCHOICE=7, N/A	Black
MCRSUP=1, Yes, covered by supplemental policy	Children
PRECOVX=5, N/A	Hispanic
PRECOVX=5, N/A	Black
SPCHOCX=3, Neither satisfied/dissatisfied	Children
SPCHOCX=3, Neither satisfied/dissatisfied	Hispanic
SPCHOCX=3, Neither satisfied/dissatisfied	Black
TAKRISK=3, Neither agree/disagree	Black
USCARE=3, More than 1 place	Children
USCARE=3, More than 1 place	Black

Note: All had relative standard errors of more than 0.30 for the specified subgroups in one or more high-intensity site.

## **Appendix C**

### **Standard Error Tables**

## APPENDIX C

### STANDARD ERROR TABLES FOR THE CTS ROUND TWO HOUSEHOLD SURVEY PUBLIC AND RESTRICTED USE FILES:

Table No.

#### PERCENTAGE ESTIMATES FOR PERSONS

##### NATIONAL ESTIMATES (COMBINED SAMPLE)

All Persons .....	C.1
Adults .....	C.2
Children .....	C.3
Hispanics .....	C.4
Non-Hispanic Blacks .....	C.5

##### ESTIMATES FOR HIGH-INTENSITY SITES (AUGMENTED SITE SAMPLE)

All Persons .....	C.6
Adults .....	C.7
Children .....	C.8
Hispanics .....	C.9
Non-Hispanic Blacks .....	C.10

##### ESTIMATES FOR LOW-INTENSITY SITES (AUGMENTED SITE SAMPLE)

All Persons .....	C.11
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#### PERCENTAGE ESTIMATES FOR FAMILIES

##### NATIONAL ESTIMATES (COMBINED SAMPLE)

All Persons .....	C.12
-------------------	------

##### ESTIMATES FOR HIGH-INTENSITY SITES (AUGMENTED SITE SAMPLE)

All Persons .....	C.13
-------------------	------

#### MEANS ESTIMATES FOR PERSONS

##### NATIONAL ESTIMATES (COMBINED SAMPLE)

All Persons, Adults, Children, Hispanics, and Non-Hispanic Blacks .....	C.14
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#### MEANS ESTIMATES FOR FAMILIES

##### NATIONAL ESTIMATES (COMBINED SAMPLE)

All Families, Hispanics, and Non-Hispanic Blacks .....	C.15
--	------

TABLE C.1  
STANDARD ERRORS FOR PERCENTAGES: COMBINED NATIONAL SAMPLE, ALL PERSONS  
(INCLUDING SUBGROUPS NOT CLASSIFIED ELSEWHERE)

Sample Size	For Percentages Near								
	5.00%	10.00%	15.00%	20.00%	25.00%	30.00%	35.00%	40.00%	50.00%
	or 95.00%	or 90.00%	or 85.00%	or 80.00%	or 75.00%	or 70.00%	or 65.00%	or 60.00%	
59,000	0.16%	0.22%	0.27%	0.31%	0.34%	0.37%	0.40%	0.42%	0.46%
55,000	0.16%	0.23%	0.28%	0.32%	0.35%	0.38%	0.40%	0.43%	0.46%
52,500	0.16%	0.23%	0.28%	0.32%	0.35%	0.38%	0.41%	0.43%	0.47%
50,000	0.16%	0.23%	0.28%	0.32%	0.36%	0.39%	0.41%	0.43%	0.47%
47,500	0.17%	0.23%	0.28%	0.32%	0.36%	0.39%	0.42%	0.44%	0.48%
45,000	0.17%	0.24%	0.29%	0.33%	0.36%	0.39%	0.42%	0.44%	0.48%
42,500	0.17%	0.24%	0.29%	0.33%	0.37%	0.40%	0.43%	0.45%	0.49%
40,000	0.17%	0.24%	0.29%	0.34%	0.37%	0.40%	0.43%	0.46%	0.50%
37,500	0.18%	0.25%	0.30%	0.34%	0.38%	0.41%	0.44%	0.46%	0.50%
35,000	0.18%	0.25%	0.30%	0.35%	0.38%	0.42%	0.44%	0.47%	0.51%
32,500	0.18%	0.25%	0.31%	0.35%	0.39%	0.42%	0.45%	0.48%	0.52%
30,000	0.18%	0.26%	0.31%	0.36%	0.40%	0.43%	0.46%	0.48%	0.53%
27,500	0.19%	0.26%	0.32%	0.36%	0.40%	0.44%	0.47%	0.49%	0.54%
25,000	0.19%	0.27%	0.32%	0.37%	0.41%	0.45%	0.48%	0.50%	0.55%
22,500	0.20%	0.27%	0.33%	0.38%	0.42%	0.46%	0.49%	0.51%	0.56%
20,000	0.20%	0.28%	0.34%	0.39%	0.43%	0.47%	0.50%	0.53%	0.57%
17,500	0.21%	0.29%	0.35%	0.40%	0.44%	0.48%	0.51%	0.54%	0.59%
15,000	0.21%	0.30%	0.36%	0.41%	0.46%	0.50%	0.53%	0.56%	0.61%
12,500	0.22%	0.31%	0.38%	0.43%	0.48%	0.52%	0.55%	0.58%	0.63%
10,000	0.23%	0.32%	0.39%	0.45%	0.50%	0.54%	0.58%	0.61%	0.66%
7,500	0.25%	0.34%	0.42%	0.48%	0.53%	0.57%	0.61%	0.65%	0.70%

TABLE C.2  
STANDARD ERRORS FOR PERCENTAGES: COMBINED NATIONAL SAMPLE, ADULTS  
(INCLUDING SUBGROUPS OTHER THAN HISPANICS OR BLACKS)

Sample Size	For Percentages Near								
	5.00%	10.00%	15.00%	20.00%	25.00%	30.00%	35.00%	40.00%	50.00%
	or 95.00%	or 90.00%	or 85.00%	or 80.00%	or 75.00%	or 70.00%	or 65.00%	or 60.00%	
48,000	0.15%	0.22%	0.26%	0.30%	0.33%	0.35%	0.37%	0.38%	0.39%
45,000	0.16%	0.22%	0.27%	0.31%	0.34%	0.36%	0.38%	0.39%	0.40%
42,500	0.16%	0.23%	0.28%	0.31%	0.34%	0.37%	0.39%	0.40%	0.41%
40,000	0.17%	0.23%	0.28%	0.32%	0.35%	0.38%	0.40%	0.41%	0.42%
37,500	0.17%	0.24%	0.29%	0.33%	0.36%	0.39%	0.41%	0.42%	0.43%
35,000	0.17%	0.25%	0.30%	0.34%	0.37%	0.40%	0.42%	0.43%	0.45%
32,500	0.18%	0.26%	0.31%	0.35%	0.39%	0.41%	0.43%	0.45%	0.46%
30,000	0.19%	0.26%	0.32%	0.36%	0.40%	0.43%	0.45%	0.46%	0.48%
27,500	0.19%	0.27%	0.33%	0.38%	0.41%	0.44%	0.46%	0.48%	0.49%
25,000	0.20%	0.29%	0.35%	0.39%	0.43%	0.46%	0.48%	0.50%	0.51%
22,500	0.21%	0.30%	0.36%	0.41%	0.45%	0.48%	0.50%	0.52%	0.54%
20,000	0.22%	0.31%	0.38%	0.43%	0.47%	0.51%	0.53%	0.55%	0.56%
17,500	0.23%	0.33%	0.40%	0.46%	0.50%	0.53%	0.56%	0.58%	0.60%
15,000	0.25%	0.35%	0.43%	0.49%	0.53%	0.57%	0.60%	0.62%	0.64%
12,500	0.27%	0.38%	0.46%	0.53%	0.58%	0.62%	0.65%	0.67%	0.69%
10,000	0.30%	0.42%	0.51%	0.58%	0.63%	0.68%	0.71%	0.73%	0.76%
7,500	0.33%	0.48%	0.58%	0.65%	0.72%	0.76%	0.80%	0.83%	0.85%
5,000	0.40%	0.56%	0.68%	0.78%	0.85%	0.91%	0.95%	0.98%	1.01%
2,500	0.53%	0.76%	0.92%	1.04%	1.14%	1.22%	1.27%	1.32%	1.36%

TABLE C.3  
STANDARD ERRORS FOR PERCENTAGES: COMBINED NATIONAL SAMPLE, CHILDREN  
(INCLUDING SUBGROUPS OTHER THAN HISPANICS OR BLACKS)

Sample Size	For Percentages Near								
	5.00%	10.00%	15.00%	20.00%	25.00%	30.00%	35.00%	40.00%	50.00%
	or 95.00%	or 90.00%	or 85.00%	or 80.00%	or 75.00%	or 70.00%	or 65.00%	or 60.00%	
10,200	0.30%	0.42%	0.50%	0.57%	0.62%	0.66%	0.69%	0.71%	0.73%
10,000	0.30%	0.42%	0.51%	0.57%	0.62%	0.66%	0.69%	0.71%	0.73%
9,500	0.31%	0.43%	0.52%	0.59%	0.64%	0.68%	0.71%	0.73%	0.75%
9,000	0.32%	0.44%	0.53%	0.60%	0.65%	0.70%	0.73%	0.75%	0.77%
8,500	0.33%	0.45%	0.55%	0.62%	0.67%	0.71%	0.74%	0.77%	0.79%
8,000	0.33%	0.47%	0.56%	0.63%	0.69%	0.73%	0.77%	0.79%	0.81%
7,500	0.34%	0.48%	0.58%	0.65%	0.71%	0.75%	0.79%	0.81%	0.83%
7,000	0.35%	0.50%	0.60%	0.67%	0.73%	0.78%	0.81%	0.84%	0.86%
6,500	0.37%	0.51%	0.62%	0.69%	0.76%	0.80%	0.84%	0.86%	0.89%
6,000	0.38%	0.53%	0.64%	0.72%	0.78%	0.83%	0.87%	0.89%	0.92%
5,500	0.39%	0.55%	0.66%	0.75%	0.81%	0.86%	0.90%	0.93%	0.95%
5,000	0.41%	0.57%	0.69%	0.78%	0.85%	0.90%	0.94%	0.97%	1.00%
4,500	0.43%	0.60%	0.72%	0.82%	0.89%	0.94%	0.99%	1.02%	1.04%
4,000	0.45%	0.63%	0.76%	0.86%	0.94%	0.99%	1.04%	1.07%	1.10%
3,500	0.48%	0.67%	0.81%	0.91%	0.99%	1.05%	1.10%	1.14%	1.16%
3,000	0.51%	0.72%	0.87%	0.98%	1.06%	1.13%	1.18%	1.22%	1.25%
2,500	0.56%	0.78%	0.94%	1.06%	1.15%	1.22%	1.28%	1.32%	1.35%
2,000	0.62%	0.86%	1.04%	1.17%	1.27%	1.35%	1.41%	1.45%	1.49%

TABLE C.4  
STANDARD ERRORS FOR PERCENTAGES: COMBINED NATIONAL SAMPLE, HISPANIC PERSONS  
(ANY RACE, INCLUDING ALL SUBGROUPS)

Sample Size	For Percentages Near								
	5.00% or 95.00%	10.00% or 90.00%	15.00% or 85.00%	20.00% or 80.00%	25.00% or 75.00%	30.00% or 70.00%	35.00% or 65.00%	40.00% or 60.00%	50.00%
6,000	0.38%	0.52%	0.62%	0.70%	0.76%	0.80%	0.83%	0.85%	0.87%
5,500	0.39%	0.54%	0.65%	0.72%	0.78%	0.83%	0.86%	0.89%	0.91%
5,000	0.41%	0.57%	0.67%	0.76%	0.82%	0.87%	0.90%	0.93%	0.94%
4,500	0.43%	0.59%	0.71%	0.79%	0.86%	0.91%	0.94%	0.97%	0.99%
4,000	0.45%	0.62%	0.74%	0.83%	0.90%	0.95%	0.99%	1.02%	1.04%
3,500	0.48%	0.66%	0.79%	0.88%	0.96%	1.01%	1.05%	1.08%	1.10%
3,000	0.51%	0.71%	0.84%	0.94%	1.02%	1.08%	1.13%	1.16%	1.18%
2,500	0.56%	0.77%	0.91%	1.02%	1.11%	1.17%	1.22%	1.25%	1.28%
2,000	0.61%	0.85%	1.01%	1.13%	1.22%	1.29%	1.35%	1.38%	1.41%
1,500	0.70%	0.96%	1.14%	1.28%	1.39%	1.47%	1.53%	1.57%	1.60%
1,000	0.83%	1.15%	1.36%	1.53%	1.66%	1.75%	1.82%	1.87%	1.91%
500	1.13%	1.55%	1.85%	2.07%	2.24%	2.37%	2.47%	2.54%	2.59%

