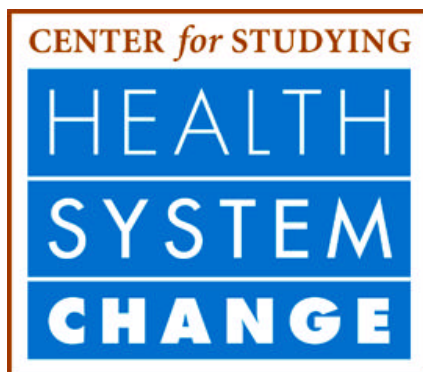


Community Tracking Study
Household Survey Public Use File: User's Guide
(Round One, Release 3)



600 Maryland Avenue, SW
Suite 550
Washington, DC 20024

Technical Publication No.

7

June 1998
Revised July 2000

What's New

Version	Date	Description of Changes
Release One	June 1998	Original release
Release Two	December 1999	<ol style="list-style-type: none">1) The variable SPANISH, indicating whether the survey was administered in Spanish, was added to the data file.2) Additional editing was applied to the RACEX and RACEREX variables to make better use of verbatim responses to the race questions. The result was a shifting of some of the "Native/Asian/Pacific/Other" responses to the other race and race/ethnicity categories.3) Minor text format changes were implemented in the User's Guide and Codebook.4) Text describing the appropriate use of weights (Chapter 3) was expanded.
Release Three	July 2000	<ol style="list-style-type: none">1) Improved edit and confidentiality masking procedures resulted in changes to the insurance and other selected variables.

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). James Reschovsky provided direction for the production of the data file and its documentation. Survey weights and procedures for variance estimation were developed by John Hall, Frank Potter, and Barbara Lepidus Carlson of MPR. David Edson of MPR, Beny Wu of SSS, and Ha Tu of HSC 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. Gary Moore, Leif Karell, Ase Sewall, and Beny Wu of SSS supervised the production of the data file and the Codebook. Sally Trude of HSC, as project officer, 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, Leif Karell and Beny Wu of SSS. David Edson developed the logic and skip pattern flowcharts in Appendix B. Barbara Lepidus Carlson wrote Appendix C, 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 Bryan Sayer of SSS. Gary Moore and Leif Karell provided sample SUDAAN setups in Appendix D. Editorial support was provided by Daryl Hall and Anne Kelleher of MPR. Helpful comments on an earlier draft were received from Peter Kemper and Holly Wong of HSC.

The Codebook was developed primarily by Beny Wu, with assistance from Gary Moore, Leif Karell, Paula Beasley, Ase Sewall, Raymond Hu and Jenny Chang of SSS and Ha Tu.

Preface

This User's Guide gives researchers the information necessary for using the Community Tracking Study (CTS) Household Survey Public Use File developed by the Center for Studying Health System Change (HSC). This version of the data contains information on a survey of consumers referred to as the Household Survey. The User's Guide presents background information about the CTS and the Household 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 and editing, and other information about the data file. A copy of the Household Survey questionnaire appears in Appendix A. Appendix B contains diagrams showing questionnaire logic and skip patterns. A discussion of the derivation of standard error look-up tables for use with the file is contained in Appendix C. Appendix D provides instructions for the use of the SUDAAN software package to develop standard error estimates. The *Community Tracking Study Household Survey Public Use File:Codebook* provides more detail on the file, including frequencies and definitions of variables. The Public Use File and the latest documentation are available through the Inter-university Consortium for Political and Social Research (www.icpsr.umich.edu). Additional information on the CTS Household Survey, and the CTS in general, may be obtained through the HSC internet home page at <http://www.hschange.org>. Technical assistance may be obtained by contacting the CTS Help Desk by e-mail (ctshelp@hschange.org) or fax (202-863-1763).

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Chapter 1

Overview of the Community Tracking Study and the Household Survey

This guide is intended to assist researchers in using the Community Tracking Study (CTS) Household Survey Public Use File. The CTS is a national study of the rapidly changing health care market and the effects of these changes on people.¹ 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 Public Use File: Codebook*. Information about other aspects of the CTS is available from HSC at www.hschange.org or by e-mail (center@hschange.org).

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:

1. **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?
2. **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.²

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.

¹An overview of the Community Tracking Study is contained in Kemper (1996).

²The 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 round of comprehensive case studies of the health system was initiated in 1996 and continued through 1997. The findings are available from HSC.³ 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, physicians, and employers, enabling researchers to explore relationships among purchasers, providers, and consumers of health care.⁴ 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.

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 round two began in the summer of 1998 and was completed by the fall of 1999. Round two case studies were completed in 1998 and 1999 and are documented in the *Community Reports* publications, available at www.hschange.org.

³Center for Studying Health System Change, “Health System Change in Twelve Communities.” Washington, DC: HSC, September 1997.

⁴The physician survey was conducted by HSC and has been made available as both public and restricted use files. The Employer Survey was conducted by RAND in collaboration with HSC. While these 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)	52-West Central Alabama
07-Miami (FL)	19-Denver (CO)	53-Central Arkansas
08-Newark (NJ)	20-Detroit (MI)	54-Northern Georgia
09-Orange County (CA)	21-Greensboro (NC)	55-Northeastern Illinois
10-Phoenix (AZ)	22-Houston (TX)	56-Northeastern Indiana
11-Seattle (WA)	23-Huntington (WV/KY/OH)	57-Eastern Maine
12-Syracuse (NY)	24-Killeen (TX)	58-Eastern North Carolina
	25-Knoxville (TN)	59-Northern Utah
	26-Las Vegas (NV/AZ)	60-Northwestern Washington
	27-Los Angeles (CA)	
	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: Numbers correspond with coding of the site ID variable in the survey.

1.3. The Household Survey

The Household Survey, funded by the Robert Wood Johnson Foundation, was conducted under the direction of HSC. Mathematica Policy Research, Inc. (MPR) was the primary contractor for survey design, instrument development, sample design and implementation, most of the interviewing, weighting, and variance estimation. Survey Research Associates, Inc. and CODA, Inc., assisted with the telephone interviewing. 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 Public Use File.

The Household Survey instrument covers 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.⁵ 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 may not have been the family informant.) A Spanish version of the instrument was used when appropriate.

The survey was administered by telephone, using computer-assisted telephone interviewing technology. Although the vast majority of the respondents 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. Interviews with 60,446 individuals from 32,732 family insurance units (FIU) were completed between July 1996 and July 1997.⁶

1.4. 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.

The Restricted Use File is provided to researchers for use on only a specific research project (new

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

⁶The 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.

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.

The Public Use File described in this User's Guide is available from ICPSR to all researchers with minimal restrictions. 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 or followback data. The Public Use File contains the same observations as the Restricted Use File.

The Public Use and Restricted Use versions differ in the amount of geographic detail provided and the availability of data obtained from the Followback Survey. 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. The Restricted Use File also contains data from the Followback Survey, while the Public Use File does not contain any information from the Followback.

Chapter 2

The Structure and Content of the Community Tracking Study Household Survey

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).⁷

⁷For more details on the definition of CTS sites, refer to Metcalf (1996).

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 1995 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 1995 population of 200,000 or more. Of the low-intensity sites, 36 are large metropolitan areas (also having a 1995 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, 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.⁸

Together, the high-intensity and low-intensity sites account for about 90 percent of all 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.

⁸Additional 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

While 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, 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 HOUSEHOLD SAMPLE STRUCTURE

Site Sample (54,371 individuals)	Supplemental Sample (6,075 individuals)
High-Intensity Sites (27,175 individuals)	High-Intensity Sites (498 individuals)
Site 1	Site 1
Site 2	Site 2
Site 3	Site 3
.	.
.	.
.	.
Site 12	Site 12
Low-Intensity Sites (27,196 individuals)	Low-Intensity Sites (1,929 individuals)
Site 13	Site 13
Site 14	Site 14
Site 15	Site 15
.	.
.	.
.	.
Site 60	Site 60
	Other areas (3,648 individuals)

2.3. Conducting the Household Survey

After selecting the sample sites, we randomly selected households within each site. We also randomly selected households for the supplemental sample, an independent national sample. 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 an FIU contained one child, we collected information about him or her. If an 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.⁹ 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.

2.3.1.1. Family Insurance Units

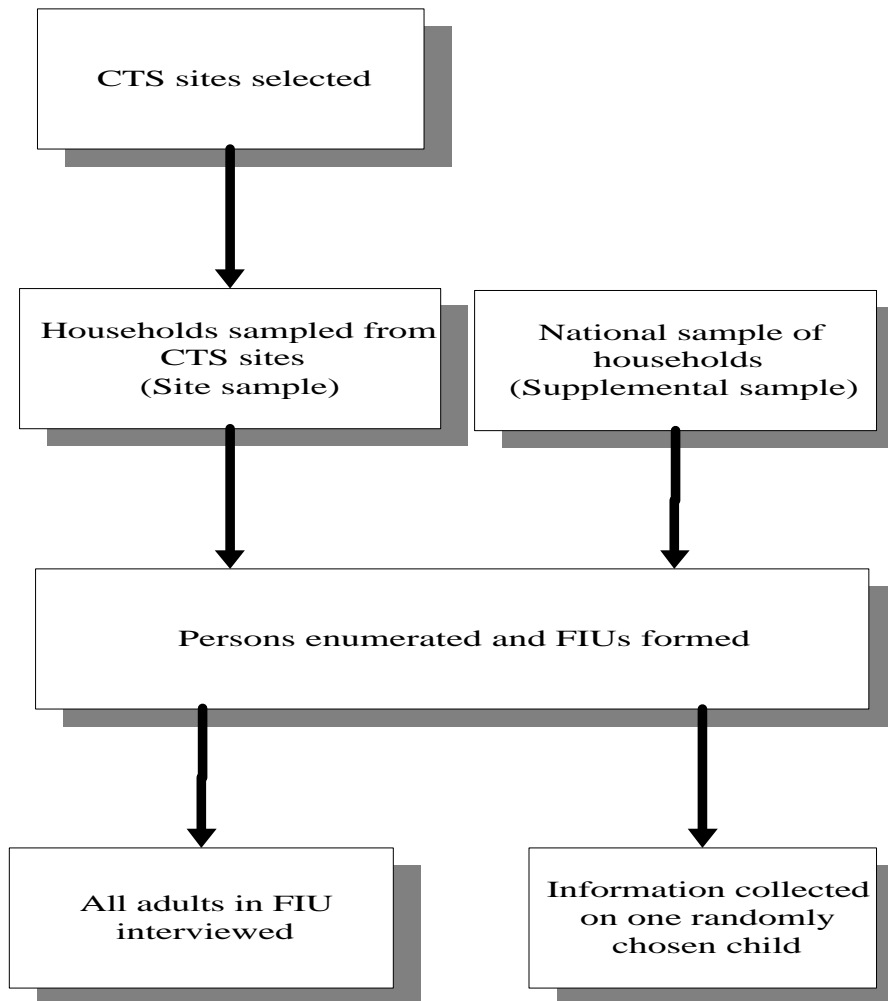
Individuals in the household were grouped into FIUs. An FIU reflects family groupings typically used by insurance carriers, which differs from groupings defined by the Bureau of the Census.¹⁰ An FIU is also similar to the filing unit used by Medicaid and state-subsidized insurance programs. The FIU includes 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).

⁹Note 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 Public Use File.

¹⁰The 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 an FIU.

FIGURE 2.2

OVERVIEW OF HOUSEHOLD SURVEY PROCEDURES



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.¹¹ 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.¹²

¹¹For the Household Survey, individuals who were not on active military duty at the time of the interview were considered to be civilians.

¹²The distinction between an 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 FIU 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.

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 their selected sibling.

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.

“Secondary families” -- those listed by but not including the household informant -- in some cases did not respond to the interview. Nonresponding families were excluded from the file but are statistically represented by responding families. 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. 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.

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)
- Risk behaviors and smoking
- Employment, earnings, and income
- Demographic characteristics

Different respondents were asked different questions, and not all questions were asked of all respondents. For instance, 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, and risk behaviors as part of the survey’s self-response module.

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. Detailed documentation for the computer-assisted telephone interview program, the equivalent of a survey instrument, is provided in Appendix A.¹³ A set of flowcharts has also been included as an appendix to assist researchers interested in understanding skip patterns in the survey.

¹³The term “interviewing unit” used in the questionnaire is synonymous with FIU. The term “householder” used in the questionnaire is synonymous with household informant.

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.¹⁴ Field staff using cellular telephones interviewed them. The survey was fielded between July 1996 and July 1997. The total number of completed interviews consisted of 32,732 FIUs and 60,446 individuals.

Sixty-eight percent of the random-digit-dialing and field samples combined completed the household composition questions. Of the households that completed this initial section of the survey, the response rate for the FIUs to complete the interview was 95 percent, for a cumulative response rate of 65 percent. Tables 2.4 and 2.5 show the number of FIUs and individuals interviewed for each site and each sample.

¹⁴Families 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. (1998).

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	Risk/ Smoking/ SF-12	Employment/ Earnings/ Employer Plan	Family Income	Race

First Family Insurance Unit

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

Second Family Insurance Unit

Family Informant	H	F2	F2	F2	F2	F2	F2	F2	F2	F2	F2		F2
Spouse	H	F2	F2	SRM	F2	SRM	SRM	SRM	F2 and SRM	SRM	F2		F2

Third Family Insurance Unit

Unrelated Adult	H	F3	F3	F3	F3	F3	F3	F3	F3	F3	F3		F3

Notes:

H	Data provided by the household informant (typically person who answers the telephone, if adult)
Fi	Data provided by family informant for family insurance unit I
SRM	Data provided by the individual adult family member via the Self-Response Module questions
Fi/SRM	Data on general health status provided by the family informant. Detailed health information provided by the individual family member
FC	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 premium for 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
Denial of coverage	Ever denied insurance coverage in past 2 years because of poor health
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 Reasons for not having a 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*
Perceived changes in access (Section C)	Getting needed medical care is easier/harder compared with 3 years ago
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 Whether there were any home 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
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*
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 2.4

NUMBER OF FAMILY INSURANCE UNITS INTERVIEWED, BY SITE AND SAMPLE

Site/Geographic Area	Sample			
	Site	Supplemental	Augmented Site	Combined
TOTAL	29,456	3,276	30,787	32,732
01-Boston (MA)	1,145	34	1,179	1,179
02-Cleveland (OH)	1,211	32	1,243	1,243
03-Greenville (SC)	1,285	14	1,299	1,299
04-Indianapolis (IN)	1,316	29	1,345	1,345
05-Lansing (MI)	1,232	5	1,237	1,237
06-Little Rock (AR)	1,412	7	1,419	1,419
07-Miami (FL)	1,171	26	1,197	1,197
08-Newark (NJ)	1,282	19	1,301	1,301
09-Orange County (CA)	1,157	35	1,192	1,192
10-Phoenix(AZ)	1,250	27	1,277	1,277
11-Seattle (WA)	1,181	38	1,219	1,219
12-Syracuse (NY)	1,303	7	1,310	1,310
13-Atlanta (GA)	296	52	348	348
14-Augusta (GA/SC)	291	6	297	297
15-Baltimore (MD)	285	25	310	310
16-Bridgeport(CT)	284	6	290	290
17-Chicago (IL)	293	92	385	385
18-Columbus (OH)	296	26	322	322
19-Denver (CO)	291	40	331	331
20-Detroit (MI)	309	49	358	358
21-Greensboro (NC)	271	12	283	283
22-Houston (TX)	280	46	326	326
23-Huntington (WV/KY/OH)	307	7	314	314
24-Killeen (TX)	298	1	299	299
25-Knoxville (TN)	311	15	326	326
26-Las Vegas (NV/AZ)	267	7	274	274
27-Los Angeles (CA)	261	111	372	372
28-Middlesex (NJ)	311	11	322	322
29-Milwaukee (WI)	311	26	337	337
30-Minneapolis (MN/WI)	334	37	371	371

TABLE 2.4

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

Site/Geographic Area	Sample			
	Site	Supplemental	Augmented Site	Combined
31-Modesto (CA)	306	4	310	310
32-Nassau (NY)	341	16	357	357
33-New York City (NY)	292	59	351	351
34-Philadelphia (PA)	309	53	362	362
35-Pittsburgh (PA/NJ)	299	23	322	322
36-Portland (OR/WA)	307	19	326	326
37-Riverside (CA)	304	22	326	326
38-Rochester (NY)	355	14	369	369
39-San Antonio (TX)	299	17	316	316
40-San Francisco (CA)	281	24	305	305
41-Santa Rosa (CA)	285	5	290	290
42-Shreveport (LA)	298	7	305	305
43-St. Louis (MO/IL)	318	30	348	348
44-Tampa (FL)	268	31	299	299
45-Tulsa (OK)	292	5	297	297
46-Washington (DC/MD)	310	68	378	378
47-W Palm Beach (FL)	253	16	269	269
48-Worcester (MA)	310	11	321	321
49-Dothan (AL)	301	0	301	301
50-Terre Haute (IN)	293	0	293	293
51-Wilmington (NC)	303	6	309	309
52-W-Cen Alabama	329	3	332	332
53-Cen Arkansas	379	11	390	390
54-N Georgia	273	11	284	284
55-NE Illinois	294	6	300	300
56-NE Indiana	286	4	290	290
57-E Maine	319	10	329	329
58-E North Carolina	304	10	314	314
59-N Utah	377	3	380	380
60-NW Washington	330	1	331	331
Areas other than CTS Sites	----	1,945	----	1,945

TABLE 2.5
NUMBER OF PERSONS INTERVIEWED, BY SITE AND SAMPLE

Site/Geographic Area	Sample			
	Site	Supplemental	Augmented Site	Combined
TOTAL	54,371	6,075	56,798	60,446
01-Boston (MA)	2,024	55	2,079	2,079
02-Cleveland (OH)	2,217	59	2,276	2,276
03-Greenville (SC)	2,436	32	2,468	2,468
04-Indianapolis (IN)	2,451	56	2,507	2,507
05-Lansing (MI)	2,291	9	2,300	2,300
06-Little Rock (AR)	2,644	14	2,658	2,658
07-Miami (FL)	2,031	44	2,075	2,075
08-Newark (NJ)	2,311	33	2,344	2,344
09-Orange County (CA)	2,101	63	2,164	2,164
10-Phoenix (AZ)	2,263	47	2,310	2,310
11-Seattle (WA)	2,043	70	2,113	2,113
12-Syracuse (NY)	2,363	16	2,379	2,379
13-Atlanta (GA)	538	97	635	635
14-Augusta (GA/SC)	563	14	577	577
15-Baltimore (MD)	527	47	574	574
16-Bridgeport (CT)	548	11	559	559
17-Chicago (IL)	573	160	733	733
18-Columbus (OH)	557	48	605	605
19-Denver (CO)	558	73	631	631
20-Detroit (MI)	562	94	656	656
21-Greensboro (NC)	506	20	526	526
22-Houston (TX)	546	90	636	636
23-Huntington (WV/KY/OH)	568	8	576	576
24-Killeen (TX)	579	2	581	581
25-Knoxville (TN)	577	24	601	601
26-Las Vegas (NV/AZ)	481	11	492	492
27-Los Angeles (CA)	462	207	669	669
28-Middlesex (NJ)	572	18	590	590
29-Milwaukee (WI)	524	48	572	572
30-Minneapolis (MN/WI)	648	76	724	724

TABLE 2.5

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

Site/Geographic Area	Sample			
	Site	Supplemental	Augmented Site	Combined
31-Modesto (CA)	606	7	613	613
32-Nassau (NY)	662	32	694	694
33-New York City (NY)	483	108	591	591
34-Philadelphia (PA/NJ)	569	95	664	664
35-Pittsburgh (PA)	544	45	589	589
36-Portland (OR/WA)	557	39	596	596
37-Riverside (CA)	574	42	616	616
38-Rochester (NY)	658	21	679	679
39-San Antonio (TX)	565	32	597	597
40-San Francisco (CA)	431	34	465	465
41-Santa Rosa (CA)	541	11	552	552
42-Shreveport (LA)	565	10	575	575
43-St. Louis (MO/IL)	590	55	645	645
44-Tampa (FL)	499	58	557	557
45-Tulsa (OK)	588	9	597	597
46-Washington (DC/MD)	551	116	667	667
47-W Palm Beach (FL)	423	22	445	445
48-Worcester (MA)	586	25	611	611
49-Dothan (AL)	558	0	558	558
50-Terre Haute (IN)	553	0	553	553
51-Wilmington (NC)	541	10	551	551
52-W-Cen Alabama	606	6	612	612
53-Cen Arkansas	770	20	790	790
54-N Georgia	511	21	532	532
55-NE Illinois	564	11	575	575
56-NE Indiana	565	8	573	573
57-E Maine	633	18	651	651
58-E North Carolina	592	17	609	609
59-N Utah	811	7	818	818
60-NW Washington	611	2	613	613
Areas other than CTS Sites	---	3,648	---	3,648

Chapter 3

Using the Household Survey Public Use File

The Household Survey Public 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.¹⁵ 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 Public Use File contains three units of analysis: person, FIU, and site. Person-level analyses are discussed in Section 3.1.1, FIU-level analyses in Section 3.1.2, and site-level analyses in Section 3.1.3.

3.1.1. Person-Level Analyses

Most researchers will probably use the person, or individual, as the unit of analysis. The Household Survey Public 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), the type of model (with or without site characteristics), and the types of variables in the analysis (imputed or unimputed SRM variables). Table 3.1 lists the relevant person-level samples, and Table 3.2 summarizes how these three factors determine the appropriate sample and weight for an analysis. A detailed discussion of Table 3.2 appears below.

3.1.1.1. Population of Interest and Type of Model

As shown in Table 3.2, two of the factors that determine the sample that we recommend for a person-level analysis are the population of interest (site or national) and the type of model (with or without site characteristics). 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.¹⁶

¹⁵For more details on the definitions and construction of the Household Survey weight variables, refer to Strouse et al (1998).

¹⁶When 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 HOUSEHOLD SURVEY PUBLIC USE FILE

Sample	Description	File Definition
Full samples: 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=54,371 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=6,075 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=56,798 persons)
Combined sample	All individuals from the site and supplemental samples	All records (N=60,446 persons)

TABLE 3.1
PERSON-LEVEL SAMPLES
IN THE HOUSEHOLD SURVEY PUBLIC USE FILE
(continued)

Self-Response Module (SRM) samples: Maximum analytic samples for analyses that require all records in the sample to have complete information for the unimputed Self-Response Module variables.		
Site sample	Individuals in the site sample who completed the self-response module	All records with SRMFLAG=1,2 and SITE > 0 (N=43,376 persons)
Supplemental sample	Individuals in the supplemental sample who completed the self-response module	All records with SRMFLAG=1,2 and SITE=0 (N=4,870 persons)
Augmented site sample	Individuals in the augmented site sample who completed the self-response module	All records with SRMFLAG=1,2 and SITEID > 0 (N=45,345 persons)
Combined sample	Individuals in the combined sample who completed the self-response module	All records with SRMFLAG=1,2 (N=48,246 persons)

TABLE 3.2

APPROPRIATE SAMPLES AND WEIGHTS FOR PERSON-LEVEL ANALYSES

Type of Model	Recommended Sample	Recommended Weight Variable	
		Analysis does not include neither unimputed SRM variables	Analysis includes unimputed SRM variables ¹⁷
Population of Interest: Site Population			
Any model	Augmented site sample	WTPER1	WTSRM1
Population of Interest: National Population			
Model includes site characteristics	Site sample	WTPER2	WTSRM2
	Augmented site sample	Not applicable	Not applicable
Model does not include site characteristics	Supplemental sample	WTPER3	WTSRM3
	Combined sample	WTPER4	WTSRM4
	Augmented site sample	Not applicable	Not applicable

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

¹⁷ For use in analyses requiring the entire sample to have complete information for the unimputed Self-Response Module 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 the national weight. 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 the national weight.

If your population of interest is the CTS site, we recommend the augmented site sample because of its design and size. The augmented site sample was formed by taking the respondents in a given site sample and adding respondents from the supplemental sample who live in that CTS site. For each CTS site, the augmented sample is larger than the site sample, allowing more precise estimates.¹⁸ 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), we recommend using the combined sample if the model does not include site characteristics. 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 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.¹⁹ We do not recommend using the augmented site sample to make national estimates because the weighting variable associated with this sample has not been constructed for that purpose. 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. However, the researcher may wish to use this sample alone to prepare national estimates in the following situations:

- ***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.

¹⁸Unbiased site-level estimates of means and proportions (not population totals) can be obtained using observations from the site sample alone, in conjunction with national weights defined for the site sample. However, these will not be as precise as estimates obtained from the augmented site sample.

¹⁹Note 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.

- ***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 (but does not eliminate) the need to use more complex statistical packages like SUDAAN to develop variance estimates. (Chapter 4 includes a discussion of how to derive appropriate variance estimates.)

3.1.1.2. 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 the types of variables in the analysis. This is because of differences in the way SRM data were collected.

The first set of variables resulting from a different data collection process consists of the Self-Response Module (SRM) variables. Unlike other Household Survey questions, for which the family informant was the respondent, the SRM questions were posed directly to each adult in the FIU. Because not all adults in all the FIUs responded, some records for adults contain only partial information.²⁰ Although we imputed values for some of the SRM variables, we felt that imputation was less appropriate for other SRM variables because they were attitudinal in nature or likely to be used as dependent variables in analyses. As a result, we constructed separate weights that should be used in analyses that require the unimputed SRM variables to have no missing values. If the researcher uses the SRM weights and the SRM sample, the resulting estimates for the unimputed SRM variables will be representative of all adults in the population of interest (site or national). Table 3.2 lists the SRM weights that go along with each analytic scenario, and Table 3.1 describes the SRM samples associated with those weights. Table 3.3 lists the imputed and unimputed SRM variables and provides guidance on when to use the SRM weights. If unimputed SRM variables are used in an analysis, use the regular person- or family-level weights.

3.1.2. FIU-Level Analysis

In addition to the individual, the FIU can also be the unit of analysis because the Household Survey collects information *on* the FIU and *from* multiple people in the family. 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 an FIU-level data file from the person-level Public 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).

Table 3.4 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.a. Note, however, that the specific samples and weights discussed in that section do not apply to FIU-level analyses.

As shown in Table 3.4, we recommend 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 site sample or the combined sample, depending on your estimation model. Only one weight variable is recommended

²⁰ We were unable to obtain responses to these questions from about 3 percent of all adult respondents to the survey.

for each scenario. 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.

3.1.3. Site-Level Analysis

To generate estimates for the national population based on means in each of the 60 CTS sites, use the weight variable WTSITE and the 60 site-level means. WTSITE indicates the relative weights of the 60 CTS sites. To obtain the site-level means (that is, mean values for desired characteristics of persons or FIUs in a site), we recommend the augmented site sample over the site sample because the augmented site sample is larger (as discussed above). Note that the means generated from the low-intensity sites will have larger standard errors because of the smaller number of observations for these sites.

TABLE 3.3

APPROPRIATE WEIGHTS FOR SELF-RESPONSE MODULE VARIABLES

Variable	Description
The weight variables WTSRM1-4 should be used with the following unimputed SRM variables:	
Section B: Health Insurance	
MCHOICE	Whether person would be willing to accept limited provider choice in order to save on out-of-pocket expenses
Section C: Resource Use During the Last 12 Months	
PUTOFF	Delayed getting needed services
PUTOFR0- PUTOF21	Reasons for delaying or not getting needed services
UNMET	Did not get needed services
Section D: Usual Source of Care/Patient Trust	
DRINFLU	Agree/disagree that doctor is influenced by health insurance company rules
DRMETND	Agree/disagree that doctor puts patient's medical needs above all other considerations
DRNOREF	Agree/disagree that doctor may not refer to specialist when needed
DRUNNEC	Agree/disagree that doctor may perform unnecessary tests or procedures
Section E: Family Level Satisfaction/Last Visit Process and Satisfaction/Risk Behaviors	
CHECKUP CHKASIK	Reason for last visit: Checkup, physical exam, other preventive care
DRCHOCX	Satisfaction with choice of primary care doctors; specialists
DRORSP	Type of physician seen at last visit (PCP or specialist)
LSTAPP	Whether last visit was with appointment or walk-in
LSTAPPX	Lag time between making appointment and seeing doctor at last physician visit
LSTEXPL	Satisfaction with how well doctor explained things
LSTHOR	Satisfaction with thoroughness and carefulness of exam
LSTLISN	Satisfaction with how well doctor listened
LSTOER	Whether last visit was to an emergency room

TABLE 3.3

APPROPRIATE WEIGHTS FOR SELF-RESPONSE MODULE VARIABLES
(continued)

Variable	Description
LSTRAVX	Travel time to physician's office at last visit
LSTUSC	Whether last visit was to usual source of care
LSTWATX	Time spent in waiting room before seeing medical person at last physician visit
LSTYPE	Type of last doctor visit
SICKCR	Reason for last visit: Illness or injury
SMKADV	Whether doctor advised smoker to stop smoking in past 12 months
SMKDAY5	Average cigarettes smoked per day in past 30 days
SMKEVR	Whether person has smoked at least 100 cigarettes in lifetime
SMKNDAY	Average cigarettes smoked per day
SMKNOW	Whether currently smoking cigarettes every day, some days, or not at all
SMKNUM	Average number of cigarettes smoked per day in past 30 days
SMKQUIT	How long since quit smoking
SMKTRYQ	Whether stopped smoking one day or longer in past 12 months, in effort to quit
SPCHOCX	Satisfaction with choice of specialist
SPNEED	Need a specialist
TAKRISK	Whether person agrees that he/she is more likely to take risks than the average person
VISCUR	Doctor visit (if any) under current plan
The weight variables WTPER1-4 should be used for the following imputed SRM variables:	
Section E: Family Level Satisfaction/Last Visit Process and Satisfaction/Risk Behaviors	
FLCALM	How much time calm and peaceful
EMOACT	Less careful in work because of emotional health
EMOLESS	Accomplished less because of emotional health
ENERGY	How much time have energy
FLDOWN	How much time downhearted/blue

TABLE 3.3

APPROPRIATE WEIGHTS FOR SELF-RESPONSE MODULE VARIABLES
(continued)

Variable	Description
LMTMACT	Limited in moderate activity
LMTSOC	How much time have health problems interfered with social activities
LMTSTR	Limited in climbing stairs
PAININT	Pain interfered with work
PHYACT	Limited in kind of work because of physical health
PHYLESS	Accomplished less because of physical health
PCS12 MCS12	SF-12 scores: Physical Component Summary; Mental Component Summary

TABLE 3.4

APPROPRIATE SAMPLES AND WEIGHTS FOR FIU ANALYSES

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

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,²¹ which is an indicator of the precision of an estimate. 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.²² 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 Public Use File.

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 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.

²¹The 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.

²²We 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.

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:

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

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 3.7. This means that the standard error is, on average, almost double what it would have been if the same number of cases had been selected using a simple random sample. With a design effect of 3.7, the Household Survey (with 60,446 observations) has the equivalent precision of a simple random sample with a size of about 16,300. 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 to calculate standard errors.

4.2. Tables of Standard Errors and Design Effects for Household Survey Variables

Tables 4.1 through 4.15 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 C explains how these standard errors were derived.²³

4.2.1. Person-Level Percentages

The first 11 tables (4.1 through 4.11) are for person-level percentage estimates: five tables for combined national estimates,²⁴ 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

²³As explained in Appendix C, certain estimates with too small a sample size, too high a relative standard error, 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 C. Before using one of the tables, check that your estimate is not included among these outliers.

²⁴See Appendix C for formulas to use when making national estimates using only the site sample or only the national supplemental sample.

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.²⁵

For example, suppose you are interested in the standard error for the percentage of adults in the Boston site with employer-sponsored health insurance. We know that the unweighted number of adults in the Boston site is 1,737 and that the estimated (weighted) percentage of adults with employer-sponsored insurance (and no Medicare) in Boston is about 59 percent. So, you would go to the high-intensity site table for adults (Table 4.7) and find the row with sample size equal to 1,700 and the column for percentages near 40 or 60 percent. The approximate standard error of this estimate would be 1.41 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 2,866 and that the estimated percentage (weighted) of Hispanic females with no usual source of care nationally is about 17 percent. So, you would go to the national table for Hispanics (Table 4.4) and find the row with sample size equal to 2,750 and the column for percentages near 15 or 85 percent. The approximate standard error of this estimate would be 1.16 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.

4.2.2. FIU-Level Percentages

Tables 4.12 and 4.13 present standard errors for FIU-level percentage estimates: one for combined national estimates and one for high-intensity site-specific estimates.²⁶ After producing weighted estimates on an FIU-level file, use Tables 4.1 through 4.11 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

²⁵ 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.

²⁶ See Appendix C for formulas to use when making national estimates using only the site sample or only the national supplemental sample.

weighted percentage estimates for that subgroup.

4.2.3. Continuous Variables

Tables 4.14 and 4.15 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 4.14 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:²⁷

$$\hat{R}_{person-natl} = \log_{10}(RSE) = -7.24574 + -2.02882 \log_{10}(n_u) + 1.774969 \log_{10}(n_{subw})$$

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

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

For high-intensity site-specific mean estimates at the person level, including any subgroups, you should use the following formula to first estimate the logarithm of the relative standard error:

$$\hat{R}_{person-high-int} = \log_{10}(RSE) = -0.236421 + -0.620332 \log_{10}(n_u) + 0.105884 \log_{10}(n_w) .$$

The standard error can then be approximated as:

$$\hat{SE}_{person-high-int} = \text{weighted mean} \bullet 10^{\hat{R}_{person-high-int}}$$

Table 4.15 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.

4.3. Options for Calculating Variances for Household Survey Variables

²⁷The “relative standard error” is the standard error of an estimate divided by the estimate itself.

The tables discussed in the previous section are appropriate for obtaining approximate estimates of standard errors for percents, proportions, and means. 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.²⁸ 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.²⁹

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.

Other software packages (PC-CARP and STATA, for example) use the Taylor series approximations but do not account for the Household Survey design as completely as does SUDAAN. 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.³⁰ Using survey packages that do not account for the finite population correction will produce somewhat higher variance estimates.

The alternative to the Taylor series approximations is a replication technique, such as balanced repeated replications, jackknife, or boot strapping. WESVAR uses replication techniques to estimate sampling errors but does not incorporate the finite population correction, which is used for national estimates of sampling variances based on the site or combined sample.³¹ Again, not incorporating a finite population correction factor will overestimate the variance of estimates to some extent.

4.4. How to Specify the Sample Design for Specialized Survey Software

²⁸See Appendix C 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.

³⁰Software 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 their sample design.

³¹The latest version of SUDAAN also provides for replication techniques.

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. Table 4.16 at the end of this chapter provides guidelines for the design variables to specify in SUDAAN statements for different types of estimates. (See Appendix D for sample SUDAAN code.)

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 4.16, 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.³² 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 4.16, 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 20 values: one for each of the nine certainty sites, 10 for the remaining metropolitan sites, and one to classify the nonmetropolitan sites. For these national estimates, it is also necessary to specify a second-stage sampling stratum variable: SECSTRA. For metropolitan sites in the site sample, SECSTRA is equivalent to SITE_STR as defined above. For nonmetropolitan sites in the site sample, SECSTRA is set to a constant. For the national supplement cases, SECSTRA is equivalent to STRATUM as defined above.

As stated above, you must also specify the clustering variable(s) in the NEST statement. For site-

³²In the case of the field sample, the first stage was geographical interviewing areas.

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, 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, NFSUX represents the household; for nonmetropolitan sites it represents the site.

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.³³ (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, the site sample, or augmented site sample only, 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 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.

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

³³The joint inclusion probability for a pair of sites is the probability that those two sites will occur in the same sample.

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.

TABLE 4.1
 STANDARD ERRORS FOR PERCENTAGES: COMBINED NATIONAL SAMPLE, ALL PERSONS
 (INCLUDING SUBGROUPS NOT CLASSIFIED ELSEWHERE)

Sample Size	For Percentages Near								
	5%	10%	15%	20%	25%	30%	35%	40%	50%
	or 95%	or 90%	or 85%	or 80%	or 75%	or 70%	or 65%	or 60%	
60,500	0.16%	0.22%	0.27%	0.31%	0.34%	0.37%	0.38%	0.39%	0.40%
59,000	0.16%	0.23%	0.28%	0.32%	0.35%	0.37%	0.39%	0.40%	0.40%
55,000	0.16%	0.23%	0.28%	0.32%	0.35%	0.38%	0.40%	0.41%	0.41%
50,000	0.17%	0.24%	0.29%	0.34%	0.37%	0.39%	0.41%	0.42%	0.43%
45,000	0.17%	0.25%	0.31%	0.35%	0.38%	0.41%	0.43%	0.44%	0.45%
40,000	0.18%	0.26%	0.32%	0.36%	0.40%	0.43%	0.45%	0.46%	0.47%
35,000	0.19%	0.27%	0.34%	0.38%	0.42%	0.45%	0.47%	0.48%	0.49%
32,500	0.19%	0.28%	0.35%	0.39%	0.43%	0.46%	0.48%	0.50%	0.51%
30,000	0.20%	0.29%	0.36%	0.41%	0.44%	0.47%	0.50%	0.51%	0.52%
27,500	0.21%	0.30%	0.37%	0.42%	0.46%	0.49%	0.51%	0.53%	0.54%
25,000	0.21%	0.31%	0.38%	0.43%	0.48%	0.51%	0.53%	0.55%	0.56%
22,500	0.22%	0.32%	0.40%	0.45%	0.50%	0.53%	0.55%	0.57%	0.58%
20,000	0.23%	0.34%	0.41%	0.47%	0.52%	0.55%	0.58%	0.60%	0.61%
19,000	0.24%	0.34%	0.42%	0.48%	0.53%	0.56%	0.59%	0.61%	0.62%
18,000	0.24%	0.35%	0.43%	0.49%	0.54%	0.57%	0.60%	0.62%	0.63%
17,000	0.25%	0.36%	0.44%	0.50%	0.55%	0.59%	0.61%	0.63%	0.65%
16,000	0.25%	0.37%	0.45%	0.51%	0.56%	0.60%	0.63%	0.65%	0.66%
15,000	0.26%	0.38%	0.46%	0.53%	0.58%	0.62%	0.64%	0.66%	0.68%
14,000	0.27%	0.39%	0.47%	0.54%	0.59%	0.63%	0.66%	0.68%	0.69%
13,000	0.27%	0.40%	0.49%	0.56%	0.61%	0.65%	0.68%	0.70%	0.71%
12,000	0.28%	0.41%	0.50%	0.57%	0.63%	0.67%	0.70%	0.72%	0.74%
11,000	0.29%	0.42%	0.52%	0.59%	0.65%	0.69%	0.72%	0.75%	0.76%
10,000	0.30%	0.44%	0.54%	0.61%	0.67%	0.72%	0.75%	0.77%	0.79%
9,000	0.31%	0.46%	0.56%	0.64%	0.70%	0.75%	0.78%	0.80%	0.82%
8,000	0.33%	0.48%	0.58%	0.67%	0.73%	0.78%	0.82%	0.84%	0.86%
7,000	0.35%	0.50%	0.61%	0.70%	0.77%	0.82%	0.86%	0.89%	0.90%
6,000	0.37%	0.53%	0.65%	0.74%	0.82%	0.87%	0.91%	0.94%	0.96%
5,000	0.39%	0.57%	0.70%	0.80%	0.87%	0.93%	0.98%	1.01%	1.03%
4,000	0.43%	0.62%	0.76%	0.87%	0.95%	1.02%	1.06%	1.10%	1.12%

TABLE 4.2
 STANDARD ERRORS FOR PERCENTAGES: COMBINED NATIONAL SAMPLE, ADULTS
 (INCLUDING SUBGROUPS OTHER THAN HISPANICS OR BLACKS)

Sample Size	For Percentages Near								
	5%	10%	15%	20%	25%	30%	35%	40%	50%
	or 95%	or 90%	or 85%	or 80%	or 75%	or 70%	or 65%	or 60%	
50,000	0.16%	0.23%	0.29%	0.33%	0.36%	0.39%	0.41%	0.42%	0.43%
45,000	0.17%	0.24%	0.30%	0.34%	0.38%	0.40%	0.42%	0.44%	0.45%
40,000	0.18%	0.26%	0.31%	0.36%	0.40%	0.42%	0.44%	0.46%	0.47%
35,000	0.19%	0.27%	0.33%	0.38%	0.42%	0.45%	0.47%	0.48%	0.50%
30,000	0.20%	0.29%	0.35%	0.40%	0.44%	0.48%	0.50%	0.52%	0.53%
25,000	0.21%	0.31%	0.38%	0.44%	0.48%	0.51%	0.54%	0.56%	0.57%
20,000	0.23%	0.34%	0.42%	0.48%	0.53%	0.56%	0.59%	0.61%	0.63%
17,500	0.25%	0.36%	0.44%	0.50%	0.55%	0.59%	0.62%	0.64%	0.66%
15,000	0.26%	0.38%	0.47%	0.54%	0.59%	0.63%	0.66%	0.69%	0.70%
12,500	0.28%	0.41%	0.51%	0.58%	0.64%	0.68%	0.71%	0.74%	0.76%
10,000	0.31%	0.45%	0.56%	0.64%	0.70%	0.75%	0.78%	0.81%	0.83%
9,000	0.33%	0.47%	0.58%	0.66%	0.73%	0.78%	0.82%	0.85%	0.87%
8,000	0.34%	0.50%	0.61%	0.70%	0.76%	0.82%	0.86%	0.89%	0.91%
7,000	0.36%	0.53%	0.64%	0.74%	0.81%	0.86%	0.91%	0.94%	0.96%
6,000	0.39%	0.56%	0.69%	0.78%	0.86%	0.92%	0.97%	1.00%	1.03%
5,000	0.42%	0.60%	0.74%	0.85%	0.93%	0.99%	1.04%	1.08%	1.11%
4,000	0.46%	0.66%	0.81%	0.93%	1.02%	1.09%	1.14%	1.18%	1.21%
3,000	0.51%	0.74%	0.91%	1.04%	1.15%	1.22%	1.29%	1.33%	1.36%
2,000	0.61%	0.88%	1.08%	1.23%	1.35%	1.45%	1.52%	1.57%	1.61%
1,000	0.81%	1.17%	1.44%	1.64%	1.80%	1.93%	2.02%	2.09%	2.14%

TABLE 4.3
 STANDARD ERRORS FOR PERCENTAGES: COMBINED NATIONAL SAMPLE, CHILDREN
 (INCLUDING SUBGROUPS OTHER THAN HISPANICS OR BLACKS)

Sample Size	For Percentages Near								
	5% or 95%	10% or 90%	15% or 85%	20% or 80%	25% or 75%	30% or 70%	35% or 65%	40% or 60%	50%
10,700	0.29%	0.41%	0.50%	0.57%	0.62%	0.66%	0.70%	0.72%	0.74%
10,000	0.30%	0.43%	0.52%	0.59%	0.64%	0.69%	0.72%	0.74%	0.77%
9,500	0.31%	0.44%	0.53%	0.60%	0.66%	0.71%	0.74%	0.76%	0.79%
9,000	0.32%	0.45%	0.55%	0.62%	0.68%	0.72%	0.76%	0.78%	0.81%
8,500	0.33%	0.47%	0.56%	0.64%	0.70%	0.75%	0.78%	0.81%	0.83%
8,000	0.34%	0.48%	0.58%	0.66%	0.72%	0.77%	0.81%	0.83%	0.86%
7,500	0.35%	0.50%	0.60%	0.68%	0.74%	0.79%	0.83%	0.86%	0.89%
7,000	0.36%	0.51%	0.62%	0.70%	0.77%	0.82%	0.86%	0.89%	0.92%
6,500	0.38%	0.53%	0.64%	0.73%	0.80%	0.85%	0.89%	0.92%	0.95%
6,000	0.39%	0.55%	0.67%	0.76%	0.83%	0.89%	0.93%	0.96%	0.99%
5,500	0.41%	0.58%	0.70%	0.79%	0.87%	0.93%	0.97%	1.00%	1.03%
5,000	0.43%	0.61%	0.74%	0.83%	0.91%	0.97%	1.02%	1.05%	1.08%
4,500	0.45%	0.64%	0.77%	0.88%	0.96%	1.02%	1.07%	1.11%	1.14%
4,000	0.48%	0.68%	0.82%	0.93%	1.02%	1.09%	1.14%	1.18%	1.21%
3,500	0.51%	0.73%	0.88%	1.00%	1.09%	1.16%	1.22%	1.26%	1.30%
3,000	0.55%	0.78%	0.95%	1.08%	1.18%	1.25%	1.31%	1.36%	1.40%
2,500	0.61%	0.86%	1.04%	1.18%	1.29%	1.37%	1.44%	1.49%	1.53%
2,000	0.68%	0.96%	1.16%	1.32%	1.44%	1.54%	1.61%	1.66%	1.71%
1,500	0.78%	1.11%	1.34%	1.52%	1.66%	1.77%	1.86%	1.92%	1.98%
1,000	0.96%	1.36%	1.64%	1.86%	2.04%	2.17%	2.28%	2.35%	2.43%

TABLE 4.4
 STANDARD ERRORS FOR PERCENTAGES: COMBINED NATIONAL SAMPLE,
 HISPANICS (ANY RACE, INCLUDING ALL SUBGROUPS)

Sample Size	For Percentages Near								
	5% or 95%	10% or 90%	15% or 85%	20% or 80%	25% or 75%	30% or 70%	35% or 65%	40% or 60%	50%
5,500	0.49%	0.73%	0.92%	1.06%	1.17%	1.26%	1.32%	1.36%	1.39%
5,000	0.50%	0.76%	0.95%	1.10%	1.21%	1.30%	1.37%	1.41%	1.44%
4,500	0.52%	0.79%	0.98%	1.14%	1.26%	1.35%	1.41%	1.46%	1.49%
4,000	0.54%	0.82%	1.02%	1.18%	1.31%	1.40%	1.47%	1.52%	1.55%
3,500	0.57%	0.86%	1.07%	1.24%	1.37%	1.47%	1.54%	1.59%	1.62%
3,000	0.60%	0.90%	1.13%	1.30%	1.44%	1.55%	1.62%	1.68%	1.71%
2,750	0.62%	0.93%	1.16%	1.34%	1.48%	1.59%	1.67%	1.73%	1.76%
2,500	0.64%	0.96%	1.20%	1.39%	1.53%	1.64%	1.73%	1.78%	1.82%
2,250	0.66%	1.00%	1.24%	1.44%	1.59%	1.70%	1.79%	1.85%	1.88%
2,000	0.69%	1.04%	1.30%	1.50%	1.65%	1.77%	1.86%	1.92%	1.96%
1,750	0.72%	1.09%	1.36%	1.57%	1.73%	1.86%	1.95%	2.01%	2.05%
1,500	0.76%	1.15%	1.43%	1.65%	1.82%	1.96%	2.06%	2.12%	2.16%
1,000	0.88%	1.32%	1.64%	1.90%	2.10%	2.25%	2.36%	2.44%	2.48%

TABLE 4.5
 STANDARD ERRORS FOR PERCENTAGES: COMBINED NATIONAL SAMPLE,
 NON-HISPANIC BLACKS (INCLUDING ALL SUBGROUPS)

Sample Size	For Percentages Near								
	5% or 95%	10% or 90%	15% or 85%	20% or 80%	25% or 75%	30% or 70%	35% or 65%	40% or 60%	50%
7,000	0.43%	0.64%	0.80%	0.92%	1.02%	1.10%	1.15%	1.19%	1.22%
6,500	0.44%	0.66%	0.82%	0.95%	1.05%	1.12%	1.18%	1.22%	1.25%
6,000	0.45%	0.67%	0.84%	0.97%	1.07%	1.15%	1.21%	1.25%	1.28%
5,500	0.46%	0.69%	0.86%	1.00%	1.10%	1.18%	1.24%	1.29%	1.32%
5,000	0.48%	0.71%	0.89%	1.03%	1.13%	1.22%	1.28%	1.33%	1.36%
4,500	0.49%	0.74%	0.92%	1.06%	1.17%	1.26%	1.33%	1.37%	1.41%
4,250	0.50%	0.75%	0.94%	1.08%	1.19%	1.28%	1.35%	1.40%	1.43%
4,000	0.51%	0.76%	0.95%	1.10%	1.22%	1.31%	1.38%	1.42%	1.46%
3,750	0.52%	0.78%	0.97%	1.12%	1.24%	1.33%	1.40%	1.45%	1.49%
3,500	0.53%	0.80%	0.99%	1.15%	1.27%	1.36%	1.43%	1.48%	1.52%
3,250	0.54%	0.82%	1.02%	1.17%	1.30%	1.40%	1.47%	1.52%	1.56%
3,000	0.56%	0.84%	1.04%	1.20%	1.33%	1.43%	1.50%	1.56%	1.60%
2,000	0.63%	0.95%	1.18%	1.37%	1.51%	1.62%	1.71%	1.77%	1.81%
1,000	0.79%	1.18%	1.47%	1.70%	1.88%	2.02%	2.12%	2.20%	2.25%

TABLE 4.6
 STANDARD ERRORS FOR PERCENTAGES: HIGH-INTENSITY SITES, ALL PERSONS
 (INCLUDING SUBGROUPS NOT CLASSIFIED ELSEWHERE)

Sample Size	For Percentages Near								
	5% or 95%	10% or 90%	15% or 85%	20% or 80%	25% or 75%	30% or 70%	35% or 65%	40% or 60%	50%
2,650	0.54%	0.75%	0.90%	1.01%	1.10%	1.17%	1.22%	1.26%	1.29%
2,600	0.54%	0.76%	0.91%	1.02%	1.11%	1.18%	1.23%	1.27%	1.30%
2,500	0.55%	0.77%	0.92%	1.04%	1.13%	1.20%	1.25%	1.29%	1.32%
2,400	0.56%	0.78%	0.94%	1.06%	1.15%	1.22%	1.27%	1.31%	1.34%
2,300	0.57%	0.79%	0.95%	1.07%	1.17%	1.24%	1.29%	1.33%	1.37%
2,200	0.58%	0.81%	0.97%	1.09%	1.19%	1.26%	1.32%	1.36%	1.39%
2,100	0.59%	0.82%	0.99%	1.11%	1.21%	1.29%	1.34%	1.38%	1.42%
2,000	0.60%	0.84%	1.01%	1.14%	1.24%	1.31%	1.37%	1.41%	1.45%
1,900	0.62%	0.86%	1.03%	1.16%	1.26%	1.34%	1.40%	1.44%	1.48%
1,800	0.63%	0.88%	1.05%	1.19%	1.29%	1.37%	1.43%	1.47%	1.51%
1,700	0.64%	0.90%	1.08%	1.22%	1.32%	1.40%	1.47%	1.51%	1.55%
1,600	0.66%	0.92%	1.11%	1.25%	1.35%	1.44%	1.50%	1.55%	1.59%
1,500	0.68%	0.95%	1.14%	1.28%	1.39%	1.48%	1.54%	1.59%	1.63%
1,400	0.70%	0.97%	1.17%	1.32%	1.43%	1.52%	1.59%	1.63%	1.68%
1,300	0.72%	1.00%	1.20%	1.36%	1.47%	1.57%	1.64%	1.68%	1.73%
1,200	0.74%	1.04%	1.24%	1.40%	1.52%	1.62%	1.69%	1.74%	1.78%
1,100	0.77%	1.07%	1.29%	1.45%	1.58%	1.68%	1.75%	1.80%	1.85%
1,000	0.80%	1.12%	1.34%	1.51%	1.64%	1.74%	1.82%	1.88%	1.92%
900	0.84%	1.17%	1.40%	1.58%	1.71%	1.82%	1.90%	1.96%	2.01%
800	0.88%	1.22%	1.47%	1.65%	1.80%	1.91%	2.00%	2.05%	2.11%
700	0.93%	1.29%	1.55%	1.75%	1.90%	2.02%	2.11%	2.17%	2.23%
600	0.99%	1.38%	1.65%	1.86%	2.02%	2.15%	2.24%	2.31%	2.37%
500	1.06%	1.48%	1.78%	2.01%	2.18%	2.32%	2.42%	2.49%	2.55%
400	1.16%	1.63%	1.95%	2.20%	2.39%	2.54%	2.65%	2.73%	2.80%
300	1.31%	1.83%	2.20%	2.47%	2.69%	2.86%	2.98%	3.07%	3.15%
200	NA	2.16%	2.59%	2.92%	3.18%	3.38%	3.52%	3.63%	3.72%
100	NA	2.88%	3.45%	3.89%	4.23%	4.49%	4.69%	4.83%	4.95%

Note: NA - Not Applicable

TABLE 4.7
 STANDARD ERRORS FOR PERCENTAGES: HIGH-INTENSITY SITES, ADULTS
 (INCLUDING SUBGROUPS OTHER THAN HISPANICS OR BLACKS)

Sample Size	For Percentages Near								
	5% or 95%	10% or 90%	15% or 85%	20% or 80%	25% or 75%	30% or 70%	35% or 65%	40% or 60%	50%
2,200	0.54%	0.75%	0.90%	1.01%	1.10%	1.16%	1.21%	1.25%	1.28%
2,100	0.55%	0.77%	0.92%	1.03%	1.12%	1.19%	1.24%	1.28%	1.31%
2,000	0.57%	0.78%	0.94%	1.05%	1.14%	1.21%	1.27%	1.31%	1.34%
1,900	0.58%	0.80%	0.96%	1.08%	1.17%	1.24%	1.30%	1.34%	1.37%
1,800	0.59%	0.82%	0.98%	1.11%	1.20%	1.27%	1.33%	1.37%	1.40%
1,700	0.61%	0.84%	1.01%	1.13%	1.23%	1.31%	1.36%	1.41%	1.44%
1,600	0.63%	0.87%	1.04%	1.17%	1.27%	1.34%	1.40%	1.44%	1.48%
1,500	0.64%	0.89%	1.07%	1.20%	1.30%	1.38%	1.44%	1.49%	1.53%
1,400	0.67%	0.92%	1.10%	1.24%	1.35%	1.43%	1.49%	1.53%	1.57%
1,300	0.69%	0.95%	1.14%	1.28%	1.39%	1.48%	1.54%	1.59%	1.63%
1,200	0.71%	0.99%	1.18%	1.33%	1.44%	1.53%	1.60%	1.65%	1.69%
1,100	0.74%	1.03%	1.23%	1.38%	1.50%	1.59%	1.66%	1.71%	1.76%
1,000	0.77%	1.07%	1.28%	1.44%	1.57%	1.66%	1.74%	1.79%	1.83%
900	0.81%	1.13%	1.35%	1.51%	1.64%	1.74%	1.82%	1.87%	1.92%
800	0.86%	1.19%	1.42%	1.60%	1.73%	1.84%	1.92%	1.98%	2.03%
700	0.91%	1.26%	1.51%	1.70%	1.84%	1.95%	2.04%	2.10%	2.15%
600	0.98%	1.35%	1.62%	1.82%	1.97%	2.10%	2.19%	2.25%	2.31%
500	1.06%	1.47%	1.76%	1.98%	2.15%	2.28%	2.38%	2.45%	2.51%
400	1.17%	1.63%	1.94%	2.19%	2.37%	2.52%	2.63%	2.71%	2.78%
300	1.34%	1.85%	2.22%	2.49%	2.70%	2.87%	3.00%	3.08%	3.16%
200	NA	2.23%	2.66%	2.99%	3.25%	3.45%	3.60%	3.71%	3.80%
100	NA	NA	3.65%	4.11%	4.46%	4.73%	4.94%	5.09%	5.22%

Note: NA - Not Applicable

TABLE 4.8
 STANDARD ERRORS FOR PERCENTAGES: HIGH-INTENSITY SITES, CHILDREN
 (INCLUDING SUBGROUPS OTHER THAN HISPANICS OR BLACKS)

Sample Size	For Percentages Near								
	5% or 95%	10% or 90%	15% or 85%	20% or 80%	25% or 75%	30% or 70%	35% or 65%	40% or 60%	50%
500	1.11%	1.57%	1.89%	2.14%	2.32%	2.46%	2.57%	2.64%	2.68%
400	1.24%	1.74%	2.10%	2.37%	2.58%	2.74%	2.85%	2.93%	2.98%
300	1.41%	2.00%	2.41%	2.72%	2.95%	3.13%	3.27%	3.35%	3.41%
200	NA	2.42%	2.91%	3.29%	3.58%	3.79%	3.95%	4.06%	4.13%
100	NA	NA	4.04%	4.56%	4.96%	5.27%	5.49%	5.64%	5.73%

Note: NA - Not Applicable

TABLE 4.9
 STANDARD ERRORS FOR PERCENTAGES: HIGH-INTENSITY SITES,
 HISPANICS (ANY RACE, INCLUDING ALL SUBGROUPS)

Sample Size	For Percentages Near								
	5% or 95%	10% or 90%	15% or 85%	20% or 80%	25% or 75%	30% or 70%	35% or 65%	40% or 60%	50%
1,050	0.82%	1.18%	1.44%	1.65%	1.81%	1.94%	2.04%	2.11%	2.19%
1,000	0.83%	1.20%	1.47%	1.68%	1.85%	1.98%	2.08%	2.16%	2.24%
900	0.87%	1.26%	1.54%	1.76%	1.93%	2.07%	2.17%	2.25%	2.34%
800	0.91%	1.32%	1.61%	1.84%	2.03%	2.17%	2.28%	2.37%	2.45%
700	0.97%	1.39%	1.70%	1.95%	2.14%	2.29%	2.41%	2.50%	2.59%
600	1.03%	1.49%	1.82%	2.08%	2.28%	2.44%	2.57%	2.66%	2.76%
500	1.11%	1.60%	1.96%	2.24%	2.46%	2.64%	2.77%	2.87%	2.98%
400	1.22%	1.76%	2.15%	2.46%	2.70%	2.89%	3.04%	3.15%	3.27%
300	1.37%	1.98%	2.42%	2.77%	3.04%	3.26%	3.43%	3.55%	3.68%
200	NA	2.34%	2.87%	3.27%	3.60%	3.85%	4.05%	4.20%	4.35%
100	NA	NA	3.82%	4.37%	4.80%	5.14%	5.41%	5.61%	5.81%

Note: NA - Not Applicable

TABLE 4.10
 STANDARD ERRORS FOR PERCENTAGES: HIGH-INTENSITY SITES,
 NON-HISPANIC BLACKS (INCLUDING ALL SUBGROUPS)

Sample Size	For Percentages Near								
	5% or 95%	10% or 90%	15% or 85%	20% or 80%	25% or 75%	30% or 70%	35% or 65%	40% or 60%	50%
550	1.09%	1.58%	1.93%	2.22%	2.45%	2.63%	2.78%	2.90%	3.04%
500	1.13%	1.63%	2.01%	2.30%	2.54%	2.73%	2.89%	3.01%	3.16%
400	1.23%	1.78%	2.19%	2.51%	2.77%	2.98%	3.15%	3.28%	3.44%
300	1.37%	1.99%	2.44%	2.80%	3.09%	3.33%	3.52%	3.66%	3.84%
200	NA	2.33%	2.86%	3.27%	3.61%	3.89%	4.11%	4.28%	4.49%
100	NA	NA	3.73%	4.28%	4.73%	5.09%	5.37%	5.60%	5.87%

Note: NA - Not Applicable

TABLE 4.11
 STANDARD ERRORS FOR PERCENTAGES: LOW-INTENSITY SITES,
 ALL PERSONS (INCLUDING ALL SUBGROUPS)

Sample Size	For Percentages Near								
	5% or 95%	10% or 90%	15% or 85%	20% or 80%	25% or 75%	30% or 70%	35% or 65%	40% or 60%	50%
820	0.99%	1.38%	1.67%	1.89%	2.07%	2.21%	2.32%	2.41%	2.50%
800	0.99%	1.40%	1.68%	1.91%	2.09%	2.23%	2.34%	2.43%	2.52%
700	1.04%	1.46%	1.76%	1.99%	2.18%	2.32%	2.44%	2.53%	2.63%
600	1.09%	1.53%	1.85%	2.09%	2.29%	2.44%	2.57%	2.66%	2.77%
500	1.15%	1.62%	1.96%	2.22%	2.42%	2.59%	2.72%	2.82%	2.93%
400	1.24%	1.74%	2.10%	2.38%	2.60%	2.78%	2.92%	3.03%	3.15%
300	1.36%	1.91%	2.31%	2.61%	2.86%	3.05%	3.20%	3.32%	3.46%
200	NA	2.18%	2.63%	2.98%	3.25%	3.48%	3.65%	3.78%	3.94%
100	NA	2.72%	3.29%	3.72%	4.07%	4.35%	4.57%	4.74%	4.93%

Note: NA - Not Applicable

TABLE 4.12
 STANDARD ERRORS FOR PERCENTAGES: COMBINED NATIONAL SAMPLE,
 ALL FAMILIES (INCLUDING ALL SUBGROUPS)

Sample Size	For Percentages Near								
	5% or 95%	10% or 90%	15% or 85%	20% or 80%	25% or 75%	30% or 70%	35% or 65%	40% or 60%	50%
32,000	0.18%	0.26%	0.32%	0.36%	0.39%	0.42%	0.44%	0.45%	0.46%
30,000	0.19%	0.27%	0.33%	0.37%	0.41%	0.43%	0.45%	0.47%	0.48%
25,000	0.20%	0.29%	0.36%	0.41%	0.45%	0.48%	0.50%	0.51%	0.52%
20,000	0.23%	0.33%	0.40%	0.46%	0.50%	0.53%	0.56%	0.57%	0.59%
17,500	0.24%	0.35%	0.43%	0.49%	0.53%	0.57%	0.59%	0.61%	0.63%
15,000	0.26%	0.38%	0.46%	0.53%	0.58%	0.61%	0.64%	0.66%	0.68%
10,000	0.32%	0.46%	0.57%	0.64%	0.70%	0.75%	0.79%	0.81%	0.83%
7,500	0.37%	0.54%	0.65%	0.74%	0.81%	0.87%	0.91%	0.94%	0.96%
5,000	0.45%	0.66%	0.80%	0.91%	1.00%	1.06%	1.11%	1.15%	1.17%
2,500	0.64%	0.93%	1.13%	1.29%	1.41%	1.50%	1.57%	1.62%	1.66%

TABLE 4.13
 STANDARD ERRORS FOR PERCENTAGES: HIGH-INTENSITY SITES, ALL FAMILIES
 (INCLUDING ALL SUBGROUPS)

Sample Size	For Percentages Near								
	5%	10%	15%	20%	25%	30%	35%	40%	50%
	or 95%	or 90%	or 85%	or 80%	or 75%	or 70%	or 65%	or 60%	
1,200	0.99%	1.39%	1.70%	1.94%	2.15%	2.34%	2.50%	2.64%	2.89%
1,150	1.01%	1.42%	1.73%	1.98%	2.20%	2.39%	2.55%	2.70%	2.95%
1,100	1.04%	1.46%	1.77%	2.03%	2.25%	2.44%	2.61%	2.76%	3.02%
1,050	1.06%	1.49%	1.81%	2.08%	2.30%	2.50%	2.67%	2.83%	3.09%
1,000	1.09%	1.53%	1.86%	2.13%	2.36%	2.56%	2.74%	2.90%	3.16%
950	1.12%	1.57%	1.91%	2.18%	2.42%	2.63%	2.81%	2.97%	3.24%
900	1.15%	1.61%	1.96%	2.24%	2.49%	2.70%	2.89%	3.05%	3.33%
850	1.18%	1.66%	2.01%	2.31%	2.56%	2.78%	2.97%	3.14%	3.43%
800	1.22%	1.71%	2.08%	2.38%	2.64%	2.86%	3.06%	3.24%	3.54%
750	1.26%	1.76%	2.15%	2.46%	2.72%	2.96%	3.16%	3.35%	3.65%
700	1.30%	1.83%	2.22%	2.54%	2.82%	3.06%	3.27%	3.46%	3.78%
650	1.35%	1.90%	2.30%	2.64%	2.93%	3.18%	3.40%	3.59%	3.92%
600	1.41%	1.97%	2.40%	2.75%	3.05%	3.31%	3.54%	3.74%	4.08%
550	1.47%	2.06%	2.51%	2.87%	3.18%	3.45%	3.69%	3.91%	4.27%
500	1.54%	2.16%	2.63%	3.01%	3.34%	3.62%	3.88%	4.10%	4.47%
450	1.62%	2.28%	2.77%	3.17%	3.52%	3.82%	4.09%	4.32%	4.72%
400	1.72%	2.42%	2.94%	3.37%	3.73%	4.05%	4.33%	4.58%	5.00%
350	1.84%	2.59%	3.14%	3.60%	3.99%	4.33%	4.63%	4.90%	5.35%

TABLE 4.14
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
Overall						
ERUSENX	HP1:c221:Number of ER visits w/o hosp adm	60,446	263,489	0.30	0.006	3.27
DRVISNX	HP1:c311:Number of doctor visits	60,446	263,489	3.45	0.030	3.09
MPVISNX	HP1:c331:Number of medical profssonal visits	60,446	263,489	0.24	0.010	10.01
LSTWATX	HP1:CV>Last visit, waiting time in mins	43,230	184,421	25.25	0.737	24.49
PCS12	HP1:CV:SF-12 Physical Component Summary	49,807	195,185	48.94	0.096	4.30
WAGEHRX	HP1:CV:Hourly wage	32,143	119,556	13.32	0.098	4.95
FAMINCX	HF1:CV:Annual family income	58,619	257,512	36,843.19	443.829	13.67
AGEX	HP1:a301:Age	60,446	263,489	35.55	0.214	5.70
HIGRADX	HP1:a601:Education	49,806	195,182	12.91	0.042	12.00
Adults						
ERUSENX	HP1:c221:Number of ER visits w/o hosp adm	49,807	195,185	0.28	0.006	3.06
DRVISNX	HP1:c311:Number of doctor visits	49,807	195,185	3.55	0.035	3.04
MPVISNX	HP1:c331:Number of medical profssonal visits	49,807	195,185	0.24	0.010	8.22
LSTWATX	HP1:CV>Last visit, waiting time in mins	35,409	135,029	25.08	0.775	22.41
PCS12	HP1:CV:SF-12 Physical Component Summary	49,807	195,185	48.94	0.096	4.30
WAGEHRX	HP1:CV:Hourly wage	32,143	119,556	13.32	0.098	4.95
FAMINCX	HF1:CV:Annual family income	48,281	190,763	35,714.70	433.902	11.02
AGEX	HP1:a301:Age	49,807	195,185	45.02	0.162	4.32
HIGRADX	HP1:a601:Education	49,806	195,182	12.91	0.042	12.00
Children						
ERUSENX	HP1:c221:Number of ER visits w/o hosp adm	10,639	68,304	0.35	0.011	1.81
DRVISNX	HP1:c311:Number of doctor visits	10,639	68,304	3.15	0.044	1.59
MPVISNX	HP1:c331:Number of medical profssonal visits	10,639	68,304	0.23	0.012	3.06
LSTWATX	HP1:CV>Last visit, waiting time in mins	7,821	49,392	25.70	0.761	4.63
FAMINCX	HF1:CV:Annual family income	10,338	66,749	40,068.32	535.522	3.34
AGEX	HP1:a301:Age	10,639	68,304	8.50	0.062	1.59

TABLE 4.14
 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
Hispanics						
ERUSENX	HP1:c221:Number of ER visits w/o hosp adm	5,369	28,784	0.29	0.018	2.67
DRVISNX	HP1:c311:Number of doctor visits	5,369	28,784	2.87	0.086	2.37
MPVISNX	HP1:c331:Number of medical profssional visits	5,369	28,784	0.18	0.021	5.45
LSTWATX	HP1:CV:Last visit, waiting time in mins	3,201	16,428	38.42	2.909	11.38
PCS12	HP1:CV:SF-12 Physical Component Summary	4,171	19,573	49.18	0.175	1.35
WAGEHRX	HP1:CV:Hourly wage	2,557	11,731	11.06	0.213	2.37
FAMINCX	HF1:CV:Annual family income	5,275	28,389	25,401.05	575.951	3.02
AGEX	HP1:a301:Age	5,369	28,784	29.39	1.548	32.59
HIGRADX	HP1:a601:Education	4,171	19,573	11.24	0.132	6.44
Non-Hispanic Blacks						
ERUSENX	HP1:c221:Number of ER visits w/o hosp adm	6,961	33,309	0.47	0.018	2.31
DRVISNX	HP1:c311:Number of doctor visits	6,961	33,309	3.47	0.089	2.87
MPVISNX	HP1:c331:Number of medical profssional visits	6,961	33,309	0.26	0.014	1.97
LSTWATX	HP1:CV:Last visit, waiting time in mins	4,768	22,260	31.20	0.953	3.01
PCS12	HP1:CV:SF-12 Physical Component Summary	5,436	23,097	47.03	0.389	7.24
WAGEHRX	HP1:CV:Hourly wage	3,304	13,200	11.23	0.215	3.43
FAMINCX	HF1:CV:Annual family income	6,889	33,050	23,611.50	779.953	8.06
AGEX	HP1:a301:Age	6,961	33,309	32.14	0.529	4.32
HIGRADX	HP1:a601:Education	5,436	23,097	12.22	0.098	7.84

Note: Estimates computed combining data from site and supplemental samples.

TABLE 4.15
 STANDARD ERRORS FOR MEANS: COMBINED NATIONAL SAMPLE, ALL FAMILIES,
 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
A: Overall						
FAMINCX	HF1:CV:Annual family income	32,732	121,756	31757.40	362.024	5.55
CENSINX	HF1:CV:Annual Census family income	32,732	121,756	41161.68	479.973	6.84
POVLEV	HF1:CV:1996 Census family poverty level	32,732	121,756	12055.32	65.882	8.36
B: Hispanics						
FAMINCX	HF1:CV:Annual family income	2,787	10,890	21967.59	493.095	1.41
CENSINX	HF1:CV:Annual Census family income	2,787	10,890	32313.17	745.591	1.84
POVLEV	HF1:CV:1996 Census family poverty level	2,787	10,890	13893.85	256.294	6.98
C: Non-Hispanic Blacks						
FAMINCX	HF1:CV:Annual family income	4,221	15,810	20751.36	666.520	4.23
CENSINX	HF1:CV:Annual Census family income	4,221	15,810	29689.95	958.935	5.22
POVLEV	HF1:CV:1996 Census family poverty level	4,221	15,810	12519.50	138.461	4.22

TABLE 4.16

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)
DESIGN=	WR	UNEQWOR	WR	UNEQWOR
NEST	SITE_STR FSUX	PSTRATA PPSU SECSTRA NFSUX	STRATUM NFSUX	PSTRATA PPSU SECSTRA NFSUX
TOTCNT	Not Applicable	PSTRTOT3 _ZERO_ _MINUS1_ _ZERO_	Not Applicable	PSTRTOT3 _ZERO_ _MINUS1_ _ZERO_
JOINTPROB	Not Applicable	P1X P2X P3X P4X P5X P6X P7X	Not Applicable	P1X P2X P3X P4X P5X P6X P7X
WEIGHT	WTPER1 WTSRM1 or WTFAM1	WTPER2 WTSRM2 or WTFAM2	WTPER3 WTSRM3 or WTFAM3	WTPER4 WTSRM4 or WTFAM4
DDF=	Not Applicable	6500	Not Applicable	6500

Chapter 5

Variable Construction and Editing

The CTS Public Use File contains three types of variables: unedited variables, edited variables, and constructed variables created from edited or unedited variables.³⁴ 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 annotated questionnaire and flowcharts provided in Appendix A and Appendix B 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. This section describes the editing that followed the Household Survey CATI 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(SURG), 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 SURG 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.”

³⁴In 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.³⁵ 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 variables had few incidences of missing values (under 4 percent, except for income-related variables, which had nonresponse rates as high as 25 percent). 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 1.1 percent of the values for these variables were imputed.

³⁵In 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
Household Survey Variables	
Section A:	
Education	HIGRADX
Section B:	
Characteristics of private health insurance plans	PRVSIG1-PRVPAY1, PRVSIG2-PRVPAY2, and PRVSIG3-PRVPAY3
Medicaid and state insurance plans (imputation performed at the plan-level)	MCDSIGN, MCDREF, MCDLST, MCDHMO, MCDPAY, STSIGN, STREF, STLST, STHMO, and STPAY
Characteristics of Medicare (imputation performed at the person-level)	MCRSIGP, MCRREFP, MCRLSTP, MCRHMOP, and MCRPAYP
Section C:	
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
Home care	NURCARE
Section E:	
General health condition	GENHLH
Component variables for the SF-12	LMTMACT -- FLDOWN
Summary variables (PCS-12 and MCS-12)	
Section F:	
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, and EMPMULT -- OFRBOTH
Section G:	
Family income and race	FAMINCX and RACEREX

5.1.3. Editing for Confidentiality

Data in the Public Use File have been somewhat 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, constructing new variables based on the original ones, and “switching” data. 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 a601 (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.”

5.1.3.4. Data Switching

Several of the sites include areas from multiple states. When this occurs the sub-site areas defined by the combination of state and site identifiers may have populations sufficiently small that respondents could be identified. Therefore, in some of these cross-state sites, state identifiers have been altered through a “data switching” procedure. This involves switching the state of residence for a portion of the cases within these sites. The resulting uncertainty about the “true” geographic location for an individual case reduces the likelihood that an individual could correctly be identified using the information on the file. This technique introduces some measurement error for researchers who use the state identifier directly or to merge in secondary data. For national population analysis, data switching is unlikely to have any significant effect on results.

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 Public 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 Public Use File were obtained directly from survey respondents via the Household Survey CATI questions. 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 Public 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 Public 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 54,371 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 56,798 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.)

TABLE 5.2

ADDITIONAL INFORMATION ON IDENTIFICATION VARIABLES

Variable	Additional Information
Household Survey Variables	
HHIDX	HHIDX is the 7-digit identifier for the household. There are 26,747 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 32,732 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 60,446 unique values of PERSIDX, which identify the 60,446 records on the file. PERSIDX was constructed by concatenating the variables CSIDX and PID.
KIDID	<p>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.</p> <p>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.</p>
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 Public 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 5.3

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
FIU # 1								
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	-	-	-	-	-	-	-	-
FIU # 2								
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
FIU # 3								
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 Public 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 32,732 family insurance units on the Public 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 an 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 Public Use File.

TABLE 5.4
TWO HYPOTHETICAL FAMILY INSURANCE UNITS

FIU Member	CSIDX	PI D	NPERX	AGEX	GENHLH	FAMINCX	SEX	RELATEX	FIUFLAG
Family Informant	10000010	1	5	43	1	64885	1	0	1
Spouse	10000010	2	5	41	4	64885	2	2	0
Daughter	10000010	3	5	14	5	64885	2	3	0
Family Informant	10000020	1	2	57	2	46500	2	0	1
Spouse	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 Public 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																				
Household Survey, Section A Variables: Demographic Characteristics and Household Composition																					
AGEX	The variable AGEX indicates the person's age. There are 10,647 persons on the file with AGEX less than 18. This includes the 10,639 randomly selected children (indicated by KIDFLAG=1) plus 8 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.																				
Household Survey, Section B Variables: Health Insurance Coverage																					
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> <table border="0"> <tr><td>1</td><td>Medicare</td></tr> <tr><td>2</td><td>Medicare and Medigap</td></tr> <tr><td>3</td><td>Medicare and other public</td></tr> <tr><td>4</td><td>Private, employment-related</td></tr> <tr><td>5</td><td>Private, direct purchase</td></tr> <tr><td>6</td><td>Private, coverage provided by someone outside the family</td></tr> <tr><td>7</td><td>Military insurance (e.g., CHAMPUS, CHAMP-VA, TRICARE, VA, etc.)</td></tr> <tr><td>8</td><td>Medicaid</td></tr> <tr><td>9</td><td>Other public coverage</td></tr> <tr><td>10</td><td>Uninsured</td></tr> </table> <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> <p>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 nonelderly Medicaid population estimates, the variable MCAID should be used rather than INSTYPE. Population estimates for the elderly with Medicare and Medicaid should use MCRMCD.</p>	1	Medicare	2	Medicare and Medigap	3	Medicare and other public	4	Private, employment-related	5	Private, direct purchase	6	Private, coverage provided by someone outside the family	7	Military insurance (e.g., CHAMPUS, CHAMP-VA, TRICARE, VA, etc.)	8	Medicaid	9	Other public coverage	10	Uninsured
1	Medicare																				
2	Medicare and Medigap																				
3	Medicare and other public																				
4	Private, employment-related																				
5	Private, direct purchase																				
6	Private, coverage provided by someone outside the family																				
7	Military insurance (e.g., CHAMPUS, CHAMP-VA, TRICARE, VA, etc.)																				
8	Medicaid																				
9	Other public coverage																				
10	Uninsured																				

TABLE 5.6

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

Variable	Additional Information
PRVSIG1-3 PRVREF1-3 PRVLST1-3 PRVHMO1-3 PRVPAY1-3 MCDSIGN MCDREF MCDLST MCDHMO MCDPAY STSIGN STREF STLST STHMO STPAY 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, MCDSIGN, MCDREF, MCDLST, MCDHMO, MCDPAY, STSIGN, STREF, STLST, STHMO, and STPAY. 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 Public 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 Public 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 Public Use File.</p>
MCRSUP MCRSUPU	<p>The variables MCRSUP and MCRSUPU, corresponding to questions b59 and b59c, describe coverage and premiums for Medicare supplemental or Medigap policies. These variables are unedited and researchers should consider reviewing outlier values for possible editing.</p>
UNINR12- UNINR14	<p>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.</p>
PREINSX	<p>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.</p>
PRECOVX	<p>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.</p>

TABLE 5.6

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

Variable	Additional Information
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.
DENIANY NENHLH	Question b98 (DENIANY) asks whether anyone in the family has been denied health insurance or has been limited in the kind of health insurance available due to poor health. If b98 is answered yes, then the informant is asked to name the person(s) in question b99 (DENHLH). There may be cases where the family informant answered yes to question b98, but no person from that family is on the file with a value of yes for question b99. These are due to the fact that the response to question b99 was either “non-selected person” or “no one.”
Household Survey, Section C Variables: Health Care Resource Use	
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 Public 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.

TABLE 5.6

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

Variable	Additional Information
Household Survey, Section D Variables: Usual Source of Care and Patient Trust Information	
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.
Household Survey, Section E Variables: Satisfaction with Care, Characteristics of Last Physician Visit, and Activity Limitations	
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 Public 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). As described in Chapter 2, the weights WTPER1-4 should be used with these variables rather than the SRM weights, since imputation of missing values was done for the full adult population.
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
Household Survey, Section F Variables: Employment	
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 Public 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.
Household Survey, Section G Variables: Family Income and Race	
FAMINCX CENSINX	There are two income variables on the Public 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 Public 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.

TABLE 5.6

ADDITIONAL INFORMATION ON VARIABLES
BY SURVEY AND QUESTIONNAIRE SECTION

(continued)

Variable	Additional Information
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.
Household Survey, Section H Variables: Interview Closing	
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.	
Weights and Sampling Variables	
Weights and sampling variables are described in Chapter 2.	

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 Public Use File contains 60,446 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
- Weights and sampling variables

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

Data set name:	CTSR1HR3.TXT
Number of observations:	60,446
Number of variables:	410
Logical record length:	1,078 bytes

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 (1,078). If RECFM=F is used, the LRECL value must be specified as the logical record length plus two (1,080). 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 (1,078).

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 Public 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 c831 (PUTOFF-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 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, and P1X-P7X. These variables end in “X” for reasons other than masking.

Copies of the data collection instruments, annotated with the names of only the variables that directly correspond to a single question, are provided in Appendices A and E.

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**

October 1997

INTRODUCTION SCREEN:

>a0< Hello, my name _____. I'm calling to ask you to take part in a major health study. This study is supported by [NAME OF STATE HEALTH DEPARTMENT/IF STATE NOT LISTED: state health departments throughout the country], and is funded by the Robert Wood Johnson Foundation. We are not trying to sell anything or ask for money, and we are not associated with any political party. We simply want to know your concerns and opinions about health care so communities in [STATE] and other states will have accurate information about peoples' health care needs. [INCENTIVE: Because your participation is very important to our study, we will send you or your family [\$15/25/35] for helping us with the survey.]

<g> CONTINUE [PUT CODES ON NEXT PAGE]

SCREEN FOR RESPONSE CODES [USE TRADITIONAL CODES]

>A1< ADDITIONAL QUESTIONS SCREEN [ADDITIONAL TEXT ON ANSWERS TO VARIOUS QUESTIONS IS INCLUDED IN THE ATTACHMENT]

RWJF: The RWJF is a non-profit organization whose sole purpose is to improve health care. It is not associated with any political party or private company.

CONTACT: If you would like to find out more about the study or the foundation, you can call Maureen Michael at 1-800-719-9419.

PURPOSE: We are doing this study because health care has changed so much in recent years and we don't really know how people are being affected by these changes. This study will help (NAME OF STATE HEALTH DEPT/state health departments) and others responsible for health care answer important questions. For example, the study will help us understand what types of health plans best cover different families' needs, how satisfied people are with their insurance plans and medical providers, whether people can afford the health care they need, and how we can help people who don't have health insurance or may lose it. We are not proposing particular solutions to these problems. Our goal is to get accurate information about people's health concerns and views and to use this information to improve health care in communities throughout the country.

WHY ME/US: 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.

HOUSEHOLD COMPOSITION

>a2< To begin, what are the first names of the people who are living or staying here. Begin with one of the people who owns or rents this home, 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. If you'd rather not give names, we can use initials 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 manual), or in other group quarters (10 or more unrelated persons living together)::sk cb and code as ineligible.

<1> [fill NAME]

<2> [fill NAME]

<3> [fill NAME]

<4> [fill NAME]

<5> [fill NAME]

<6> [fill NAME]

<7> [fill NAME]

<8> [fill NAME]

===>

>a21< 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 "9"

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 college, regardless of whether they live 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]

<9> NO

====>

>a301< Beginning with [fill HOUSEHOLDER'S NAME], what is his/her 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 used to
understand differences in health care for people in different
age groups.**

<16-96>

====>

>a401< ... and sex?

SEX - P

(sex1) **INTERVIEWER: CODE WITHOUT ASKING IF KNOWN**

<1> MALE

<2> FEMALE

====>

[If a301 le 23 goto a501; else goto a601]

>a501< Is [HOUSEHOLDER] 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

<8> DON'T KNOW

====>

>a601< 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>

<98> DON'T KNOW

<99> REFUSED

====>

>a701< [IF LT 65] Is [fill NAME] on active duty in the military at this time?

<1> YES

<0> NO

<8> DON'T KNOW

<9> REFUSED

====>

>a302< What is [fill SECOND PERSON'S NAME] age?

AGEX - P

INTERVIEWER: (1) CODE "0" IF LESS THAN ONE YEAR.
(2) IF R. IS UNCERTAIN PROBE FOR BEST ESTIMATE.

<0-96>

====>

>a402< ... and sex?

SEX - P

INTERVIEWER: CODE WITHOUT ASKING IF KNOWN

<1> MALE

<2> FEMALE

====>

test: [if a302 ge 16 and lt 23 goto a502; else goto test a602]

>a502< 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

<8> DON'T KNOW

====>

>test a602< [if a302 lt 18 goto a802]

>a602< 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>

<98> DON'T KNOW

<99> REFUSED

==>

>a702< [IF LT 65] Is [fill NAME] on active duty in the military at this time?

<1> YES

<0> NO

<8> DON'T KNOW

<9> REFUSED

==>

>a802< What is [fill NAME'S] relationship to [fill HOUSEHOLDER]?

RELATEX - P

- <1> HUSBAND
 - <2> WIFE
 - <3> OWN CHILD
 - <13> ADOPTED CHILD¹
 - <4> STEPCHILD
 - <5> GRANDCHILD
 - <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 had been added)
- ====>

Repeat a302-a802 for each person.

test: [if any person is \geq 18 and relationship to householder is <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 a90; else goto test after a901.

>a90< Is [fill NAME] married to anyone who currently lives here?

INTERVIEWER: CODE "NO" FOR COHABITEE

- <1> YES
 - <0> NO [goto next person or next test]
- ====>

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

>a901< 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 <8>, <10> or <12>.

(3) If any person lt 18 and relationship to householder is not equal to <3>, <4>, <11>, or <13> then goto a902; else goto family formation.