TABLE C.5  
STANDARD ERRORS FOR PERCENTAGES: COMBINED NATIONAL SAMPLE, NON-HISPANIC BLACKS  
(INCLUDING ALL SUBGROUPS)

Sample Size	For Percentages Near								
	5.00%	10.00%	15.00%	20.00%	25.00%	30.00%	35.00%	40.00%	50.00%
	or 95.00%	or 90.00%	or 85.00%	or 80.00%	or 75.00%	or 70.00%	or 65.00%	or 60.00%	
6,800	0.39%	0.56%	0.68%	0.77%	0.84%	0.90%	0.94%	0.97%	1.00%
6,600	0.39%	0.56%	0.68%	0.77%	0.85%	0.90%	0.95%	0.98%	1.01%
6,000	0.40%	0.58%	0.70%	0.79%	0.87%	0.93%	0.97%	1.01%	1.04%
5,500	0.41%	0.59%	0.72%	0.81%	0.89%	0.95%	1.00%	1.03%	1.06%
5,000	0.43%	0.61%	0.74%	0.84%	0.91%	0.98%	1.02%	1.06%	1.09%
4,500	0.44%	0.62%	0.76%	0.86%	0.94%	1.00%	1.05%	1.09%	1.12%
4,000	0.45%	0.64%	0.78%	0.89%	0.97%	1.04%	1.09%	1.12%	1.16%
3,500	0.47%	0.67%	0.81%	0.92%	1.01%	1.08%	1.13%	1.17%	1.20%
3,000	0.49%	0.70%	0.85%	0.96%	1.05%	1.12%	1.18%	1.22%	1.26%
2,500	0.52%	0.73%	0.89%	1.01%	1.11%	1.18%	1.24%	1.28%	1.32%
2,000	0.55%	0.78%	0.95%	1.08%	1.18%	1.26%	1.32%	1.36%	1.40%
1,500	0.59%	0.84%	1.02%	1.16%	1.27%	1.36%	1.43%	1.47%	1.52%
1,000	0.66%	0.94%	1.15%	1.30%	1.42%	1.52%	1.59%	1.65%	1.70%



TABLE C.6  
STANDARD ERRORS FOR PERCENTAGES: HIGH INTENSITY SITES, ALL PERSONS  
(INCLUDING SUBGROUPS NOT CLASSIFIED ELSEWHERE)

Sample Size	For Percentages Near								
	5.00% or 95.00%	10.00% or 90.00%	15.00% or 85.00%	20.00% or 80.00%	25.00% or 75.00%	30.00% or 70.00%	35.00% or 65.00%	40.00% or 60.00%	50.00%
2,600	0.50%	0.69%	0.82%	0.92%	1.00%	1.06%	1.11%	1.14%	1.18%
2,500	0.51%	0.70%	0.83%	0.94%	1.02%	1.08%	1.13%	1.16%	1.20%
2,000	0.55%	0.76%	0.91%	1.02%	1.11%	1.18%	1.23%	1.27%	1.30%
1,500	0.62%	0.85%	1.01%	1.14%	1.24%	1.31%	1.37%	1.41%	1.46%
1,000	0.72%	0.99%	1.18%	1.33%	1.44%	1.53%	1.60%	1.65%	1.70%
900	0.75%	1.03%	1.23%	1.39%	1.50%	1.60%	1.67%	1.72%	1.77%
800	0.78%	1.08%	1.29%	1.45%	1.57%	1.67%	1.75%	1.80%	1.85%
700	0.82%	1.14%	1.36%	1.53%	1.66%	1.76%	1.84%	1.89%	1.95%
600	0.87%	1.21%	1.44%	1.62%	1.76%	1.87%	1.95%	2.01%	2.07%
500	0.94%	1.30%	1.55%	1.74%	1.89%	2.00%	2.09%	2.16%	2.22%
400	1.02%	1.41%	1.68%	1.89%	2.05%	2.18%	2.28%	2.35%	2.42%
300	1.14%	1.58%	1.88%	2.11%	2.30%	2.44%	2.55%	2.62%	2.70%
200	1.34%	1.84%	2.20%	2.47%	2.68%	2.85%	2.98%	3.07%	3.16%
100	1.75%	2.41%	2.88%	3.23%	3.51%	3.73%	3.89%	4.01%	4.13%

TABLE C.7  
STANDARD ERRORS FOR PERCENTAGES: HIGH INTENSITY SITES, ADULTS  
(INCLUDING SUBGROUPS OTHER THAN HISPANICS OR BLACKS)

Sample Size	For Percentages Near								
	5.00% or 95.00%	10.00% or 90.00%	15.00% or 85.00%	20.00% or 80.00%	25.00% or 75.00%	30.00% or 70.00%	35.00% or 65.00%	40.00% or 60.00%	50.00%
2,200	0.60%	0.83%	0.99%	1.11%	1.20%	1.27%	1.32%	1.36%	1.38%
2,000	0.63%	0.87%	1.03%	1.16%	1.25%	1.32%	1.38%	1.42%	1.45%
1,500	0.72%	0.99%	1.17%	1.32%	1.42%	1.51%	1.57%	1.61%	1.65%
1,000	0.86%	1.18%	1.41%	1.58%	1.71%	1.81%	1.88%	1.93%	1.97%
900	0.90%	1.24%	1.48%	1.66%	1.79%	1.90%	1.97%	2.03%	2.07%
800	0.95%	1.31%	1.56%	1.75%	1.89%	2.00%	2.08%	2.14%	2.18%
700	1.01%	1.39%	1.66%	1.85%	2.01%	2.12%	2.21%	2.27%	2.32%
600	1.08%	1.49%	1.77%	1.99%	2.15%	2.28%	2.37%	2.43%	2.48%
500	1.18%	1.62%	1.93%	2.16%	2.34%	2.47%	2.57%	2.64%	2.70%
400	1.30%	1.79%	2.13%	2.39%	2.58%	2.73%	2.84%	2.92%	2.98%
300	1.48%	2.04%	2.42%	2.72%	2.94%	3.11%	3.24%	3.33%	3.39%
200	1.78%	2.45%	2.91%	3.26%	3.53%	3.74%	3.89%	3.99%	4.08%
100	2.43%	3.35%	3.98%	4.46%	4.83%	5.11%	5.32%	5.47%	5.58%

TABLE C.8  
STANDARD ERRORS FOR PERCENTAGES: HIGH INTENSITY SITES, CHILDREN  
(INCLUDING SUBGROUPS OTHER THAN HISPANICS OR BLACKS)

Sample Size	For Percentages Near								
	5.00% or 95.00%	10.00% or 90.00%	15.00% or 85.00%	20.00% or 80.00%	25.00% or 75.00%	30.00% or 70.00%	35.00% or 65.00%	40.00% or 60.00%	50.00%
500	1.38%	1.93%	2.32%	2.61%	2.83%	3.00%	3.12%	3.21%	3.27%
400	1.55%	2.16%	2.59%	2.91%	3.16%	3.35%	3.49%	3.59%	3.66%
300	1.79%	2.49%	2.99%	3.37%	3.65%	3.87%	4.03%	4.14%	4.22%
200	NA	NA	3.67%	4.13%	4.48%	4.75%	4.95%	5.08%	5.18%
100	NA	NA	NA	5.85%	6.35%	6.73%	7.01%	7.20%	7.34%

Note: NA – Not Applicable

TABLE C.9  
STANDARD ERRORS FOR PERCENTAGES: HIGH INTENSITY SITES,  
HISPANICS (ANY RACE, INCLUDING ALL SUBGROUPS)

Sample Size	For Percentages Near								
	5.00% or 95.00%	10.00% or 90.00%	15.00% or 85.00%	20.00% or 80.00%	25.00% or 75.00%	30.00% or 70.00%	35.00% or 65.00%	40.00% or 60.00%	50.00%
1,100	0.80%	1.10%	1.31%	1.48%	1.60%	1.70%	1.78%	1.84%	1.89%
1,000	0.83%	1.14%	1.36%	1.53%	1.66%	1.77%	1.85%	1.90%	1.96%
900	0.86%	1.19%	1.42%	1.59%	1.73%	1.84%	1.92%	1.98%	2.04%
800	0.90%	1.24%	1.48%	1.67%	1.81%	1.92%	2.01%	2.07%	2.13%
700	0.95%	1.31%	1.56%	1.75%	1.90%	2.02%	2.11%	2.18%	2.25%
600	1.00%	1.38%	1.65%	1.86%	2.02%	2.14%	2.24%	2.31%	2.38%
500	1.07%	1.48%	1.77%	1.99%	2.16%	2.30%	2.40%	2.47%	2.55%
400	1.17%	1.61%	1.93%	2.16%	2.35%	2.50%	2.61%	2.69%	2.77%
300	1.30%	1.80%	2.15%	2.41%	2.62%	2.79%	2.91%	3.00%	3.09%
200	1.52%	2.10%	2.51%	2.82%	3.06%	3.25%	3.39%	3.50%	3.61%
100	NA	2.73%	3.26%	3.67%	3.98%	4.23%	4.42%	4.56%	4.70%

Note: NA – Not Applicable

TABLE C.10  
STANDARD ERRORS FOR PERCENTAGES: HIGH INTENSITY SITES,  
NON-HISPANIC BLACKS (INCLUDING ALL SUBGROUPS)

Sample Size	For Percentages Near								
	5.00% or 95.00%	10.00% or 90.00%	15.00% or 85.00%	20.00% or 80.00%	25.00% or 75.00%	30.00% or 70.00%	35.00% or 65.00%	40.00% or 60.00%	50.00%
550	1.19%	1.68%	2.03%	2.30%	2.51%	2.68%	2.81%	2.90%	2.98%
500	1.24%	1.75%	2.12%	2.40%	2.62%	2.79%	2.92%	3.02%	3.11%
400	1.36%	1.92%	2.33%	2.64%	2.88%	3.07%	3.21%	3.32%	3.42%
300	1.54%	2.17%	2.63%	2.98%	3.25%	3.47%	3.63%	3.75%	3.86%
200	NA	NA	3.12%	3.54%	3.86%	4.12%	4.31%	4.45%	4.59%
100	NA	NA	4.20%	4.76%	5.20%	5.54%	5.80%	5.99%	6.17%

Note: NA – Not Applicable

TABLE C.11  
STANDARD ERRORS FOR PERCENTAGES: LOW INTENSITY SITES, ALL PERSONS  
(INCLUDING ALL SUBGROUPS)

Sample Size	For Percentages Near								
	5.00% or 95.00%	10.00% or 90.00%	15.00% or 85.00%	20.00% or 80.00%	25.00% or 75.00%	30.00% or 70.00%	35.00% or 65.00%	40.00% or 60.00%	50.00%
800	0.83%	1.15%	1.38%	1.56%	1.70%	1.81%	1.90%	1.97%	2.05%
700	0.87%	1.21%	1.45%	1.63%	1.78%	1.89%	1.99%	2.06%	2.14%
600	0.92%	1.27%	1.52%	1.72%	1.87%	2.00%	2.09%	2.17%	2.26%
500	0.98%	1.35%	1.62%	1.83%	1.99%	2.12%	2.23%	2.31%	2.40%
400	1.06%	1.46%	1.75%	1.97%	2.15%	2.29%	2.41%	2.49%	2.59%
300	1.16%	1.61%	1.93%	2.18%	2.37%	2.53%	2.65%	2.75%	2.86%
200	1.34%	1.85%	2.22%	2.50%	2.73%	2.91%	3.05%	3.16%	3.29%
100	1.70%	2.35%	2.81%	3.17%	3.46%	3.69%	3.87%	4.01%	4.17%

TABLE C.12  
STANDARD ERRORS FOR PERCENTAGES: COMBINED NATIONAL SAMPLE, ALL FAMILY INSURANCE UNITS  
(INCLUDING ALL SUBGROUPS)