====>

>a902< Is anyone who lives here the parent or guardian of [fill NAME]?

<1> YES

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

====>

>a903< Who is [fill NAME]'s parent or guardian?

CODE ONLY ONE

INTERVIEWER: If child has two parents/guardians code mother or female guardian.

PARENT - 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]

====>

Repeat for others meeting test before a902.

Form interviewing units using the following rules:²

- (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.

²The interviewing unit is defined to reflect an insurance unit, including the head, spouse, and their dependent children up to age 18, or to 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.

- (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 full-time student, 16-22 years of age, and is not a child or ward of anyone in the household.
 - (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.

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

b. HEALTH INSURANCE

The rest of the interview is about [fill FAMILY MEMBERS NAMES, INCLUDING RANDOMLY SELECTED CHILD].

[IF MULTI-FAMILY HH: I will call the other adults who live here to schedule separate interviews with them.]

>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.

>test b1a< [IF ALL FAMILY MEMBERS ARE 65 AND OLDER, GOTO b1d.]

>b1a< (Are you/either of you/any of you) covered by a health insurance plan from (your/any of your/either of your) current or past employers or unions. [CPS]³

FPRVJOB - F PRIVJOB - P
IF YES: Who is covered?

INTERVIEWER: DO NOT INCLUDE MILITARY COVERAGE OR MEDIGAP POLICIES HERE. NOTE THAT A FEW PEOPLE 65 AND OLDER MAY NOT BE COVERED BY MEDICARE, BUT HAVE PRIVATE COVERAGE. DO NOT INCLUDE HERE; ENTER COVERAGE IN bli1 (OTHER PLANS).

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.

<1> [fill NAME] [fill AGE]

<2> [fill NAME] [fill AGE]

<3> [fill NAME] [fill AGE]

<4> [fill NAME] [fill AGE]

<5> [fill NAME] [fill AGE]

<6> [fill NAME] [fill AGE]

<7> [fill NAME] [fill AGE]

<8> [fill NAME] [fill AGE]

<0> NO ONE/NO ONE ELSE

====>

³IF THE FAMILY INCLUDES BOTH PERSONS 65 AND OLDER AND PERSONS LESS THAN 65, THE PROGRAM WILL NOT PERMIT THE INTERVIEWER TO CODE A PERSON 65 OR OLDER IN QUESTIONS ON PRIVATE HEALTH PLANS (b1a,b,c).

>test b1b< **[IF ALL FAMILY MEMBERS ARE COVERED BY PRIVATE HEALTH PLANS IN b1a GOTO b1d]**

>b1b< (Are you/either of you/any of you) covered by a health insurance plan bought on your own. [BRFQ]

FPRVDIR - F PRIVDIR - P

IF YES: Who is covered?

INTERVIEWER: DO NOT INCLUDE MILITARY COVERAGE OR MEDIGAP POLICIES HERE. NOTE THAT A FEW PEOPLE 65 AND OLDER MAY NOT BE COVERED BY MEDICARE, BUT HAVE PRIVATE COVERAGE. DO NOT INCLUDE HERE; ENTER COVERAGE IN bli1 (OTHER PLANS).

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.

<1> [fill NAME] [fill AGE]

<2> [fill NAME] [fill AGE]

<3> [fill NAME] [fill AGE]

<4> [fill NAME] [fill AGE]

<5> [fill NAME] [fill AGE]

<6> [fill NAME] [fill AGE]

<7> [fill NAME] [fill AGE]

<8> [fill NAME] [fill AGE]

<0> NO ONE/NO ONE ELSE

====>

>test b1c< **[If all family members are covered by private health plans in b1a and b1b goto b1d]**

>b1c< (Are you/either of you/any of you) 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 OR MEDIGAP POLICIES HERE. NOTE THAT A FEW PEOPLE 65 AND OLDER MAY NOT BE COVERED BY MEDICARE, BUT HAVE PRIVATE COVERAGE. DO NOT INCLUDE HERE; ENTER COVERAGE IN bli1 (OTHER PLANS).

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> [fill NAME] [fill AGE]

<2> [fill NAME] [fill AGE]

<3> [fill NAME] [fill AGE]

<4> [fill NAME] [fill AGE]

<5> [fill NAME] [fill AGE]

<6> [fill NAME] [fill AGE]

<7> [fill NAME] [fill AGE]

<8> [fill NAME] [fill AGE]

<0> NO ONE/NO ONE ELSE

==>

>b1d< (Are you/any of you/either of you) covered by Medicare, the health insurance plan for people 65 years old and older or persons with certain disabilities. [CPS] IF YES:
Who is covered?

FM CARE - F MCARE - P

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

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

<1> [fill NAME] [fill AGE]

<2> [fill NAME] [fill AGE]

<3> [fill NAME] [fill AGE]

<4> [fill NAME] [fill AGE]

<5> [fill NAME] [fill AGE]

<6> [fill NAME] [fill AGE]

<7> [fill NAME] [fill AGE]

<8> [fill NAME] [fill AGE]

<0> NO ONE/NO ONE ELSE

===>

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

===>

>test b1e< **[IF ALL FAMILY MEMBERS ARE COVERED BY PRIVATE HEALTH
PLANS (see b1a, b1b, b1c) OR MEDICARE (b1d), GOTO b1f; ELSE GOTO
ble.]**

>b1e< (Are you/any of you/either of you) covered by [Medicaid /fill STATE NAME]⁴, the government assistance program for people in need. [CPS, NHIS] IF YES: Who is covered?

FMCAID - F MCAID - P

<1> [fill NAME] [fill AGE]

<2> [fill NAME] [fill AGE]

<3> [fill NAME] [fill AGE]

<4> [fill NAME] [fill AGE]

<5> [fill NAME] [fill AGE]

<6> [fill NAME] [fill AGE]

<7> [fill NAME] [fill AGE]

<8> [fill NAME]

<0> NO ONE/NO ONE ELSE

====>

>test b1f< **[IF ALL FAMILY MEMBERS ARE COVERED BY MEDICAID GOTO TEST b1g]**

⁴State fills for Medicaid

MED-CAL: California

WELFARE: Oregon

MEDIKAN: Kansas

MEDICAL ASSISTANCE:

Alaska

Arkansas

Colorado

Delaware

District of Columbia

Georgia

Hawaii

Idaho

Kentucky

Louisiana

Maine

Maryland

Massachusetts

Michigan

Minnesota

New Jersey

Oklahoma

Pennsylvania

Rhode Island

South Carolina

Texas

Virginia

Washington

Wisconsin

>b1f< (Are you/any of you/either of you) covered by CHAMPUS, CHAMP-VA, TRICARE, VA, or some other military health care. [NHIS]

IF YES: Who is covered?

*F*MILINS - *F* *M*LILINS - *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]
- <0> NO ONE/NO ONE ELSE

====>

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

>b1f1< (Are they/Is he/she) covered by CHAMPUS, CHAMP-VA, TRICARE STANDARD OR PRIME, VA, or some other military health plan? [CODE WITHOUT ASKING IF REPORTED IN b1f]

PROBE: IF R IS UNSURE BETWEEN TRICARE STANDARD AND PRIME, CODE STANDARD.

- <1> CHAMPUS
- <2> CHAMP-VA
- <3> TRICARE STANDARD
- <4> TRICARE PRIME
- <5> VA
- <6> OTHER [SPECIFY]
- <8> DON'T KNOW TYPE
- <9> REFUSED

====>

>test b1g< **[IF ALL FAMILY MEMBERS ARE COVERED BY ONE OR MORE HEALTH PLANS, GOTO test b1j; ELSE, goto blg.]**

>b1g< (Are you/any of you/either of you) covered by the Indian Health Service. IF YES:
Who is covered?

<1> [fill NAME] [fill AGE]

<2> [fill NAME] [fill AGE]

<3> [fill NAME] [fill AGE]

<4> [fill NAME] [fill AGE]

<5> [fill NAME] [fill AGE]

<6> [fill NAME] [fill AGE]

<7> [fill NAME] [fill AGE]

<8> [fill NAME] [fill AGE]

<0> NO ONE/NO ONE ELSE

====>

>test b1h< **[IF ALL FAMILY MEMBERS ARE COVERED BY ONE OR MORE HEALTH PLANS, GOTO test b1j; ELSE, IF STATE HAS HEALTH PLAN, GOTO b1h; ELSE GOTO test b1i.]**

>b1h< (Are you/any of you/either of you) covered by [INSERT STATE-SPECIFIC PLAN].⁵
IF YES: Who is covered?

- <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> NO ONE/NO ONE ELSE

====>

>test b1i< **[IF ALL FAMILY MEMBERS ARE COVERED BY ONE OR MORE
HEALTH PLANS, GOTO test b1j; ELSE, CONTINUE.]**

⁵Fills for State-specific health insurance programs for low-income uninsured individuals. [1995 CPS]

Arizona.....	Medically Indigent Programs	Minnesota.....	Minnesota Care
California.....	AIM (Access for Infants and Mothers)	Mississippi.....	Mississippi subsidized insurance coverage
Colorado.....	Children's Health Plan	Missouri.....	Missouri's coverage for unemployed
Connecticut.....	Healthy Steps	New Hampshire..	Healthy Kids
Delaware.....	Nemours Child Program	New Jersey.....	Health Access New Jersey
Florida.....	Healthy Kids	New York.....	Child Health Plus
Hawaii.....	Hawaii HealthQUEST	Ohio.....	Children's Health Care Program
Iowa.....	Iowa coverage for unemployed workers	Oregon.....	Oregon Health Plan
Kansas.....	Kansas Caring Program for Kids	Pennsylvania.....	Children's Health Insurance Programs
Maine.....	Maine Health Program	Rhode Island.....	Rite Care
Maryland.....	AIDS Insurance Assistance Program	Tennessee.....	TennCare
Massachusetts..	Healthy Kids, CenterCare Program, or Medical Security Plan	Washington.....	Children's Health Plan, or Basic Health Plan
Michigan.....	Caring for Children	Wisconsin.....	Healthy Start

>bli1< (Are you/any of you/either of you) covered by a health insurance plan that I have not mentioned. IF YES: What is the name of the plan?

INTERVIEWER: (1) INCLUDE PRIVATE PLANS HELD BY PERSONS 65 AND OLDER WHO DO NOT HAVE MEDICARE COVERAGE. (2) BE SURE TO OBTAIN THE COMPLETE NAME.

<1> YES [SPECIFY]

<0> NO [goto test blj]

===>

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

FOTHINS - F *OTHINS - 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]

<0> NO ONE/NO ONE ELSE

===>

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

>b1j< 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?
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. ASS.
- <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]

====> [GOTO NEXT UNINSURED PERSON OR GOTO test b1k]

>test b1k< **[PROGRAM WILL DISPLAY A TABLE SHOWING TYPES OF PLANS AND PERSONS ASSIGNED TO THEM. FOR COMPLEX INSURANCE UNITS, INTERVIEWER WILL VERIFY WITH INFORMANT TO REDUCE ERROR AND CORRECTIONS IN SUBSEQUENT QUESTIONS; FOR SIMPLE UNITS (ONE PLAN), VERIFICATION IS UNNECESSARY.]**

>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].**

>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 WHO ARE 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>⁶

<0> [go back to b1 and correct]

====>

>b211< What is the complete name of the [FIRST] plan?

⁶We used a maximum of three private plans/findings in the SI Family Survey.

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

[ALLOW 72 CHARACTERS]

<98> DON'T KNOW [fill "this plan" in subsequent questions]

<99> REFUSED [fill "this plan" in subsequent questions]

====>

>b221< INTERVIEWER: CODE WHETHER DOCUMENT USED. [NO ERASE]

<1> INSURANCE CARD

<2> CLAIMS FORM

<3> INSURANCE POLICY

<0> NO DOCUMENT USED

====>

>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]

PRVHLD1, PRVHLD2, PRVHLD3 - P

In whose name is this plan?⁷

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]

====>

>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.

⁷The 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.]

<1> [fill NAME]

<2> [fill NAME]

<3> [fill NAME]

<4> [fill NAME]

<5> [fill NAME]

<6> [fill NAME]

<7> [fill NAME]

<8> [fill NAME]

===>

>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

<8> DON'T KNOW

<9> REFUSED

===> [goto test b27]

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

PROBE IF RESPONDENT ASKS WHY WE WANT EMPLOYER/UNION NAME:
We won't be contacting your employer or union. We are trying to understand differences in insurance plans and how the benefits offered by a particular insurance company vary by employer/union.

[72 CHARACTERS]

<98> DON'T KNOW

<99> REFUSED

====>

>test b27< [if b221 >0 goto b271; else goto b291]

>b271< **IF DOCUMENT USED:** The plan number identifies the type of insurance coverage you have. Is there a plan or group number on the [fill DOCUMENT TYPE]?

RESPONSE TO CONFIDENTIALITY ISSUES: The plan number is different from your personal ID number. We want the plan number so we can contact your health plan to learn more about the plan's benefits and relationships with doctors. However, we will not be asking about your individual coverage. Your name will not be used when we contact the insurer.

<1> YES [goto b281]

<0> NO

<8> DON'T KNOW

<9> REFUSED

====> [goto b291]

>b281< What is the plan or group number?

[ALLOW 12]

<98> DON'T KNOW

<99> REFUSED

====>

>b291< [Did (you/either of you/any of you/PERSON NAME) enroll in [NAME OF PLAN] in the past 12 months, that is after [FILL DATE]?

PRVIY1, PRVIY2, PRVIY3 - F *PRVI2M1, PRVI2M2, PRVI2M3 - P*

IF MORE THAN ONE PERSON, ASK: Who enrolled in [FILL PLAN] 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 b301]

<2> [Fill NAME] [goto b301]

<n> NO ONE

<8> DON'T KNOW

<9> 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

====> [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]

<8> DON'T KNOW

<9> 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)⁸ 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
- <8> DON'T KNOW
- <9> REFUSED

====>

>b341< Under [fill PLAN NAME], do (you/members) need approval or a referral to see a specialist or get special care?

PRVREF1, PRVREF2, PRVREF3 - F

PROBE: Do not include emergency care.

- <1> YES
- <0> NO
- <8> DON'T KNOW
- <9> REFUSED

====>

⁸Substitute "members" if informant is not covered.

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

PRVLST1, PRVLST2, PRVLST3 - F

<1> YES

<0> NO

<8> DON'T KNOW

<9> 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

<8> DON'T KNOW

<9> 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

<8> DON'T KNOW

<9> REFUSED

==>

>test b381< [IF b251 = <0>, <8> or <9>, goto test b401; 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

<8> DON'T KNOW

<9> REFUSED

====> [goto test b401]

>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

<8> DON'T KNOW

<9> REFUSED

====>

>test b401< **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>), GOTO b401; GOTO test b51]**⁹

⁹Based on pretest results, we decided not to ask persons with military coverage the managed care attribute questions (b431, b441, b451, b461, and b471). However, the managed care questions were left in the program (with a skip) to facilitate adding them if managed care penetration expands for military health care plans.

>b401< In whose name is this [fill b1f1] plan?

NOTE: If b1f1 = <6>, <8>, or <9>, 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> OTHER [SPECIFY] (value had been changed from 0 to 9)

====>

>b411< Did [fill NAMES OF POLICY-HOLDER (b401) AND PERSONS COVERED (b1f)] 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?

MILINIY - F MILI2M - P

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

<8> DON'T KNOW

<9> REFUSED

====> [goto test b51]

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

<0-11>

====> [REPEAT b421 FOR EACH PERSON COVERED, THEN GOTO test b51.]

>b431< Does (PLAN NAME) require you to sign up with a certain primary care doctor, group of doctors, or clinic, which you must go to for all of your routine care?

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

<1> YES

<0> NO

<8> DON'T KNOW

<9> REFUSED

===>

>b441< Under [fill PLAN NAME], do you need approval or a referral to see a specialist or get special care?

PROBES: (1) Do not include emergency care.

(2) IF BENEFICIARY DOES NOT NEED APPROVAL TO SEE A SPECIALIST ON BASE, BUT DOES NEED APPROVAL/REFERRAL TO SEE SPECIALISTS OFF BASE, CODE "YES".

<1> YES

<0> NO

<8> DON'T KNOW

<9> REFUSED

===>

>b451< Under [fill PLAN NAME], can you go to any doctor or clinic who will accept [fill PLAN NAME] or must you choose from a book, directory, or list of doctors?

<1> ANY DOCTOR/CLINIC

<2> BOOK/DIRECTORY/LIST

<8> DON'T KNOW

<9> REFUSED

===>

>b461< Is (PLAN NAME) an HMO, that is, a Health Maintenance Organization?

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

<8> DON'T KNOW

<9> REFUSED

===>

>test b471< [IF b451 eq <2> OR b461 eq <1> GOTO b471; ELSE GOTO test b51]

>b471< If you 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]?

<1> YES

<0> NO

<8> DON'T KNOW

<9> REFUSED

===>

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

>b51< According to the information I have, [fill NAMES] (is/are) covered by Medicare.
(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: Do not include emergency care or care from a specialist you were referred to.

<1> YES

<0> NO

<8> DON'T KNOW

<9> REFUSED

===>

>b52< (Do(es) (you/they/he/she) need approval or a referral to see a specialist or get special care?

MCRREF - F

PROBE: Do not include emergency care.

<1> YES

<0> NO

<8> DON'T KNOW

<9> REFUSED

====>

>b53< 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?

MCRNST - F

<1> ANY DOCTOR/CLINIC

<2> BOOK/DIRECTORY/LIST

<8> DON'T KNOW

<9> REFUSED

====>

>b54< Are [fill NAMES] signed up with an HMO, that is, a Health Maintenance Organization?

MCRHMO - F

INTERVIEWER: IF HUSBAND AND WIFE, BOTH ARE 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

<8> DON'T KNOW

<9> REFUSED

====> [goto test b56]

>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?

[PLAN NAME - 72 CHARACTERS]

<98> DON'T KNOW [fill "this plan"]

<99> 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

<8> DON'T KNOW

<9> 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

<8> DON'T KNOW

<9> REFUSED

====>

>b57< Did [fill NAMES OF MEDICARE ENROLLEES] enroll in [b55a PLAN NAME/Medicare] in the past 12 months, that is, after [fill DATE]?
MCRINIY - F MCR12M - P
IF MORE THAN ONE PERSON, ASK: Who enrolled in [fill PLAN] in the past 12 months?

<1> [fill NAME] [goto b58]

<0> [fill NAME] [goto b58]

<n> NO ONE

<8> DON'T KNOW

<9> REFUSED

====> [goto b59]

>b58< How many months ago did [fill NAME] enroll in [fill PLAN NAME in b55a/Medicare]?

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

<0-11> MONTHS

====> [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.

<1> [fill NAME] [goto b59a]

<2> [fill NAME] [goto b59a]

<n> NONE

<8> DON'T KNOW

<9> REFUSED

====> [goto b60]

>b59a< 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 [goto b59b]

<8> DON'T KNOW

<9> REFUSED

====> [goto b60]

>b59b< How much is the insurance premium for this supplemental or Medigap policy?

MCRSUPP - P

\$<10-9997> [goto b59c]

<8> DON'T KNOW

<9> REFUSED

====> [goto b60]

>b59c< **INTERVIEWER: CODE TIME PERIOD.**

MCRSUPU - P

<1> WEEK

<2> EVERY OTHER WEEK

<3> TWICE A MONTH

<4> MONTH

<5> QUARTER

<6> SEMI-ANNUAL

<7> ANNUAL

====>

>b60< (Are/Is) [fill NAMES OF MEDICARE ENROLLEES] covered by [Medicaid/fill STATE NAME], the government assistance program for people in need?

F **MCRMCD** - *F* **MCRMCD** - *P*

IF YES: Who is covered?

<1> [fill NAME]

<2> [fill NAME]

<n> NONE

<8> DON'T KNOW

<9> REFUSED

====>

>test b61< **Medicaid [if b1e ge <1> goto b61; else goto test b70]**

>b61< According to the information I have, [fill NAMES OF MEDICAID ENROLLEES] (is/are) covered by [Medicaid/fill State Name].

(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/he/she) must go to for all of (your/their/his her) routine care?

F **MCDSIGN** - *F*

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

<1> YES

<0> NO

<8> DON'T KNOW

<9> REFUSED

====>

>b62< (Do(es) (they/he/ she/you) need approval or a referral to see a specialist or get special care?

F **MCDREF** - *F*

PROBE: Do not include emergency care.

<1> YES

<0> NO

<8> DON'T KNOW

<9> REFUSED

====>

>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?

MCDLST - F

<1> ANY DOCTOR/CLINIC

<2> SELECT FROM BOOK/LIST/DIRECTORY

<8> DON'T KNOW

<9> REFUSED

====>

>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 [goto b65a]

<0> NO

<8> DON'T KNOW

<9> REFUSED

====> [goto test b66]

>b65a< What is the name of the HMO plan?

PROBE: Do you have an insurance card or something else with the plan name on it?

[PLAN NAME - 72 CHARACTERS]

<98> DON'T KNOW [fill "this plan"]

<99> REFUSED [fill "this plan"]

====>

>b65b< **INTERVIEWER:** CODE TYPE OF DOCUMENT. [NO ERASE]

<1> INSURANCE CARD

<2> CLAIMS FORM

<3> INSURANCE POLICY

<0> NO DOCUMENT USED

====>

test b66< **[IF b63 eq <2> OR b64 eq <1> GOTO b66; ELSE GOTO b67]**

>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]?

MCDPAY - F

<1> YES

<0> NO

<8> DON'T KNOW

<9> REFUSED

===>

>b67< Did [fill NAMES OF MEDICAID BENEFICIARIES] enroll in [HMO NAME/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 the past 12 months?

INTERVIEWER: DO NOT INCLUDE BABIES UNDER ONE YEAR IF THEY

<1> [fill NAME] [goto b68]

<2> [fill NAME] [goto b68]

<8> DON'T KNOW

<9> REFUSED

>b68< How many months ago did [fill NAME] enroll in [fill PLAN NAME]?

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

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

State Specified Insurance Plans [if b1h ge <1> or bli1 ge <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.

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

STPHD - F

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]

===>

>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?

STSIGN - F

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

<1> YES

<0> NO

<8> DON'T KNOW

<9> REFUSED

===>

>b73< Under [PLAN NAME], do (you/members) need approval or a referral to see a specialist or get special care?

STREF - F

PROBE: Do not include emergency care.

<1> YES

<0> NO

<8> DON'T KNOW

<9> REFUSED

===>

>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?

STLST - F

<1> ANY DOCTOR/CLINIC

<2> BOOK/DIRECTORY/LIST

<8> DON'T KNOW

<9> REFUSED

===>

>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 [goto b75a]

<0> NO

<8> DON'T KNOW

<9> REFUSED

===> [go to test b76]

>b75a< What is the name of the HMO plan?

PROBE: Do you have an insurance card or something else with the plan name on it?

[PLAN NAME - 72 CHARACTERS]

<98> DON'T KNOW [fill "this plan"]

<99> REFUSED [fill "this plan"]

===>

>b75b< **INTERVIEWER:** CODE TYPE OF DOCUMENT.

<1> INSURANCE CARD

<2> CLAIMS FORM

<3> INSURANCE POLICY

<0> NO DOCUMENT USED

===>

>test b76< **[IF b74 eq <2> OR b75 eq <1> GOTO b76; ELSE GOTO b77]**

>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]?

STPAY - F

<1> YES

<0> NO

<8> DON'T KNOW

<9> REFUSED

===>

>b77< Did [fill NAMES OF PLAN MEMBERS] enroll in [NAME OF PLAN] 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]

<n> NO ONE

<8> DON'T KNOW

<9> REFUSED

====> [goto test b80]

>b78< 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

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

CURRENTLY UNINSURED

>test b80< **[IF ONE OR MORE FAMILY MEMBERS IS CURRENTLY UNINSURED
GOTO b80; ELSE GOTO TEST b85]**

>b80< 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

<8> DON'T KNOW

<9> 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

<8> DON'T KNOW

<9> REFUSED

====> [goto next uncovered person or test b85]

>b82<
UNINHMO - P

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

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

<8> DON'T KNOW

<9> REFUSED

===>

>b83<

In what month did [fill NAME'S/your] health insurance coverage under this plan stop?

<1> JAN

<7> JULY

<98> DON'T KNOW

<2> FEB

<8> AUG

<99> 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]
- <98> DON'T KNOW
- <99> REFUSED
- UNINSR12 - P* <12> ***(INELIGIBLE/LOST) PUBLIC ASSISTANCE***
- UNINR13 - P* <13> ***FAILED TO RE-ENROLL***
- UNINR14 - P* <14> ***UNHAPPY WITH PLAN/DROPPED PRIVATE PLAN***
- ===>

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^a [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]

<8> DON'T KNOW [goto test 852]

<9> 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]**

^a Can capture prior coverage of Medicare beneficiaries who had changes in last 12 months here.

>b861< Were [fill NAMES OF OTHER CURRENTLY INSURED FAMILY MEMBERS WHOSE COVERAGE BEGAN LESS THAN 12 MONTHS AGO] covered under this plan?

<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> NO ONE

====>

>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

<8> DON'T KNOW

<9> 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 JOB CHANGE

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.¹⁰

CHGINS5 - P <5> OTHER [SPECIFY]

CHGINS6 - P <6> *ELIGIBILITY STATUS CHANGE (AGE, MARITAL STATUS ETC.)*

CHGINS7 - P <7> *NOT AN ACTUAL CHANGE*

<8> DON'T KNOW

<9> 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] .**

Q b853

Q b873

Q b854

Q b874

¹⁰Frequency for particular services is too low to justify burden and cost of separate coding.

>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..

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]

<8> DON'T KNOW [goto next insured person whose coverage began LT 12 months ago or test b90]

<9> 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?

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

<8> DON'T KNOW

<9> 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.

<1> OWN/SPOUSE JOB CHANGE

<2> EMPLOYER OFFERINGS CHANGED

<3> CURRENT PLAN IS LESS EXPENSIVE

<4> CURRENT PLAN HAS BETTER SERVICES: PREFERRED DOCTORS,
BETTER QUALITY, CONVENIENT LOCATION, ETC. ¹¹

<5> OTHER [SPECIFY]

<8> DON'T KNOW

<9> REFUSED

====>

>test b90< **[IF INFORMANT HAS BEEN IN HMO IN LAST YEAR GOTO b901; ELSE
GOTO b921]**

>b901< [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

<98> DON'T KNOW [goto b911]

<99> REFUSED

==== [goto test b902]

>b911< 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

<8> DON'T KNOW

<9> REFUSED

====> [goto test b902]

>b921< Have you ever been enrolled in an HMO?

¹¹Frequency for particular services is too low to justify burden and cost of separate coding.

<1> YES [goto b931]

<0> NO

<8> DON'T KNOW

<9> REFUSED

===> [goto test b902]

>b931< 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

<98> DON'T KNOW [goto b941]

<99> REFUSED

=== [goto test b902]

>b941< 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

<8> DON'T KNOW

<9> REFUSED

===>

>test b902< **[IF INFORMANT IS MARRIED, GOTO test b90 AND ASK b902... b942 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.

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.¹²

MCHOICE - P

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

<8> DON'T KNOW

<9> REFUSED

===>

>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?

DENIANY - F

<1> YES [goto b99]

<0> NO

<8> DON'T KNOW

<9> REFUSED

===> [goto c101]

¹² Source: Royal, Kenneth, et al, **The Gallup Arizona Health Care Poll**. P.18, The Gallup Organization, 1995. Distributions by coverage available.

>b99<

DENHLH - P

Who was that?

<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-SELECTED PERSON]

<0> NO ONE

===>

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]

<2> NO

<8> DON'T KNOW

<9> 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]

<0> NO ONE

====>

>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

<98> DON'T KNOW

<99> REFUSED

====>

>test c131< [if (FEMALE AND GE 12 AND LE 45) or (CHILD LE 1) goto c131; else goto c151]

>c131< MOTHER: Were any of these hospital stays for delivery of a baby?

CHILD: Did [fill CHILD LE 1] stay in the hospital overnight at birth?

<1> YES [goto c141]

<0> NO (value had been changed from 2 to 0)

<8> DON'T KNOW

<9> REFUSED

====> [goto c151]

>c141< Have you included this hospitalization in the number of hospital stays you gave me for [fill NAME]?

<1> YES

<0> NO (value had been changed from 2 to 0)

<8> DON'T KNOW

<9> 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

NOTE: INTRODUCTORY PHRASE USED IF MORE THAN ONE HOSPITALIZATION.

<0-20>TIMES

<98> DON'T KNOW

<99> 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

<001-366> 001-366 NIGHTS

<998> DON'T KNOW

<999> REFUSED

====>

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]]¹³. Not counting [fill NAME]'s [fill c151] emergency room visits you told me about, 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]].¹⁵ During the past 12 months, 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 (value had been changed from 2 to 0)

<8> DON'T KNOW

<9> REFUSED

====> [goto c311]

¹³Delete phrase for one person family.

>c221< 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 you received a brief exam, but were sent elsewhere.

PROBE: Your best estimate is fine.

<1-20>TIMES

<98> DON'T KNOW [goto c231]

<99> 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

<8>DON'T KNOW

<9>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.

<0-96> [goto c331]

<98>DON'T KNOW [goto c321]

<99>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

<8> DON'T KNOW [go to test c411]

<9> REFUSED [go to test c411]

===>

>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?

MPVISNX - P

IF YES: How many times has [fill NAME] seen a nurse practitioner, physician's assistant or midwife during the last 12 months?

INTERVIEWER: READ "midwife" FOR FEMALE RESPONDENTS.

PROBES: (1) Your best estimate will be fine.

(2) Include times you got a shot, but did not see the doctor.

<0> NO/NONE [goto test c411]

<1-96> VISITS [goto test c411]

<98> DON'T KNOW

<99> 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

<8> DON'T KNOW

<9> REFUSED

===>

>test c411< [IF NO HOSP/ER/PHYS./OTHER PROVIDER VISITS, GOTO c511]¹⁴

>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 (value had been changed from 2 to 0)

<8>DON'T KNOW

<9>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]

<98> DON'T KNOW

<99> 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

<98> DON'T KNOW

<99> REFUSED

====>

>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?

¹⁴ 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.

MENTAL - P

<1> YES

<0> NO (value had been changed from 2 to 0)

<8> DON'T KNOW

<9> REFUSED

===>

>c521<

During the past 12 months, did [fill NAME] receive care at home from a nurse or other health care professional?

NURCARE - P

<1> YES

<0> NO (value had been changed from 2 to 0)

<8> DON'T KNOW

<9> REFUSED

===>

>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 (value had been changed from 2 to 0)

<8> DON'T KNOW

<9> 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 (value had been changed from 2 to 0)

<8> DON'T KNOW

<9> REFUSED

===> [goto c811]

>c621<
MAMLASX - P

How long has it been since [fill NAME] had (her/your) last mammogram?

<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

<8> DON'T KNOW

<9> 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

<1>YES

<0>NO

<8>DON'T KNOW

<9>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

<8>DON'T KNOW

<9>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 C90]

>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

PUTOFR0 - P <n>Or any other reason I haven't mentioned [SPECIFY]

PUTOFR8 - P *Had to wait in the office or clinic too long*

PUTOFR9 - P *Do not know where to go/can't find doctor/can't use doctor of choice*

PUTOF10 - P *Can't get referral from doctor*

PUTOF11 - P *Other problems related to health system*

PUTOF12 - P *Change in health insurance*

PUTOF13 - P *Other insurance-related problems*

PUTOF14 - P *No time, too busy*

PUTOF15 - P *Can't get off work*

PUTOF16 - P *Transportation problems*

PUTOF17 - P *Caring for family members*

PUTOF18 - P *Too sick*

PUTOF19 - P *Negative attitudes with doctors, or bad experiences in getting care*

PUTOF20 - P *Didn't think it was serious enough*

PUTOF21 - P *Too lazy, procrastinated, didn't feel like it, don't like to go to doctors*

<0>NONE CITED

<8>DON'T KNOW

<9>REFUSED

===>

>test c90< [ASK c21...c62...FOR NEXT PERSON¹⁵; THEN GOTO c90]

>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?

GETMED - F

<1>EASIER

<2>HARDER

<3>STAYED THE SAME

<8>DON'T KNOW

<9>REFUSED

¹⁵Include unmet need (c81c...c83c) 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>

<8>DON'T KNOW [goto c93]

<9>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.

\$<0-96,000>

<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

<8>DON'T KNOW

<9>REFUSED

====>

d. USUAL SOURCE OF CARE/PATIENT TRUST

BEGIN WITH FAMILY INFORMANT

>d100< 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 d201] (**value had been changed from 2 to 0**)

<3>NO, THERE IS MORE THAN ONE PLACE [goto d111]

<8>DON'T KNOW [goto d201]

<9>REFUSED [goto d201]

====>

>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?

USCTYPE - P

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?

<1>DOCTOR'S OFFICE

<2>HMO

<3>HOSPITAL OUTPATIENT CLINIC

<4>OTHER CLINIC OR HEALTH CENTER

<5>HOSPITAL EMERGENCY ROOM

<6>SOME OTHER PLACE

<8>DON'T KNOW

<9>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)

<8> DON'T KNOW [goto d141]

<9> 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 (value had been changed from 2 to 0)

<8> DON'T KNOW

<9> REFUSED

====>

>d141< At any time in the past 12 months did [fill NAME] change the [fill PROVIDER/PLACE]¹⁶ you/he/she **usually** go(es) to for health care?

USCCHG - P

<1> YES [goto d151]

<0> NO (value had been changed from 2 to 0)

<8> DON'T KNOW

<9> REFUSED

====> [goto test d301]

¹⁶Fill hierarchically: if d121 answered and d131=1 - (1)doctor,(2) nurse,(3) health professional; else fill d111 if d111 ≤ 5; else place.

>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

<2>QUALITY OF CARE

<3>OTHER [SPECIFY]

<4>**USC NO LONGER AVAILABLE**

<5>**NEEDED PARTICULAR TYPE OF DOCTOR**

<6>**RECENTLY MOVED**

<7>**CONVENIENCE (LOCATION, OFFICE HOURS ETC.)**

<8>DON'T KNOW

<9>REFUSED

===> [goto test d301]

>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.

ROTATE RESPONSES

USCNORI - P

<1>There is no reason to have a usual source of care because (I/he/she) seldom or never get sick.

USCNOR2- P

<2>(I/he/she) recently moved into the area.

USCNOR3- P

<3>(My/his/her) usual source of medical care in this area is no longer available.

USCNOR4- P

<4>(I/he/she) (don't/doesn't) have health insurance. [END ROTATION]

USCNOR5- P

<5>Anything else (SPECIFY)

<0>NO

<8>DON'T KNOW

<9>REFUSED

===>

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.]

>d311< 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.]

DRNOREF- P

I think my doctor may not refer me to a specialist when needed.

(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
- <8> DON'T KNOW
- <9> REFUSED
- ===>

INTERVIEWER: REPEAT IF NECESSARY. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?

>d321<

I trust my doctor to put my medical needs above all other considerations when treating my medical problems.

DRMETND- P

(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

<8> DON'T KNOW

<9> REFUSED

===>

INTERVIEWER: REPEAT IF NECESSARY. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?

>d331<

I think my doctor is strongly influenced by health insurance company rules when making decisions about my medical care.

DRINFLU- P

(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

<8> DON'T KNOW

<9> REFUSED

===>

INTERVIEWER: REPEAT IF NECESSARY. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?

>d341<
DRUNNEC- P

I sometimes think that my doctor might perform unnecessary tests or procedures.

(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

<8> DON'T KNOW

<9> 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]

>e101< The next questions are about your satisfaction with health care.

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

<8> DON'T KNOW

<9> REFUSED

==> [goto e121]

>e111< Would that be very (dis)satisfied or somewhat (dis)satisfied?

<1> VERY

<2> SOMEWHAT

<8> DON'T KNOW

<9> 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],¹⁷ 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

<8> DON'T KNOW

<9> REFUSED
====> [goto e141]

>e131< Would that be very (dis)satisfied or somewhat (dis)satisfied?

<1> VERY

<2> SOMEWHAT

<8> DON'T KNOW

<9> REFUSED
====>

>e141< During the past 12 months, have you personally 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 e151]

<0> NO

<8> DON'T KNOW

<9> REFUSED

====> [goto test e161]

¹⁷Exclude for adults.

>e151< Are you satisfied or dissatisfied with the **choice** you have for specialists?

<1> SATISFIED [goto e15a]

<2> DISSATISFIED [goto e15a]

<3> NEITHER SATISFIED NOR DISSATISFIED

<8> DON'T KNOW

<9> REFUSED

====> [goto test e16]

>e15a< Would that be very (dis)satisfied or somewhat (dis)satisfied?

<1> VERY

<2> SOMEWHAT

<8> DON'T KNOW

<9> 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

<8> DON'T KNOW

<9> REFUSED

====> [goto e201]

>e171< In what month was (fill NAME)'s **most recent** visit for sickness or injury?¹⁸

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/95	<8> JAN/96	<15> AUG/96	<22> MAR/97
<2> JULY/95	<9> FEB/96	<16> SEPT/96	<23> <i>APR/97</i>
<3> AUG/95	<10> MAR/96	<17> OCT/96	<24> <i>MAY/97</i>
<4> SEPT/95	<11> APR/96	<18> NOV/96	<25> <i>JUN/97</i>
<5> OCT/95	<12> MAY/96	<19> DEC/96	<26> <i>JUL/97</i>
<6> NOV/95	<13> JUNE/96	<20> JAN/97	<98> DON'T KNOW
<7> DEC/95	<14> JULY/96	<21> FEB/97	<99> REFUSED

====>

>e181< Since that visit in MONTH, has [fill NAME] visited a doctor for a general check up, physical examination, [FEMALES OVER 12 - gynecological [or pregnancy]¹⁹ 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
<8>	DON'T KNOW
<9>	REFUSED

====> [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/95	<8> JAN/96	<15> AUG/96	<22> MAR/97
<2> JULY/95	<9> FEB/96	<16> SEPT/96	<23> <i>APR/97</i>
<3> AUG/95	<10> MAR/96	<17> OCT/96	<24> <i>MAY/97</i>
<4> SEPT/95	<11> APR/96	<18> NOV/96	<25> <i>JUN/97</i>
<5> OCT/95	<12> MAY/96	<19> DEC/96	<26> <i>JUL/97</i>
<6> NOV/95	<13> JUNE/96	<20> JAN/97	<98> DON'T KNOW
<7> DEC/95	<14> JULY/96	<21> FEB/97	<99> REFUSED

====>

>test e191< **[VERIFY THAT MONTH IN e191 IS SAME MONTH OR FOLLOWS MONTH IN e171; THEN GOTO test e221]**

¹⁸In 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.

¹⁹Limit "or pregnancy" to women between 12 and 50.

>e201< ASKED IF PERSON HAS NOT HAD A SICK VISIT.

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?

CHECKUP - P

<1> YES [goto e211]

<0> NO [goto e901]

<8> DON'T KNOW

<9> 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/95	<8> JAN/96	<15> AUG/96	<22> MAR/97
<2> JULY/95	<9> FEB/96	<16> SEPT/96	<23> APR/97
<3> AUG/95	<10> MAR/96	<17> OCT/96	<24> MAY/97
<4> SEPT/95	<11> APR/96	<18> NOV/96	<25> JUN/97
<5> OCT/95	<12> MAY/96	<19> DEC/96	<26> JUL/97
<6> NOV/95	<13> JUNE/96	<20> JAN/97	<98> DON'T KNOW
<7> DEC/95	<14> JULY/96	<21> FEB/97	<99> REFUSED

====>

>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 SF12 (e401)]

====>

<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].

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?

DRORSP - P

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

<8> DON'T KNOW

<9> REFUSED

===>

>test e241< [IF PERSON HAS USC (d101 = 1) GOTO e241; ELSE GOTO e24e]

>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

<8> DON'T KNOW

<9> REFUSED

===>

>E241< Was this visit to an emergency room?

LSTOER - P

<1> YES [goto e291]

<0> NO

<8> DON'T KNOW

<9> REFUSED

===>

>e251< For this visit in [fill MONTH], did you have an appointment ahead of time or did (you/he/she) just walk in?

LSTAPP - P

<1> APPOINTMENT [goto e261]

<2> WALK IN (**value had been changed from 0 to 2**)

<8> DON'T KNOW

<9> 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: CODE "O" FOR SAME DAY.

<0-30> [goto e271]

<88> DON'T KNOW

<99> REFUSED

====> [goto e281]

>e271< ENTER TIME PERIOD. [DISPLAY ON SAME SCREEN AS e261].

<1> DAYS

<2> WEEKS

<3> MONTHS

====>

>e281< 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 e28t]

<998> DON'T KNOW

<999> REFUSED

====> [goto e291]

>e28t< ENTER TIME PERIOD. [DISPLAY ON SAME SCREEN AS e281]

<1> MINUTES

<2> HOURS

====>

>e291< For this visit, how long did it take [fill NAME] to get to the (doctor's office/emergency room)?

<1-60> [goto E291]

<98> DON'T KNOW (value had been changed from 88 to 98)

<99> REFUSED

====> [goto e301]

>E291< ENTER TIME PERIOD. [DISPLAY ON SAME SCREEN AS e291]

<1> MINUTES

<2> HOURS

====>

>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)

<8> DON'T KNOW

<9> REFUSED

====>

>e311< 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)

<8> DON'T KNOW

<9> REFUSED

====>

>e321<

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)
 - <8> DON'T KNOW
 - <9> REFUSED
- ===>

>e401<

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
 - <8> DON'T KNOW
 - <9> 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]

Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf?

LMTMACT - 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?

<1> YES, LIMITED A LOT

<2> YES, LIMITED A LITTLE

<0> NO, NOT LIMITED AT ALL

<8> DON'T KNOW

<9> 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

<8> DON'T KNOW

<9> REFUSED

===>

>e431< 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?

PHYLESS - P

- <1> YES
- <0> NO
- <8> DON'T KNOW
- <9> REFUSED

===>

>e441< 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?

PHYACT - P

- <1> YES
- <0> NO
- <8> DON'T KNOW
- <9> REFUSED

===>

>e451< 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?

EMOLESS - P

- <1> YES
- <0> NO
- <8> DON'T KNOW
- <9> REFUSED

===>

>e461< 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
 - <8> DON'T KNOW
 - <9> 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
 - <8> DON'T KNOW
 - <9> 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
 - <8> DON'T KNOW
 - <9> REFUSED
- ===>

>e491< 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?

How much of the time during the past 4 weeks have you felt calm and peaceful?

FLCALM - P

READ CATEGORIES SLOWLY.

- <1> all of the time
- <2> most
- <3> some
- <4> a little, or
- <5> none of the time
- <8> DON'T KNOW
- <9> 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
- <8> DON'T KNOW
- <9> 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
- <8> DON'T KNOW
- <9> REFUSED

===>

>e521<
TAKRISK - P

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.

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
- <8> DON'T KNOW
- <9> 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 e16c] (**value had been changed from 2 to 0**)
 - <8> DON'T KNOW [goto test e16c]
 - <9> REFUSED [goto test e16c]
- ====>

>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]
- <8> DON'T KNOW
- <9> REFUSED

====> [goto test e16c]

>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> 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

- <98> DON'T KNOW
- <99> 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]

<98> DON'T KNOW [goto e661]

<99> REFUSED [goto e661]

====>

>e641<
SMKNDAY - 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> 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

<98> DON'T KNOW

<99> 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
 - <8> DON'T KNOW
 - <9> REFUSED
- ====> [goto test e16c]

>e661<
SMKTRYQ - P

During the past 12 months, have you stopped smoking for one day or longer, because you were trying to quit smoking?

- <1> YES
 - <0> NO (value had been changed from 2 to 0)
 - <8> DON'T KNOW
 - <9> 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<
SMKADV - P

During the past 12 months, did any medical doctor advise you to stop smoking?

- <1> YES
- <0> NO
- <8> DON'T KNOW
- <9> REFUSED

====> [goto test e12c]

>test e12c<

[IF FAMILY HAS CHILD GOTO e12c, ELSE GOTO test e801]

>e12c<

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 e13c]
- <2> DISSATISFIED [goto e13c]
- <3> NEITHER SATISFIED NOR DISSATISFIED
- <8> DON'T KNOW
- <9> REFUSED

====> [goto e14c]

>e13c<

Would that be very (dis)satisfied or somewhat (dis)satisfied?

- <1> VERY
- <2> SOMEWHAT
- <8> DON'T KNOW
- <9> REFUSED

====>

>e14c<
SPNEED - P

During the past 12 months, has [fill CHILD'S NAME] 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 e15c]

<0> NO

<8> DON'T KNOW

<9> REFUSED

====> [goto test e16c]

>e15c< Are you satisfied or dissatisfied with your choice of specialists for [fill CHILD'S NAME]?

<1> SATISFIED [goto E15c]

<2> DISSATISFIED [goto E15c]

<3> NEITHER SATISFIED NOR DISSATISFIED

<8> DON'T KNOW

<9> REFUSED

====> [goto test e16c]

>E15c< Would that be very (dis)satisfied or somewhat (dis)satisfied?

<1> VERY

<2> SOMEWHAT

<8> DON'T KNOW

<9> REFUSED

====>

>test e16c< **[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 test e801]**

>e16x<
TAKEID - F

Who went with [fill NAME] to the doctor on (his/her) most recent visit?

INTERVIEWER: CODE "you," IF RESPONDENT AND SPOUSE TOOK CHILD TO DOCTORS.

<1> RESPONDENT [goto e16c]

<2> [FILL NAME]

<3> [FILL NAME]

<4> [FILL NAME]

<0> NON-FAMILY MEMBER

<8> DON'T KNOW

<9> REFUSED

====> [goto e40c]

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.

>e16c<

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 e17c]

<0> NO

<8> DON'T KNOW

<9> REFUSED

====> [goto e20c]

>e17c< In what month was (fill NAME)'s **most recent** visit for sickness or injury?

<1> JUNE/95	<8> JAN/96	<15> AUG/96	<22> MAR/97
<2> JULY/95	<9> FEB/96	<16> SEPT/96	<23> APR/97
<3> AUG/95	<10> MAR/96	<17> OCT/96	<24> MAY/97
<4> SEPT/95	<11> APR/96	<18> NOV/96	<25> JUN/97
<5> OCT/95	<12> MAY/96	<19> DEC/96	<26> JUL/97
<6> NOV/95	<13> JUNE/96	<20> JAN/97	<98> DON'T KNOW
<7> DEC/95	<14> JULY/96	<21> FEB/97	<99> REFUSED

====>

>e18c< 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 e19c]

<0> NO

<8> DON'T KNOW

<9> REFUSED

====> [goto test e22c]

>e19c< In what month was [fill NAME]'s **most recent** visit for a check up or physical exam?

<1> JUNE/95	<8> JAN/96	<15> AUG/96	<22> MAR/97
<2> JULY/95	<9> FEB/96	<16> SEPT/96	<23> APR/97
<3> AUG/95	<10> MAR/96	<17> OCT/96	<24> MAY/97
<4> SEPT/95	<11> APR/96	<18> NOV/96	<25> JUN/97
<5> OCT/95	<12> MAY/96	<19> DEC/96	<26> JUL/97
<6> NOV/95	<13> JUNE/96	<20> JAN/97	<98> DON'T KNOW
<7> DEC/95	<14> JULY/96	<21> FEB/97	<99> REFUSED

====>

>test e19c< **[VERIFY THAT MONTH IN e19c IS SAME MONTH OR AFTER MONTH IN e17c; THEN GOTO test e22c.]**

>e20c< 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 e21c]

<0> NO [goto e90c]

<8> DON'T KNOW

<9> REFUSED

====> [goto e40c]

>e21c< In what month was [fill NAME]'s **most recent** visit?

<1> JUNE/95	<8> JAN/96	<15> AUG/96	<22> MAR/97
<2> JULY/95	<9> FEB/96	<16> SEPT/96	<23> APR/97
<3> AUG/95	<10> MAR/96	<17> OCT/96	<24> MAY/97
<4> SEPT/95	<11> APR/96	<18> NOV/96	<25> JUN/97
<5> OCT/95	<12> MAY/96	<19> DEC/96	<26> JUL/97
<6> NOV/95	<13> JUNE/96	<20> JAN/97	<98> DON'T KNOW
<7> DEC/95	<14> JULY/96	<21> FEB/97	<99> REFUSED

====>

>e90c< Earlier I noted that [fill NAME] had [fill #] doctor visits in the last 12 months. Is that correct or incorrect?

CORRECT [jb e16c]

<1> INCORRECT [goto e40c]

====>

>test e22c< **[IF CHILD HAD SICK AND WELL VISIT, SELECT MOST RECENT FOR e22c. IF SAME MONTH, FILL WELL VISIT IN e22c]**

>e22c< 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

<8> DON'T KNOW

<9> REFUSED

====>

>test e24c< **[IF CHILD HAS USC (d10... = 1), GOTO e24c; ELSE GOTO e24e]**

>e24c< 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 e25c]

<0> NO

<8> DON'T KNOW

<9> REFUSED

====>

>e24e< Was this visit to a hospital emergency room?

LSTOER - P

<1> YES [goto e29c]

<0> NO

<8> DON'T KNOW

<9> REFUSED

====>

>e25c< 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 e26c]

<0> WALK IN

<8> DON'T KNOW

<9> REFUSED

====> [goto e28c]

>e26c< 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.

<0-30> [goto e27c]

<98> DON'T KNOW

<99> REFUSED

====> [goto e28c]

>e27c< ENTER TIME PERIOD. [DISPLAY ON SAME SCREEN AS e26c]

<1> DAYS

<2> WEEKS

<3> MONTHS

====>

>e28c< How long did you have to wait in the waiting room before seeing a medical person for this visit in [fill MONTH]?

<1-240> [go to e28x]

<998> DON'T KNOW

<999> REFUSED

====> [goto e29c]

>e28x< ENTER TIME PERIOD. [DISPLAY ON SAME SCREEN AS e28c]

<1> MINUTES

<2> HOURS

====>

>e29c< For this visit, how long did it take you to get to the (doctor's office/emergency room)?

<1-60> [goto e29x]

<98> DON'T KNOW

<99> REFUSED

====> [goto e30c]

>e29x< ENTER TIME PERIOD. [DISPLAY ON SAME SCREEN AS e29c]

<1> MINUTES

<2> HOURS

====>

>e30c< 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)

<8> DON'T KNOW

<9> REFUSED

====>

>e31c<
LSTLISN - P

How would you rate how well the 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)
- <8> DON'T KNOW
- <9> REFUSED
- ====>

>e32c<
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)
- <8> DON'T KNOW
- <9> REFUSED
- ====>

>e40c<

In general, would you say [fill NAME]'s health is:

- <1> Excellent
- <2> Very Good
- <3> Good
- <4> Fair
- <5> Poor
- ====>

>test e801<

**[IF THERE ARE OTHER ADULTS (≥ 18) IN FAMILY BESIDES
INFORMANT GOTO e801; ELSE GOTO f10]**

>e801< 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.

In general, would you say [fill NAME]'s health is:

<1> Excellent

<2> Very Good

<3> Good

<4> Fair

<5> Poor

====> [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 (value had been changed from 2 to 0)

<8> DON'T KNOW

<9> REFUSED

====>

>f111< Last week, did [fill NAME] do any work (either) for pay (or profit)?²⁰

WRKPAY - P

INTERVIEWER: CODE "YES" IF R. WAS ON VACATION FROM HIS/HER JOB.

<1> YES [goto f121]

<0> NO

<8> DON'T KNOW

<9> 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

<8> DON'T KNOW

<9> REFUSED

====>

>f131< **ONE JOB (f121 = 0):** How many hours per week (do you/do(es) [fill NAME]) usually work at this job?²¹

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 f113x]

<98> DON'T KNOW

<99> REFUSED

====> [goto test f141]

NOTE: Test will verify values less than 20 hours.

²⁰ Include parenthetical phrases if f101=1.

²¹ 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.

>f113x< (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

<8> DON'T KNOW

<9> 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

PROBE: If [fill NAME] worked overtime hours include them.

<0-96> HOURS WORKED AT OTHER JOBS

<97> HOURS VARY/CAN'T ESTIMATE

<98> DON'T KNOW

<99> 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

<8> DON'T KNOW

<9> 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
- <98> DON'T KNOW
- <99> 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 (value had been changed from 2 to 0)
- <8> DON'T KNOW
- <9> 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
- <98> DON'T KNOW
- <99> REFUSED

===>

>f241< What kind of business or industry is this?

PROBE: What do they make or do there?

- <1> SPECIFY
- <8> DON'T KNOW (value had been changed from 98 to 8)
- <9> REFUSED (value had been changed from 99 to 9)

===>

>f301< For (your/his/her) (main) job, what is the easiest way for you to report (his/her/your) total earnings: hourly, weekly, 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> WEEKLY
- <3> BI-WEEKLY/EVERY TWO WEEKS
- <4> TWICE MONTHLY
- <5> MONTHLY
- <6> ANNUAL
- <8> DON'T KNOW [go to f331]
- <9> REFUSED [go to 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

<998> DON'T KNOW [goto f331] (**value had been added**)

<999> REFUSED [goto test f401] (**value had been added**)

\$ <20-500,000> OTHER PAY PERIODS

<8> DON'T KNOW [goto f331] (**value had been changed from 1 to 8**)

<9> REFUSED [goto test f401] (**value had been changed from 2 to 9**)

====> [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
 - <8> DON'T KNOW
 - <9> 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
 - <8> DON'T KNOW
 - <9> 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]²²

>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
- <8> DON'T KNOW
- <9> 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]
- <8> DON'T KNOW [goto next person or g10]
- <9> 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 SIGNED UP**
- <8> DON'T KNOW
- <9> REFUSED
- ====> [goto f541]

²²Skipped self-employed.

>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**

<8> DON'T KNOW

<9> 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

<8> DON'T KNOW [goto NEXT PERSON or g10]

<9> 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

<8> DON'T KNOW

<9> 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

<8> DON'T KNOW

<9> 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 1995. During 1995, what was your family's total income from all sources, before taxes and other deductions?

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 1995 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

<8> DON'T KNOW [goto g11]

<9> REFUSED

====> [goto test g20]

>g11< Which of the following income ranges is closest to your family's 1995 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
- <98> DON'T KNOW
- <99> 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
- <8> DON'T KNOW
- <9> 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]

<8> DON'T KNOW

<9> REFUSED

====>

>test g23< [IF FAMILY HAS MORE THAN ONE ADULT, GO TO g23; ELSE GOTO test h10]

>g23< INTRODUCTION: I have just a few more questions for you. Then, 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.

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 husband or wife.

<g> CONTINUE

====>

h. CLOSING (Family)

>test h10< [IF RESPONDENT PAYMENT, GOTO h10; ELSE GOTO h11]

>h10< As a token of our appreciation, we would like to send (you/your family) a check for (\$15/25/35). Could you please give me your (and your (husband/wife))'s²³ and your full name and address?

PROBE: Your name and address are confidential and will only be used if we call you for another interview.

<Enter First and Last Name>²⁴

<Enter Street Address>

<Enter City/State>

<Enter Zip Code>

====> [goto test h30]

>h11< It is possible that we may want to conduct another interview to understand changes in people's health care. So that we could include your family in a follow up survey, could you give me your full name and address?²⁵

PROBE: Your name and address are confidential and will only be used if we call you for another interview.

<Enter Name>

<Enter Street Address>

<Enter City/State>

<Enter Zip Code>

====>

²³ Use husband/wife if informant is married.

²⁴ Enter first name before last name.

²⁵ Purpose is to verify address for listed families who may be reinterviewed.

>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.

<0> [goto h32]

<1-4> OTHER TELEPHONE NUMBERS

<9> 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

<8> DON'T KNOW

<9> 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

<8> DON'T KNOW

<9> REFUSED

====> [goto end]

>h33< For how many of the past 12 months did you not have a working telephone?

NOPHNMX - F

<0-12> MONTHS

<98> DON'T KNOW [goto end] (**value had been changed from 91 to 98**)

<99> 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
 - <8> DON'T KNOW
 - <9> REFUSED
- ====>

>h35< [IF PUBLISHED] DID HOUSEHOLD RECEIVE LETTER/BROCHURE? (8/5/96)

- <1> YES
 - <0> NO
 - <8> DON'T KNOW
- ====>

>test< [IF NO SELF RESPONSE MODULE, GOTO fin; ELSE GOTO h23]

>fin< Thank you again for your time and interest in this important survey.

>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> R. COMES TO PHONE [GOTO SELF RESPONSE MODULE]
- <0> R. IS NOT AVAILABLE [THANK INF. AND GOTO CALLBACK]²⁶
- <R> R./INFORMANT REFUSES [GOTO REFUSAL ITEMS]²⁶
- <2> INFORMANT WILL PROXY: R. IS CHRONICALLY ILL
- <3> INFORMANT WILL PROXY: R. IS AWAY AT SCHOOL
- <4> INFORMANT WILL PROXY: R. SPEAKS NEITHER ENGLISH NOR SPANISH
- <5> REFUSED (value had been added)

²⁶ THESE QUESTION SEQUENCES ARE ONLY SHOWN IN THE CATI PROGRAM.

²⁶ THESE QUESTION SEQUENCES ARE ONLY SHOWN IN THE CATI PROGRAM.

SELF RESPONSE MODULE

>self< 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: The study is supported by [fill STATE AGENCY] and is being funded by The Robert Wood Johnson Foundation. We are doing this study so that communities in [STATE] and other states will have accurate information about peoples' health needs.

IF INCENTIVE REMINDER NEEDED: Because (your/your family's) participation is very important to our study, we will send (you/your family) \$AMOUNT for helping us with the survey.

<1> CONTINUE [goto test b94]

SET UP APPOINTMENT [GOTO CALLBACK ROUTINE]

====>

test b94< **[IF PERSON IS FAMILY INFORMANT'S SPOUSE GOTO b952 else goto c812]**

MCHOICE - P

>b952< In choosing among alternative health plans, some people have concerns that are especially important to them.

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.²⁷

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

<8> DON'T KNOW

<9> 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

²⁷ Source: Royal, Kenneth, et al., **The Gallup Arizona Health Care Poll**. P.18, The Gallup Organization, 1995. Distributions by coverage available.

<0> NO

<8> DON'T KNOW

<9> 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

<8> DON'T KNOW

<9> REFUSED

===>

>test c832<

[IF c812 EQ <1> OR <8> OR c822 EQ <1> OR <8> GOTO c832; ELSE GOTO test d302]

>c832< Did you not get or postpone getting medical care 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
 - PUTOFR0 - P* <n> Or any other reason I haven't mentioned [specify]
 - PUTOFR8 - P* ***Had to wait in the office or clinic too long***
 - PUTOFR9 - P* ***Do not know where to go/can't find doctor/can't use doctor of choice***
 - PUTOF10 - P* ***Can't get referral from doctor***
 - PUTOF11 - P* ***Other problems related to health system***
 - PUTOF12 - P* ***Change in health insurance***
 - PUTOF13 - P* ***Other insurance-related problems***
 - PUTOF14 - P* ***No time, too busy***
 - PUTOF15 - P* ***Can't get off work***
 - PUTOF16 - P* ***Transportation problems***
 - PUTOF17 - P* ***Caring for family members***
 - PUTOF18 - P* ***Too sick***
 - PUTOF19 - P* ***Negative attitudes with doctors, or bad experiences in getting care***
 - PUTOF20 - P* ***Didn't think it was serious enough***
 - PUTOF21 - P* ***Too lazy, procrastinated, didn't feel like it, don't like to go to doctors***
- <0> NONE CITED
- <8> DON'T KNOW
- <9> 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].

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

<2> SOMEWHAT AGREE

<3> NEITHER AGREE NOR DISAGREE

<4> SOMEWHAT DISAGREE

<5> STRONGLY DISAGREE

<7> NOT APPLICABLE

<8> DON'T KNOW

<9> REFUSED

===>

INTERVIEWER: REPEAT IF NECESSARY. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?

>d322< I trust my doctor to put my medical needs above all other considerations when treating my medical problems.

DRMETND - P

(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

<8> DON'T KNOW

<9> REFUSED

==>

INTERVIEWER: REPEAT IF NECESSARY. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?

>d332< I think my doctor is strongly influenced by health insurance company rules when making decisions about my medical care.

DRINFLU - P

(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

<8> DON'T KNOW

<9> REFUSED

==>

INTERVIEWER: REPEAT IF NECESSARY. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree?

>d342< I sometimes think that my doctor might perform unnecessary tests or procedures.

DRUNNEC - P

(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

<8> DON'T KNOW

<9> REFUSED

====>

e. **LAST VISIT PROCESS AND SATISFACTION/SF12/RISK BEHAVIORS**

>e122< Now I would like to ask you about satisfaction with your choice of doctors.

First, primary care doctors, such as family doctors, [pediatricians,]²⁸ 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 e132]

<2> DISSATISFIED [goto e132]

<3> NEITHER SATISFIED NOR DISSATISFIED

<8> DON'T KNOW

<9> REFUSED

====> [goto e142]

>e132< Would that be very (dis)satisfied or somewhat (dis)satisfied?

<1> VERY

<2> SOMEWHAT

<8> DON'T KNOW

<9> REFUSED

====>

²⁸Exclude for adults.

>e142< During the past 12 months, have you personally 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 e152]

<0> NO

<8> DON'T KNOW

<9> 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]

<3> NEITHER SATISFIED NOR DISSATISFIED

<8> DON'T KNOW

<9> REFUSED

====> [goto test e162]

>e15b< Would that be very (dis)satisfied or somewhat (dis)satisfied?

<1> VERY

<2> SOMEWHAT

<8> DON'T KNOW

<9> 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

<8> DON'T KNOW

<9> REFUSED

====> [goto e202]

>e172< In what month was (fill NAME)'s **most recent** visit for sickness or injury?

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/95	<8> JAN/96	<15> AUG/96	<22> MAR/97
<2> JULY/95	<9> FEB/96	<16> SEPT/96	<23> APR/97
<3> AUG/95	<10> MAR/96	<17> OCT/96	<24> MAY/97
<4> SEPT/95	<11> APR/96	<18> NOV/96	<25> JUN/97
<5> OCT/95	<12> MAY/96	<19> DEC/96	<26> JUL/97
<6> NOV/95	<13> JUNE/96	<20> JAN/97	<98> DON'T KNOW
<7> DEC/95	<14> JULY/96	<21> FEB/97	<99> REFUSED

====>

>e182< Since that visit in MONTH, has [fill NAME] visited 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?

CHKASIK - 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 e192]

<0> NO

<8> DON'T KNOW

<9> REFUSED

====> [goto test e222]

>e192< In what month was [fill NAME]'s **most recent** visit for a check up or physical?

INTERVIEWER: THE LAST 12 MONTHS ARE SHOWN BELOW WITH AN
ASTERISK. PREVENTIVE CARE VISIT MUST BE LATER THAN SICK VISIT [fill
DATE].

<1> JUNE/95	<8> JAN/96	<15> AUG/96	<22> MAR/97
<2> JULY/95	<9> FEB/96	<16> SEPT/96	<98> DON'T KNOW
<3> AUG/95	<10> MAR/96	<17> OCT/96	<99> REFUSED
<4> SEPT/95	<11> APR/96	<18> NOV/96	====>
<5> OCT/95	<12> MAY/96	<19> DEC/96	
<6> NOV/95	<13> JUNE/96	<20> JAN/97	
<7> DEC/95	<14> JULY/96	<21> FEB/97	

>test e192< **[VERIFY THAT MONTH IN e192 IS SAME MONTH OR FOLLOWS e172;
THEN GOTO test e222]**

>e202< ASKED IF PERSON HAS NOT HAD A SICK VISIT.

During the last 12 months, did you 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?

CHECKUP - P

<1> YES [goto e212]

<0> NO [goto e902]

<8> DON'T KNOW

<9> REFUSED

====> [goto SF12-e402]

>e212< In what month was [fill NAME]'s **most recent** visit?

INTERVIEWER: THE LAST 12 MONTHS ARE SHOWN WITH AN ASTERISK.

<1> JUNE/95	<8> JAN/96	<15> AUG/96	<22> MAR/97
<2> JULY/95	<9> FEB/96	<16> SEPT/96	<98> DON'T KNOW
<3> AUG/95	<10> MAR/96	<17> OCT/96	<99> REFUSED
<4> SEPT/95	<11> APR/96	<18> NOV/96	====> [goto test 222]
<5> OCT/95	<12> MAY/96	<19> DEC/96	
<6> NOV/95	<13> JUNE/96	<20> JAN/97	
<7> DEC/95	<14> JULY/96	<21> FEB/97	

>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/for care of sickness or injury] 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?

- <1> FAMILY DOCTOR
- <2> SPECIALIST, INCLUDING OB/GYN
- <8> DON'T KNOW
- <9> 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
- <8> DON'T KNOW
- <9> REFUSED

====>

>e24e< Was this visit to an emergency room?

LSTOER - P

- <1> YES [goto e292]
- <0> NO
- <8> DON'T KNOW
- <9> 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

<8> DON'T KNOW

<9> 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?

<0-30>

====>

>e272< ENTER TIME PERIOD. [DISPLAY ON SAME SCREEN AS e261].

<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 e282t]

<998> DON'T KNOW

<999> REFUSED

====> [goto e292]

>e282t< 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/emergency room)?

<1-60>

==>

>e292t< ENTER TIME PERIOD. [DISPLAY ON SAME SCREEN AS e291]

<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? 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)

<8> DON'T KNOW

<9> 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)
 - <8> DON'T KNOW
 - <9> REFUSED
- ====>

>e322< 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)
 - <8> DON'T KNOW
 - <9> 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

====>

>e412< 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.

Moderate activities, such as moving a table, pushing a vacuum cleaner, bowling, or playing golf?

LMTMACT-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?

<1> YES, LIMITED A LOT

<2> YES, LIMITED A LITTLE

<0> NO, NOT LIMITED AT ALL

<8> DON'T KNOW

<9> 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

<8> DON'T KNOW

<9> REFUSED

====>

The next two questions ask about your physical health and daily activities.

>e432< During the past 4 weeks, have you accomplished less than you would like as a result of your physical health?

PHYLESS - P

<1> YES

<0> NO

<8> DON'T KNOW

<9> REFUSED

====>

>e442< 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?

PHYACT - P

<1> YES

<0> NO

<8> DON'T KNOW

<9> REFUSED

====>

>e452< 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?

EMOLESS - P

<1> YES

<0> NO

<8> DON'T KNOW

<9> 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

<8> DON'T KNOW

<9> 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

<8> DON'T KNOW

<9> 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
- <8> DON'T KNOW
- <9> 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?

How much of the time during the past 4 weeks have you felt calm and peaceful?

FLCALM - P

REPEAT CATEGORIES IF NECESSARY.

- <1> All of the time
- <2> most
- <3> some
- <4> a little, or
- <5> none of the time
- <8> DON'T KNOW
- <9> REFUSED

====>

>e502< How much of the time during the past 4 weeks did you have a lot of energy?

ENERGY - P

READ CATEGORIES SLOWLY.

<1> All of the time

<2> most

<3> some

<4> a little, or

<5> none of the time

<8> DON'T KNOW

<9> REFUSED

==>

>e512< How much of the time during the past 4 weeks have you felt downhearted and blue?

FLDOWN - P

READ CATEGORIES SLOWLY.

<1> All of the time

<2> most

<3> some

<4> a little, or

<5> none of the time

<8> DON'T KNOW

<9> REFUSED

==>

>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

[NOTE: NEITHER AGREE NOR DISAGREE IS NOT READ, BUT IS CODED IF OFFERED.]

- <1> STRONGLY AGREE
- <2> SOMEWHAT AGREE
- <3> NEITHER AGREE NOR DISAGREE
- <4> SOMEWHAT DISAGREE
- <5> STRONGLY DISAGREE
- <8> DON'T KNOW
- <9> REFUSED

====>

The last questions are about cigarette smoking.

>e602< Have you smoked at least 100 cigarettes in your entire life?

SMKEVR - P

- <1> YES
- <2> NO [goto end]
- <8> DON'T KNOW [goto test e16c]
- <9> 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]
- <8> DON'T KNOW
- <9> 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

<98> DON'T KNOW

<99> REFUSED

====> [goto e662]

>e632< On how many of the past 30 days did you smoke a cigarette?

SMKDAY - P

<0> NONE [goto e652]

<1-31> DAYS [goto e662]

<98> DON'T KNOW [goto e642]

<99> REFUSED [goto e662]

====>

>e642< On the average, when you smoked during the past 30 days, about how many cigarettes did you smoke a day?

SMKNDAY - 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

<98> DON'T KNOW

<99> REFUSED

====> [goto e662]

>e652< How long has it been since you quit smoking cigarettes?

SMKQUIT - P

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

<8> DON'T KNOW

<9> 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

<8> DON'T KNOW

<9> 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

<1> YES

<0> NO

<8> DON'T KNOW

<9> REFUSED

====> [goto test e16c]

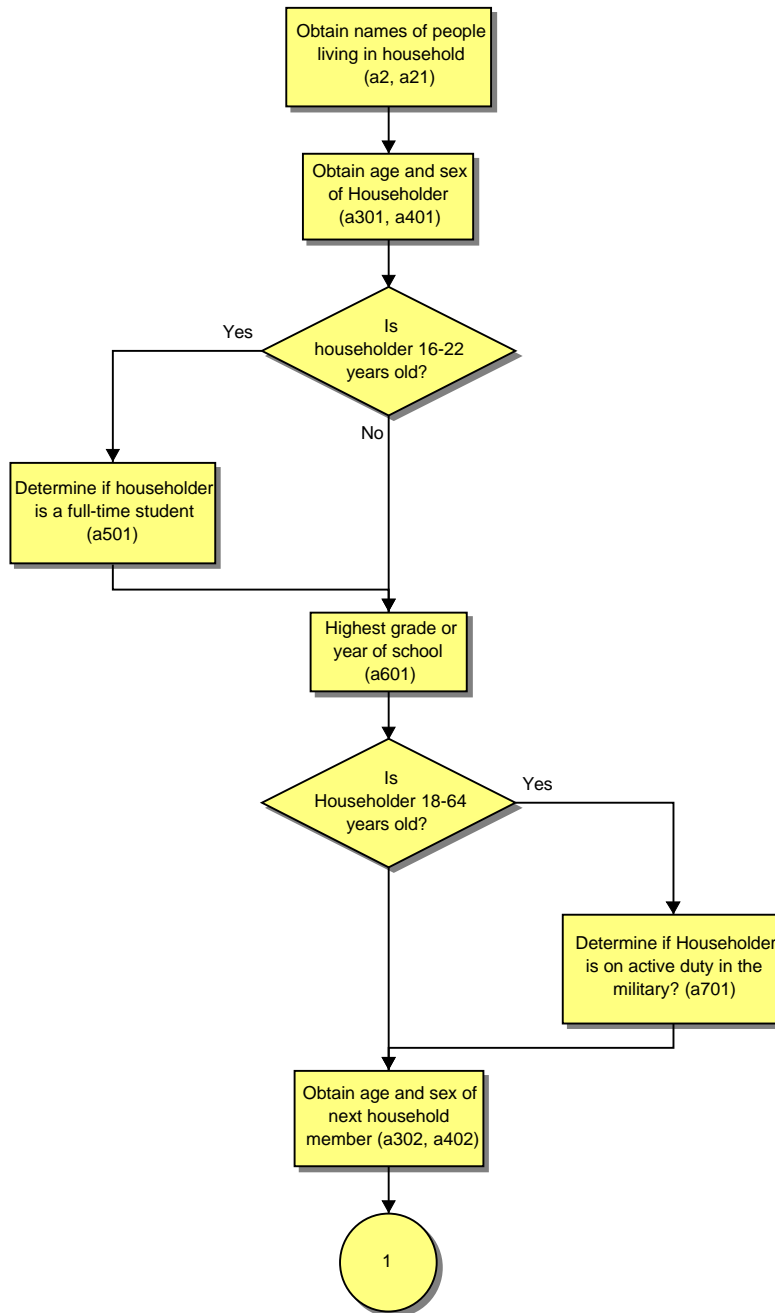
>test e16c< [IF THIS PERSON ACCOMPANIED CHILD ON LAST VISIT INCLUDE CHILD'S LAST VISIT QUESTIONS.] [e16c-e40c]

Appendix B

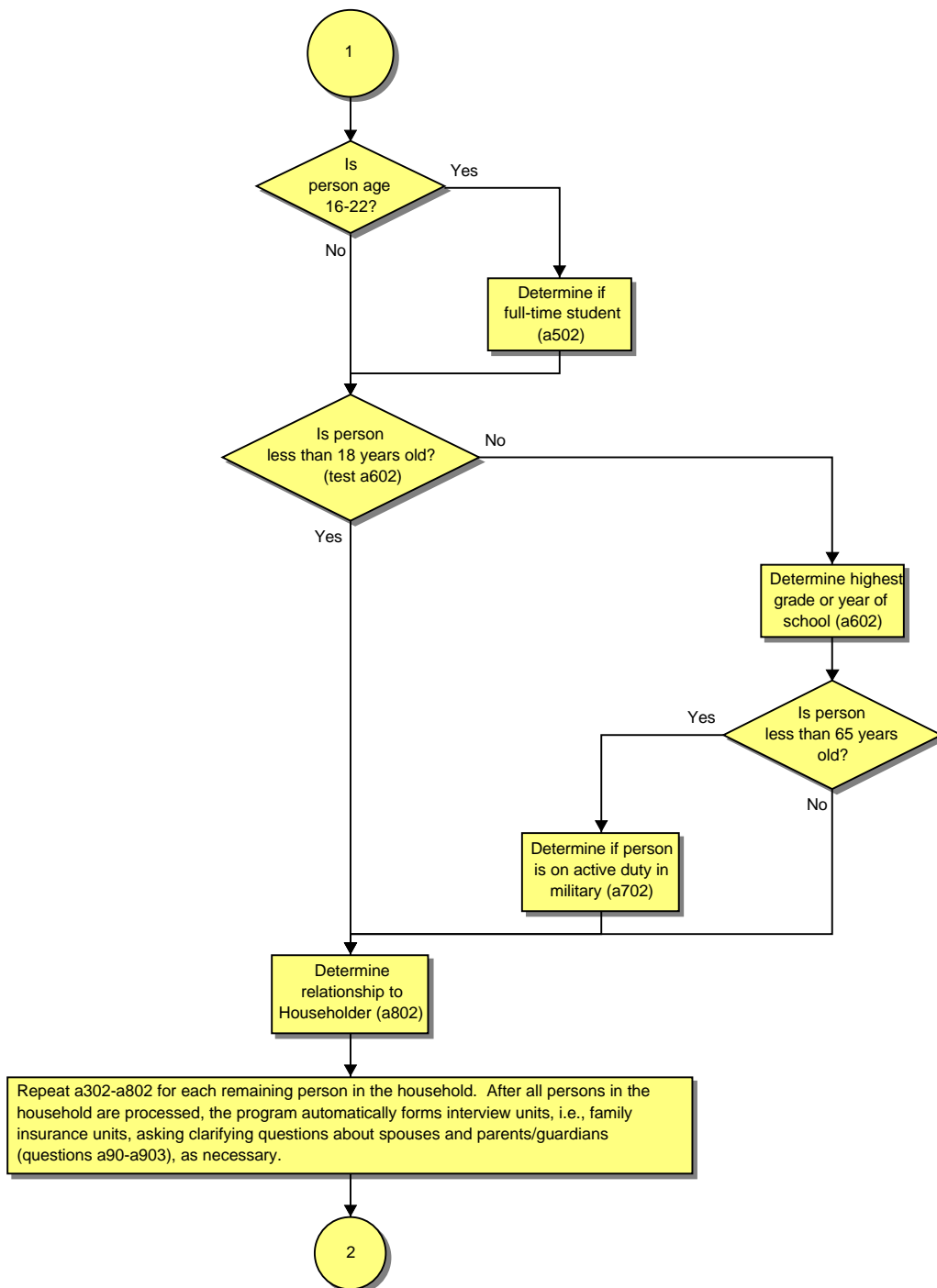
The CTS Household Survey Questionnaire Logic and Skip Pattern

Round One

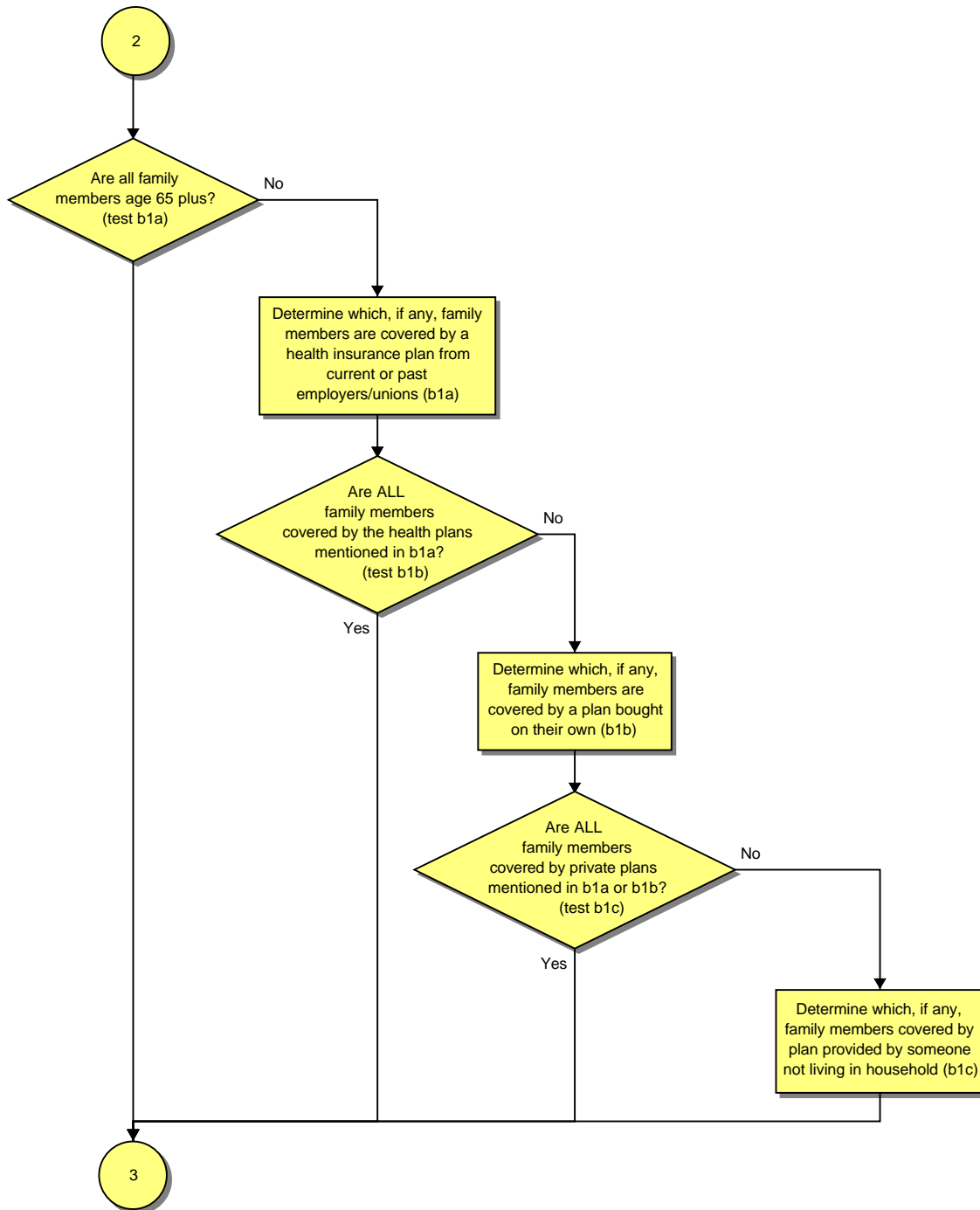
Section A: Household Composition



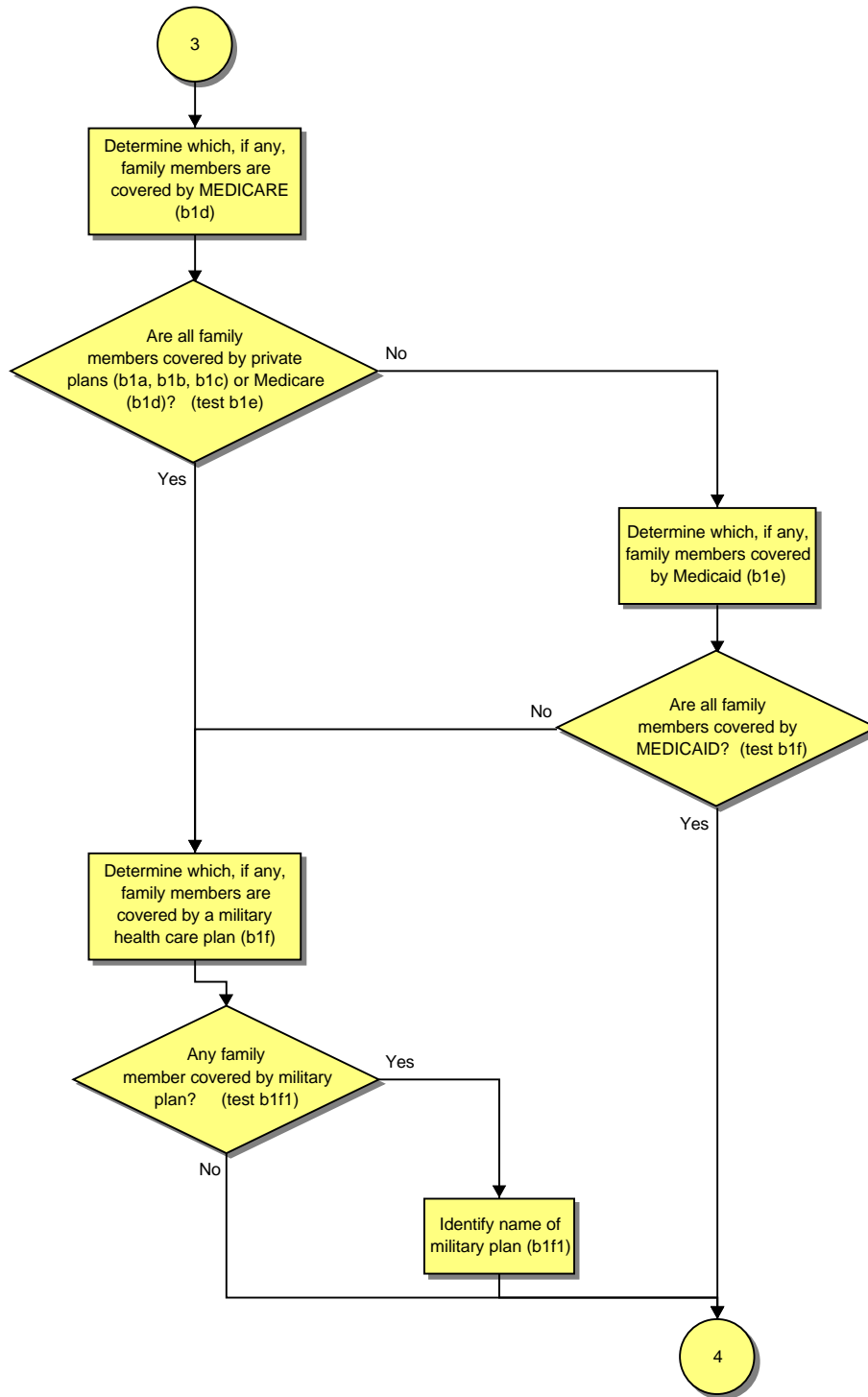
Section A: Household Composition - continued