Sample Size	For Percentages Near								
	5.00%	10.00%	15.00%	20.00%	25.00%	30.00%	35.00%	40.00%	50.00%
	or 95.00%	or 90.00%	or 85.00%	or 80.00%	or 75.00%	or 70.00%	or 65.00%	or 60.00%	
30,000	0.21%	0.31%	0.39%	0.45%	0.50%	0.54%	0.57%	0.59%	0.62%
27,500	0.22%	0.33%	0.41%	0.47%	0.52%	0.56%	0.59%	0.62%	0.65%
25,000	0.23%	0.34%	0.43%	0.49%	0.55%	0.59%	0.62%	0.65%	0.68%
22,500	0.25%	0.36%	0.45%	0.52%	0.58%	0.62%	0.66%	0.68%	0.71%
20,000	0.26%	0.38%	0.48%	0.55%	0.61%	0.66%	0.70%	0.73%	0.76%
17,500	0.28%	0.41%	0.51%	0.59%	0.65%	0.70%	0.74%	0.78%	0.81%
15,000	0.30%	0.44%	0.55%	0.64%	0.71%	0.76%	0.80%	0.84%	0.88%
12,500	0.33%	0.49%	0.60%	0.70%	0.77%	0.83%	0.88%	0.92%	0.96%
10,000	0.37%	0.54%	0.68%	0.78%	0.86%	0.93%	0.99%	1.03%	1.07%
9,000	0.39%	0.57%	0.71%	0.82%	0.91%	0.98%	1.04%	1.08%	1.13%
8,000	0.41%	0.61%	0.76%	0.87%	0.97%	1.04%	1.10%	1.15%	1.20%
7,000	0.44%	0.65%	0.81%	0.93%	1.03%	1.11%	1.18%	1.23%	1.28%
6,000	0.47%	0.70%	0.87%	1.01%	1.12%	1.20%	1.27%	1.32%	1.38%
5,000	0.52%	0.77%	0.96%	1.10%	1.22%	1.32%	1.39%	1.45%	1.52%
4,000	0.58%	0.86%	1.07%	1.23%	1.37%	1.47%	1.56%	1.62%	1.69%
3,000	0.67%	0.99%	1.23%	1.42%	1.58%	1.70%	1.80%	1.87%	1.96%
2,500	0.74%	1.09%	1.35%	1.56%	1.73%	1.86%	1.97%	2.05%	2.14%
2,000	0.82%	1.22%	1.51%	1.74%	1.93%	2.08%	2.20%	2.29%	2.40%
1,500	0.95%	1.41%	1.74%	2.01%	2.23%	2.41%	2.54%	2.65%	2.77%
1,000	1.16%	1.72%	2.14%	2.47%	2.73%	2.95%	3.12%	3.25%	3.39%
500	1.65%	2.44%	3.02%	3.49%	3.87%	4.17%	4.41%	4.59%	4.80%

TABLE C.13  
STANDARD ERRORS FOR PERCENTAGES: HI INTENSITY SITES, ALL FAMILY INSURANCE UNITS  
(INCLUDING ALL SUBGROUPS)

Sample Size	For Percentages Near								
	5.00% or 95.00%	10.00% or 90.00%	15.00% or 85.00%	20.00% or 80.00%	25.00% or 75.00%	30.00% or 70.00%	35.00% or 65.00%	40.00% or 60.00%	50.00%
1300	0.74%	1.05%	1.27%	1.43%	1.57%	1.67%	1.75%	1.80%	1.86%
1200	0.77%	1.09%	1.32%	1.49%	1.63%	1.74%	1.82%	1.88%	1.93%
1100	0.81%	1.14%	1.38%	1.56%	1.70%	1.81%	1.90%	1.96%	2.02%
1000	0.85%	1.20%	1.44%	1.64%	1.79%	1.90%	1.99%	2.06%	2.12%
900	0.89%	1.26%	1.52%	1.72%	1.88%	2.01%	2.10%	2.17%	2.23%
800	0.95%	1.34%	1.62%	1.83%	2.00%	2.13%	2.23%	2.30%	2.37%
700	1.01%	1.43%	1.73%	1.96%	2.13%	2.27%	2.38%	2.46%	2.53%
600	1.09%	1.54%	1.87%	2.11%	2.31%	2.46%	2.57%	2.65%	2.73%
500	1.20%	1.69%	2.04%	2.31%	2.53%	2.69%	2.82%	2.91%	2.99%
400	1.34%	1.89%	2.29%	2.59%	2.83%	3.01%	3.15%	3.25%	3.35%
300	1.55%	2.19%	2.64%	2.99%	3.26%	3.48%	3.64%	3.76%	3.87%
200	1.90%	2.68%	3.24%	3.67%	4.00%	4.26%	4.46%	4.61%	4.74%



TABLE C.14  
STANDARD ERRORS FOR MEANS: COMBINED NATIONAL SAMPLE, ALL PERSONS,  
ADULTS, CHILDREN, HISPANICS, AND NON-HISPANIC BLACKS

Variable Name	Description Of Variable	Unweighted Sample Size	Weighted Sample Size (in thousands)	Mean Value of Variable	Standard Error of Mean	Design Effect
<b>Overall</b>						
ERUSENX	Number Er Visits W/O Hosp Adm	58,956	267,270	0.30	0.007	4.59
DRVISNX	Number Of Doctor Visits	58,956	267,270	3.43	0.029	2.77
MPVISNX	Num Medical Professional Visits	58,956	267,270	0.25	0.010	9.27
LSTWATX	Last Visit Waiting Time,In Mins	43,919	193,392	25.79	0.854	30.94
PCS12	Sf-12 Physical Component Summary	48,724	195,763	48.75	0.099	4.47
WAGEHRX	Hourly Wage	31,481	122,704	14.32	0.123	7.03
FAMINCX	Annual Family Income	56,664	259,540	39,653.30	555.443	18.65
AGEX	Age	58,956	267,270	35.07	0.208	5.26
HIGRADX	Education	48,724	195,763	12.99	0.041	11.25
<b>Adults</b>						
ERUSENX	Number Er Visits W/O Hosp Adm	48,724	195,763	0.28	0.006	3.40
DRVISNX	Number Of Doctor Visits	48,724	195,763	3.57	0.030	2.28
MPVISNX	Num Medical Professional Visits	48,724	195,763	0.25	0.011	9.63
LSTWATX	Last Visit Waiting Time,In Mins	36,164	140,842	25.76	0.904	27.27
PCS12	Sf-12 Physical Component Summary	48,724	195,763	48.75	0.099	4.47
WAGEHRX	Hourly Wage	31,481	122,704	14.32	0.123	7.03
FAMINCX	Annual Family Income	46,818	190,235	38,799.27	529.773	14.09
AGEX	Age	48,724	195,763	44.73	0.165	4.39
HIGRADX	Education	48,724	195,763	12.99	0.041	11.25
<b>Children</b>						
ERUSENX	Number Er Visits W/O Hosp Adm	10,232	71,508	0.35	0.013	2.29
DRVISNX	Number Of Doctor Visits	10,232	71,508	3.06	0.051	2.17
MPVISNX	Number Of Medical Professional Visits	10,232	71,508	0.23	0.011	2.45
LSTWATX	Last Visit Waiting Time,In Mins	7,755	52,550	25.86	0.835	5.95
FAMINCX	Annual Family Income	9,846	69,305	41,997.52	661.048	4.57
AGEX	Age	10,232	71,508	8.64	0.067	1.82

TABLE C.14  
STANDARD ERRORS FOR MEANS: COMBINED NATIONAL SAMPLE, ALL PERSONS,  
ADULTS, CHILDREN, HISPANICS, AND NON-HISPANIC BLACKS  
(Continued)

Variable Name	Description Of Variable	Unweighted Sample Size	Weighted Sample Size (in thousands)	Mean Value of Variable	Standard Error of Mean	Design Effect
<b>Hispanics</b>						
ERUSENX	Number Er Visits W/O Hosp Adm	5,910	33,943	0.29	0.014	1.92
DRVISNX	Number Of Doctor Visits	5,910	33,943	2.94	0.090	2.89
MPVISNX	Number Of Medical Professional Visits	5,910	33,943	0.16	0.018	5.09
LSTWATX	Last Visit Waiting Time,In Mins	3,733	20,787	39.86	2.957	13.80
PCS12	SF-12 Physical Component Summary	4,598	22,505	49.29	0.169	1.49
WAGEHRX	Hourly Wage	2,899	14,028	11.62	0.181	1.90
FAMINCX	Annual Family Income	5,749	33,208	27,285.69	484.056	2.31
AGEX	Age	5,910	33,943	28.21	1.464	34.54
HIGRADX	Education	4,598	22,505	11.32	0.118	5.67
<b>Non-Hispanic Blacks</b>						
ERUSENX	Number Er Visits W/O Hosp Adm	6,811	33,366	0.46	0.020	2.88
DRVISNX	Number Of Doctor Visits	6,811	33,366	3.49	0.072	1.88
MPVISNX	Number Of Medical Professional Visits	6,811	33,366	0.25	0.016	2.89
LSTWATX	Last Visit Waiting Time,In Mins	4,983	23,871	30.50	1.164	4.59
PCS12	SF-12 Physical Component Summary	5,324	22,777	47.01	0.247	2.89
WAGEHRX	Hourly Wage	3,264	13,237	12.2	0.183	2.13
FAMINCX	Annual Family Income	6,710	33,004	26,719.50	546.839	3.18
AGEX	Age	6,811	33,366	32.11	0.484	3.45
HIGRADX	Education	5,324	22,777	12.36	0.072	4.32

TABLE C.15  
STANDARD ERRORS FOR MEANS: COMBINED NATIONAL SAMPLE, ALL FAMILY INSURANCE UNITS,  
HISPANIC FAMILIES, AND NON-HISPANIC BLACK FAMILIES

Variable Name	Description Of Variable	Unweighted Sample Size	Weighted Sample Size (in thousands)	Mean Value of Variable	Standard Error of Mean	Design Effect
<b>All Families</b>						
FAMINCX	Annual Family Income	31,006	122,890	34,715.42	453.345	7.40
CENSINX	Annual Census Family Income	32,047	126,091	43,993.06	508.266	6.69
POVLEV	1998 Census Family Poverty Level	32,047	126,091	12,419.04	57.166	5.78
<b>Hispanic Families</b>						
FAMINCX	Annual Family Income	3,023	12,400	23,920.52	465.409	1.25
CENSINX	Annual Census Family Income	3,092	12,647	34,188.51	679.744	1.50
POVLEV	1998 Census Family Poverty Level	3,092	12,647	13,935.14	255.443	8.20
<b>Non-Hispanic Black Families</b>						
FAMINCX	Annual Family Income	4,012	16,030	23,229.59	500.936	1.83
CENSINX	Annual Census Family Income	4,066	16,193	32,488.04	762.870	2.66
POVLEV	1998 Census Family Poverty Level	4,066	16,193	12,810.24	137.946	3.97

## **Appendix D**

### **Sample SUDAAN Procedure Statements**

## SAMPLE SUDAAN PROCEDURE STATEMENTS

There are a number of releases of the SUDAAN software, running on several different platforms. Although the same procedure statements are used, there can be enhancements or subtle differences from one release to the next, particularly in reading and writing external data files. The statements displayed in the examples in this appendix are tailored for SUDAAN Release 7.5, SAS-Callable for Windows 95 and NT. The user should take this into consideration when using these examples or parts of these examples verbatim.

The example procedures represent relatively simple, straightforward applications. The options (various parameters, test statistics, etc.) in the sample programs may not be suitable for all your needs. Likewise, particular types of analyses may require options that are not displayed in the sample program statements. Our intention is not to suggest analytical approaches but to provide the key parameters that capture the relevant characteristics of the sample design. These parameters are found in the SUDAAN *design*, *weight*, *nest*, *totcnt*, and *jointprob* statements. In addition, the examples are limited to simple descriptive procedures for producing means or percentages. The same sample design parameters used for descriptive procedures are used for more complex estimation procedures such as regression or logit.

The CTS Household Survey is made up of several samples, each of which can be used for certain types of analyses. Each sample requires different sample design statements and/or weights. The user is encouraged to review Tables 3.2 and 3.3 from Chapter 3, which indicate the appropriate weights for person- and family-level analyses. Table 4.1 from Chapter 4 explains how to choose the design variables appropriate for each sample. As expected, the sample design statements used in SUDAAN are consistent within samples regardless of the unit of analysis. That is, person-level estimates and family-level estimates require different weights but share the same sample design statements.

Separate person- and family-level examples are provided for the following five samples:

- ***Site-specific estimates based on the augmented sample.*** The examples assume that the input file, ASITES, consists of all records with SITEID>0 and is sorted by the variables appearing in the NEST statement (SITE\_STR, FSUX). The sample would include 55,417 persons or 30,143 families if producing family-level estimates.
- ***National estimates based on the site sample.*** The examples assume that the input file, NSITES, consists of all records with SITE>0 and is sorted by the variables appearing in the NEST statement (PSTRATA, PPSU, SECSTRA, NFSUX). The sample would include 52,974 persons or 28,796 families if producing family-level estimates.

- ***National estimates based on the supplemental sample.*** The examples assume that the input file, SUPP, consists of all records with SITE=0 and is sorted by the variables appearing in the NEST statement (STRATUM, NFSUX). The sample would include 5,982 persons or 3,251 families if producing family-level estimates.
- ***National estimates based on the combined sample.*** The examples assume that the input file, SITESUPP, consists of all records on the Restricted Use File and is sorted by the variables appearing in the NEST statement (PSTRATA, PPSU, SECSTRA, NFSUX). The sample would include 58,956 persons or 32,047 families if making family-level estimates.
- ***National estimates based on the augmented site sample.*** The examples assume that the input file, NASITES, consists of all records with SITEID>0 and is sorted by the variables appearing in the NEST statement (PSTRATAH, PPSUH, SECSTRAH, NFSUHX). The sample would include 55,417 persons or 30,143 families if producing family-level estimates.