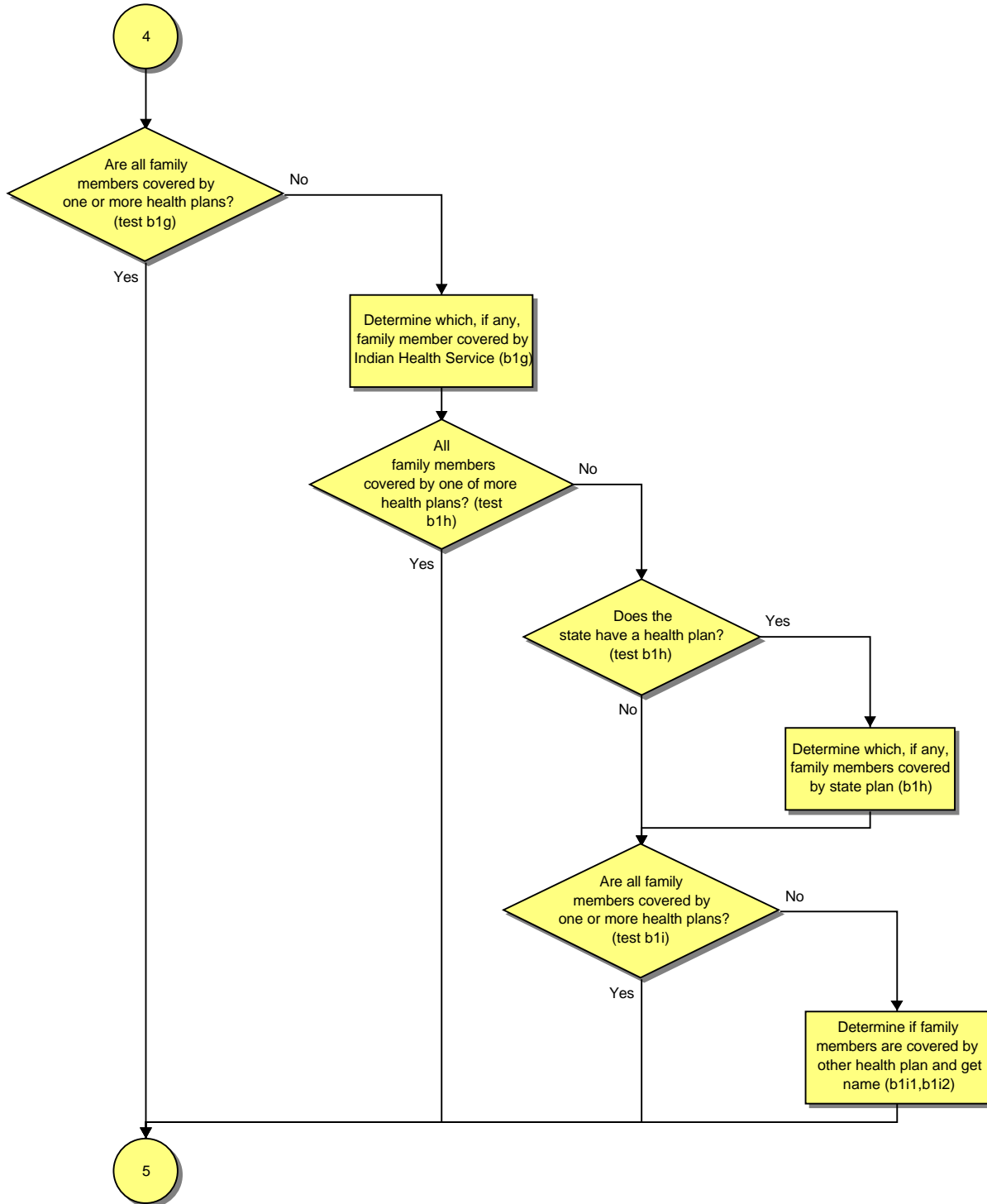
Section B: Health Insurance



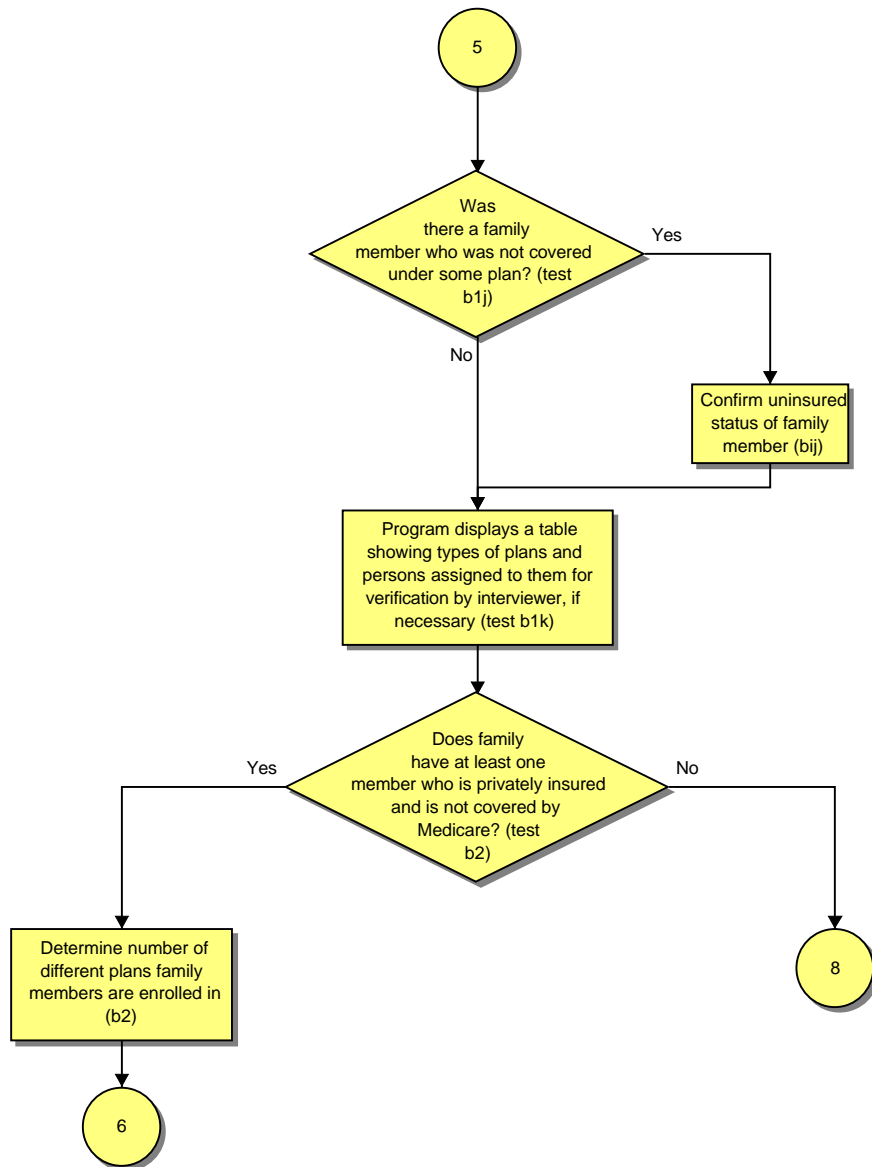
Section B: Health Insurance - Continued



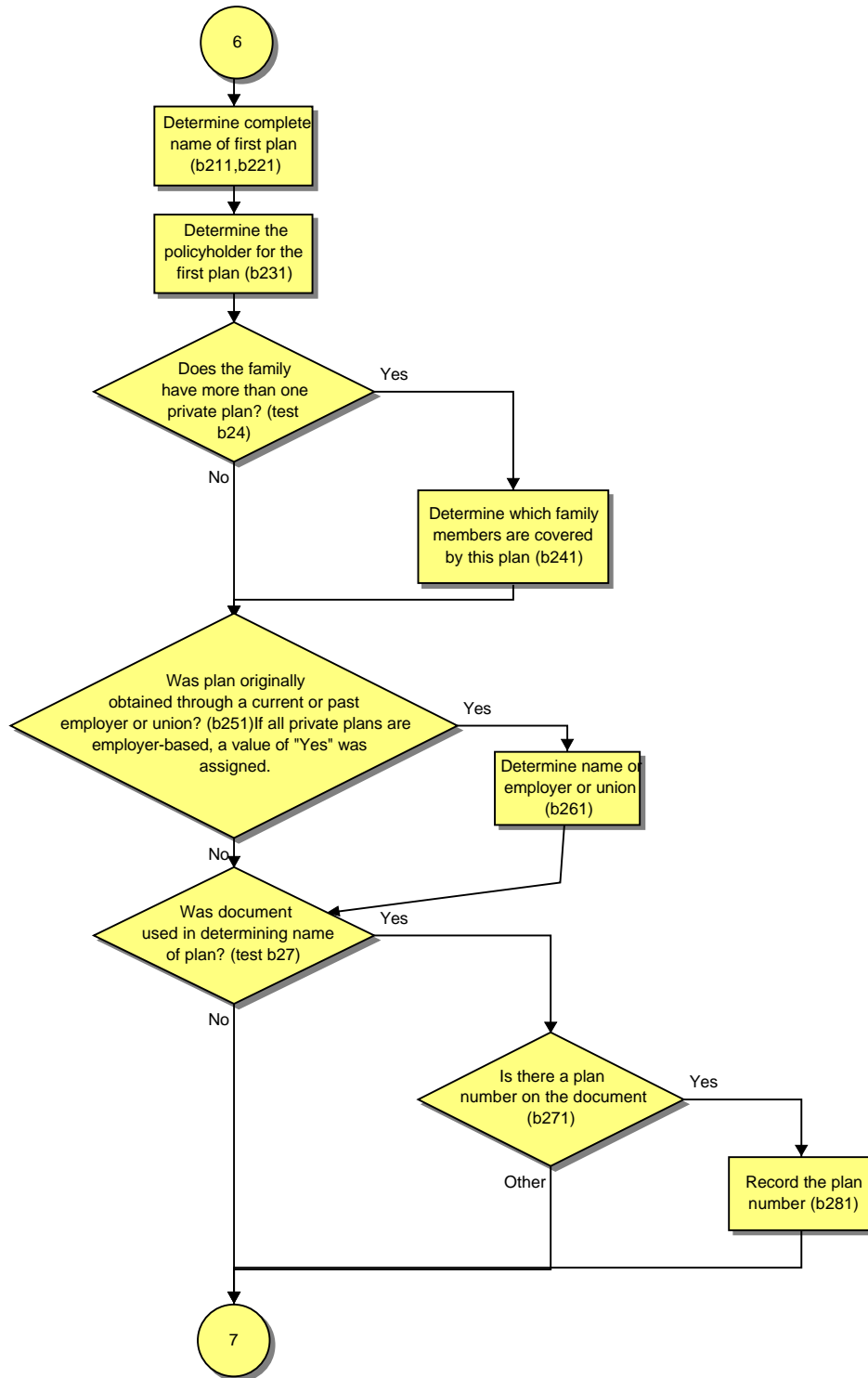
Section B: Health Insurance - Continued



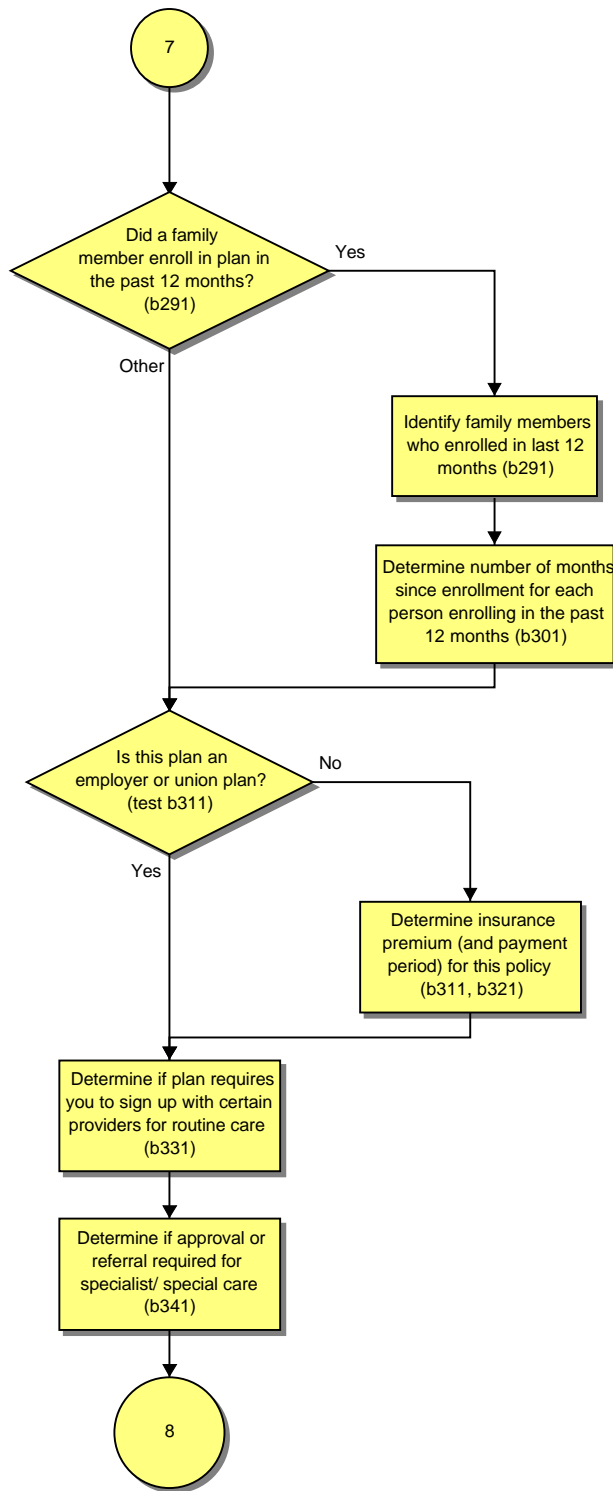
Section B: Health Insurance - Continued



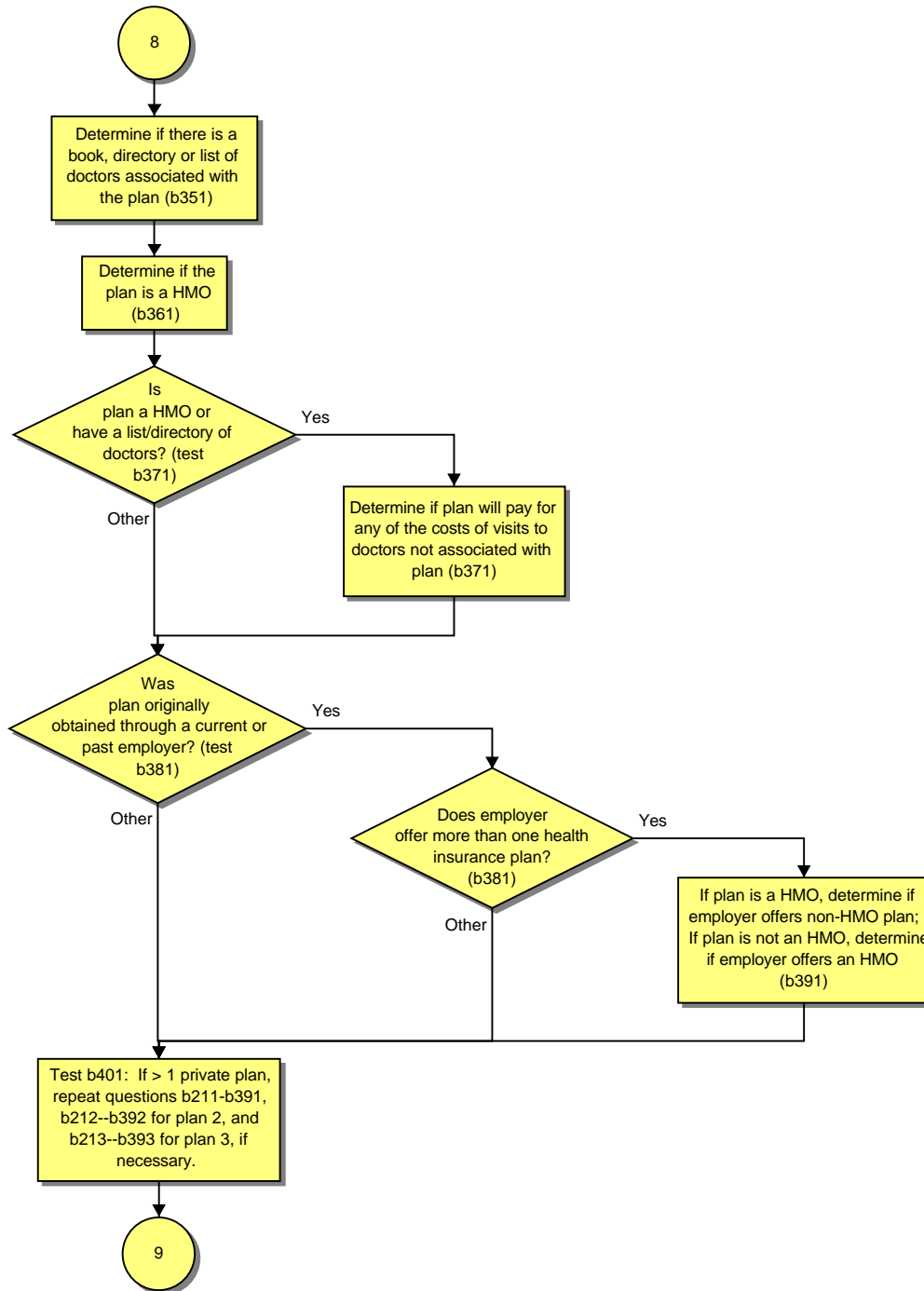
Section B: Household Insurance - Continued