Preprocessing or recoding may be required for some variables because of missing or nonpositive data. Missing data in CTS files are assigned an applicable negative value (ex.: “-9 Not Ascertained,” see Section 6.3 - Variable Coding Conventions). Classification (SUBGROUP) variables with zero or negative values will be treated by SUDAAN as missing and dropped from the procedure. This does not hold true for analysis variables (VAR) where zero or negative values are valid. Records with zero weights will automatically be excluded from estimates produced in SUDAAN procedures.

In using SUDAAN, the full sample should be processed even when analyses are limited to subgroups or subpopulations.<sup>1</sup> This is to ensure the correct computation of the sampling variance. The SUDAAN statement SUBPOPN should be used to identify the specific analytic subpopulation of interest. The sampling variance estimates SUDAAN computes may be wrong if the file is reduced to a specific subpopulation prior to running the procedure.

Cases in which a person was not part of the Followback Survey, because he or she did not have private insurance or was not under 65 years old, were given a positive Followback weight (FBWTPER1, FBWTPER5) equal to their “regular” person-level weight.<sup>2</sup> Only nonmatches and

---

<sup>1</sup> Note that you can create a file that excludes those cases not in the sample you have chosen to analyze. For example, when you are using the augmented site sample, cases with SITEID=0 can be excluded but your file should include all cases that are part of the augmented sample (SITEID>0). Removing the out-of-sample cases is optional, as these cases will have a value of zero for the weight you will be using and SUDAAN will ignore them as part of the design.

<sup>2</sup> However, because of weight trimming done during the development of the Followback Survey weights, there are

households outside the augmented site sample were given values of zero for the Followback weights. You should therefore always read in those cases with SITEID>0 when performing Followback Survey analyses and then specify SUBPOPN MATCH=1 to limit your analysis to those cases that were part of the Followback Survey. Reading in the non-Followback cases with non-zero weights will allow SUDAAN to see the entire design structure when computing variances.

Some of the SUDAAN examples use the DDF option, which overrides the default denominator degrees of freedom. We recommend that you use this option when running significance tests on national estimates based on the site sample, national estimates based in the augmented site sample, or national estimates based on the combined sample. In SUDAAN, the default denominator degrees of freedom is the difference between the number of PSUs and the number of first stage strata, which is appropriate for most surveys. Because the CTS design includes some sites with certainty, the SUDAAN default count is substantially smaller than the actual count for these national estimates. This undercount would result in significance tests that would be too conservative (that is, that do not reject the null hypothesis often enough). We included the DDF option in four of the generic examples to provide researchers with an approximation of the true degrees of freedom that will be valid for most significance tests. The DDF for the full sample is also appropriate for analyses of subpopulations, because the full design is being utilized in the sampling variance computation.

---

114 people in three sites who were not part of the Followback Survey but have values for FBWTPER1 not equal to WTPER1.

## 1. Person-Level Estimates

The examples in this section are appropriate for person-level analyses.

### 1.1 Site-Specific Estimates Based on the Augmented Sample

This example estimates the percentage of persons covered by Medicare (MCARE) within each of the 12 high-intensity sites. Standard errors of the percentages, unweighted and weighted population counts, and sample design effects are also included in the output. Note that MCARE, a “0/1” dichotomous variable, has been recoded to “1/2” to conform to SUDAAN conventions for SUBGROUP variables. Also, the SUBPOPN statement is used to identify the high-intensity site subpopulation within the overall augmented sample.

```
proc crosstab data=asites design=wr;
  subpopn (1<=siteid) & (siteid<=12) / name="High Intensity Sites Only";
  nest site_str fsux / missunit;
  weight wtper1;
  subgroup siteid mcare;
  recode mcare=(0 1);
  levels 12 2;
  tables siteid*mcare;
  rformat siteid siteid.;
  print nsum wsum rowper serow deffrow / style=nchs
        wsumfmt=f10.0 rowperfmt=f8.2 serowfmt=f8.2 deffrowfmt=f8.4;
  rtitle "Augmented Site Estimates";
```

### 1.2 National Estimates from the Site Sample

This example estimates the mean number of doctor visits (DRVISNX) and hospital stays (HSPSTYN) by race (RACEREX). Standard errors of the means, population counts, and sample design effects are also included in the output.

```
proc descript data=nsites design=uneqwor ddf=6500;
  nest pstrata ppsu secstra nfsux / missunit;
  totcnt pstrtot3 _zero_ _minus1_ _zero_;
  jointprob plx p2x p3x p4x p5x p6x p7x;
  weight wtper2;
  subgroup racerex;
  levels 4;
  var drvisnx hspstyn;
  rformat racerex racerex.;
  print nsum wsum mean semean deffmean / style=nchs
        wsumfmt=f10.0 meanfmt=f8.4 semeanfmt=f8.4 deffmeanfmt=f8.4;
  rtitle "National Estimates from the Site Sample";
```



### 1.3 National Estimates from the Supplemental Sample

This example estimates the mean number of emergency room visits (ERUSENX) for persons covered by Medicaid (MCAID=1). Standard errors, population counts, and design effects are also included in the output.

```
proc descript data=supp design=wr;
  nest stratum nfsux / missunit;
  weight wtper3;
  subgroup mcaid;
  recode mcaid=(0 1);
  levels 2;
  var erusenx;
  print nsum wsum mean semean deffmean / style=nchs
    wsumfmt=f10.0 meanfmt=f8.2 semeanfmt=f8.4 deffmeanfmt=f8.4;
  rtitle "National Estimates from the Supplemental Sample";
```

### 1.4 National Estimates from the Combined Sample

This example estimates the percentage of persons who did not get needed medical care (UNMET) or who put off getting needed medical care (PUTOFF), by general health status (GENHLH). Standard errors, population counts, and design effects are also included in the output.

```
proc crosstab data=sitesupp design=uneqwor ddf=6500;
  nest pstrata ppsu secstra nfsux / missunit;
  totcnt pstrtot3 _zero_ _minus1_ _zero_;
  jointprob plx p2x p3x p4x p5x p6x p7x;
  weight wtper4;
  subgroup genhlh unmet putoff;
  recode unmet=(0 1) putoff=(0 1);
  levels 5 2 2;
  tables genhlh*(unmet putoff);
  rformat genhlh genhlh.;
  print nsum wsum rowper serow deffrow / style=nchs
    wsumfmt=f10.0 rowperfmt=f8.2 serowfmt=f8.2 deffrowfmt=f8.4;
  rtitle "National Estimates from the Combined Sample";
```

## 1.5 National Estimates from the Augmented Site Sample

This example estimates mean doctor visits (DRVISNX) and hospital stays (HSPSTYN) by insurance type (INSTYPE), using the weight for producing national estimates from the augmented site sample. The SUBPOPN statement is used to further restrict the analytical sample to persons covered by Medicare. Standard errors of the means, population counts, and sample design effects are also included in the output.

```
proc descript data=nasites design=uneqwor ddf=6500;
  subpopn siteid>0 & mcare=1 /
    name="Augmented Site Sample, Medicare Enrollees";
  nest pstratah ppsuh secstrah nfsuhx / missunit;
  totcnt pstrtoth _zero_ _minus1_ _zero_;
  jointprob plh p2h p3h p4h p5h p6h p7h;
  weight wtper5;
  subgroup instype;
  levels 3;
  var drvisnx hspstyn;
  rformat instype instype.;
  print nsum wsum mean semean deffmean / style=nchs
    wsumfmt=f10.0 meanfmt=f8.2 semeanfmt=f8.2 deffmeanfmt=f8.4;
  rtitle "National Estimates from the Augmented Site Sample";
```

## 2. Family-Level Estimates

The following examples are based on the use of a family-level input file. The user is encouraged to review the discussion in Section 5.4 from Chapter 5, which provides suggestions for converting a person-level file to the family level and on summarizing person-level responses at the family level.

### 2.1 Site-Specific Estimates Based on the Augmented Sample

This example provides percentage estimates displaying total family out-of-pocket medical costs, grouped into five categories (MEDCSTX), for each of the 60 sites. Standard errors of the percentages, population counts, and design effects are also included in the output.

```
proc crosstab data=asites design=wr;
  nest site_str fsux / missunit;
  weight wtfam1;
  subgroup siteid medcstx;
  levels 60 5;
  tables siteid*medcstx;
  rformat siteid siteid.;
  rformat medcstx medcstx.;
  print nsum wsum rowper serow deffrow / style=nchs
        wsumfmt=f10.0 rowperfmt=f8.2 serowfmt=f8.2 deffrowfmt=f8.4;
  rtitle "Family-Level Augmented Site Estimates";
```

### 2.2 National Estimates from the Site Sample

This example produces percentage estimates displaying the family informant's satisfaction with health care, grouped into 5 categories (CRSAFX), for families with any Medicaid coverage. Standard errors of the percentages, population counts, and sample design effects are also included in the output.

```
proc crosstab data=nsites design=uneqwor ddf=6500;
  nest pstrata ppsu secstra nfsux / missunit;
  totcnt pstrtot3 _zero_ _minus1_ _zero_;
  jointprob plx p2x p3x p4x p5x p6x p7x;
  weight wtfam2;
  subgroup fmcaid crsafx;
  recode fmcaid=(0 1);
  levels 2 5;
  tables fmcaid*crsafx;
  rformat crsafx crsafx.;
  print nsum wsum rowper serow deffrow / style=nchs
        wsumfmt=f10.0 rowperfmt=f8.4 serowfmt=f8.4 deffrowfmt=f8.4;
  rtitle "Family-Level National Estimates from the Site Sample";
```

## 2.3 National Estimates from the Supplemental Sample

This example produces percentage estimates displaying family structure (FAMTYPX) for families with any Medicaid coverage (FMCAID=1). Standard errors, population counts, and design effects are also included in the output.

```
proc crosstab data=supp design=wr;
  nest stratum nfsux / missunit;
  weight wtfam3;
  subgroup fmcaid famtypx;
  recode fmcaid=(0 1);
  levels 2 5;
  tables fmcaid*famtypx;
  print nsum wsum rowper serow deffrow / style=nchs
        wsumfmt=f10.0 rowperfmt=f8.2 serowfmt=f8.2 deffrowfmt=f8.4;
  rtitle "Family-Level National Estimates from the Supplemental Sample";
```

## 2.4 National Estimates from the Combined Sample

This example estimates mean family income (FAMINCX) for families with any Medicaid coverage (FMCAID=1). Standard errors, population counts, and design effects are also included in the output. FAMINCX will require recoding, since a number of families were assigned negative values (“-5, top-code”) for confidentiality reasons.

```
proc descript data=sitesupp design=uneqwor ddf=6500;
  nest pstrata ppsu secstra nfsux / missunit;
  totcnt pstrtot3 _zero_ _minus1_ _zero_;
  jointprob plx p2x p3x p4x p5x p6x p7x;
  weight wtfam4;
  subgroup fmcaid;
  recode fmcaid=(0 1);
  levels 2;
  var famincx;
  print nsum wsum mean semean deffmean / style=nchs
        wsumfmt=f10.0 meanfmt=f8.2 semeanfmt=f8.2 deffmeanfmt=f8.4;
  rtitle "Family-Level National Estimates from the Combined Sample";
```

## 2.5 National Estimates from the Augmented Site Sample

This example produces percentage estimates displaying the family informant's satisfaction with health care (CRSAFX), by a flag for families with any employment-related coverage. Standard errors of the percentages, population counts, and sample design effects are also included in the output.

```
proc crosstab data=nasites design=uneqwor ddf=6500;
  nest pstratah ppsuh secstrah nfsuhx / missunit;
  totcnt pstrtoth _zero_ _minus1_ _zero_;
  jointprob p1h p2h p3h p4h p5h p6h p7h;
  weight wtfam5;
  subgroup fprvjob crsafx;
  recode fprvjob=(0 1);
  levels 2 5;
  tables fprvjob*crsafx;
  rformat crsafx crsafx.;
  print nsum wsum rowper serow deffrow / style=nchs
        wsumfmt=f10.0 rowperfmt=f8.4 serowfmt=f8.4 deffrowfmt=f8.4;
  rtitle "Family-Level National Estimates from the Augmented Site Sample";
```

## **Appendix E**

### **An Overview of the CTS Household Survey Interview**

This appendix provides an outline of the content and general flow of the CTS Round Two Household Survey. It also includes information on the respondent for each part of the interview and the name of the variable corresponding to each survey question. For simplicity, the self-response module (SRM) is not represented separately here, although questions that appear in the SRM are noted. Users can refer to the complete version of the survey instrument in Appendix A for the exact text of the survey questions and the response categories, as well as the complete version of the SRM.