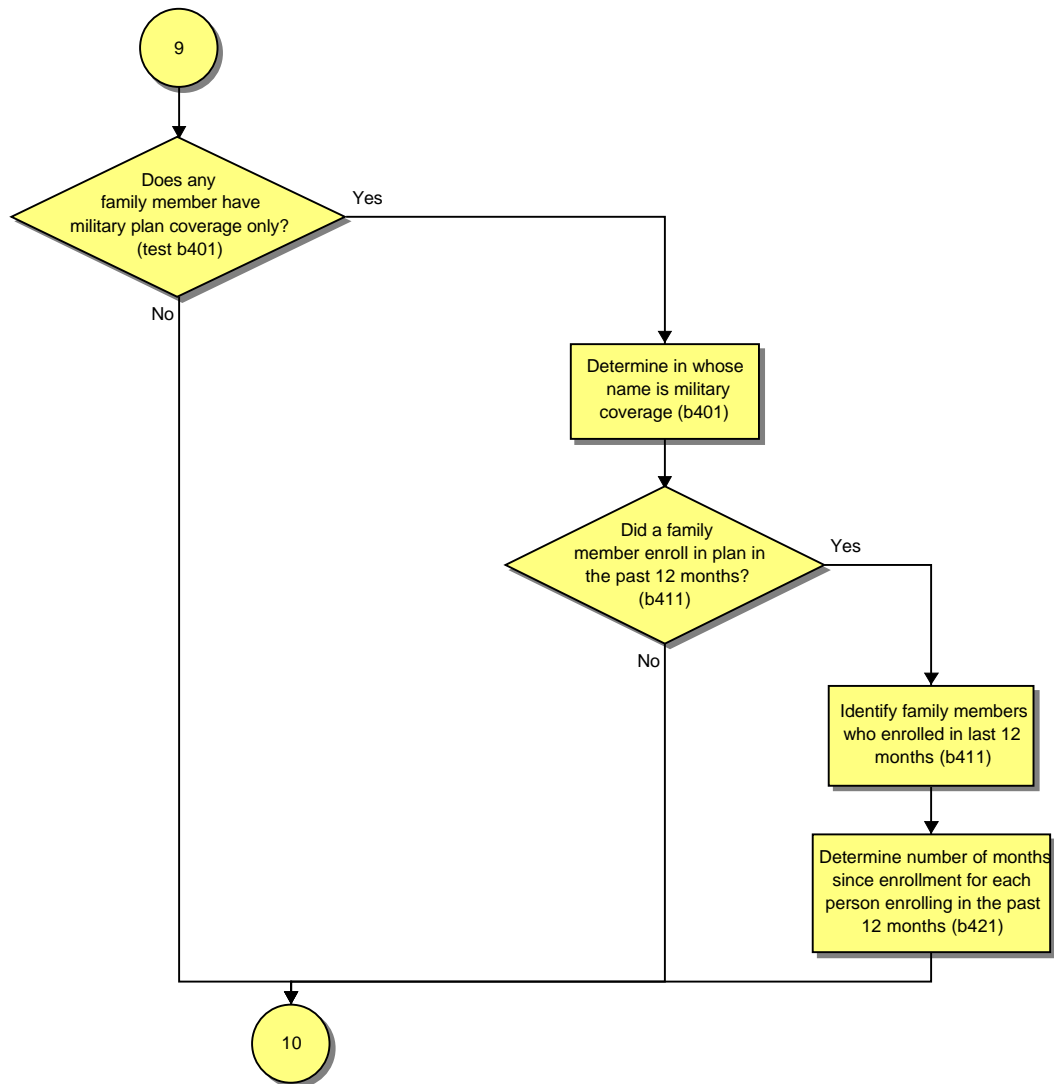
Section B: Health Insurance - Continued



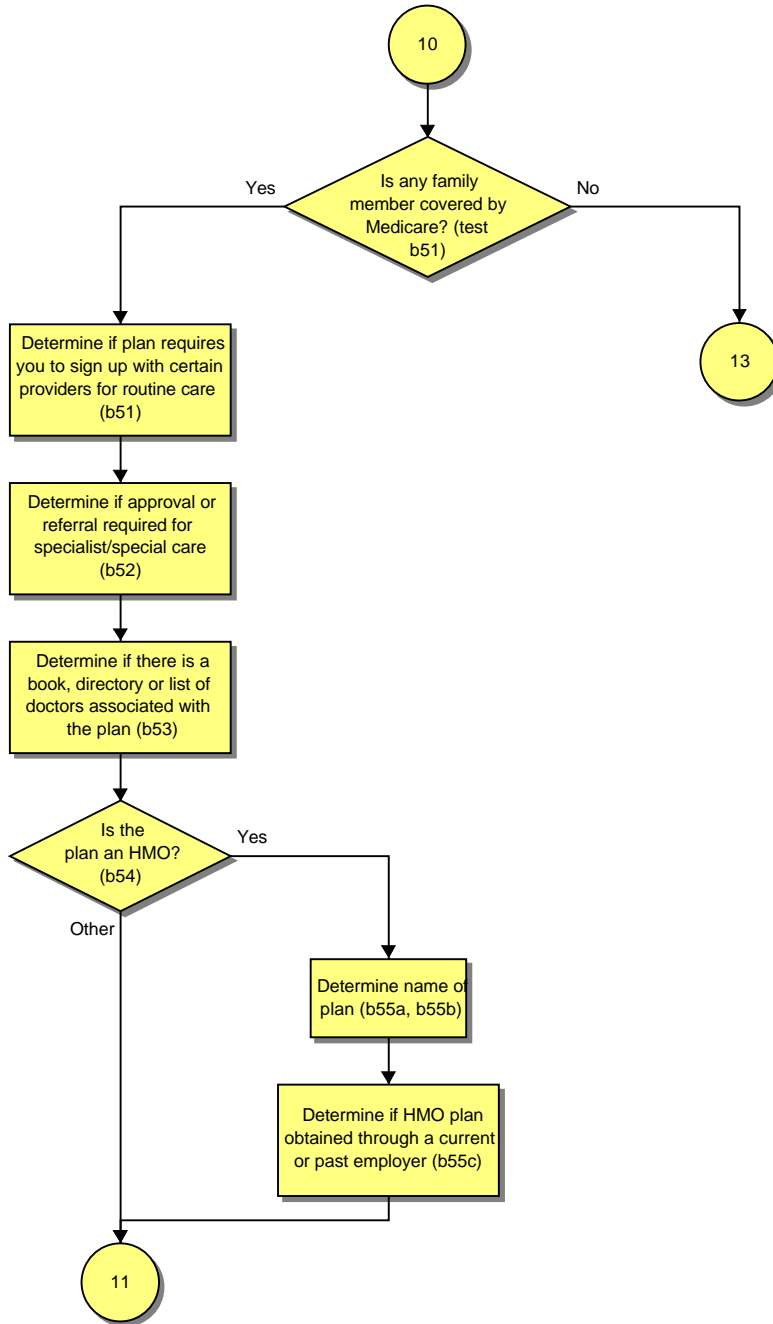
Section B: Health Insurance - Continued



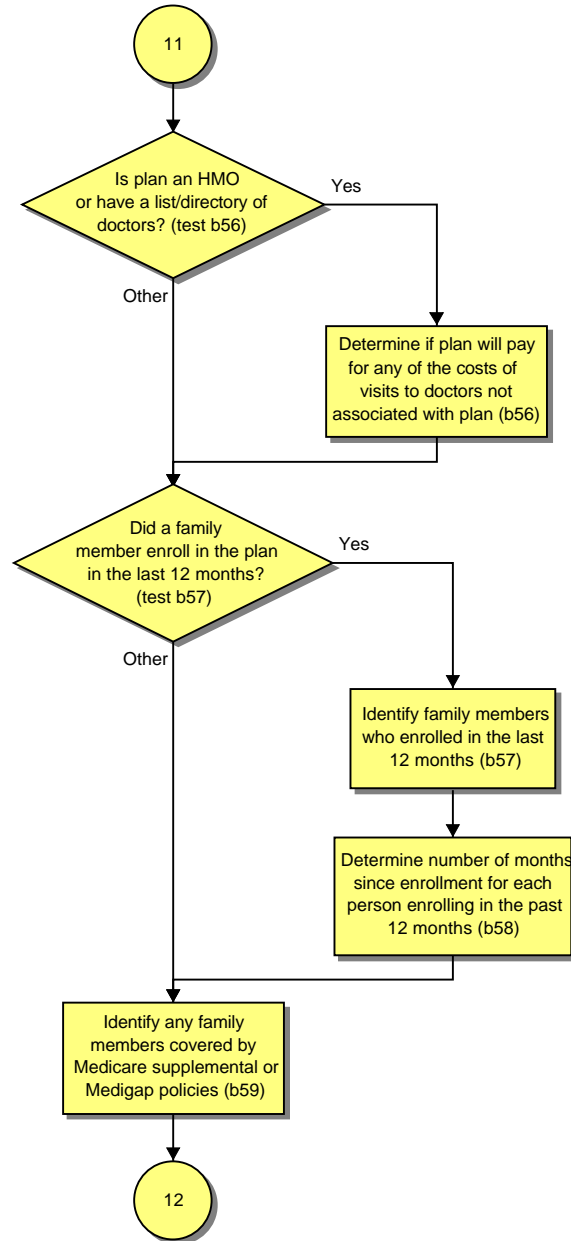
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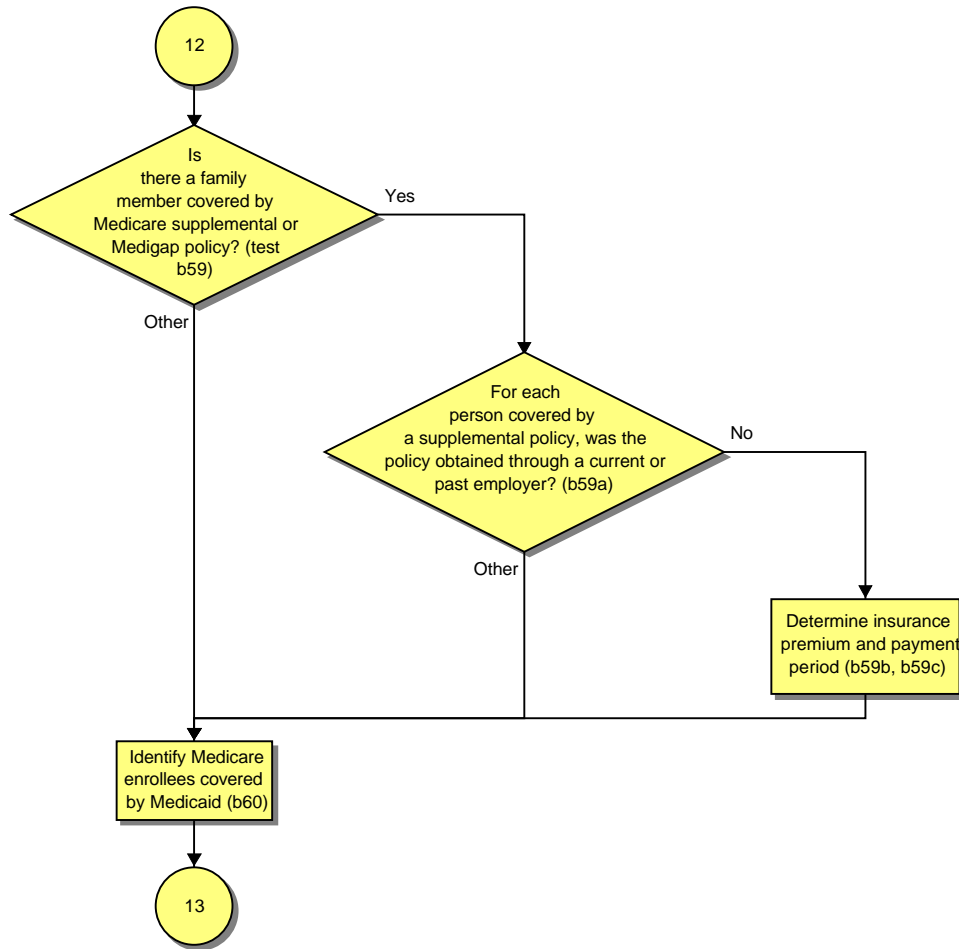
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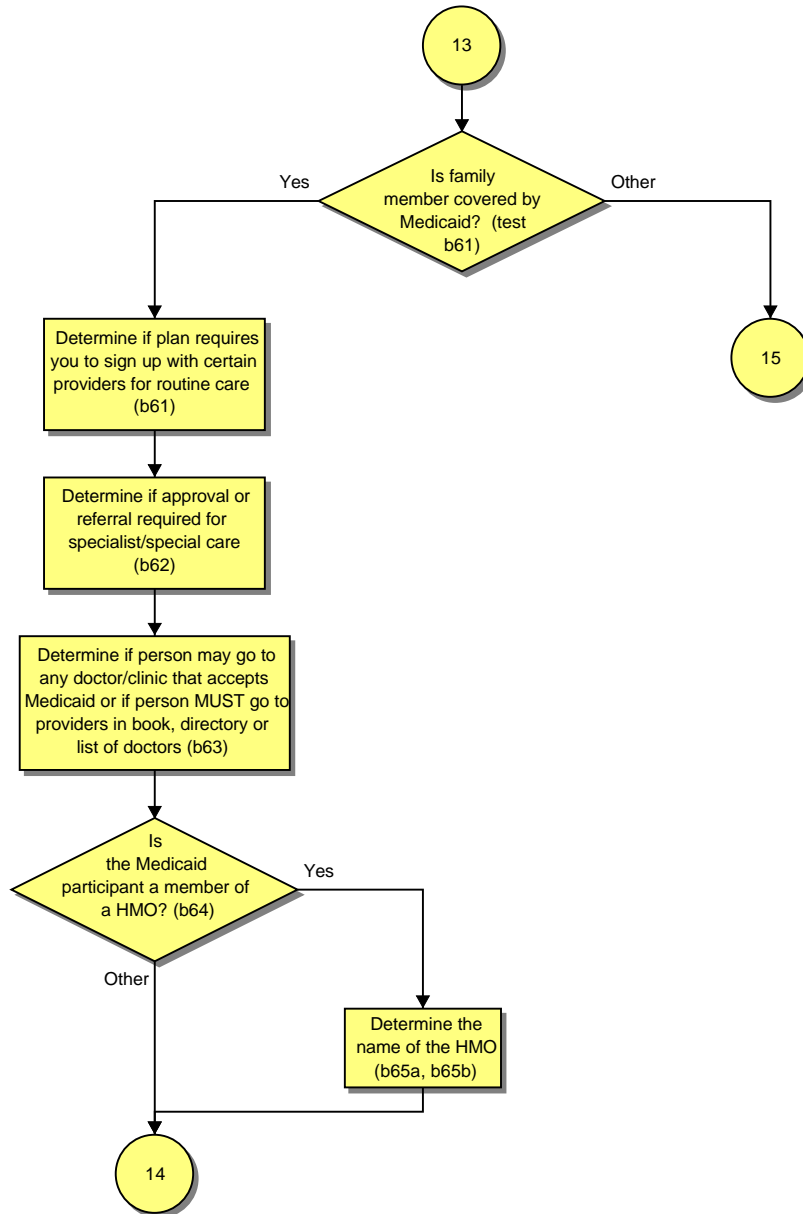
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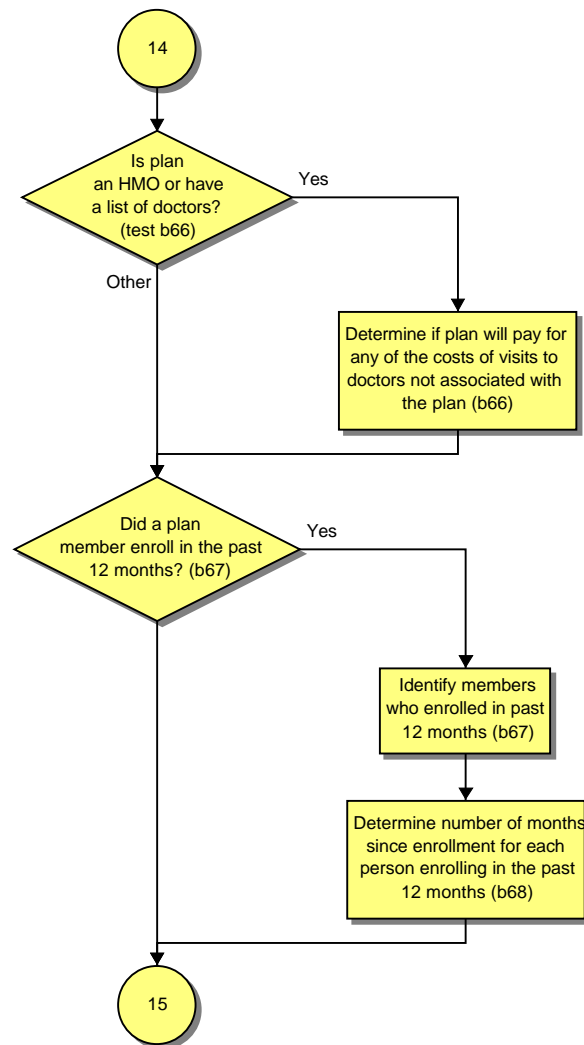
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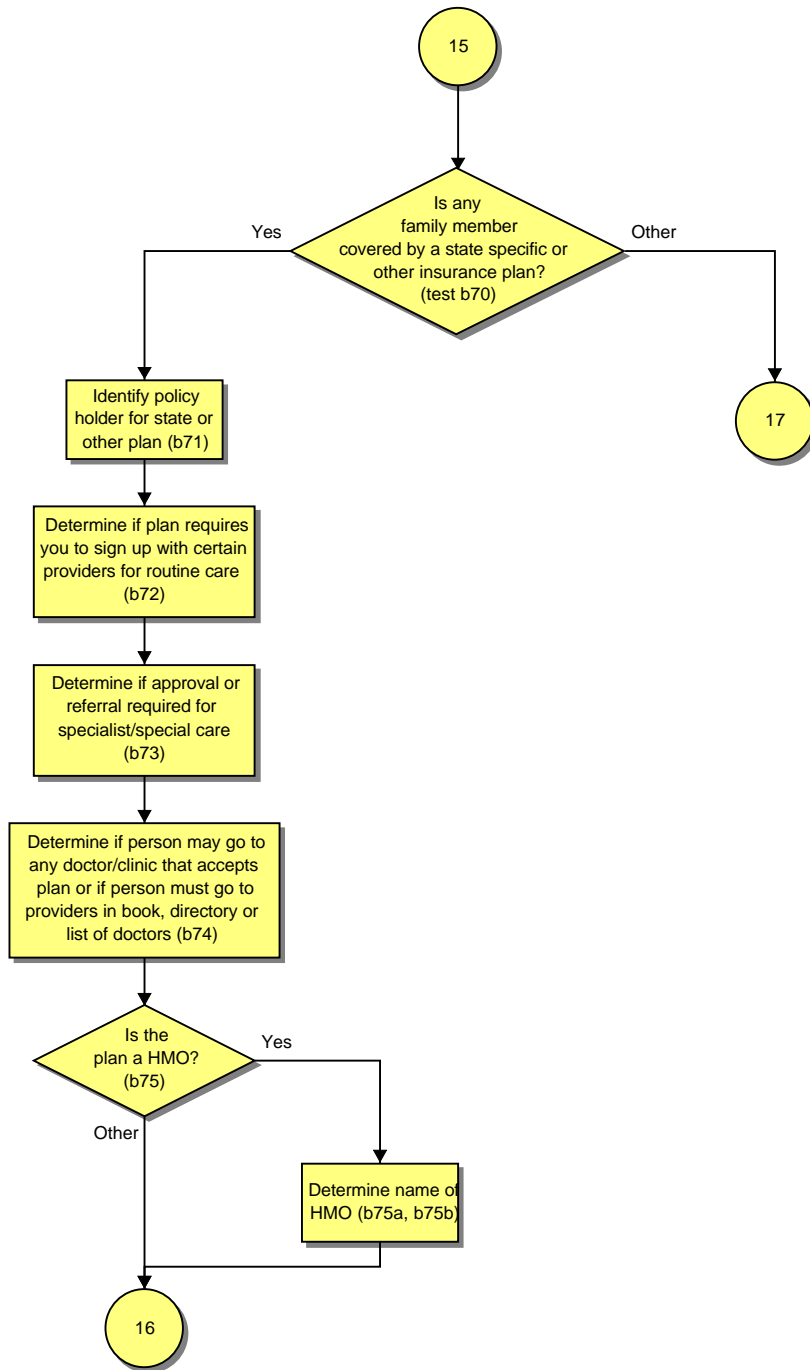
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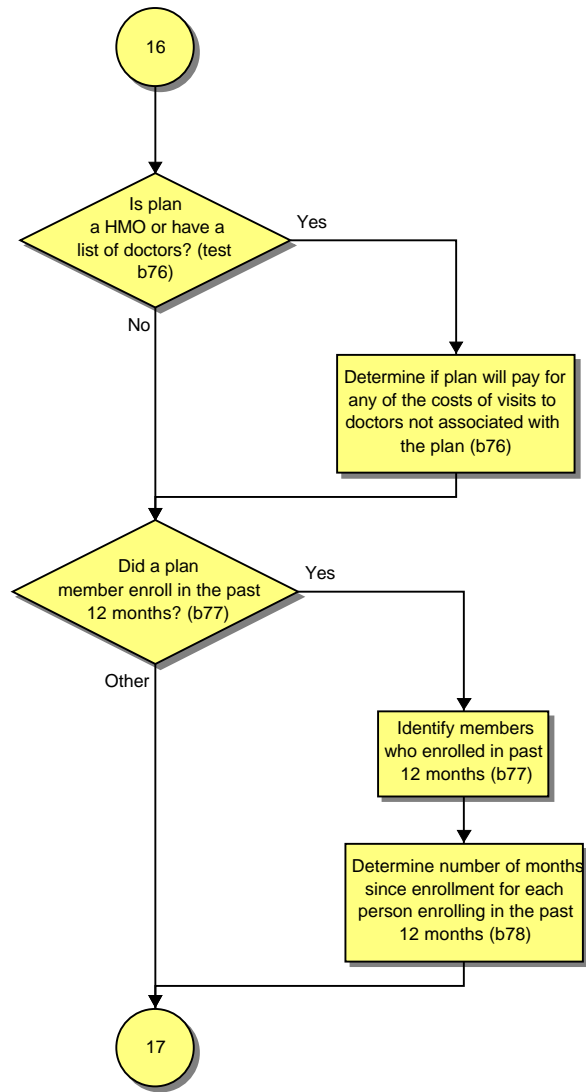
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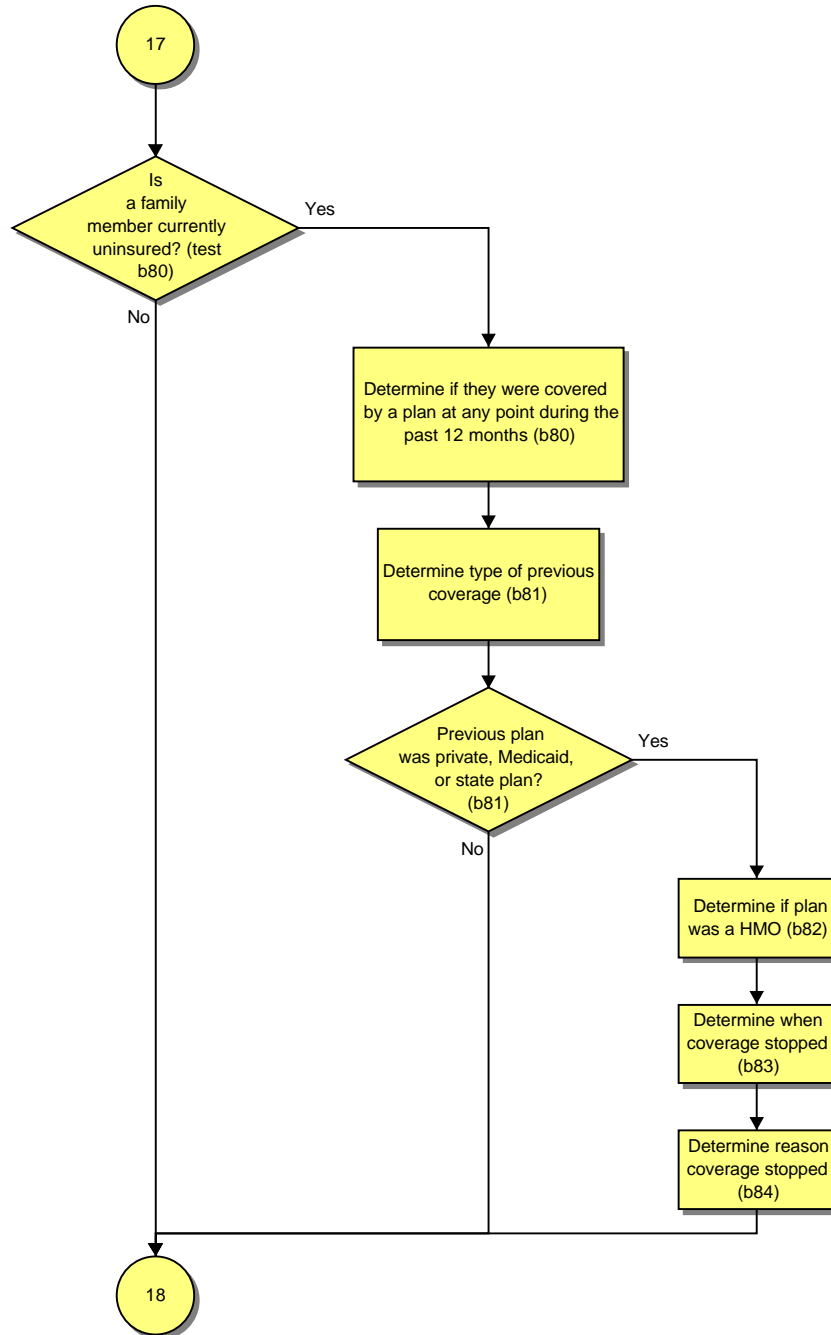
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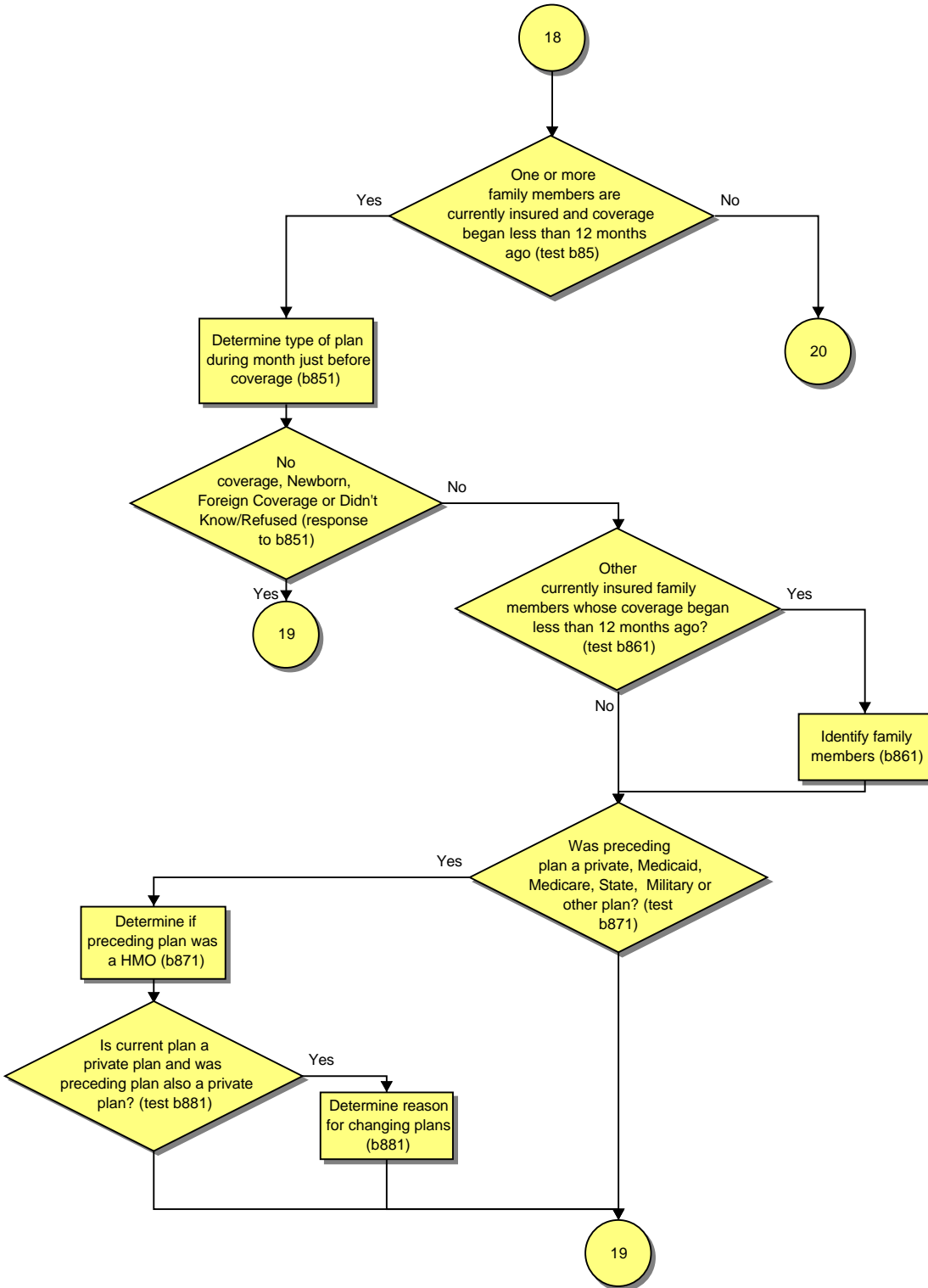
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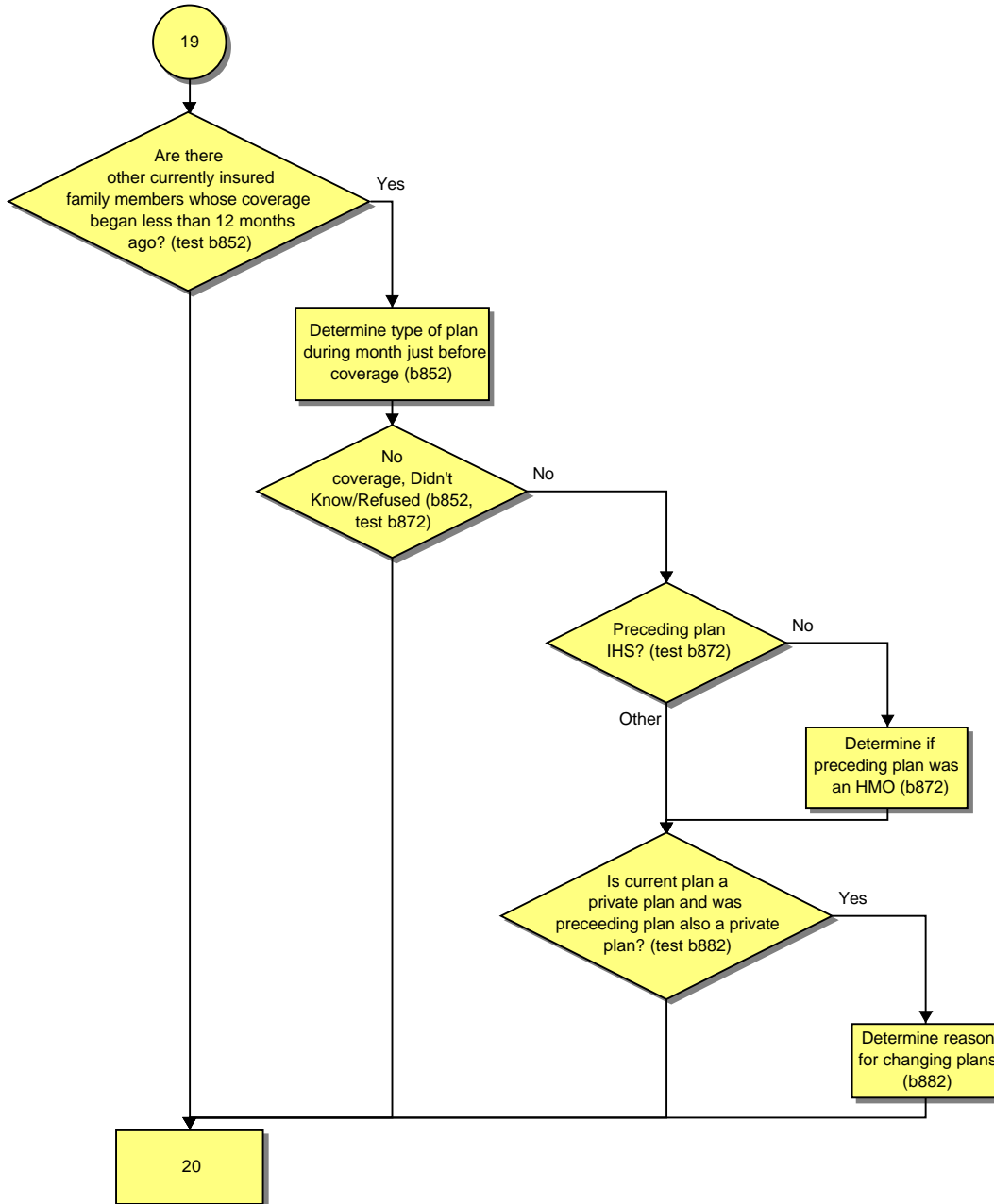
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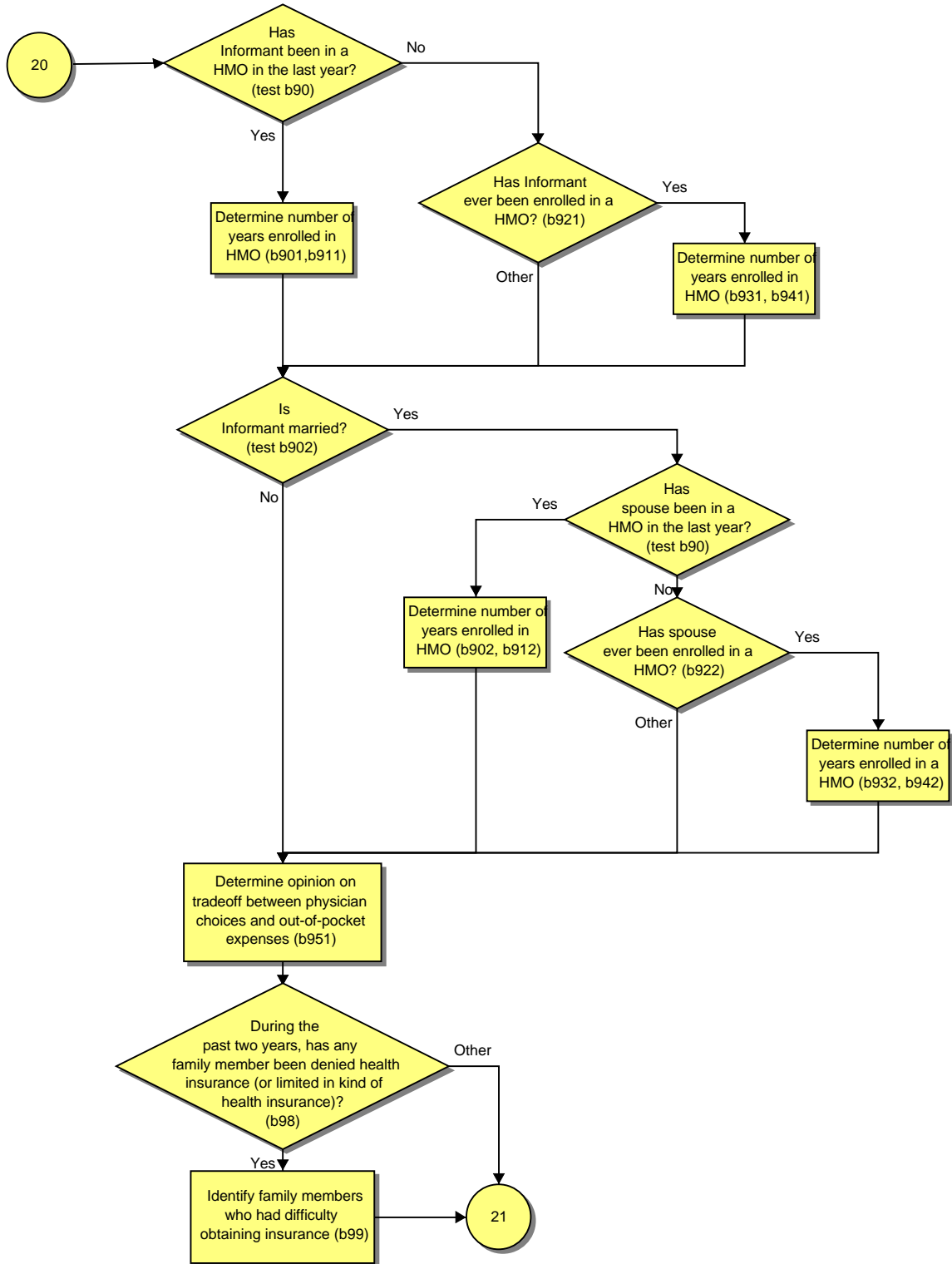
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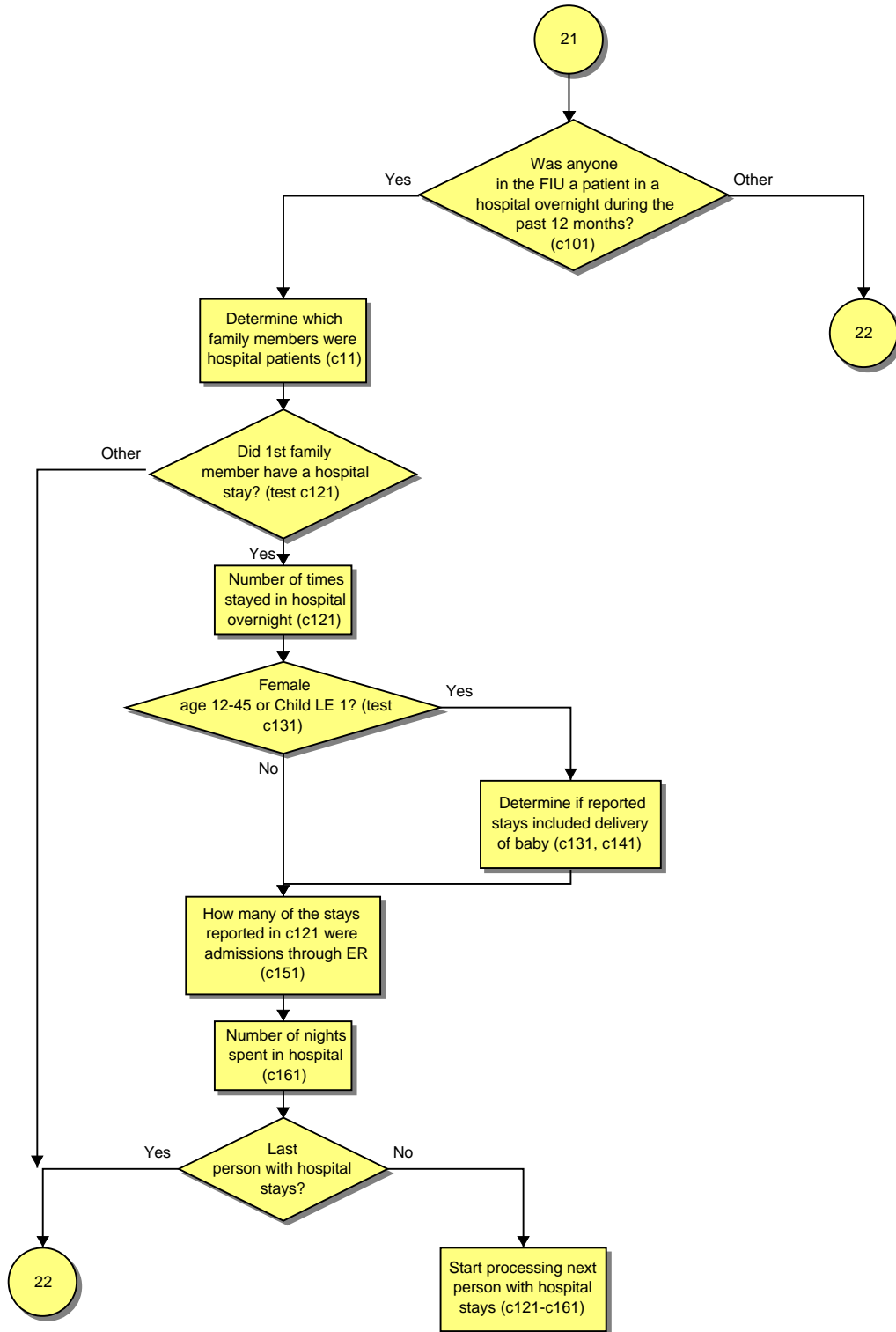
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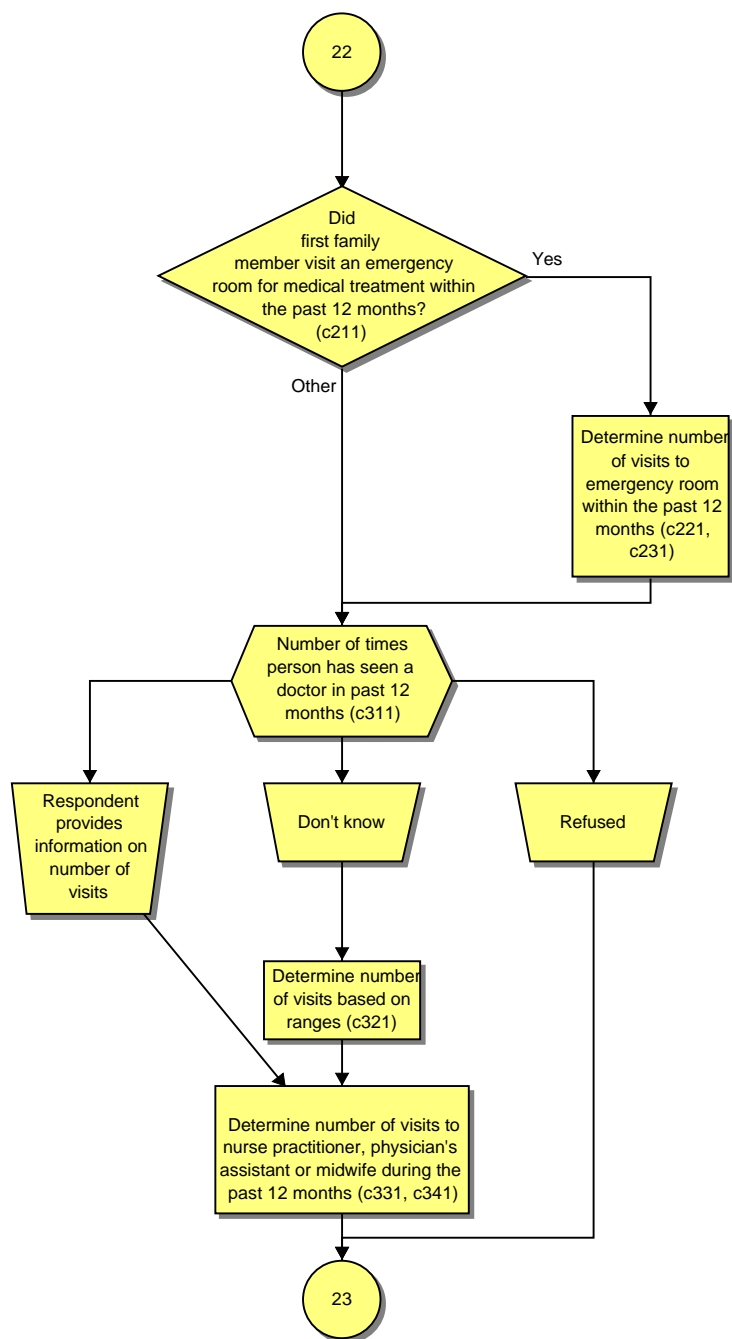
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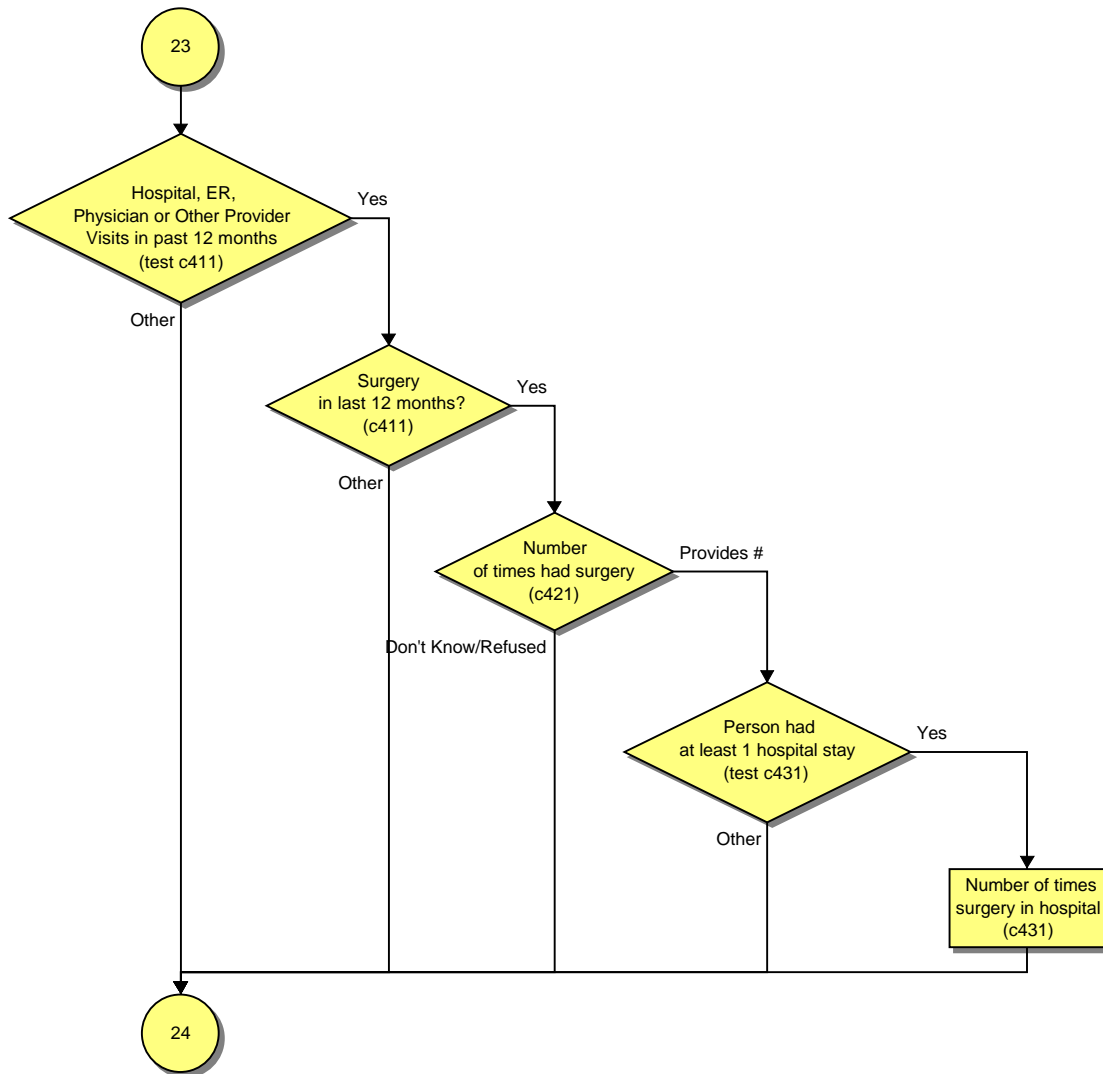
Section C: Resource Use



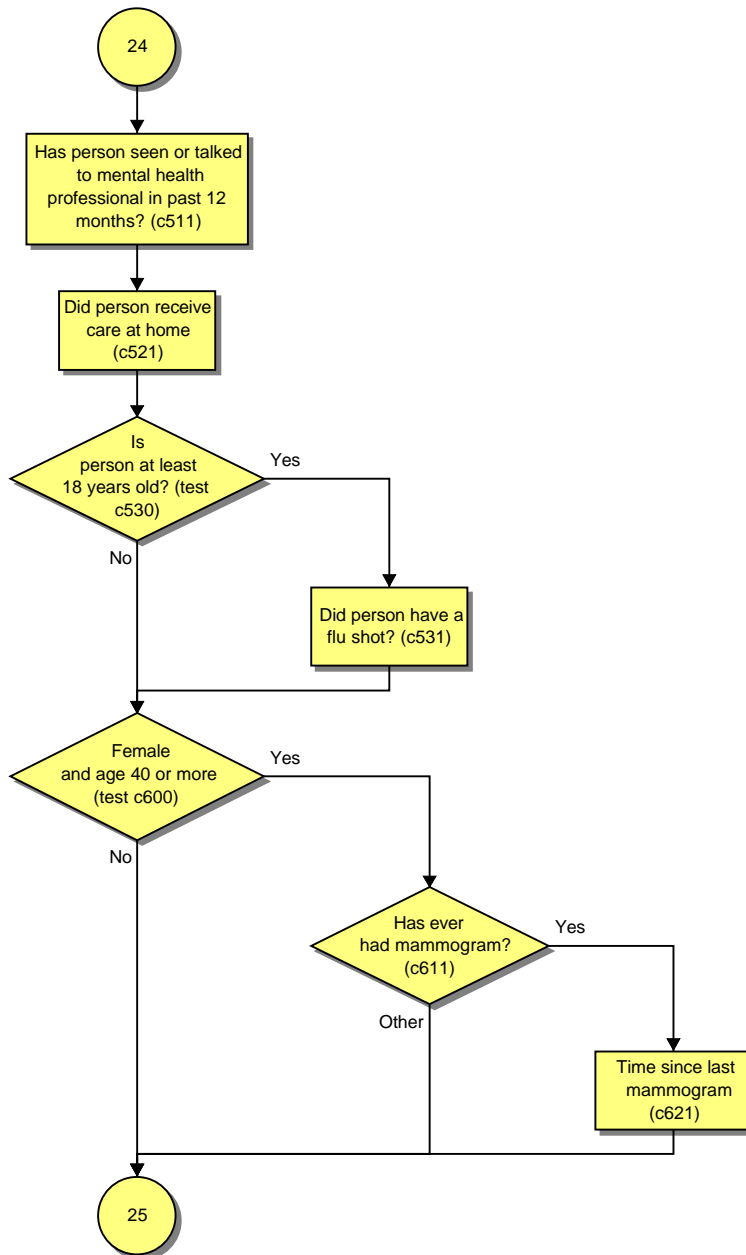
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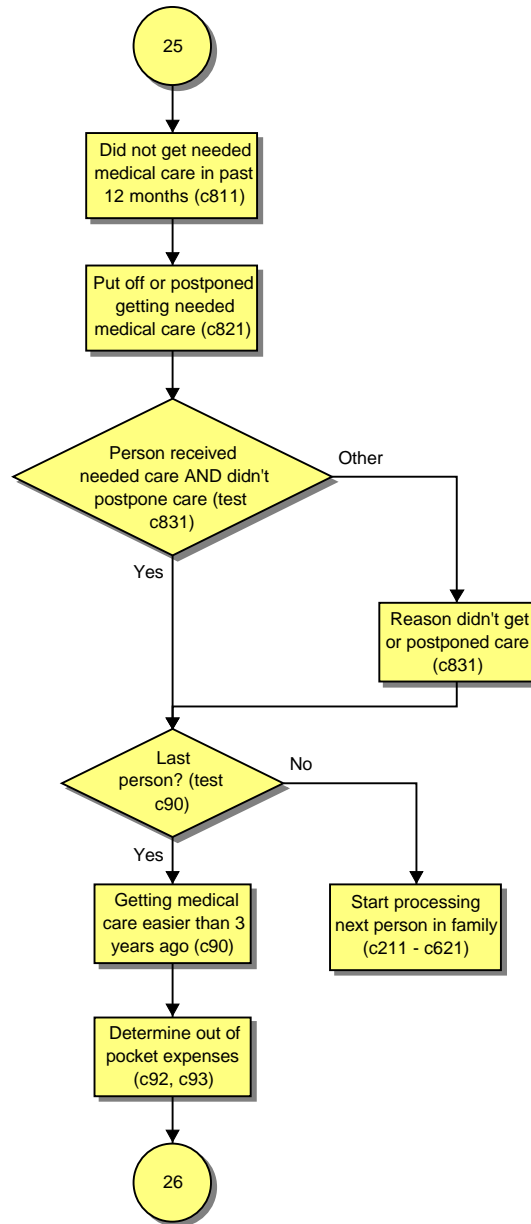
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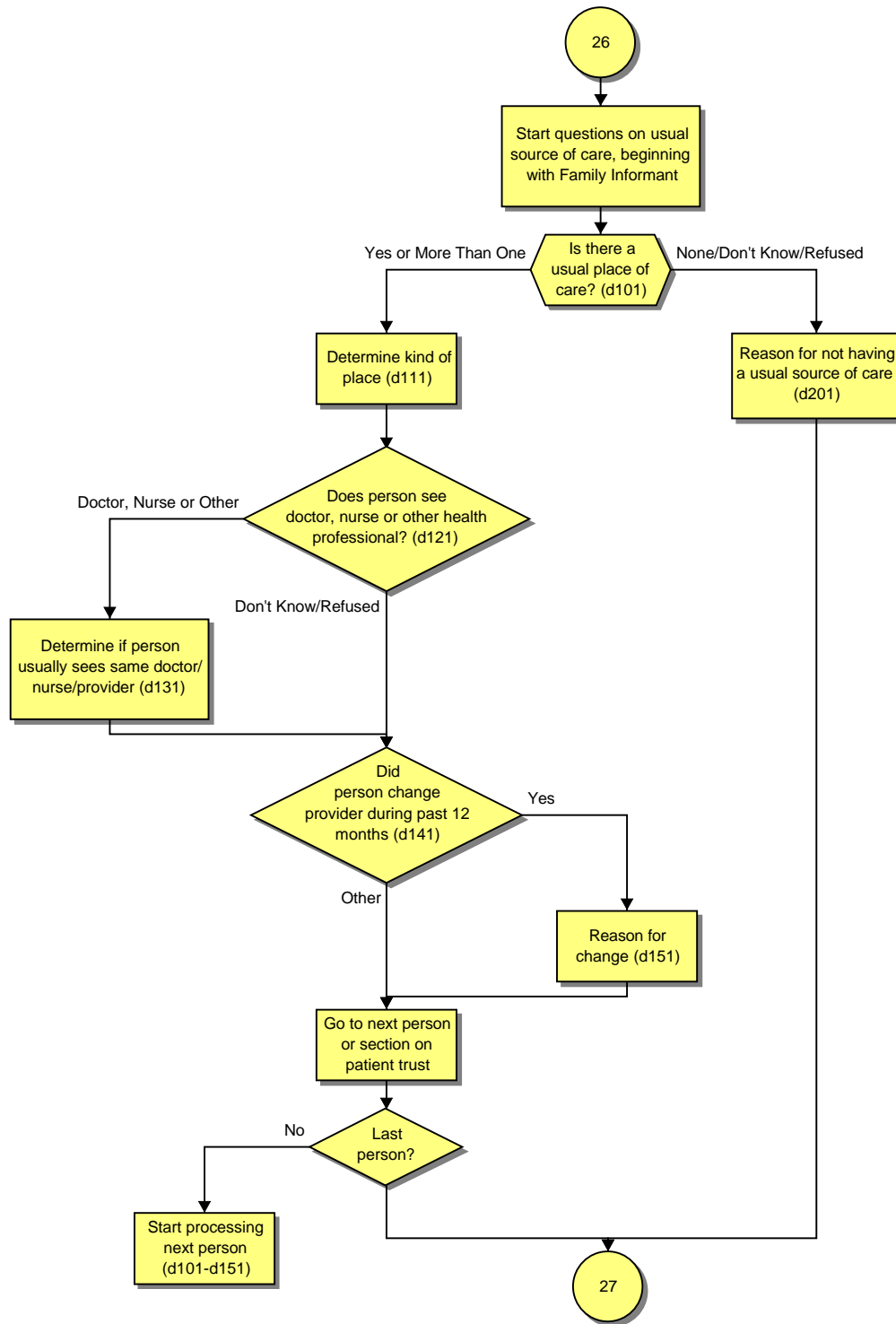
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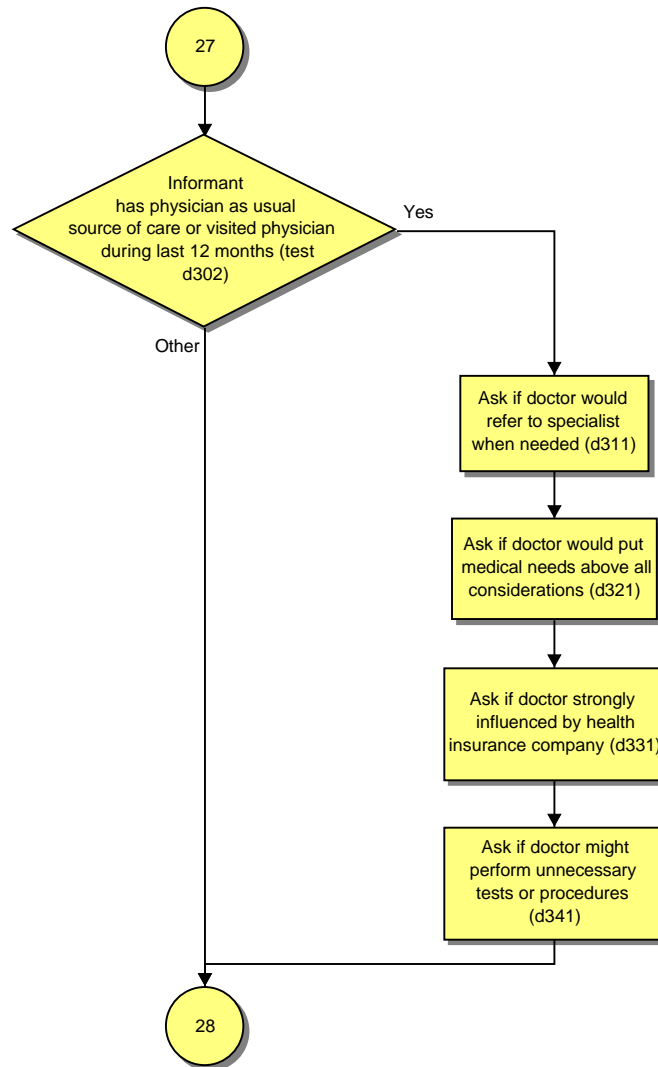
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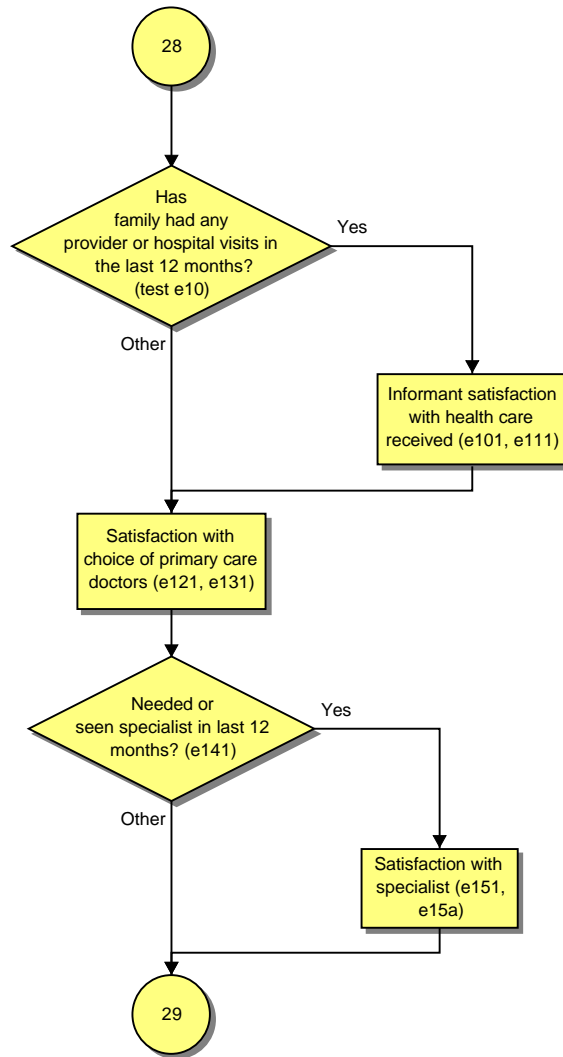
Section D: Usual Source of Care/Patient Trust



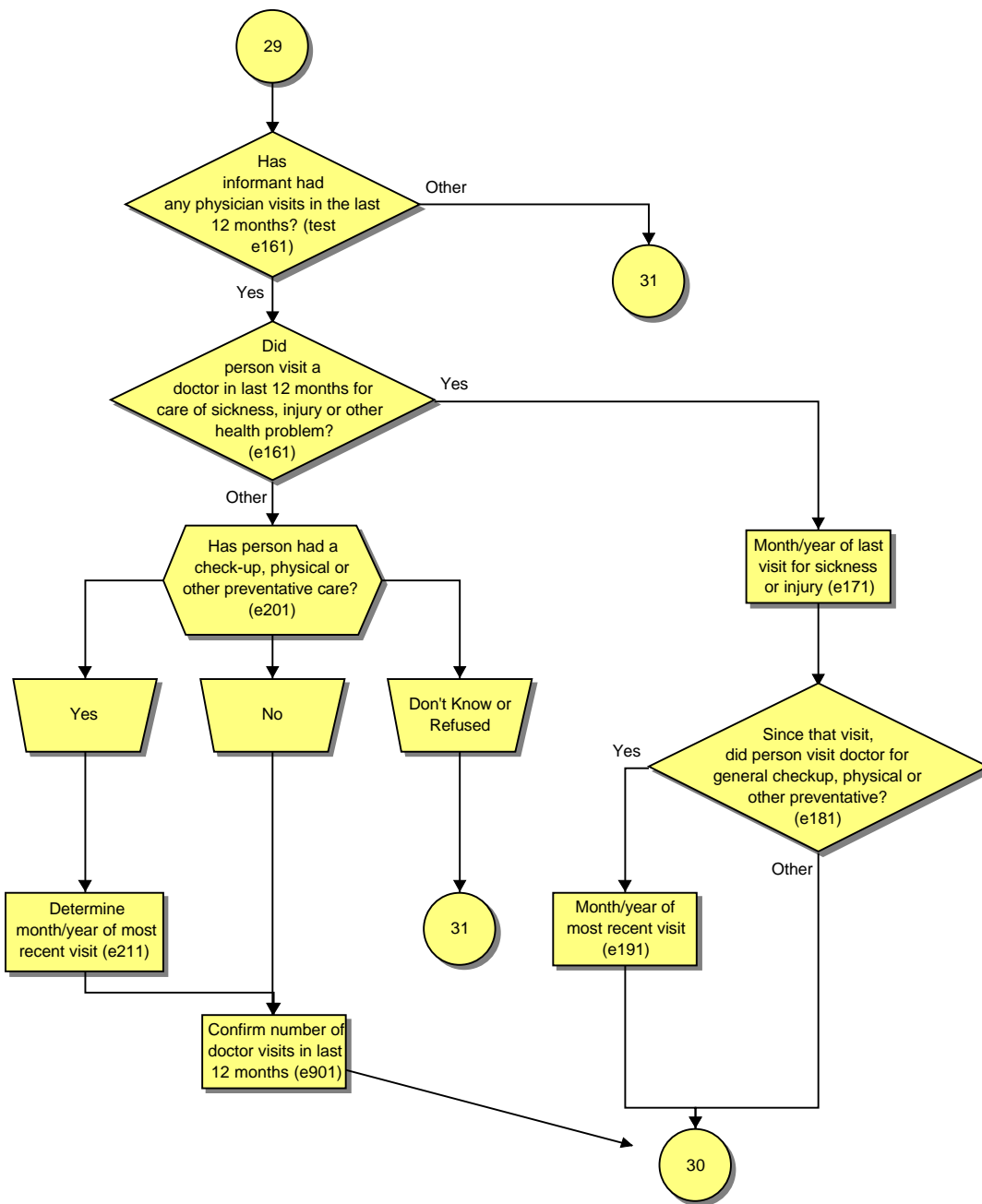
Section D: Usual Source of Care/Patient Trust - continued



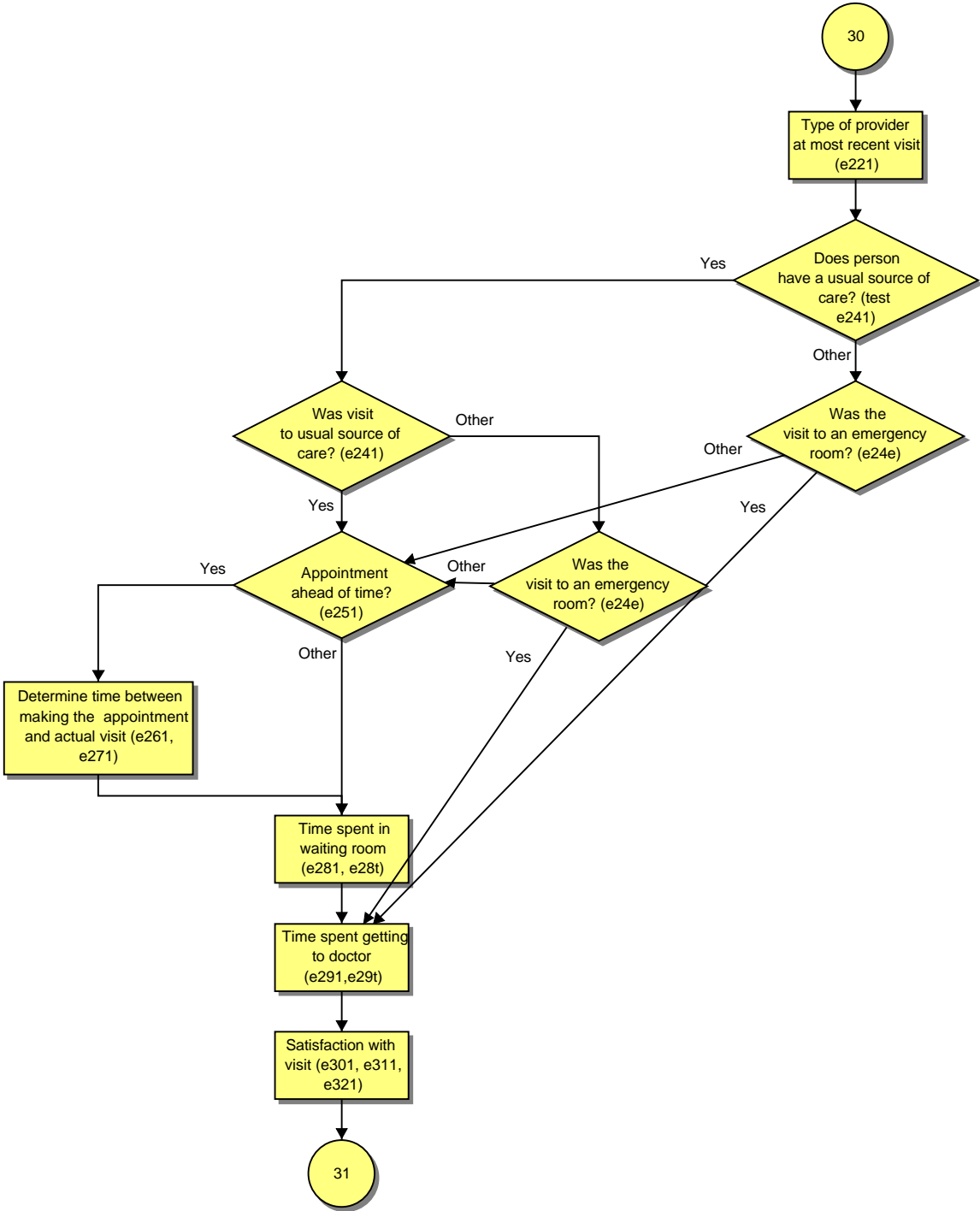
Section E: Satisfaction/Last Visit/Risk Behaviors