The respondents for each question vary depending on whether the question was applicable and whether the respondent was able to answer the question. This overview uses a system of indentation and underlined text to indicate the respondents for each survey question. The basic system is that the underlined text describes the sample and indentation indicates that the description should be interpreted as a subgroup of the unindented (or less indented) underlined text. Here is some more detail about how the system works:

1. If the question number is not indented at all, it means that the sample is the group described by the underlined text that most directly precedes the question and is also not indented. (See Example #1.)
2. If the question number is indented, it means that the sample is the group described by the underlined text that most directly precedes the question at the same indentation level, *as a subgroup of* the samples described by the underlined text that directly precedes it at lesser levels of indentation. (See Example #1.)
3. There are a few special cases in which, for cosmetic reasons, the underlined text is inserted between the question number and the question text (instead of preceding the question). This means that the subsample described by the underlined text applies only to that question. (See Example #2.)

Here are two examples to illustrate how the system works.

### Example #1

For each FIU member:

**c101, c11** Any overnight hospital stay.

If any overnight hospital stay (c11):

**c121** Number of times hospital stay was overnight or longer.

If female age 12-45 or child age 1 or younger:

**c131, c141** Determine whether the number of hospital stays in c121 included childbirth.

**c151** Number of hospital stays admitted through the emergency room.

**c161** Number of nights in the hospital altogether.

**c211** Any emergency room visits (not counting the hospital admissions through emergency room reported in c151).

The universes for the questions are as follows:

c101, c11	each FIU member
c121	each FIU member who had any overnight hospital stay
c131, c141	each FIU member who had any overnight hospital stay and who is female age 12-45 or a child age 1 or younger
c151	each FIU member who had any overnight hospital stay
c161	each FIU member who had any overnight hospital stay
c211	each FIU member

## Example #2

For each adult FIU member:

**cc3** Has a doctor or health professional ever told you that you had...?:

**cc3a** If over age 50: cataracts

**cc3b** diabetes or high blood sugar

**cc3c** arthritis

**c3ac** If arthritis (cc3c): rheumatoid arthritis

**cc3d** asthma

**cc3e** If asthma (cc3d): chronic obstructive pulmonary disease

**cc3f** atrial fibrillation

**cc3g** hypertension or high blood pressure

**cc3h** high cholesterol

The universes for the questions are as follows:

cc3a	each adult FIU member who is over age 50
cc3b	each adult FIU member
cc3c	each adult FIU member
c3ac	each adult FIU member who has arthritis
cc3d	each adult FIU member
cc3e	each adult FIU member who has asthma
cc3f	each adult FIU member
cc3g	each adult FIU member
cc3h	each adult FIU member



## CTS HOUSEHOLD SURVEY

### Survey Questions and Variables on Public Use File (Round Two, Release 2) and Restricted Use File (Round Two, Release 2)

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#### INTRODUCTION

Read introduction and request to speak with adult in household who is familiar with the health care of family members. (This adult is called the “household informant.”) The wording of the introduction varies depending on whether the household is part of the reinterview sample or the new sample.

#### A. DEMOGRAPHICS AND SCREENING

The questions in Section A determine basic information (name, age, sex, family relationship) about all household members. That information is then used to form family insurance units (FIUs) and select the children that are to be included in the sample. The respondent for Section A is the household informant.

If household is in reinterview sample: Determine whether Round One household members are still in the household. Determine any new household members. If the Round One householder is still a household member, he/she remains the householder for Round Two. If not, designate the person who owns or pays most of the rent for the house as the householder.

If household is in new sample: Determine list of household members. The person who owns or pays most of the rent for the house is designated as the householder.

For all households:

**bmo1, byr1, age1** Age of householder. *AGEX*

**sex1** Gender of householder. *SEX*

If householder is less than 23 years old:

**col1** Is householder a full-time student? *FTSTUD*

**grd1** Householder's educational attainment. *HIGRADX*

If householder is age 18-64:

**mil1** Is householder on active duty in the military?

**bmo2, byr2, age2** Age of household member #2. *AGEX*

**sex2** Gender of household member #2. *SEX*

If household member #2 is age 16-22:

**col2** Is household member #2 a full-time student? *FTSTUD*

If household member #2 is age 18 or older:

**grd2** Educational attainment of household member #2. *HIGRADX*

\* = variable on Restricted Use File only

## CTS HOUSEHOLD SURVEY

### Survey Questions and Variables on Public Use File (Round Two, Release 2) and Restricted Use File (Round Two, Release 2)

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If household member #2 is age 18-64:

**mil2** Is household member #2 on active duty in the military?

**rel2** Relationship of household member #2 to householder. *RELATEX*

Repeat bmo2 – rel2 for each additional household member.

Identify any marriages and parent/child relationships not involving the householder.

Determine whether anyone (besides students) has another residence where he/she lives more than half the year.

CONSTRUCT FAMILY INSURANCE UNITS (FIUs). These interviewing units are defined to reflect an insurance unit according to conventional practice in the private insurance market. They typically include the household head, spouse, and dependent children.

SELECT CHILDREN FOR INCLUSION IN SAMPLE. In FIUs containing more than one child, only information on one randomly selected child is collected.

#### B. HEALTH INSURANCE

The questions in Section B are asked separately for each FIU. The respondent is the family informant, except as noted for b951.

For all FIUs: Questions b1a – bij establish the health insurance coverage of the FIU members.

**b1a** FIU members covered by a health insurance plan from current or former employers or unions.

*FPRVJOB, PRIVJOB*

**b1b** FIU members covered by a health insurance plan bought on their own. *FPRVDIR, PRIVDIR*

**b1c** FIU members covered by a health insurance plan provided by someone who does not live in the household. *FPRVOTH, PRIVOTH*

**b1d, b1d1** FIU members covered by Medicare. *FMCARE, MCARE*

If state offers only Medicaid:

**blex, b1e** FIU members covered by Medicaid. *FMCAID, MCAID*

If state offers Medicaid and other subsidized programs:

**bley, b1e, b1h** FIU members covered by Medicaid or state-specific plans (including CHIP).

*FMCAID, MCAID, FOTHPUB (state or IHS), OTHPUBX (state or IHS)*

**b1f, b1f1** FIU members covered by military health care plan. *FMILINS, MILINS*

**b1g** FIU members covered by the Indian Health Service. *FOTHPUB (state or IHS), OTHPUBX (state or IHS)*

\* = variable on Restricted Use File only

## CTS HOUSEHOLD SURVEY

### Survey Questions and Variables on Public Use File (Round Two, Release 2) and Restricted Use File (Round Two, Release 2)

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**b1i1, b1i2, bij** Confirmation that the FIU members not covered by any of the insurance types listed above do not have any health insurance. *FOTHINS, OTHINS, UNINSUR*

If any FIU member is privately insured (b1a, b1b, b1c) and not covered by Medicare (b1d): Question b2 determines the number of private insurance plans covering FIU members, and then questions b231 – b391 are asked for each of those private plans (up to three plans).

**b2** Number of private health insurance plans covering FIU members. *NPRIV*

**b204 – b2104** Names of the private health plans covering FIU members (for use later in the CTS Followback Survey, a supplement to the Household Survey).

**b231** Name of policyholder for private plan #1. *PRVHLD1*

If FIU has more than one private health insurance plan (b2):

**b241** FIU members covered by private plan #1. *PRVINS1*

**b251** Is private plan #1 employer-sponsored? [If the only private plans in the FIU are employer-sponsored, (i.e., if no one is covered by any private insurance that's not employer-sponsored, based on b1b and b1c), then automatically code response to b251 as "yes."] *PRVJOB1*

**b261** Name of the employer or union that provides private plan #1.

If name unknown for the employer or union that provides private plan #1 (b261):

**b271** Was private plan #1 obtained through a state or federal government program?

**b281** Name of the state of federal government program.

**b291, b301** FIU members who enrolled in private plan #1 in the past 12 months. *PRV12M1, PRVIY1*

If private plan #1 is not employer-sponsored (b251):

**b311, b321** Insurance premium for private plan #1. *PVPRMIX*

**b331** PCP sign-up requirement (private plan #1). *PRVSIG1, PVSIG1P*

**b341** Specialist referral requirement (private plan #1). *PRVREF1, PVREF1P*

**b351** Physician network (private plan #1). *PRVLST1, PVLST1P*

**b361** Is private plan #1 an HMO? *PRVHMO1, PVHMO1P*

If private plan #1 has a network of physicians (b351) or is an HMO (b361):

**b371** Any coverage for out-of-network costs without a referral (private plan #1). *PRVPAY1, PVPAY1P*

If private plan #1 is employer-sponsored (b251):

**b381** Does employer offers its employees more than one health insurance plan? *PRVMORI*

\* = variable on Restricted Use File only

## CTS HOUSEHOLD SURVEY

### Survey Questions and Variables on Public Use File (Round Two, Release 2) and Restricted Use File (Round Two, Release 2)

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If employer offers more than one health insurance plan (b381):

**b391** If private plan #1 is an HMO (b361): Does employer offer any nonHMO plans?  
*PRVBOTI*

**b391** If private plan #1 is not an HMO (b361): Does employer offer any HMO plans?  
*PRVBOTI*

If FIU has more than one private health insurance plan (b2), then ask b231 – b391 for each of the other plans.

If any FIU member is covered only by military insurance: Questions b40 – b421 concern military insurance.

**b40** Name of policy-holder for military health plan.

**b41, b421** FIU members who enrolled in military health plan in the past 12 months. *MIL12M, MILINIY*

If any FIU member is covered by Medicare (b1d). Questions b54 – b59a1 concern Medicare.

**b54** FIU members covered by Medicare HMO. *MCRHMO, MCRHMOP*

If any FIU members in a Medicare HMO (b54):

**b55a, b55b** Name of the HMO plan.

**b55c** Was HMO plan obtained through a current or past employer or union? *MCRHJOB*

**b51** PCP sign-up requirement (Medicare). *MCRSIGN, MCRSIGP*

**b52** Specialist referral requirement (Medicare). *MCRREF, MCRREFP*

**b53** Physician network (Medicare). *MCRLST, MCRLSTP*

If Medicare plan has a network of physicians (b53) or is an HMO (b54):

**b56** Any coverage for out-of-network costs without a referral (Medicare). *MCRPAY, MCRPAYP*

**b57, b58** FIU members who enrolled in Medicare in the past 12 months. *MCR12M, MCRINIY*

**b59** Medicare enrollees who are covered by Medicare supplemental or Medigap policies. *FMCRSUP, MCRSUP*

If there are any Medicare supplemental or Medigap policies (b59):

**b59a1** Were Medicare supplemental or Medigap policies obtained through a current or past employer or union? *MCRSUPJ*

If any FIU member is covered by Medicaid: Questions b64 – b68 concern Medicaid.

**b64** FIU members covered by Medicaid HMO. *MCDHMO, MCDHMOP*

**b67, b68** FIU members who enrolled in Medicaid in the past 12 months. *MCD12M, MCDINIY*

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## CTS HOUSEHOLD SURVEY

### Survey Questions and Variables on Public Use File (Round Two, Release 2) and Restricted Use File (Round Two, Release 2)

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If any FIU member is covered by a state plan (b1h, b1i) and no FIU member is covered by a private plan:  
Questions b71 – b78 concern state health insurance plans.

**b71** Name of policyholder for state health insurance plan. *STPHD*

**b75** Is state plan an HMO? *STHMO, STHMOP*

**b77, b78** FIU members who enrolled in state plan in the past 12 months. *ST12M, STINIY*

If any FIU member is uninsured: Questions b79 – b84 concern the uninsured FIU members.

If any FIU member is privately insured:

**b79** Is family coverage offered under FIU's current private plan?

**b791** If family coverage offered (b79): Reason why uninsured FIU member(s) not covered by family coverage.

**b801** Did uninsured FIU member #1 have any health insurance coverage during the past 12 months?  
*UNINCOV*

If uninsured FIU member #1 had any insurance coverage during the past 12 months (b801):

**b81** Type of health insurance coverage before uninsured FIU member #1 became uninsured.  
*UNINPLX*

If health insurance was a private, Medicaid, or state plan (b81):

**b82** Was health plan an HMO? *UNINHMO*

**b83** Month when health insurance coverage stopped.

**b84** Reason why health insurance coverage stopped. *UNINSR1 – UNINSR9, UNINR10 – UNINR14*

Repeat questions b801 – b84 for each uninsured FIU member.

If any FIU member is currently insured and coverage began in the past 12 months: Questions b851 – b882 concern health insurance coverage prior to any current health insurance plans that began in the past 12 months.

**b851** Type of health insurance coverage prior to current plan. *PREINSX, PREINS\**

If there are other currently insured FIU members whose coverage began in the past 12 months:

**b861** Were other currently insured family members whose coverage began less than 12 months ago covered under this plan?