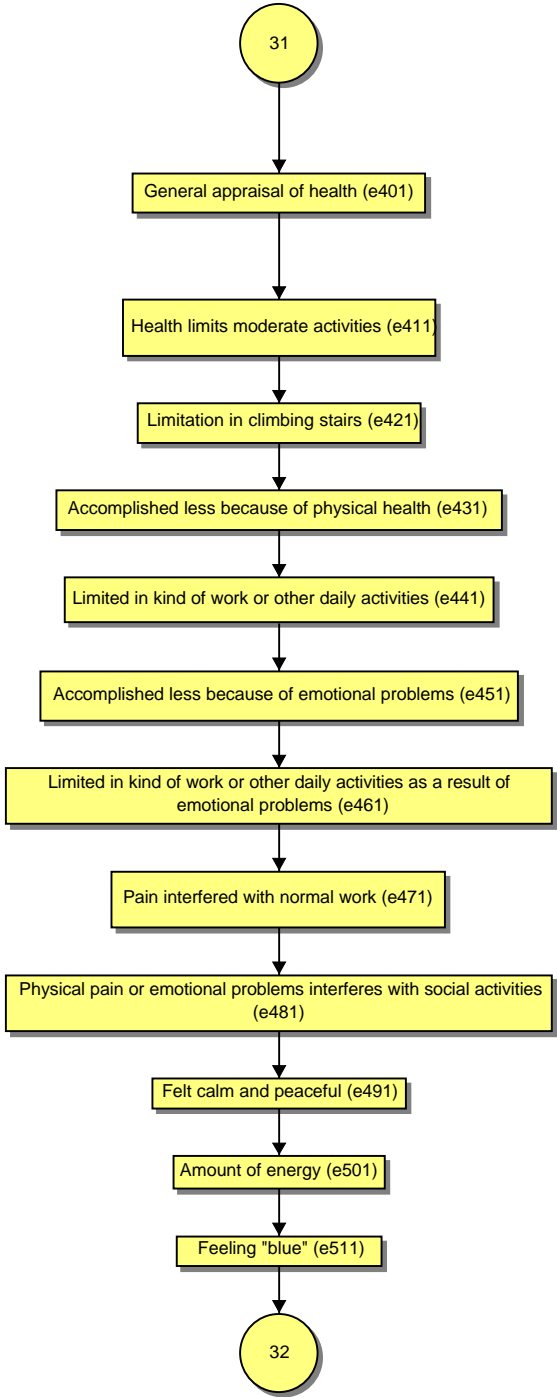
Section E: Satisfaction/Last Visit/Risk Behaviors - continued



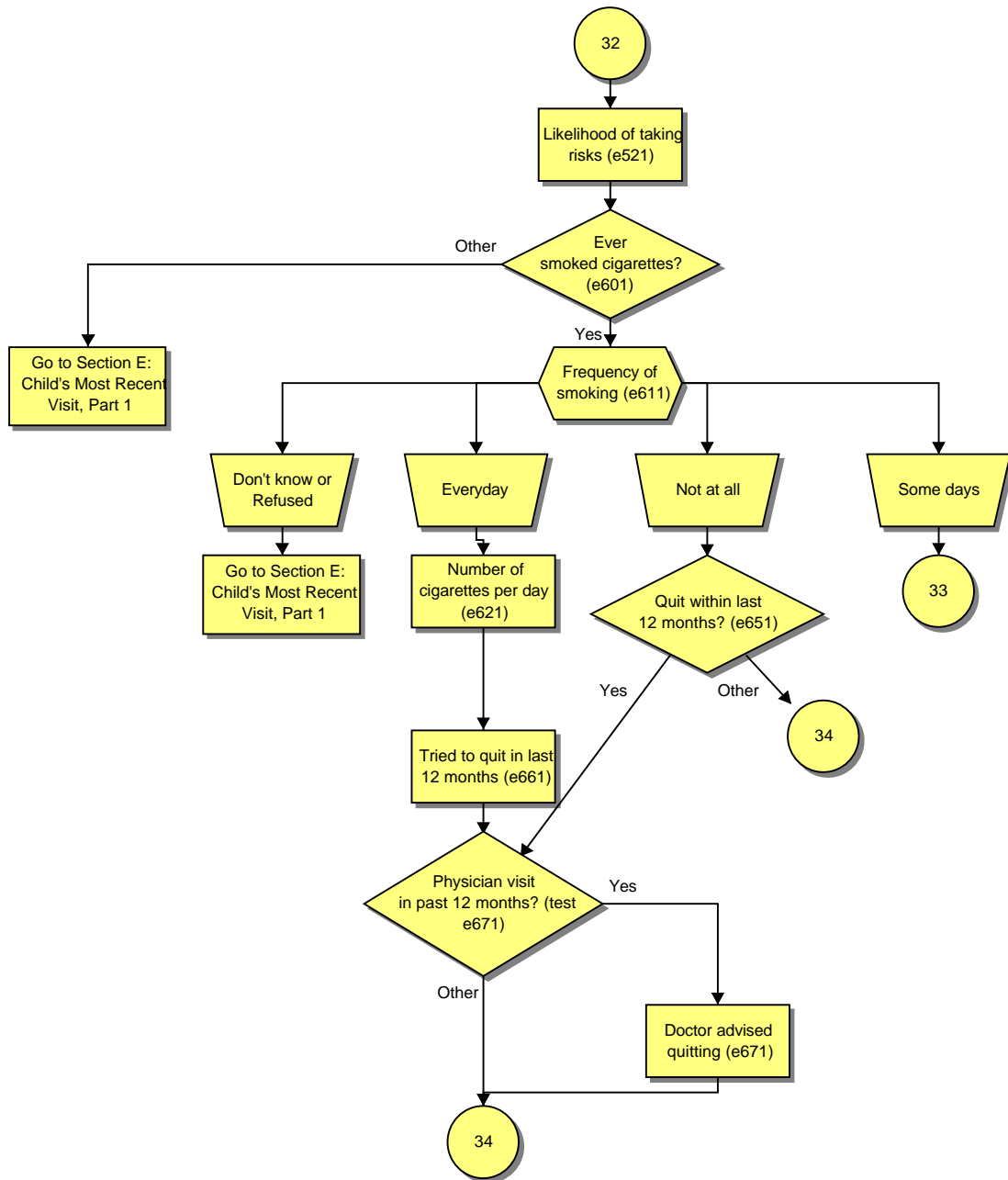
Section E: Satisfaction/Last Visit/Risk Behaviors - continued



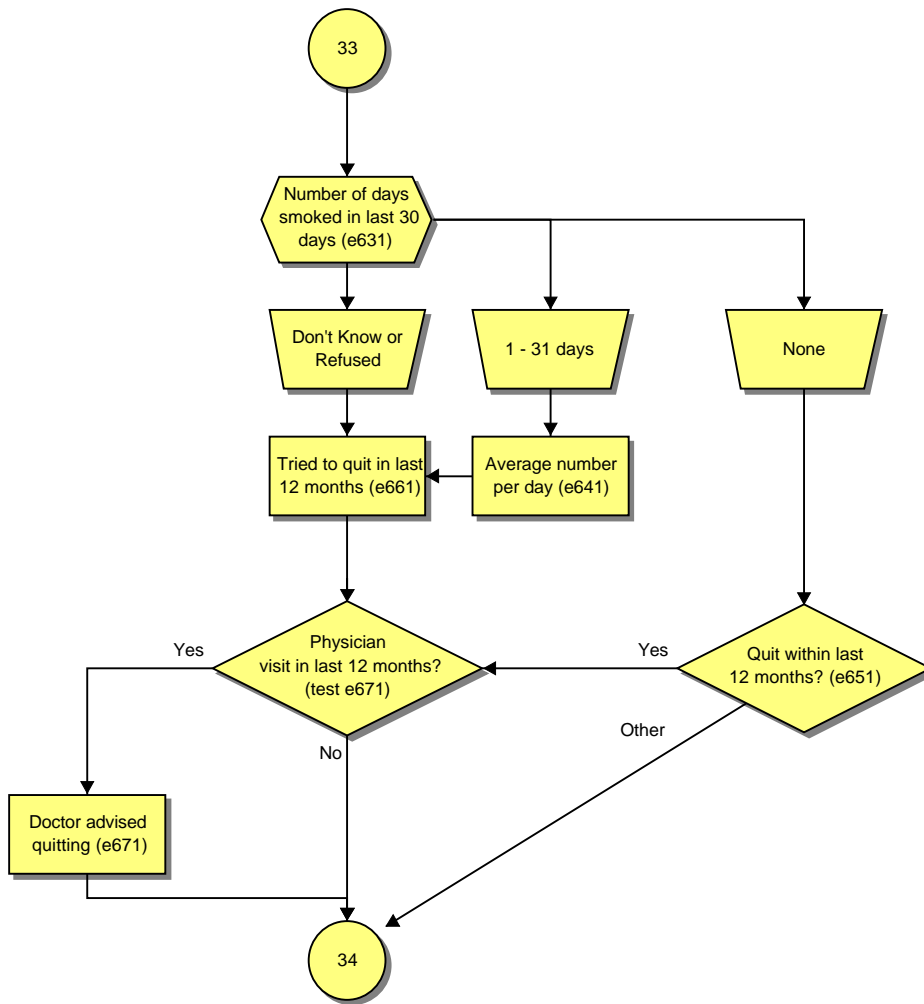
Section E: Satisfaction/Last Visit/Risk Behaviors - continued



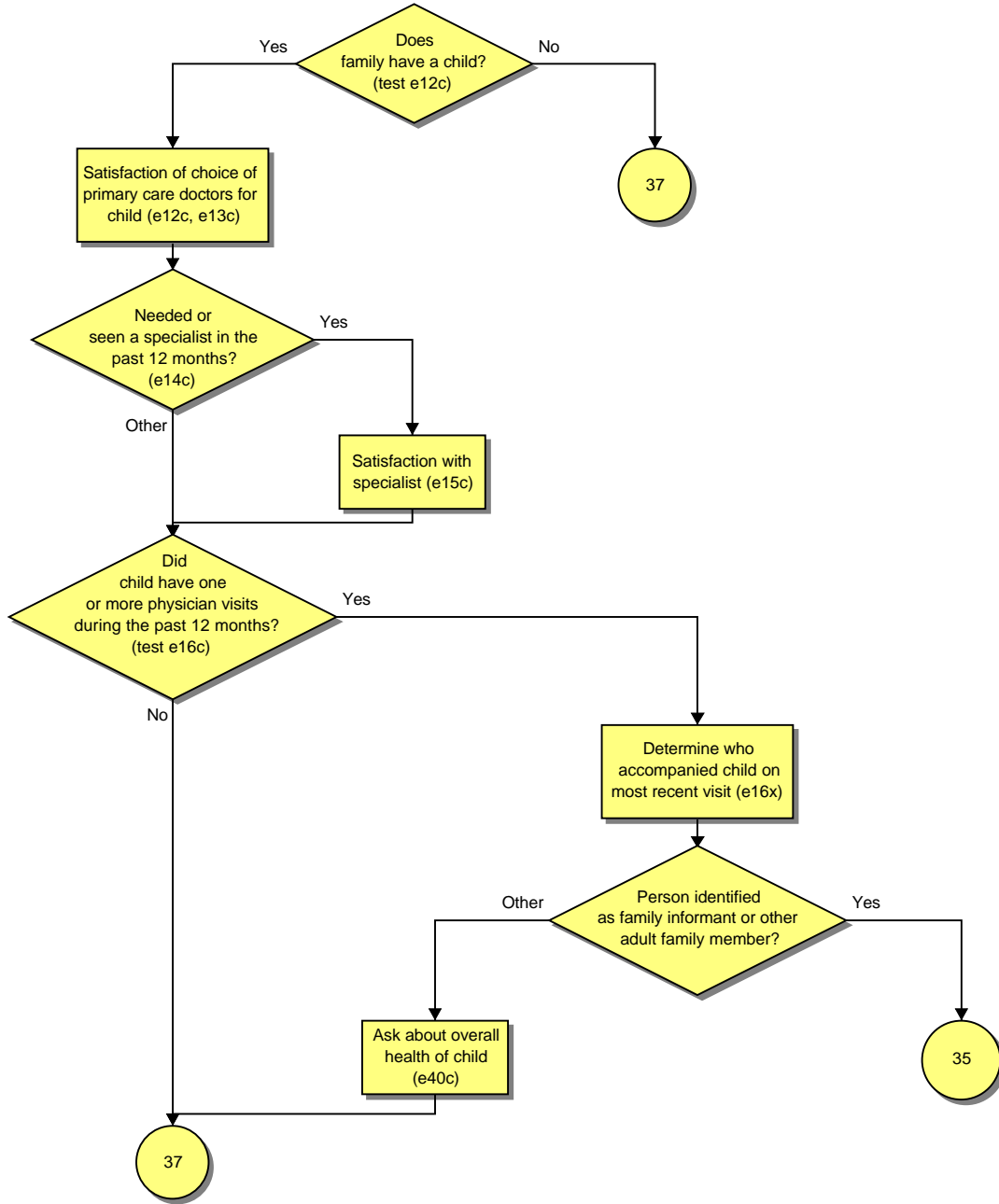
Section E: Satisfaction/Last Visit/Risk Behaviors - continued



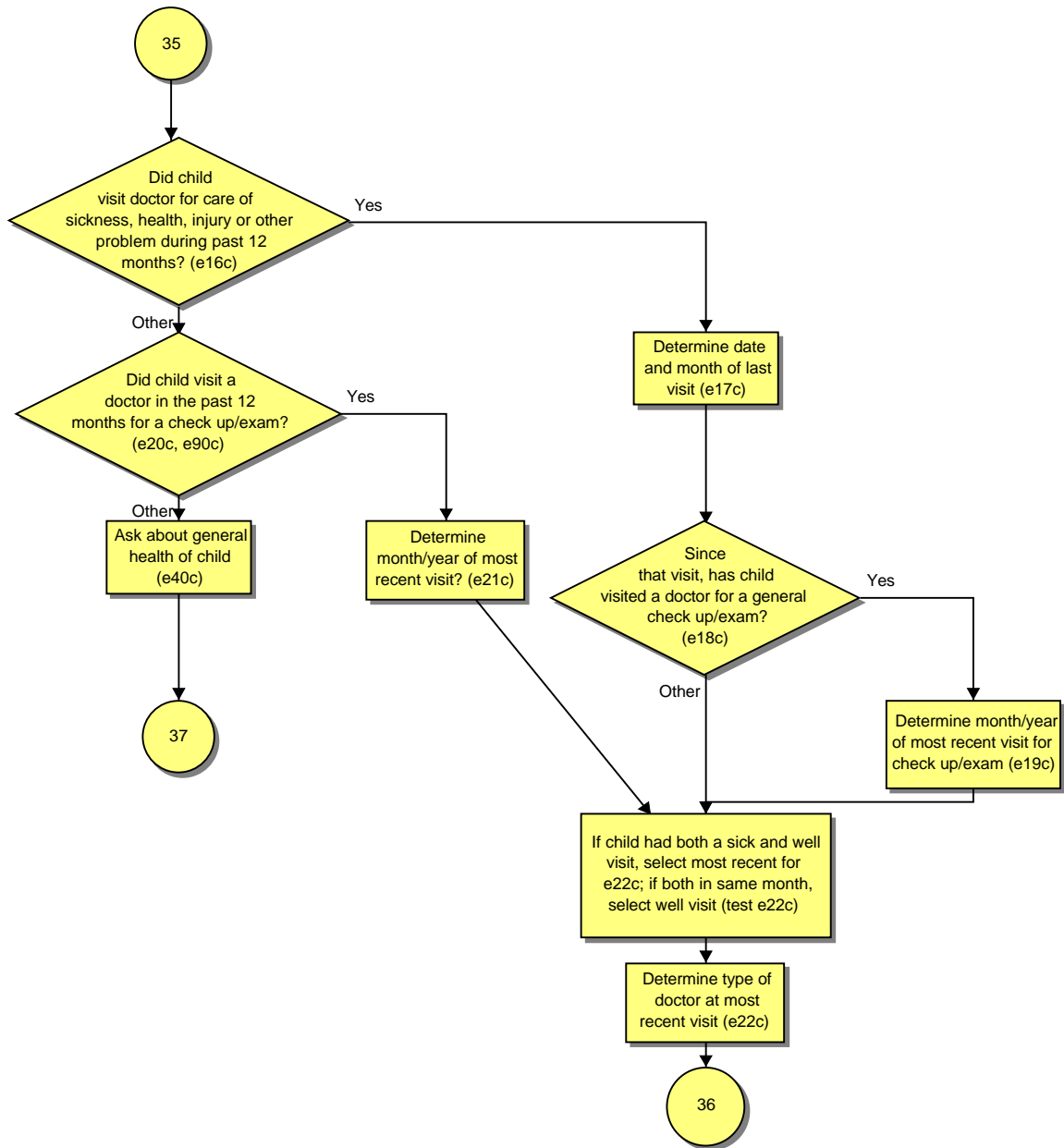
Section E: Satisfaction/Last Visit/Risk Behaviors - continued



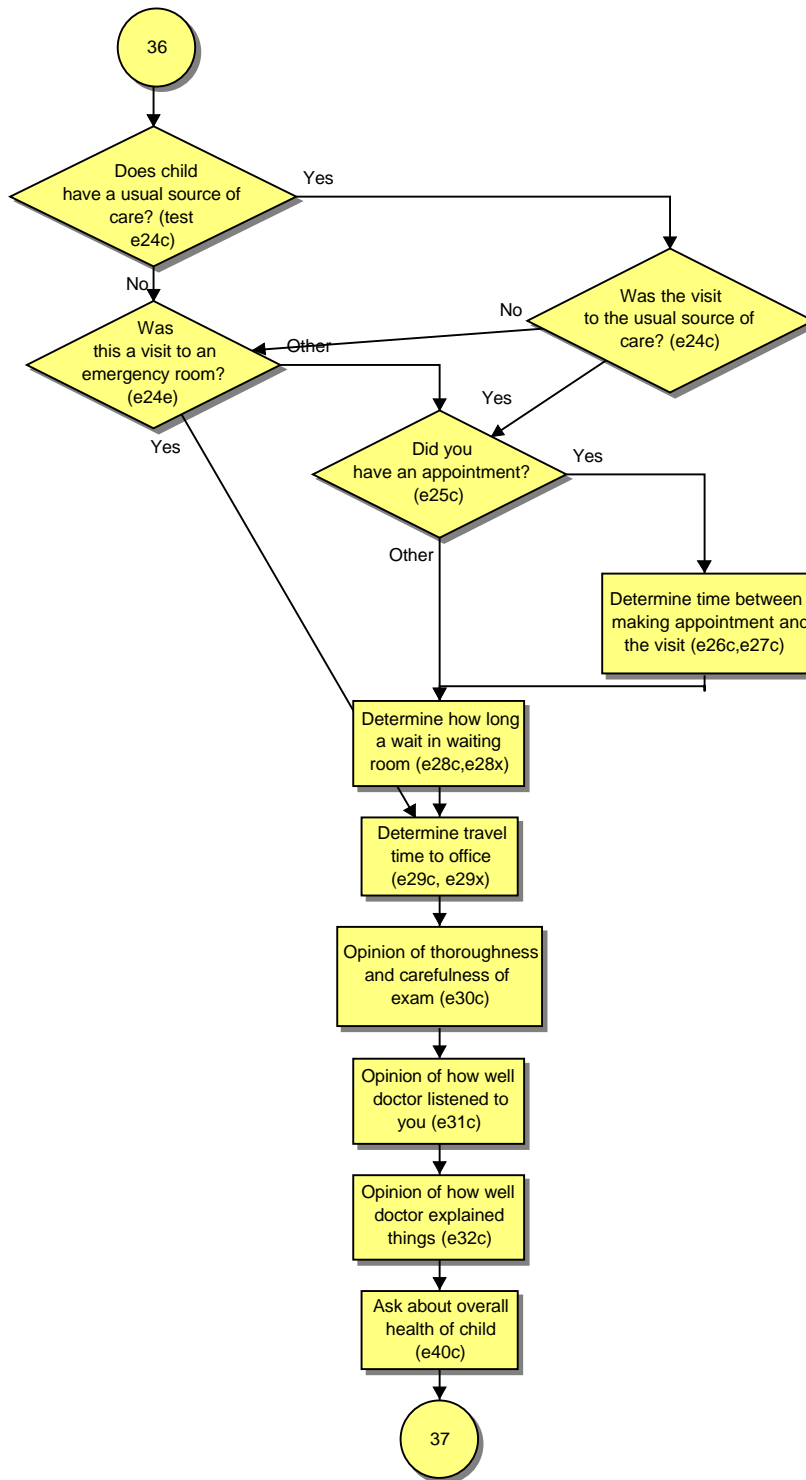
Section E: Satisfaction/Last Visit/Risk Behaviors - continued



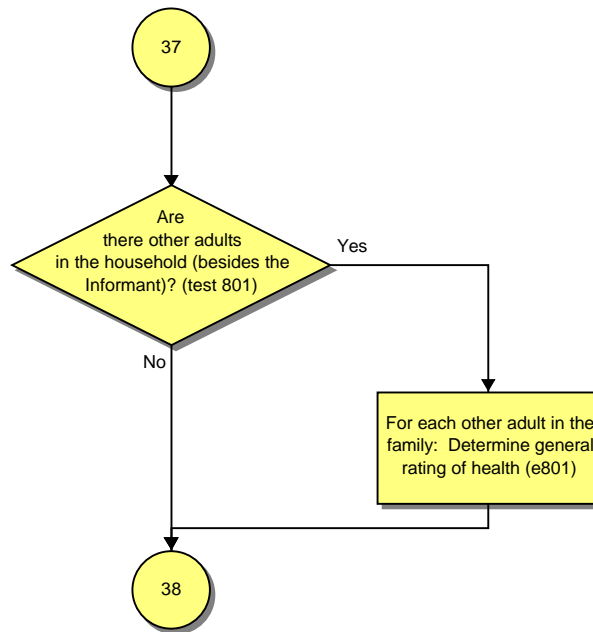
Section E: Satisfaction/Last Visit/Risk Behaviors - continued



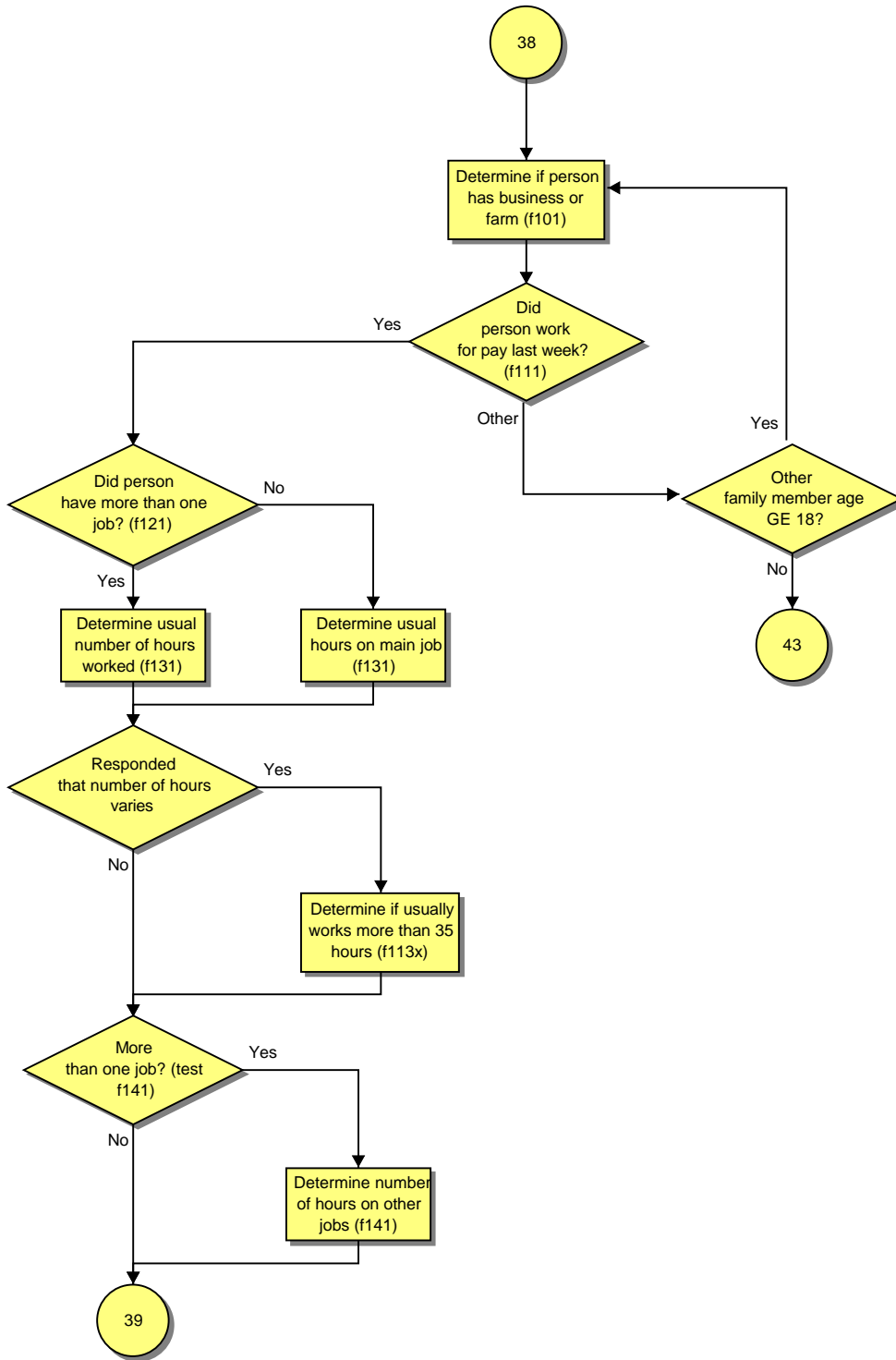
Section E: Satisfaction/Last Visit/Risk Behaviors - continued



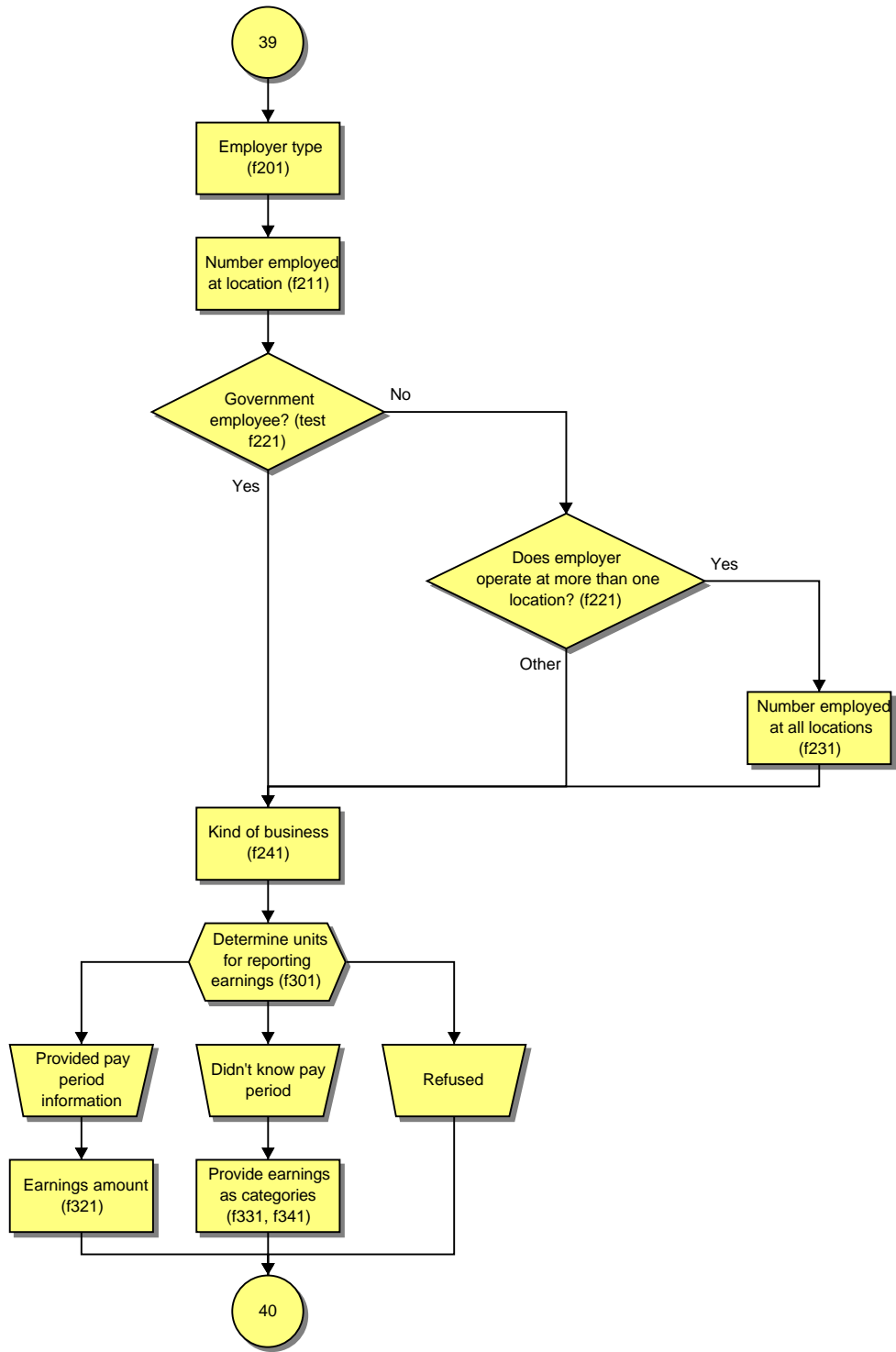
Section E: Satisfaction/Last Visit/Risk Behaviors - continued