If previous health insurance was a private, Medicaid, state, military, or Medicare plan:

**b871** Was previous health insurance plan an HMO? *PREHMO*

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## CTS HOUSEHOLD SURVEY

### Survey Questions and Variables on Public Use File (Round Two, Release 2) and Restricted Use File (Round Two, Release 2)

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If previous coverage was private (b851) and current coverage is private (b1a, b1b, b1c):

**b881** Reason for changing health insurance plans. *CHGINS1 – CHGINS7*

**b852, b872, b882** These questions are asked if there is any other currently insured FIU member (not cited in b851 or b861) whose coverage began in the past 12 months. They are a repetition of questions b851, b871, and b881.

For all FIUs: Questions b901 – b922 concern lifetime HMO enrollment for family informant and spouse.

If family informant not in HMO in past year:

**b901** Whether family informant has ever been enrolled in an HMO. *HMOEVR*

**b911, b921** Total number years that family informant has been enrolled in HMO plans. *HMOYRSX*

**b902, b912, b922** If family informant is married, these questions are asked about spouse's HMO enrollment. They are a repetition of questions b901, b911, and b921.

For family informant and spouse: Information on question b951 for the family informant is obtained from the family informant. Information for his/her spouse is obtained directly from the spouse as part of the self-reponse module (SRM question b932).

**b951** Willingness to trade off limited choice of physicians with lower health care costs. *MCHOICE*

### C. RESOURCE USE AND UNMET NEED

For each FIU member: Questions c101 – c621 concern resource use. The family informant provides information about all FIU members, and the reference period for all questions (except for c611) is the past 12 months.

**c101, c11** Any overnight hospital stay.

If person had any overnight hospital stay (c11):

**c121** Number of times hospital stay was overnight or longer. *HSPSTYN*

If female age 12-45 or child age 1 or younger:

**c131, c141** Determine whether the number of hospital stays in c121 included childbirth.

**c151** Number of hospital stays admitted through the emergency room. *HSPERX*

**c161** Number of nights in the hospital altogether. *HSPNITX*

**c211** Any emergency room visits (not counting the hospital admissions through emergency room reported in c151).

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## CTS HOUSEHOLD SURVEY

### Survey Questions and Variables on Public Use File (Round Two, Release 2) and Restricted Use File (Round Two, Release 2)

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If any emergency room visits (c211):

**c221, c231** Number of emergency room visits (excluding visits reported in c151). *ERUSENX*

**c311, c321** Number of doctor visits (excluding hospital and emergency room visits). *DRVISNX*

If any doctor visits (c311, c321):

**c3p1** Were any of these visits for routine preventive care? *DPHYEXM*

If no visits were for routine preventive care (c3p1):

**c3c1** Were any of these visits for a routine check up for an ongoing health problem?  
*DRTNPRM*

**c331, c341** Number of visits to nurse practitioner, physician assistant, or midwife (not counting doctor visits reported in c311). *MPVISNX*

If any nonphysician provider visits (c331, c341) and no routine visits reported already (c3p1, c3c1):

**c351** Were any of these visits for routine preventive care?

If no visits were for routine preventive care (c351):

**c361** Were any of these visits for a routine check up for an ongoing health problem?

If any hospital, emergency room, physician, or other provider visits:

**c411, c421** Number of surgeries. *SURGNX*

If any surgeries (c411) and any hospital stay (c121):

**c431** Number of surgeries in a hospital with an overnight hospital stay. *SURGNTX*

**c511** Any visit to a mental health professional. *MENTAL*

If age 18 or older:

**c531** Has person had a flu shot? *FLUSHOT*

If female and age 40 or older:

**c611** Has person ever had a mammogram? *MAMMGM*

**c621** If person ever had a mammogram (c611): Time since last mammogram. *MAMLASX*

For all FIU members: Questions c811 – c831 concern unmet need. The family informant responds for self and child. Information for the family informant's spouse is obtained directly from the spouse as part of the self-reponse module (SRM questions c812, c822, and c832).

**c811** Was there any time when you didn't get needed medical care? *UNMET*

**c821** Was there any time when you postponed getting medical care you thought you needed? *PUTOFF*

\* = variable on Restricted Use File only

## CTS HOUSEHOLD SURVEY

### Survey Questions and Variables on Public Use File (Round Two, Release 2) and Restricted Use File (Round Two, Release 2)

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If reporting postponing or not getting medical care (c811, c821):

**c831** Reason for postponing or not getting medical care. *PUTOFR0 – PUTOFR9, PUTOF10 – PUTOF21, PUTOFRN\**

For all FIUs: Questions c92 and c93 are answered by the family informant.

**c92 , c93** Out-of-pocket spending for family's medical care. *MEDCSTX, MEDCSTA\*, MEDCSTB\**

#### D. USUAL SOURCE OF CARE/PATIENT TRUST

For each FIU member: Questions d101 – d171 concern each FIU member's usual source of care. The family informant provides information for each person in the FIU.

**d101** Is there a place where FIU member usually goes for health care? *USCARE*

If FIU member has at least one usual source of care (d101):

**d111** What is the usual source of care? *USCTYPE*

**d121** Type of provider at usual source of care. *USCPROF*

**d131** Does FIU member usually see the same provider at the usual source of care? *USCSAME*

**d141** Any change in usual source of care in the past 12 months? [Exact wording of the question depends on d121 and d131.] *USCCHG*

If there was a change in the usual source of care (d141):

**d151, d161, d171** Reason for change in usual source of care. *USCRCHG, USCRHLH, USCROTH*

For each adult FIU member: Questions d311 – d341 concern patient trust in physician. Each adult responds for self (the corresponding self-reponse module questions are d312 – d342). No information on children is collected.

If physician as their usual source of care or had one or more physician visits in last 12 months:

**d311** Agreement with statement: Doctor may not refer to a specialist when needed. *DRNOREF*

**d321** Agreement with statement: Doctor puts medical needs above all other considerations.  
*DRMETND*

**d331** Agreement with statement: Doctor is strongly influenced by health insurance company rules. *DRINFLU*

**d341** Agreement with statement: Doctor might perform unnecessary tests or procedures.  
*DRUNNEC*

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## CTS HOUSEHOLD SURVEY

### Survey Questions and Variables on Public Use File (Round Two, Release 2) and Restricted Use File (Round Two, Release 2)

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#### E. LAST VISIT PROCESS AND SATISFACTION / HEALTH STATUS / RISK BEHAVIORS

For FIUs with members who had any provider or hospital visits in the past 12 months: Questions e101 – e111 concern satisfaction with family's health care. The respondent is the family informant.

**e101, e111** Satisfaction with (family's) health care received during last 12 months. *CRSAFX*

For each adult FIU member: Questions e121 – E151 concern satisfaction with choice of physicians for adults in the FIU. Each adult is the respondent for him- or herself, either in the family informant's survey or in the self response module.

**e121, e131** Person's satisfaction with choice of primary care doctors. *DRCHOCX*

**e141** Person needed or saw specialist in the past 12 months. *SPNEED*

If person needed or saw specialist (e141):

**e151, E151** Person's satisfaction with choice of specialists. *SPCHOCX*

For each adult FIU member with a physician visit in the past 12 months (e321, c321): Questions e161 – e321 ask for details about the most recent physician visit. Each adult is the respondent for him- or herself, either in the family informant's survey or in the self response module.

**e161** Any doctor visit for sickness, injury, or other health problems in the past 12 months. *SICKCR*

If person visited doctor for health problem (e161):

**e171** Month/year of most recent visit for health problem.

**e181** Since that visit, did person visit a doctor for a check-up or other preventive care?  
*CHKASIK*

If person visited doctor for preventive care (e181):

**e191** Month/year of most recent visit for preventive care. *CHKASM*

If person has not had a doctor visit for a health problem (e161):

**e201** Any doctor visit for check-up or other preventive care in the past 12 months. *CHECKUP*

If person visited doctor for preventive care (e201):

**e211** Month/year of most recent visit for preventive care. *CHKMON*

If person did not visit doctor for preventive care (e201):

**e901, e911** Check for correct number of doctor visits in the past 12 months.

**e221** Was the doctor at the most recent doctor visit a family doctor or a specialist? *DRORSP*

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## CTS HOUSEHOLD SURVEY

### Survey Questions and Variables on Public Use File (Round Two, Release 2) and Restricted Use File (Round Two, Release 2)

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If person has a usual source of care (d101):

**e241** Was most recent doctor visit to the person's usual place for care? *LSTUSC*

If person has no usual source of care (d101) or most recent doctor visit was not to usual source of care (e241):

**E241** Was most recent visit to an emergency room? *LSTOER*

If most recent visit was not to an emergency room (E241):

**e251** Was most recent doctor visit by appointment? *LSTAPP*

If most recent doctor visit was by appointment (e251):

**e261, e271** Time period between making appointment and seeing doctor. *LSTAPPX*

**e281, E281** Time in waiting room at most recent visit. *LSTWATX*

**e291** Travel time to doctor's office/emergency room at most recent visit. *LSTRAVX*

**e301** Rating of the thoroughness and carefulness of the examination and treatment. *LSTHOR*

**e311** Rating of how well doctor listened. *LSTLISN*

**e321** Rating of how well doctor explained things. *LSTEXPL*

For each adult FIU member: Questions e401 – e671 are asked for each adult FIU member. Each adult is the respondent for him- or herself, either in the family informant's interview or in the self response module.

**e401** Self-assessment of general health. *GENHLH*

**e411** Health limits moderate activities. *LMTMACT*

**e421** Health limits climbing several flights of stairs. *LMTSTR*

**e431** Accomplished less as result of physical health. *PHYLESS*

**e441** Physical health limited work or other regular daily activities. *PHYACT*

**e451** Accomplished less as result of emotional problems. *EMOLESS*

**e461** Emotional problems limited work or other regular activities. *EMOACT*

**e471** Pain interfered with normal work. *PAININT*

**e481** Physical health or emotional problems interfered with social activities. *LMTSOC*

**e491** Amount of time person felt calm and peaceful. *FLCALM*

**e501** Amount of time person had a lot of energy. *ENERGY*

**e511** Amount of time person felt downhearted and blue. *FLDOWN*

**cc1** If female, age 50 or less: Person had a baby during the last two years. *HAVBABY\**

**cc2** During the past two years, have you seen a doctor or health care professional for:

**cc2a** acne *ACNE\**

**cc2b** very frequent or severe headaches *HDACHE\**

**cc2c** If female: abnormal uterine bleeding *UTRNBLD\**

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## CTS HOUSEHOLD SURVEY

### Survey Questions and Variables on Public Use File (Round Two, Release 2) and Restricted Use File (Round Two, Release 2)

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**cc2d** alcohol related problems *ALCHPRM\**

**cc3** Has a doctor or health professional ever told you that you had...?: [For each "yes" response, follow up with a question about whether the person has seen a doctor or other health care professional for that chronic condition during the past two years. There is no follow-up question for c3ac.]

**cc3a** If over age 50: cataracts *CATRCT\**, *CATRCTX\**

**cc3b** diabetes or high blood sugar *DIABET\**, *DIABETX\**

**cc3c** arthritis *ARTHRS\**, *ARTHRSX\**

**c3ac** If arthritis (cc3c): rheumatoid arthritis *RHARTHR\**

**cc3d** asthma *ASTHMA\**, *ASTHMAX\**

**cc3e** If asthma (cc3d): chronic obstructive pulmonary disease *COPD\**, *COPDX\**

**cc3f** atrial fibrillation *ATLFBR\**, *ATLFBRX\**

**cc3g** hypertension or high blood pressure *HYPTEN\**, *HYPTENX\**

**cc3h** high cholesterol *HICHOL\**, *HICHOLX\**

**cc4** Has a doctor or health professional ever told you that you had...?: [For each "yes" response, follow up with a question about whether the person has seen a doctor or other health care professional for that chronic condition during the past two years. There is no follow-up question for c4ae or c4af.]

**cc4a** hardening of the arteries (atherosclerosis or arteriosclerosis) *ATHRSCL\**, *ATHRSCX\**

**cc4b** If no hardening of the arteries (cc4a): ischemic heart disease *ISCHMC\**, *ISCHMCX\**

**cc4c** If no ischemic heart disease (cc4b): angina *ANGINA\**, *ANGINAX\**

**c4ae** If no angina (cc4c): angioplasty or heart bypass surgery *CABG\**

**cc4d** congestive heart failure *CHF\**, *CHFX\**

**c4af** If no congestive heart failure (cc4d): any diuretics to treat a heart condition *DIURTC\**

**cc4e** a stroke *STROKE\**, *STROKEX\**

**cc5** Has a doctor or health professional ever told you that you had...?: [For each "yes" response, follow up with a question about whether the person has seen a doctor or other health care professional for that chronic condition during the past two years.]

**cc5b** If female: breast cancer *BRTCAN\**, *BRTCANX\**

**cc5c** skin cancer *SKNCAN\**, *SKNCANX\**

**cc5d** lung cancer *LNGCAN\**, *LNGCANX\**

**cc5e** cancer of the colon or rectum *CLNCAN\**, *CLNCANX\**

**cc5f** If male over age 50: cancer of the prostate *PRSCAN\**, *PRSCANX\**

**cc5g** If male over age 50: benign prostate disease or large prostate *PRSBGN\**, *PRSBGNX\**

**cc6** Has a doctor or health professional ever told you that you had...?: [For each "yes" response, follow up with a question about whether the person has seen a doctor or other health care professional for that chronic condition during the past two years.]

**cc6a** a hernia in the groin area *HERNIA\**, *HERNIAX\**

**cc6b** an ulcer *ULCER\**, *ULCERX\**

**cc6c** If no ulcer (cc6b): gastritis *GASTRS\**, *GASTRSX\**

**cc6d** HIV or AIDS *HIV\**, *HIVX\**

\* = variable on Restricted Use File only

## CTS HOUSEHOLD SURVEY

### Survey Questions and Variables on Public Use File (Round Two, Release 2) and Restricted Use File (Round Two, Release 2)

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**cc6e** depression *DPRESN\**, *DPRESNX\**

**e521** Agreement with statement: I'm more likely to take risks than the average person. *TAKRISK*

**e601** Have you smoked at least 100 cigarettes in your entire life? *SMKEVR*

If person has ever smoked 100 cigarettes (e601):

**e611** Do you now smoke cigarettes everyday, some days, or not at all? *SMKNOW*

If person smokes everyday (e611):

**e621** On the average, how many cigarettes do you now smoke a day? *SMKNUM*

If person smokes some days (e611):

**e631** On how many of the past 30 days did you smoke a cigarette? *SMKDAY*

If person smoked any days during the past 30 days (e631):

**e641** How many cigarettes did you smoke a day? *SMKNDAY*

If person doesn't smoke at all (e611) or has not smoked in the past 30 days (e631):

**e651** How long has it been since you quit smoking cigarettes? *SMKQUIT*

If person smokes everyday (e611) or has smoked during the past 30 days (e631):

**e661** During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking? *SMKTRYQ*

If [person currently smokes (e611 = everyday or some days) or person quit smoking within the past year (e651)] and [person had one or more physician visits in last 12 months (c311, c321)]:

**e671** During the past 12 months, did any medical doctor advise you to stop smoking? *SMKADV*

For each child in the sample: Questions k12I – e16x concern the randomly selected child in the FIU. The respondent for these questions is the family informant.

**k12I, k13I** Satisfaction with choice of primary care doctors for child. *DRCHOCX*

**k14I** Child needed or saw a specialist in the past 12 months. *SPNEED*

If child needed or saw specialist (k14I):

**k15I, K151** Satisfaction with choice of specialists for child. *SPCHOCX*

If child had any physician visit in the past 12 months:

**e16x** Who went with child to the doctor on (his/her) most recent visit? *TAKEID*

If child has had any physician visit in the past 12 months and the person who took the child for the most

\* = variable on Restricted Use File only

## CTS HOUSEHOLD SURVEY

### Survey Questions and Variables on Public Use File (Round Two, Release 2) and Restricted Use File (Round Two, Release 2)

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recent visit is a family member: Questions k16I – k32I concern the child's doctor visits in the past 12 months. The respondent is the person who took the child on his/her most recent physician visit, as indicated in e16x, unless that person is not a family member. If that person is a family member but not the family informant, then these questions are asked as part of that other family member's self-reponse module. If that person is not a family member, then these questions are not asked.

**k16I** Any doctor visit for sickness, injury, or other health problems in the past 12 months. *SICKCR*

If child visited doctor for health problem (k16I):

**k17I** Month/year of most recent visit for health problem.

**k18I** Since that visit, did child visit a doctor for a check-up or other preventive care? *CHKASIK*

If child visited doctor for preventive care (k18I):

**k19I** Month/year of most recent visit for preventive care. *CHKASM*

If child has not had a doctor visit for a health problem (k16I):

**k20I** Any doctor visit for check-up or other preventive care in the past 12 months. *CHECKUP*

If child visited doctor for preventive care (k20I):

**k21I** Month/year of most recent visit for preventive care. *CHKMON*

If child did not visit doctor for preventive care (k20I):

**k90I** Check for correct number of doctor visits in the past 12 months.

**k22I** Was the doctor at the most recent doctor visit a family doctor or specialist? *DRORSP*

If child has a usual source of care (d101):

**k24I** Was most recent doctor visit to the child's usual place for care? *LSTUSC*

If child has no usual source of care (d101) or most recent doctor visit was not to usual source of care (k24I):

**K24I** Was most recent visit to an emergency room? *LSTOER*

If most recent visit was not to an emergency room (K24I):

**k25I** Was most recent doctor visit by appointment? *LSTAPP*

If most recent doctor visit was by appointment (k25I):

**k26I, k27I** Time period between making appointment and seeing doctor. *LSTAPPX*

**k28I, K28I** Time in waiting room at most recent doctor visit. *LSTWATX*

**k29I, K29I** Travel time to doctor's office/emergency room at most recent visit. *LSTRAVX*

**k30I** Rating of the thoroughness and carefulness of the examination and treatment. *LSTHOR*

**k31I** Rating of how well doctor listened. *LSTLISN*

\* = variable on Restricted Use File only

## CTS HOUSEHOLD SURVEY

### Survey Questions and Variables on Public Use File (Round Two, Release 2) and Restricted Use File (Round Two, Release 2)

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**k32I** Rating of how well doctor explained things. *LSTEXPL*

For each child in the sample: Questions k40I – ee4 concern the child's health status. The respondent is the person who took the child on his/her most recent physician visit, as indicated in e16x, unless that person is not a family member. If that person is a family member but not the family informant, then these questions are asked as part of that other family member's self-response module. If that person is not a family member, then the respondent is the family informant.

**k40I** Respondent's assessment of child's general health. *GENHLH*

**ee2** Has child ever seen a doctor or health care professional for...?:

**ee2a** acne *KACNE\**

**ee2b** very frequent or severe headaches *KHDACHE\**

**ee2c** four or more ear infections in any one year *KEARINF\**

**ee3** Has child ever had tubes placed in ears? *KEARTUB\**

**ee4** Has a doctor or health professional ever told you that child had...?: [For each "yes" response, follow up with a question about whether the child has seen a doctor or other health care professional for that chronic condition during the past two years.]

**ee4a** sickle cell disease *KSCKLE\*, KSCKLEX\**

**ee4b** tuberculosis *KTB\*, KTBX\**

**ee4c** asthma *KAsthMA\*, KASTHMX\**

**ee4d** Attention Deficit Hyperactivity Disorder *KADHA\*, KADHAX\**

**ee4e** diabetes or high blood sugar *KDIABT\*, KDIABTX\**

For all adults in FIU: Question e802 is asked for each remaining (non-informant) adult in the FIU. The respondent is the family informant.

**e802** Respondent's assessment of adult's general health. *The variable GENHLH reflects this response (from the family informant) only if the non-informant adult didn't respond to this question in his/her self-response module (SRM question e402).*

## F. EMPLOYMENT

The family informant answers all the questions in Section F.

For each adult (18 years of age or older):

**f101** Does person have a business or farm? *HAVEBUS*

**f111** Last week, did person do any work for pay (or profit)? *WRKPAY*

\* = variable on Restricted Use File only

## CTS HOUSEHOLD SURVEY

### Survey Questions and Variables on Public Use File (Round Two, Release 2) and Restricted Use File (Round Two, Release 2)

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For each employed adult (f111):

**f121** Last week, did person have more than one job/business? *WORK2ND*

**f131** Hours per week at (main) job. *HRSWKX*

If person works varying hours per week (f131):

**13x1** Does person usually work more or less than 35 hours per week at main job?

If person works more than one job (f121):

**f141** Hours per week at other jobs. *HRWK2NX*

**f201** Employer type. *EMPTYPX*

**f211** Number of people employed at work location.

If person is not employed by government (f201):

**f221** Does employer operate in more than one location?

**f231** Number of people employed by employer at all locations. *FIRMSZX*

**f241** Type of industry. *INDUSTRY*

**f301, f321, f331, f341** Earnings at main job. *WAGEHRX*

If person is policy holder for employer-based plan (b231, b251) and has more than one job (f121):

**f401** Is person's insurance from main job? *INSMJOB*

For each person who: works for government or private employer (f201), is not a policy holder for an employer/union based plan (b231, b251), and is less than 65 years old:

**f501** Does person's employer or union offer a health insurance plan to any of its employees? *EMPOFER*

If employer offers health insurance plan (f501):

**f511** Is person eligible to participate in employer's health insurance plan? *ELIGIB*

If eligible to participate (f511) and uninsured:

**f521** Main reason not participating in employer's plan. *ELUNINS*

If not eligible to participate (f511):

**f531** Reason ineligible for employer's plan. *INELIGR*

**f541** Does employer offer only one or more than one plan to its employees? *EMPMULT*

**f551** Does employer offer an HMO plan to its employees? *EMPHMO*

If employer offers more than one plan (f541) and offers an HMO plan (f551):

**f561** Does employer offer a non-HMO health insurance plan to its employees?

\* = variable on Restricted Use File only

## CTS HOUSEHOLD SURVEY

### Survey Questions and Variables on Public Use File (Round Two, Release 2) and Restricted Use File (Round Two, Release 2)

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#### *EMPBOTH*

#### **G. FAMILY INCOME AND RACE/ETHNICITY**

The family informant is the respondent for Section G.

For all FIUs:

**g10, g11** Total income for FIU in 1997. *FAMINCX*

For each FIU member, except family informant's own child or grandchild:

**g20** Hispanic origin. *HISPAN*

**g221** Race. *RACEX*

#### **H. CLOSING**

The family informant is the respondent for Section H.

If no prepayment for interview: Arrange for payment.

**h10** Confirm name and address.

If part of reinterview sample:

**h20** Did FIU have same phone number at date of Round 1 interview?

For all FIUs:

**h30** Number of other telephone numbers in household. *PHNOTHX*

**h31** Purpose/use of other phone numbers. *PHNOTHR*

**h32** No working phone during the past 12 months. *NOPHN*

**h33** Number of months phone not working. *NOPHNMX*

**h34** Main reason no telephone.

If the FIU has more than one adult: Use the self-response module (SRM) to obtain information from other adults in the FIU.

**h23** Arrange to interview any other adults in the FIU.

\* = variable on Restricted Use File only



## **Appendix F**

### **The CTS Round Two Followback Instrument**

**COMMUNITY TRACKING STUDY  
SUMMARY OF FOLLOWBACK SURVEY QUESTIONS  
ROUND 2**

See HSC Technical Publication No. 33 for information on changes between Round One and Round Two, interviewer training, and details on the CATI program that was used.

**SECTION A: ENTITY INFORMATION**

**a3a     Blue Cross/Blue Shield**

ASK IF NOT ALREADY KNOWN, OR CODE: Are you a Blue Cross/Blue Shield Plan?

- 1       yes
- 2       no

**a3       Entity type**

**IF a3a^=yes:** Please tell me which of the following categories best describes your organization:

- 2       a licensed insurer or HMO
- 3       a managed care provider organization, such as a PPO or IPA (not licensed to sell insurance)
- 4       a third party administrator (TPA)
- 6       an employer, union or trust plan administrator (including a government employee plan)
- 8       or something else (SPECIFY)

INTERVIEWER: USE STATUS OF CORPORATE PARENT IF APPLICABLE.

**SECTION B: PRODUCT ATTRIBUTES**

**b2       Product type**

Do you think of [PRODUCT] as a(n)...

***PRODTYP***

- 1       HMO (Health Maintenance Organization)
- 2       POS (Point of Service Plan)
- 3       PPO (Preferred Provider Organization)
- 4       indemnity plan (traditional FFS)
- 5       or something else? (SPECIFY)

**b2a     Model type**

**IF b2 = HMO OR POS:** Which of the following describes the medical providers available in [SITE]?

PROBE: Exclude dental, mental and vision providers.

INTERVIEWERS: Ask for individual components of "mixed model".

SELECT ALL THAT APPLY

***MODEL2***

- 1       staff model
- 2       group model (plan contracts with a single group)
- 3       network and/or IPA (contracts with multiple individual and/or group providers)
- 4       something else (SPECIFY)
- d       don't know
- r       refused

**b3 Individual purchase**

Is [PRODUCT] ever sold to individuals in [SITE]?

- 1 yes
- 2 no
- d don't know
- r refused

**b5 Network**

**IF b2=indemnity or other:** Is there a directory or list of doctors associated with [PRODUCT] in [SITE]?

- 1 yes
- 2 no

**b6 Out-of-network coverage**

**IF (b2=HMO, POS, or PPO) or (b5=yes):** Under [PRODUCT] in [SITE], if enrollees do not have a referral and go to *out-of-network* doctors, does the plan cover *any* of the costs for these visits?

PROBE: Exclude emergency care and non-major medical services such as dental and vision care.

PROBE: By "out-of-network" we mean providers of major medical services NOT associated with [PRODUCT].

- 1 yes
- 2 no
- 7 there is no network in this sense
- d don't know
- r refused

**Construct NET:**

**NETWORK**

If [(b2 = HMO, POS, or PPO) or (b5 = yes)] and b6^=7, then set NET=1 and go to b10.

Otherwise set NET=0 and go to b13.

**b10 PCP sign-up**

**IF NET=1:** Does [PRODUCT] in [SITE] require members to have a primary care doctor, group of doctors, or clinic to receive maximum coverage for all routine care?

**REQPCP**

- 1 yes
- 2 no
- d don't know
- r refused

**b12 PCP types**

**IF b10=yes:** Which types of providers can serve as primary care physicians for enrollees in this product?

INTERVIEWERS: CODE ALL THAT APPLY

**GENLPCP, OBGYPGP, OTHRPGP**

- 1 generalists, such as an internist, pediatrician, or family practice
- 2 OB/GYNs
- 3 other specialists
- d don't know
- r refused

**b8      Maximum in-network coverage**

**IF NET=1:** We are interested in whether referrals are required for specialty care, and how they affect coverage, under [PRODUCT] in [SITE]. For these questions, please consider only major medical services, but not emergency care and other services such as dental, vision, and mental health care.

Under [PRODUCT] in [SITE], is a referral or authorization *ever* required to obtain maximum coverage for an initial visit to an in-network specialist?

PROBE: If specialists can arrange authorization on-the-spot or after the visit, consider this a requirement to get a referral.

**MAXINET**

- 1      yes
- 2      no
- d      don't know
- r      refused

**b91a   Any in-network coverage**

**IF b8=yes:** For the next few questions, "self referral" refers to visits where a patient sees an in-network specialist without obtaining a referral or authorization, even though this is required to obtain maximum coverage. Does [PRODUCT] provide at least some coverage for self-referrals to *any* types of in-network specialists?

**ANYINET**

- 1      yes
- 2      no
- d      don't know
- r      refused

**b91b   In-network coverage for most specialists**

**IF b91a=yes:** Does this coverage for self-referral apply to most types of in-network specialists?

- 1      yes
- 2      no
- d      don't know
- r      refused

**b91c   In-network coverage for OB/GYNs**

**IF b91b=no:** Does this coverage for self-referral apply to *most* visits to in-network OB/GYNs?

INTERVIEWER: Coverage of one annual visit does not count.

- 1      yes
- 2      no
- d      don't know
- r      refused

**b91d   In-network coverage for nonOB/GYNs**

**IF b91b=no:** Does this coverage for self-referral apply to *any other* types of in-network specialists?

- 1      yes
- 2      no
- d      don't know
- r      refused

**b92 In-network coverage compared to referral**

**IF b91a=yes:** When [PRODUCT] covers in-network self-referrals, is the level of coverage the same as with a physician referral, or is it less than the coverage with a physician referral?

PROBE: Lesser coverage means that the copayment or coinsurance that the enrollee pays is *higher*.

- 1 same
- 2 less
- 3 volunteer: varies
- d don't know
- r refused

**b92b In-network coverage compared to referral for OB/GYNs**

**IF b92=VARIES and (b91b=yes or b91c=yes):** What about in-network self-referrals to OB/GYNs – is the level of coverage the same as with a physician referral, or less than with a physician referral?

PROBE: Lesser coverage means that the copayment or coinsurance that the enrollee pays is *higher*.

- 1 same
- 2 reduced
- d don't know
- r refused

**b93 In-network coverage compared to out-of-network coverage**

**IF b6=yes and b92=(LESS or VARIES)** Under [PRODUCT], when the level of coverage for in-network self-referrals is reduced, is that level of coverage better than for out-of-network self-referrals, or the same?

- 1 better
- 2 same
- 3 volunteer: varies
- d don't know
- r refused

**b93b In-network coverage compared to out-of-network coverage for OB/GYNs**

**IF b93=VARIES and (b91b=yes or b91c=yes):** What about in-network self-referrals to OB/GYNs – Is that level of coverage better than for out-of-network self-referrals, or the same?

- 1 better
- 2 same
- d don't know
- r refused

**b13 Copayment or coinsurance requirement**

Does [PRODUCT] in [SITE] have a fixed copayment per visit, or percentage coinsurance payment for [IF NET=1 fill: in-network] office visits?

PROBE: Whichever is most common for enrollees in this product.

**COPCOIN**

- 1 copayment
- 2 coinsurance rate
- 0 none
- d don't know
- r refused

**b13amt Copayment amount**

**IF b13=COPAYMENT:** What is the typical copayment amount per office visit for [PRODUCT] in [SITE]?

PROBE: The lowest copayment that typically applies for [IF NET=1 fill: in-network] office visits with referrals. Exclude “well” visits if these are different.

**COPAY**

<1-2000> dollars

d don't know

r refused

**b13per Coinsurance rate**

**IF b13=COINSURANCE:** What is the typical coinsurance percentage for office visits under [PRODUCT] in [SITE]?

PROBE: The coinsurance rate is the percentage for which the enrollee is responsible.

PROBE: The lowest coinsurance rate that typically applies for [IF NET=1 fill: in-network] office visits with referrals. Exclude “well” visits if they are different.

**COINS**

<1-100> percent

d don't know

r refused

**b13out Out-of-network copayment or coinsurance requirement**

**IF b6=yes:** For out-of-network office visits without a referral, does [PRODUCT] in [SITE], have a fixed copayment per visit, or percentage coinsurance payment?

PROBE: Whichever is most common for enrollees in this product.

**OUTCO**

1 copayment

2 coinsurance rate

0 none

d don't know

r refused

**b13od Out-of-network copayment amount**

**IF b13out=COPAYMENT:** What is the typical copayment amount for out-of-network office visits under [PRODUCT] in [SITE]?

PROBE: The copayment that typically applies for office visits, without referrals, outside of any network.

<1-2000> dollars

d don't know

r refused

**b13op Out-of-network coinsurance rate**

**IF b13out=COINSURANCE:** What is the typical coinsurance percentage for out-of-network office visits under [PRODUCT] in [SITE]?

PROBE: The coinsurance rate is the percentage for which the enrollee is responsible.

PROBE: The coinsurance rate that typically applies for office visits, without referrals, outside of any network.

**OUTCOIN**

<1-100> percent

d don't know

r refused

**b14 Deductible amount**

Under [PRODUCT] in [SITE], what is the dollar amount of the individual deductible that applies to [IF NET=1 fill: in-network] office visits?

PROBE: Your best estimate is fine. Please tell me what is *typical* for this product in [SITE].

**DEDUCT**

<0-10000> dollars

d don't know

r refused

**b14out Out-of-network deductible requirement**

**IF b6=yes:** Is there a *separate* deductible for [PRODUCT] in [SITE] that applies to out-of-network office visits?

**OUTDREQ**

1 yes

2 no

d don't know

r refused

**b14od Out-of-network deductible amount**

**IF b14out=yes:** What is the dollar amount of the *individual deductible* for out-of-network office visits?

PROBE: Your best estimate is fine. Please tell me what is typical for this product in [SITE].

PROBE: The deductible that typically applies for office visits, without referrals, outside of any network.

**OUTDAMT**

<0 – 50 – 5000> dollars

d don't know

r refused

**SECTION C: NETWORK SIZE AND PHYSICIAN PAYMENT ARRANGEMENTS**

**c1r Physician network size**

**If NET=1:** Approximately what percentage of all primary care and specialist physicians in [SITE] are associated with [PRODUCT]?

Would you say ...

1 fewer than 25 percent

2 at least 25 percent but less than 50 percent

3 at least 50 percent but less than 75 percent

4 75 percent or more

d don't know

r refused

INTERVIEWER: Do **not** probe "don't know".

**c2r Hospital network size**

**If NET=1:** Under [PRODUCT], are enrollees limited to a single hospital system for general acute care services in [SITE]?

PROBE: A single hospital system would be one or more hospitals under the same ownership or management.

1 yes

2 no

d don't know

r refused

**c4 PCP payment**

Next, I have some questions about payment arrangements for primary care physicians, specialists and hospitals for each product in [SITE]. Since this may vary somewhat depending on the provider, I just want to know what is *typical* for the providers who serve a majority of enrollees in each product.

In [PRODUCT] in [SITE], what is the typical method of payment that your organization uses for primary care services? Is it . . .

PROBE: By that I mean how your organization pays individual providers, medical groups, or other entities for primary care services in [SITE].

PROBE: Capitation is a fixed payment per member per month for a class of services.

INTERVIEWER: Probe carefully between <1> and <2>.

**PAYPCP**

- 1 fee-for-service, for example, usual and customary rates
- 2 fixed fee schedule, including discounted FFS or relative value units
- 3 salaried by your organization
- 4 capitation (includes combined, "professional" or "global" capitation)
- 5 other (SPECIFY)
- d don't know
- r refused

**c4a PCP capitation**

**IF c4=CAPITATION:** What *other* services are included in this capitated payment?

INTERVIEWER: CODE ALL THAT APPLY

- 1 referrals to specialists
- 2 hospitalizations
- 3 other services, or
- 4 none of these
- d don't know
- r refused

**c5 Specialist payment**

**IF c4a^=1:** In [PRODUCT] in [SITE], what is the typical method of payment that your organization uses for *specialty* services? Is it . . .

PROBE: By that I mean how *your* organization pays individual providers, medical groups, or other entities for specialty services in [SITE].

PROBE: Capitation is a fixed payment per member per month for a class of services.

- 1 fee-for-service, for example, usual and customary rates
- 2 fixed fee schedule, including discounted FFS or relative value units
- 3 salaried by your organization, or
- 4 capitation
- 5 other (SPECIFY)
- d don't know
- r refused



**c6 Hospital payment**

**IF c4a^=2:** In [PRODUCT] in [SITE], what is the typical method of payment for hospital services? Is it ...

PROBE: By that I mean how *your* organization pays for hospital services in [SITE]. Exclude physician services delivered during the hospital stay.

PROBE: Capitation is a fixed payment per member per month for a class of services.

- 1 per diem
- 2 according to DRG or per stay
- 3 capitation
- 4 billed charges or discounted billed charges, or
- 5 something else (SPECIFY)
- 7 not applicable; hospitals owned by organization
- d don't know
- r refused

**c7 Mental health benefit**

Does [PRODUCT] in [SITE] ever include any mental health and/or substance abuse services?

PROBE: Includes "chemical dependency."

PROBE: Include mental health or substance abuse services you provide by subcontract only if your organization administers that benefit.

**MHSERV**

- 1 yes
- 2 no
- d don't know
- r refused

**c7a Specialty mental health organization**

**IF c7=yes:** Are mental health and/or substance abuse services ever provided or managed separately by a specialty managed behavioral health organization?

**MHSPEC**

- 1 yes
- 2 no
- d don't know
- r refused

**c7b Name of mental health organization**

**IF c7a=yes:** Please tell me the name of the specialty managed behavioral health organization you use in [SITE].

- 1 – 8 codes for specific organizations
- 9 something else
- d don't know
- r refused

**c7c Location of mental health organization**

**If c7b=9:** In what city and state is this specialty behavioral managed health company located?

## **SECTION D: ORGANIZATIONAL INFORMATION**

### **d1 Tax status**

**IF a3a=1 or (a3=2 or 3):** What is your organization's tax status? Is it . . .

INTERVIEWER: code organizations with a 501(c)3 or 501(c)4 tax status as non-profit

- 1 for-profit, privately held
- 2 for-profit, publicly held, or
- 3 nonprofit
- 4 other (SPECIFY)
- d don't know
- r refused

### **d2 Subsidiary**

Is your organization a division or subsidiary of another health plan organization?

- 1 yes
- 2 no
- d don't know
- r refused

### **d2a Parent company service area**

**IF d2 = yes:** Is this parent company a national or multi-state organization?

- 1 yes
- 2 no
- d don't know
- r refused

### **d2b Parent company name**

**If d2=yes:** What is the name of that parent company?

- s code from list
- o other
- d don't know
- r refused

### **d2c Parent company location**

**If d2b=other:** In what city and state is this parent company located?

### **d3 Entity service area**

**IF d2 = no:** Is your organization a national or multi-state organization?

- 1 yes
- 2 no
- d don't know
- r refuse