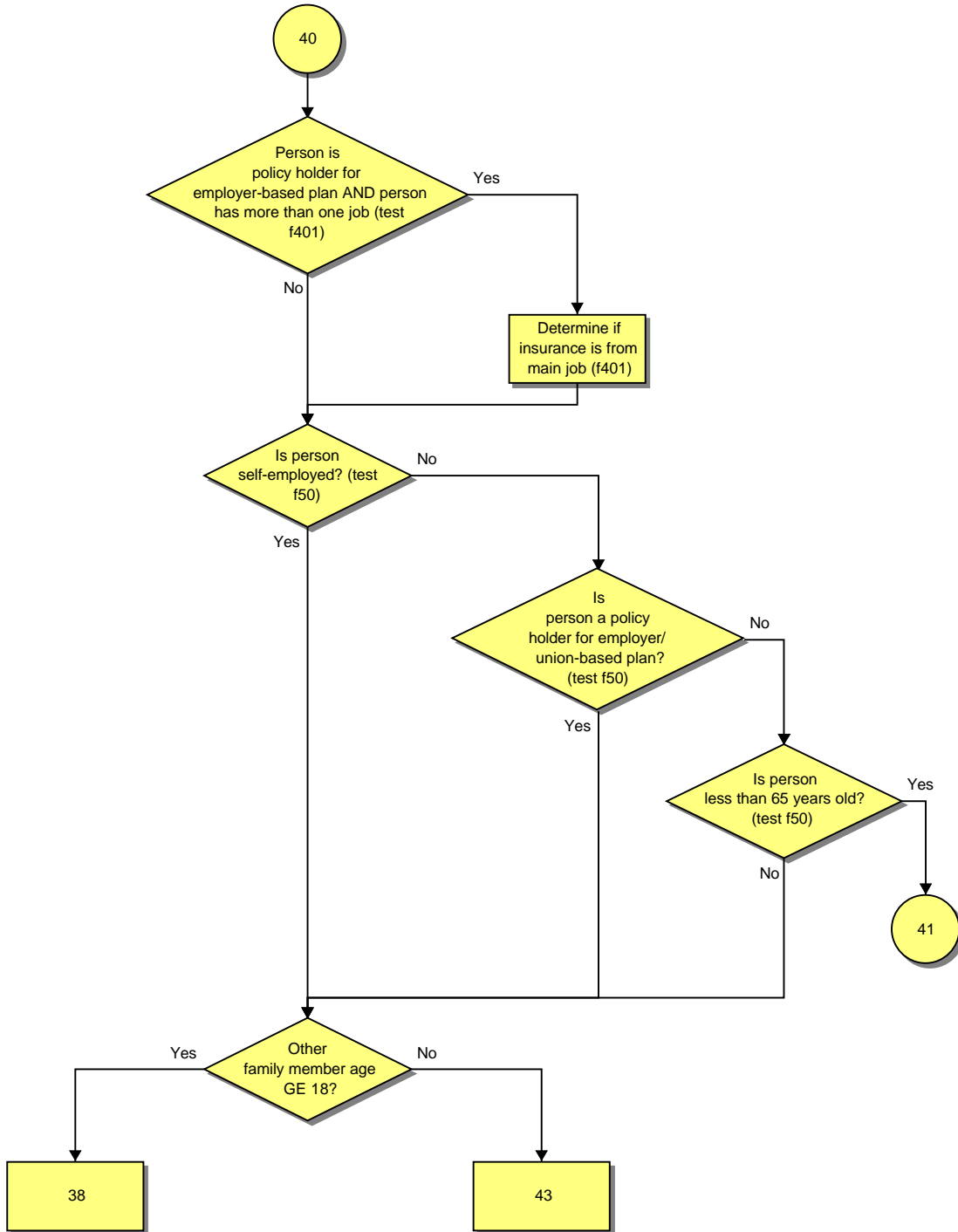
Section F: Employment



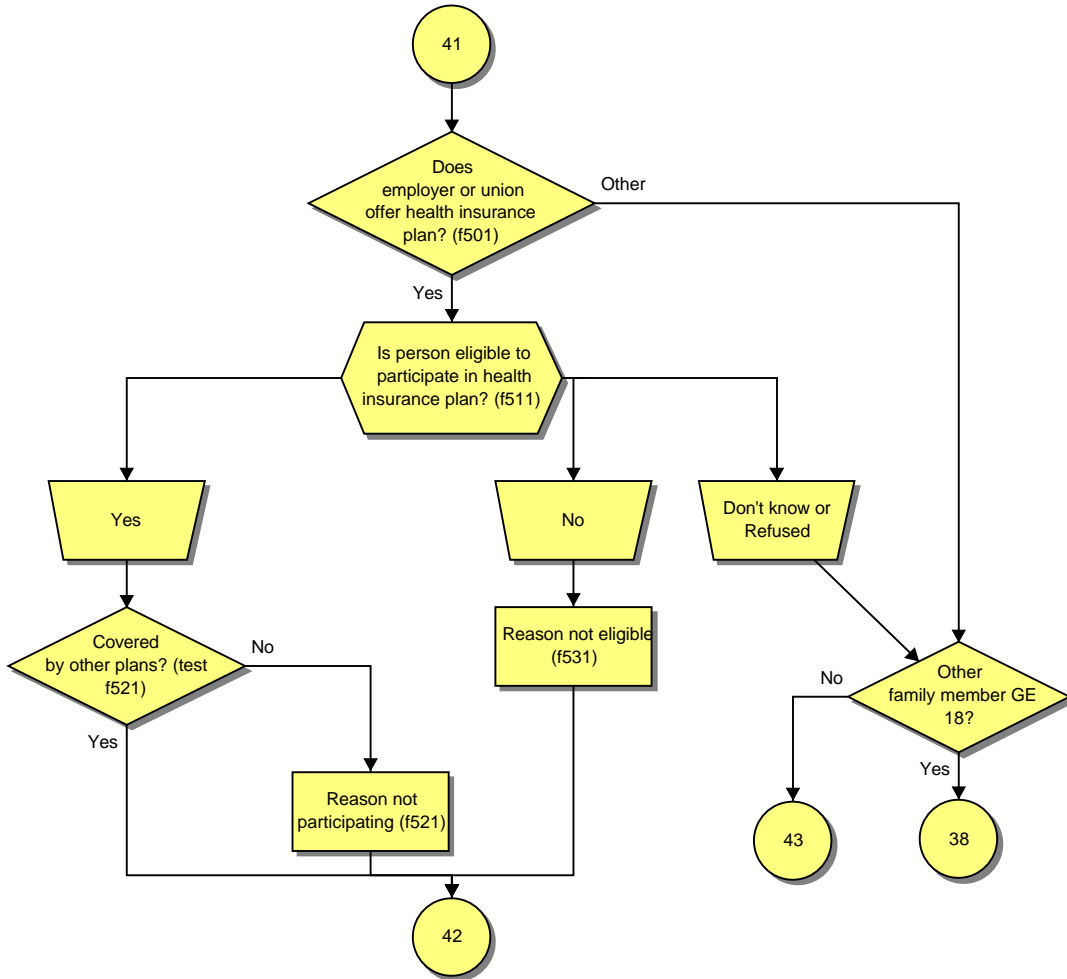
Section F: Employment - continued



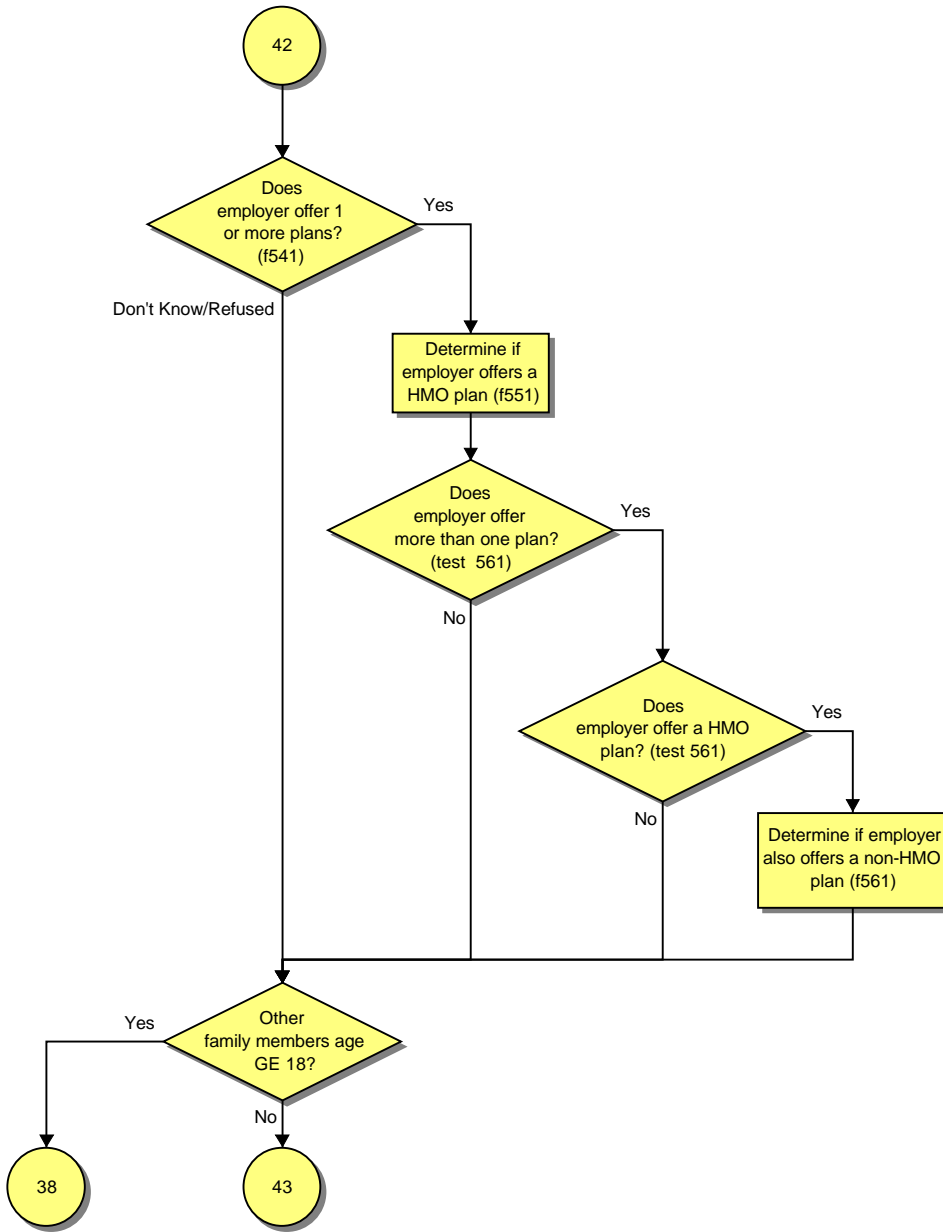
Section F: Employment - continued



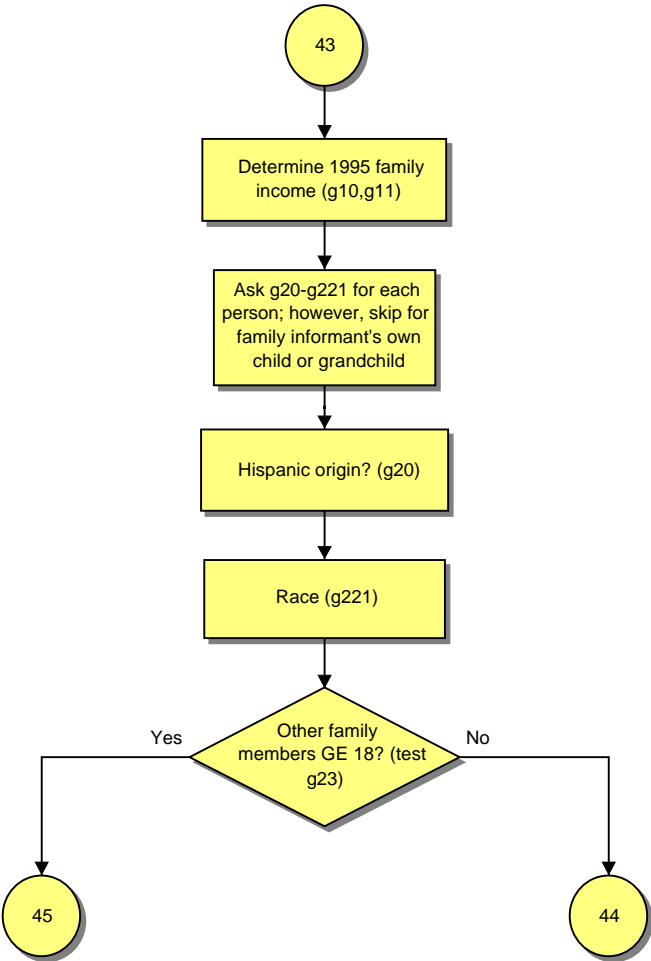
Section F: Employment - continued



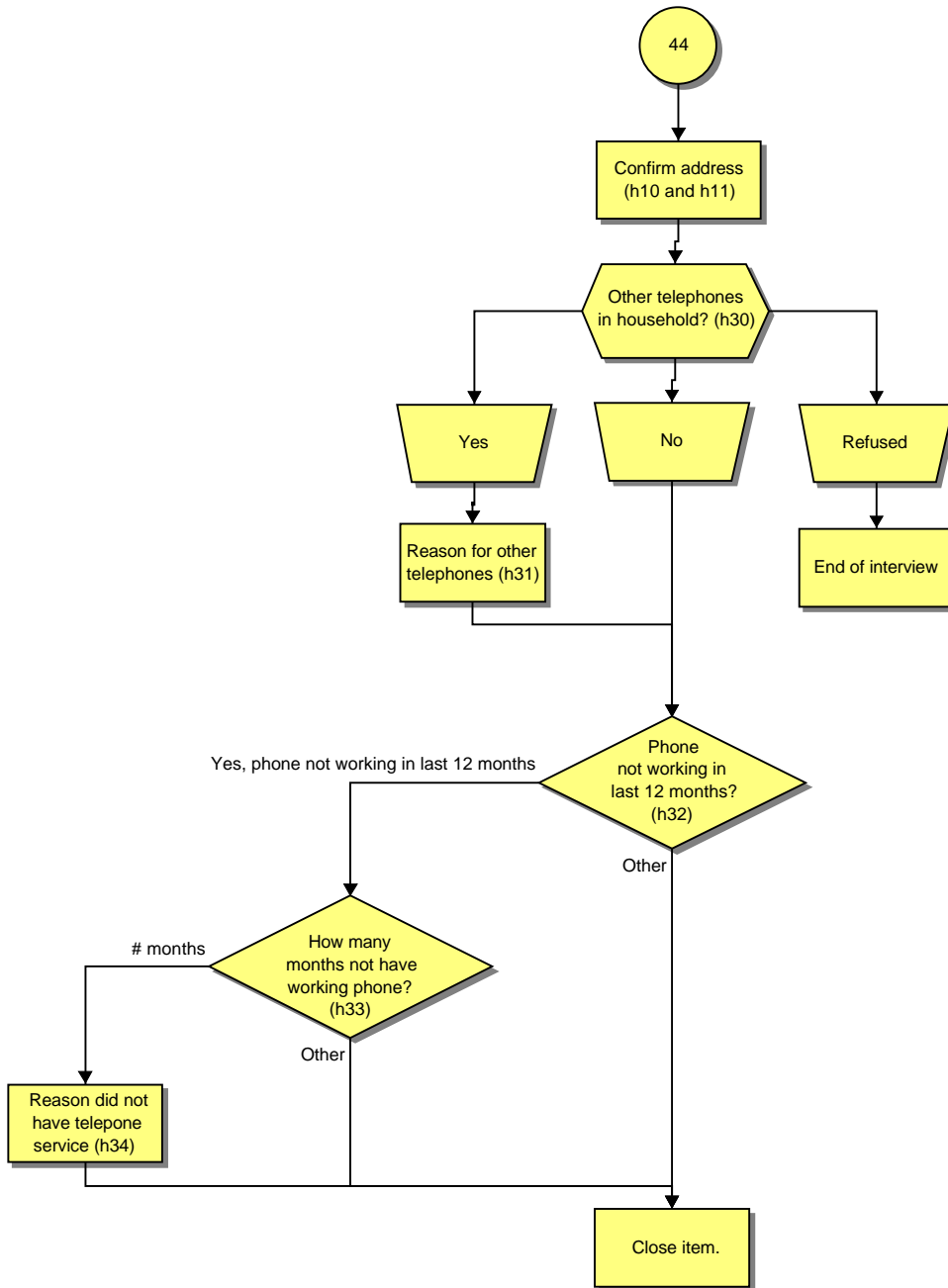
Section F: Employment - continued



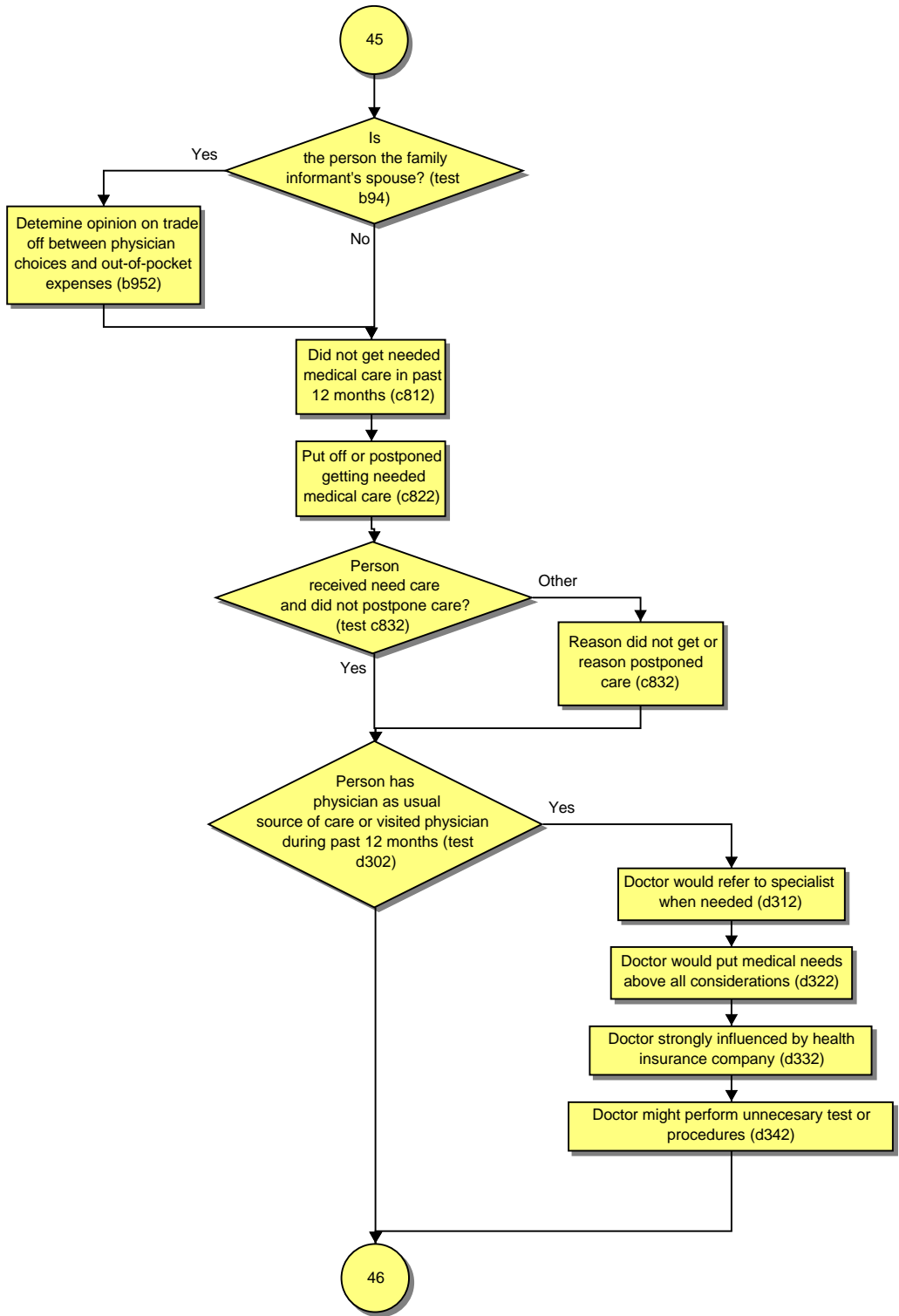
Section G: Family Income and Race/Ethnicity



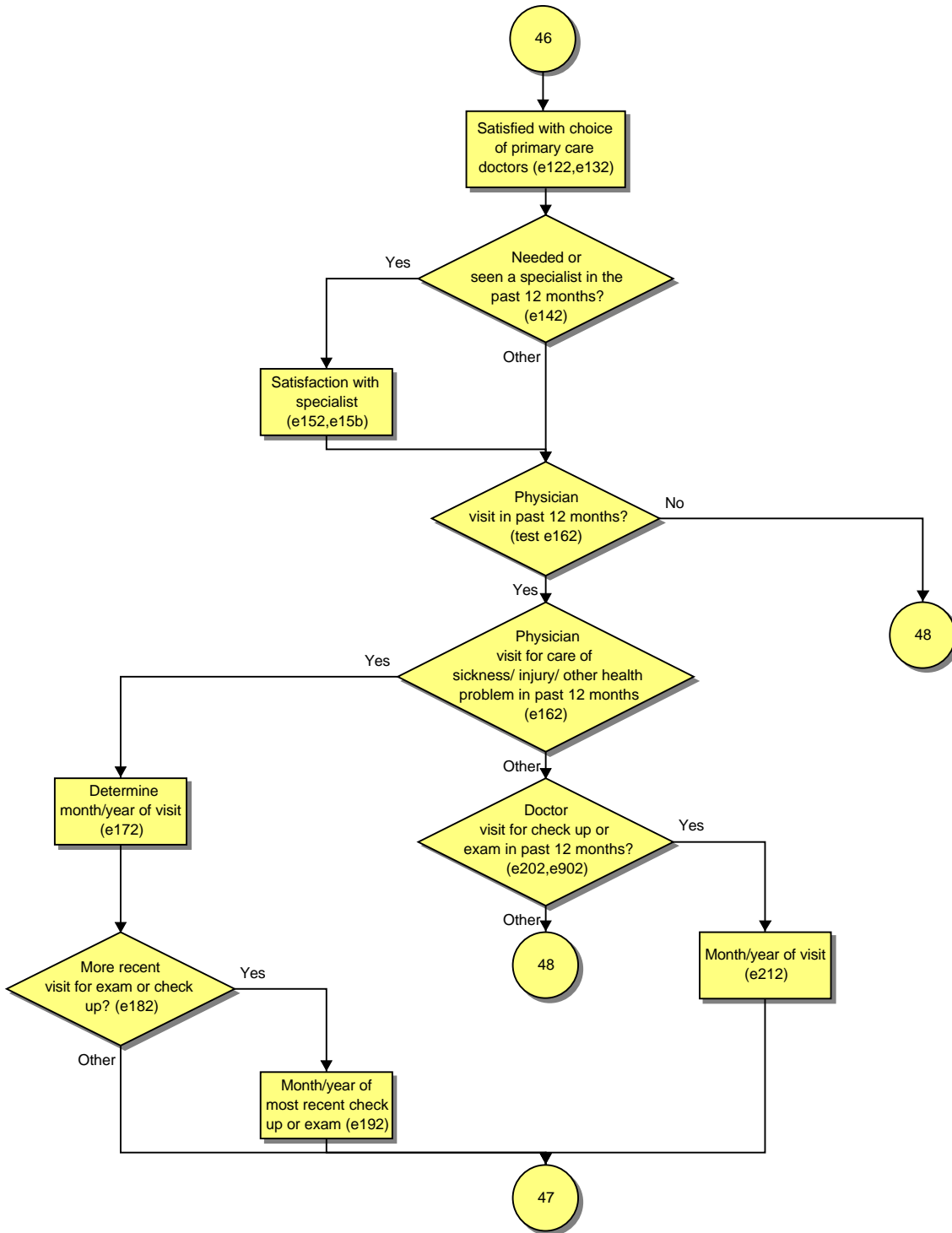
Section H: Interview Closing



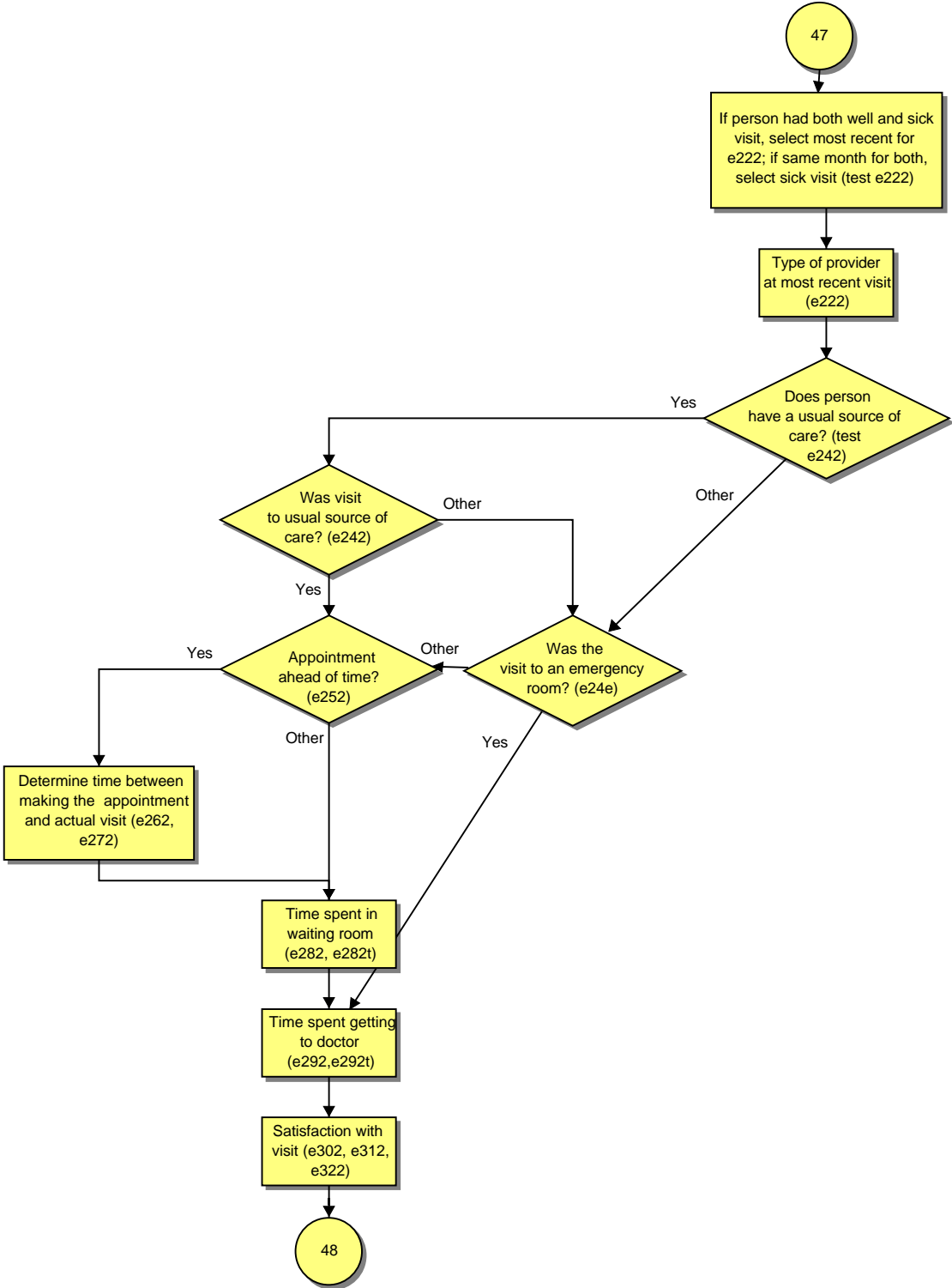
Self-Response Module



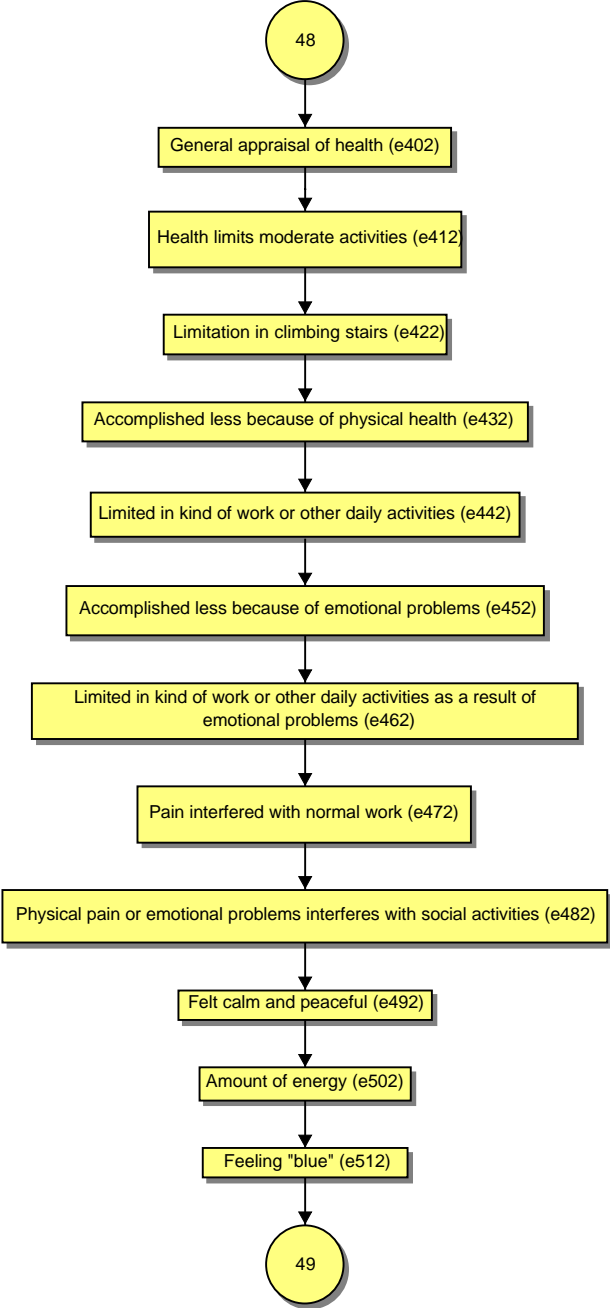
Self-Response Module - continued



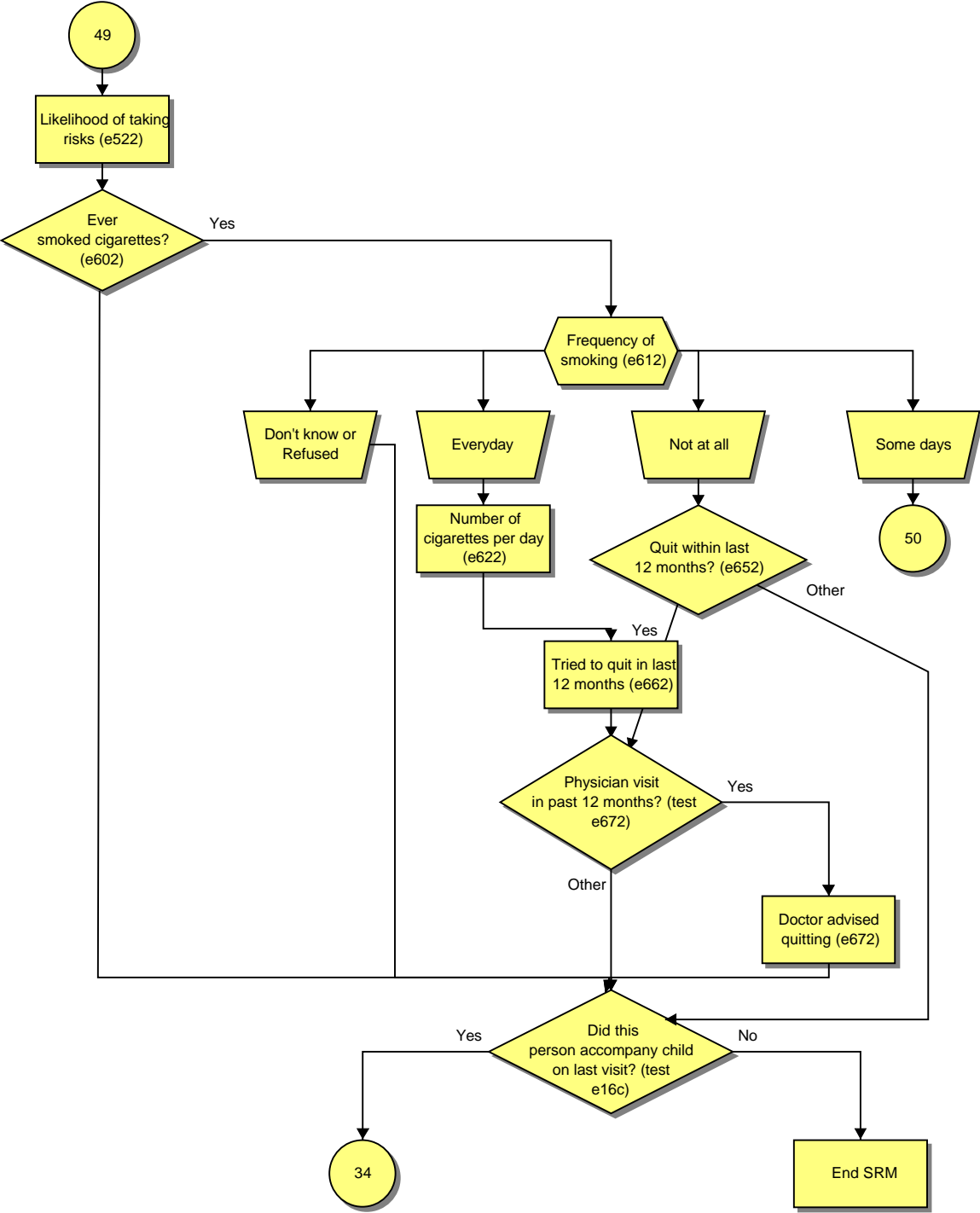
Self-Response Module - continued



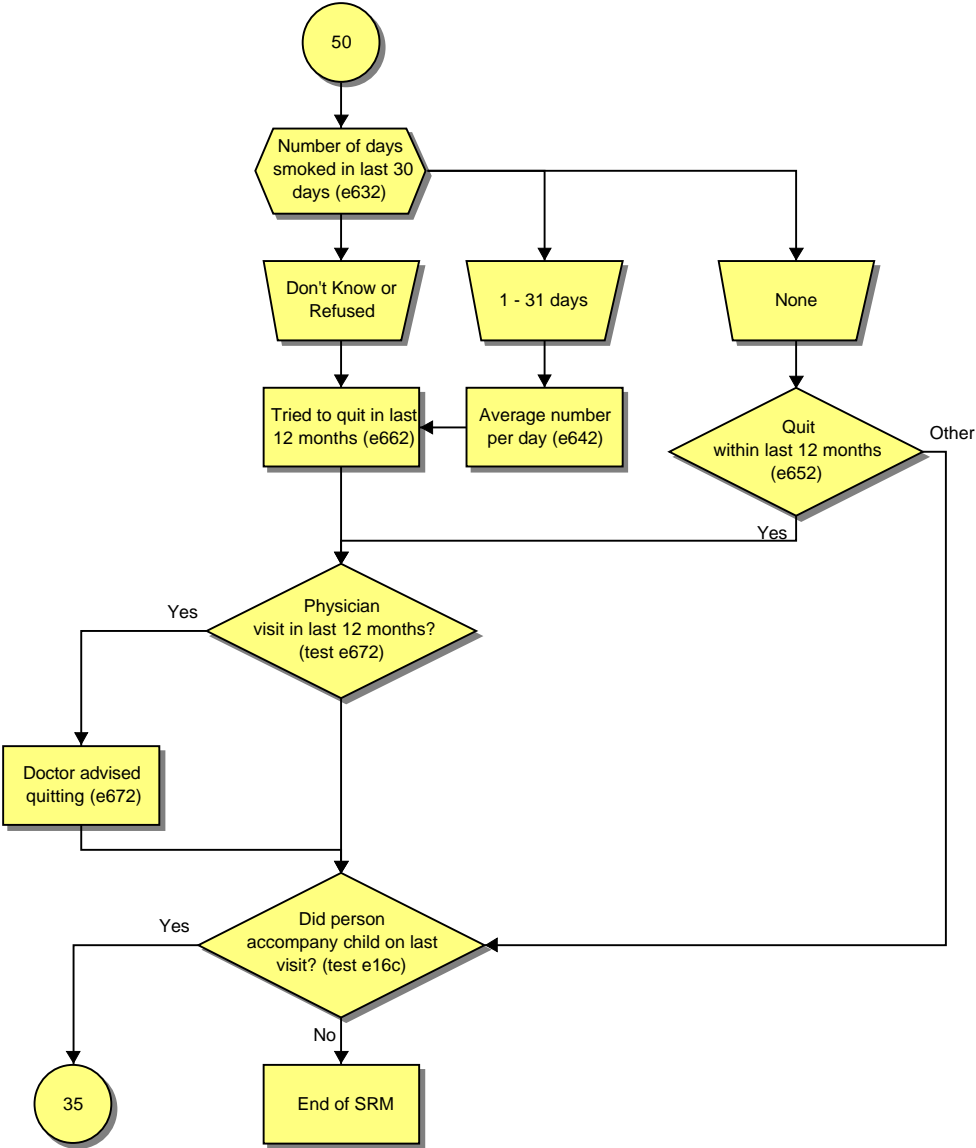
Self-Response Module - continued



Self-Response Module - continued



Self-Response Module - continued



Appendix C

Derivation of Standard Error Look-Up Tables

This appendix explains how the standard errors in the tables in Chapter 4 were derived.¹

1. Person-Level Percentages

To calculate standard errors for percentages at the person level (Tables 4.1 through 4.11), 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, DRMET, DRCHOCX, SPCHOCX, CRSAFX, LSTEXPL, TAKRISK
- Employment variables: EMPTYPX, FIRMSZX, INDSTY, WRKPAY
- General health status variables: GENHLH
- Health care access and utilization variables: GETMED, USCARE, USCTYP, LSTYPE, PVLST1, HSPSTYN, MENTAL, MAMMG, FLUSHOT, PUTOFF, SMKADV
- Demographic and economic variables: FEMALE, RACEREX
- Health insurance variables: MCDLST, OFFERED, OFRMULT, PRIVJOB, PRIVDIR, PRIVOTH, MCARE, MCRSUP, MCAID, HMOEVR, INSTYP, PRECOVX

These variable names can be cross-referenced in the file's codebook.

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 15 different combinations of estimate types and population subgroups:

¹The 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.

- Estimate types
 - Site-specific estimates, augmented sample
 - National estimates, site sample only
 - National estimates, supplemental sample only
- Population subgroups
 - All persons
 - Adults (age 18 or older)²
 - 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, a relative standard error of greater than 0.3,³ 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.⁴ 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 $\alpha=.10$), the best model was fit.⁵ The models were specified as:

$$\hat{D} = \log_{10}(DEFF) = b_0 + b_1 \log_{10}(n_u) + b_2 \log_{10}(p) + b_3 \log_{10}(q)$$

²This 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.

³The relative standard error is calculated as the standard error of an estimate divided by the estimate. It is used as a measure of instability of an estimate.

⁴See the end of this section for a list of outliers.

⁵These 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 .035 to .303 for national estimates and from .043 to .187 for site-specific estimates. To estimate design effects with greater confidence you will need to use specialized software to calculate them directly.

These models were run for categorical variables (excluding outliers) for the 15 combinations of estimate types and population subgroups described above.

For site-specific estimates, the estimated regression coefficients resulting from these runs were used 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 estimates using the combined national sample were derived by 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 as follows:

$$\hat{DEFF}(comb) = \frac{I^2 \hat{DEFF}_{site}}{p_{site}} + \frac{(1-I)^2 \hat{DEFF}_{supp}}{p_{supp}}$$

where $\hat{DEFF}_i = 10^{\hat{D}_i}$ is the anti-log of the predicted \log_{10} design effect \hat{D}_i based on the associated regression model for sample i (site or supplement), p_i is the proportion of the combined unweighted (nominal) sample size contributed by sample i ,⁶ and I is the proportion of the total effective sample size⁷ for the combined sample attributable to the site sample. This design effect $\hat{DEFF}(comb)$ was then used in the standard error formula given above for site-specific estimates to produce the tables.

To minimize the number of standard error tables in this document, we provide below the formulas (rather than tables) for predicting design effects for person-level percentage estimates resulting from the site sample only and from the national supplemental sample only. Use these formulas to obtain a design effect that can be inserted into the formula presented above for the standard error of a percentage.

⁶A value of 0.90 for p_{site} (and 0.10 for p_{supp}) was used in deriving the tables.

⁷The effective sample size is calculated as the nominal sample size divided by the design effect. The average value of 0.837 for I , incorporated in the combined weights, was used in deriving the tables.

1.1 National Estimates Based on the Site Sample Only

Estimates based on all persons (including subgroups not elsewhere classified):

$$\hat{D} = -0.280164 + 0.22268 \log_{10}(n_u) + 0.190975 \log_{10}(p) + 0.209436 \log_{10}(q)$$

Estimates based on adults (including subgroups other than Hispanics or blacks):

$$\hat{D} = -0.169443 + 0.194487 \log_{10}(n_u) + 0.195205 \log_{10}(p) + 0.156588 \log_{10}(q)$$

Estimates based on children (including subgroups other than Hispanics or blacks):

$$\hat{D} = 0.434443 + 0.104599 \log_{10}(p)$$

Estimates based on Hispanics (any race) (including all subgroups):

$$\hat{D} = -0.345208 + 0.34272 \log_{10}(n_u) + 0.327944 \log_{10}(p) + 0.414467 \log_{10}(q)$$

Estimates based on non-Hispanic blacks (including all subgroups):

$$\hat{D} = -0.498736 + 0.353962 \log_{10}(n_u) + 0.295615 \log_{10}(p) + 0.330208 \log_{10}(q)$$

1.2 National Estimates Based on the National Supplemental Sample Only

Estimates based on all persons (including subgroups not elsewhere classified):

$$\hat{D} = -1.707512 + 0.52256 \log_{10}(n_u) + 0.408546 \log_{10}(q)$$

Estimates based on adults (including subgroups other than Hispanics or blacks):

$$\hat{D} = -0.112456 + 0.073178 \log_{10}(n_u)$$

Estimates based on children (including subgroups other than Hispanics or blacks):

$$\hat{D} = 0.149819$$

Estimates based on Hispanics (any race) (including all subgroups):

$$\hat{D} = -0.197678 + 0.127245 \log_{10}(n_u)$$

Estimates based on non-Hispanic blacks (including all subgroups):

$$\hat{D} = -0.985913 + 0.498321 \log_{10}(n_u) + 0.129617 \log_{10}(p)$$

1. Family-Level Percentages

To calculate standard errors for percentages at the family level (Tables 4.12 and 4.13), 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 three different estimate types:

- Site-specific estimates, augmented sample
- National estimates, site sample only
- National estimates, supplemental sample only

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 site sample only and from the national supplemental sample only. 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 Only

Estimates based on all families (including all subgroups):

$$\hat{D} = 0.5662563 + 0.14959468 \log_{10}(p)$$

2.2 National Estimates for the National Supplemental Sample Only

Estimates based on all families (including all subgroups):

$$\hat{D} = 0.32120773 + 0.16170245 \log_{10}(p) + 0.88822369 \log_{10}(q)$$

2. 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,⁸ 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.⁹ The goal here was to derive a generalized function to predict relative standard errors, given the unweighted and weighted sample sizes.¹⁰

Before these models were run, estimates with an unweighted sample size of less than 100, a relative standard error of greater than 0.3, 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).

⁸Family income is actually a family-level variable that is being treated as a person-level characteristic here.

⁹ The results for the combined national estimates are shown in Table 4.14.

¹⁰The relative standard error is calculated as the standard error of an estimate divided by the estimate. It is used as a measure of instability of an estimate.

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:

$$\hat{SE} = \text{weighted mean} \cdot 10^{\hat{R}}.$$

3. Family-Level Means

To calculate standard errors for means at the family level (Table 4.15), 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.

4. 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 with recent use of an emergency room (ERUSE) is 18.54 percent, or 48,858,663 out of a total 1996 population of 263,489,133. CTS was post-stratified to the total 1996 population, so the above approximation can be used. The estimate of ERUSE was based on a sample size of 60,446. Table 4.1 in Chapter 4 indicates that the standard error of \hat{p} close to 20 percent with n near 60,000 is 0.27 percent, so the standard error of \hat{M} (where \hat{M} is the estimated number of persons using the emergency room) is:

$$s.e.(\hat{M}) = \frac{\hat{N} \cdot s.e.(\hat{p})}{100} = \frac{263,489,133 \cdot 0.27}{100} = 71,142.07$$

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 C.1 presents a list of person-level variables, subgroups, and sample types that were outliers for national estimates. Table C.2 lists family-level outliers for national estimates. Table C.3 lists person-level outliers for high-intensity site-specific estimates.

TABLE C.1

OUTLIERS FOR NATIONAL PERSON-LEVEL ESTIMATES,
 OVERALL AND FOR SUBGROUPS, BY TYPE OF NATIONAL ESTIMATE:
 SITE SAMPLE, SUPPLEMENT, OR COMBINED

Description of Variable	Subgroup	Type of National Estimate
AGEX Age	Hispanic	Site Sample
AGEX Age	Hispanic	Combined
CRSAFX=3 Neither Satisfied/Dissatisfied	Children	Supplement
CRSAFX=3 Neither Satisfied/Dissatisfied	Hispanic	Supplement
CRSAFX=3 Neither Satisfied/Dissatisfied	Black	Supplement
CRSAFX=5 Very Dissatisfied	Hispanic	Supplement
DRCHOCX=3 Neither Satisfied/Dissatisfied	Children	Supplement
DRCHOCX=5 Very Dissatisfied	Hispanic	Supplement
DRMETND=3 Neither Agree/Disagree	Hispanic	Supplement
DRMETND=3 Neither Agree/Disagree	Black	Supplement
DRMETND=7 N/A	Hispanic	Supplement
DRMETND=7 N/A	Black	Supplement
EMPTYPX=2 Federal Government	Hispanic	Supplement
SEX=2 Female	Adults	Site Sample
SEX=2 Female	Adults	Supplement
SEX=2 Female	Adults	Combined
GENHLH=5 Poor	Children	Supplement

TABLE C.1

OUTLIERS FOR NATIONAL PERSON-LEVEL ESTIMATES,
 OVERALL AND FOR SUBGROUPS, BY TYPE OF NATIONAL ESTIMATE:
 SITE SAMPLE, SUPPLEMENT, OR COMBINED
 (Continued)

Description of Variable	Subgroup	Type of National Estimate
INDSTRY=12 Unclassified	Black	Supplement
INDSTRY=2 Construction	Black	Supplement
INDSTRY=6 Finance insurance real estate	Hispanic	Supplement
INDSTRY=6 Finance insurance real estate	Black	Supplement
INSTYPE=10 Uninsured	Overall	Site Sample
INSTYPE=2 Medicare and Medigap	Children	Site Sample
INSTYPE=2 Medicare and Medigap	Children	Supplement
INSTYPE=2 Medicare and Medigap	Hispanic	Supplement
INSTYPE=2 Medicare and Medigap	Children	Combined
INSTYPE=3 Medicare and other public	Hispanic	Site Sample
INSTYPE=3 Medicare and other public	Children	Supplement
INSTYPE=3 Medicare and other public	Hispanic	Supplement
INSTYPE=3 Medicare and other public	Hispanic	Combined
INSTYPE=6 Private-cov outside the family	Hispanic	Supplement
INSTYPE=6 Private-cov outside the family	Black	Supplement
INSTYPE=7 Military Insurance	Children	Supplement
INSTYPE=7 Military Insurance	Hispanic	Supplement
INSTYPE=7 Military Insurance	Black	Supplement
INSTYPE=9 Other public coverage	Children	Supplement
INSTYPE=9 Other public coverage	Hispanic	Supplement
INSTYPE=9 Other public coverage	Black	Supplement
LSTEXPL=7 N/A	Hispanic	Site Sample
LSTEXPL=7 N/A	Black	Site Sample
LSTEXPL=7 N/A	Overall	Supplement
LSTEXPL=7 N/A	Adults	Supplement
LSTEXPL=7 N/A	Children	Supplement
LSTEXPL=7 N/A	Hispanic	Combined
LSTEXPL=7 N/A	Black	Combined
LSTWATX Last visit waiting time in mins	Overall	Site Sample
LSTWATX Last visit waiting time in mins	Adults	Site Sample
LSTWATX Last visit waiting time in mins	Overall	Combined

TABLE C.1

OUTLIERS FOR NATIONAL PERSON-LEVEL ESTIMATES,
 OVERALL AND FOR SUBGROUPS, BY TYPE OF NATIONAL ESTIMATE:
 SITE SAMPLE, SUPPLEMENT, OR COMBINED
 (Continued)

Description of Variable	Subgroup	Type of National Estimate
LSTWATX Last visit waiting time in mins	Adults	Combined
MAMMG M Ever had a mammogram	Hispanic	Supplement
	Hispanic	Site Sample
MCARE Covered by Medicare		
MCARE Covered by Medicare	Children	Supplement
MCARE Covered by Medicare	Hispanic	Combined
MCDLSTP=2 Book/directory/list	Hispanic	Supplement
MCDLSTP=2 Book/directory/list	Black	Supplement
MCHOICE=3 Neither Agree/Disagree	Hispanic	Supplement
MCHOICE=3 Neither Agree/Disagree	Black	Supplement
MCHOICE=7 N/A	Hispanic	Supplement
MCHOICE=7 N/A	Black	Supplement
MCRLSTP=2 Book/directory/list	Children	Site Sample
MCRLSTP=2 Book/directory/list	Children	Supplement
MCRLSTP=2 Book/directory/list	Hispanic	Supplement
MCRLSTP=2 Book/directory/list	Black	Supplement
MCRLSTP=2 Book/directory/list	Children	Combined
MCRSUP Covered by supplemental policy	Children	Site Sample
MCRSUP Covered by supplemental policy	Children	Supplement
MCRSUP Covered by supplemental policy	Hispanic	Supplement
MCRSUP Covered by supplemental policy	Black	Supplement
MCSUP Covered by supplemental policy	Children	Combined
OFFERED=6 Working elderly	Hispanic	Site Sample
OFFERED=6 Working elderly	Hispanic	Supplement
OFFERED=6 Working elderly	Black	Supplement
OFRMULT=3 Unknown offered multiple plan	Hispanic	Site Sample
OFRMULT=3 Unknown offered multiple plan	Black	Site Sample

TABLE C.1

OUTLIERS FOR NATIONAL PERSON-LEVEL ESTIMATES,
 OVERALL AND FOR SUBGROUPS, BY TYPE OF NATIONAL ESTIMATE:
 SITE SAMPLE, SUPPLEMENT, OR COMBINED
 (Continued)

Description of Variable	Subgroup	Type of National Estimate
OFRMULT=3 Unknown offered multiple plan	Overall	Supplement
OFRMULT=3 Unknown offered multiple plan	Adults	Supplement
OFRMULT=3 Unknown offered multiple plan	Hispanic	Supplement
OFRMULT=3 Unknown offered multiple plan	Hispanic	Combined
OFRMULT=3 Unknown offered multiple plan	Black	Combined
OFRMULT=6 Working elderly	Hispanic	Site Sample
OFRMULT=6 Working elderly	Hispanic	Supplement
OFRMULT=6 Working elderly	Black	Supplement
PRECOVX=1 Medicare/Medicaid/Military/Oth	Hispanic	Supplement
PRECOVX=1 Medicare/Medicaid/Military/Oth	Black	Supplement
PRECOVX=4 Unknown	Children	Supplement
PRECOVX=4 Unknown	Hispanic	Supplement
PRECOVX=4 Unknown	Black	Supplement
PRECOVX=5 N/A	Hispanic	Site Sample
PRECOVX=5 N/A	Adults	Supplement
PRECOVX=5 N/A	Hispanic	Supplement
PRECOVX=5 N/A	Black	Supplement
PRECOVX=5 N/A	Hispanic	Combined
PRIVDIR Cov by priv insur buy directly	Hispanic	Supplement
PRIVJOB Cov by priv ins thru job	Overall	Site Sample
PRIVOTH Cov by priv insur by others	Hispanic	Supplement
PRIVOTH Cov by priv insur by others	Black	Supplement
RACEREX=2 African American	Overall	Site Sample
RACEREX=2 African American	Adults	Site Sample
RACEREX=2 African American	Black	Supplement
RACEREX=2 African American	Overall	Combined
RACEREX=2 African American	Adults	Combined
RACEREX=4 Hispanic	Overall	Site Sample

TABLE C.1

OUTLIERS FOR NATIONAL PERSON-LEVEL ESTIMATES,
 OVERALL AND FOR SUBGROUPS, BY TYPE OF NATIONAL ESTIMATE:
 SITE SAMPLE, SUPPLEMENT, OR COMBINED
 (Continued)

Description of Variable	Subgroup	Type of National Estimate
RACEREX=4 Hispanic	Adults	Site Sample
RACEREX=4 Hispanic	Children	Site Sample
RACEREX=4 Hispanic	Hispanic	Site Sample
RACEREX=4 Hispanic	Hispanic	Supplement
RACEREX=4 Hispanic	Black	Supplement
RACEREX=4 Hispanic	Overall	Combined
RACEREX=4 Hispanic	Adults	Combined
RACEREX=4 Hispanic	Children	Combined
RACEREX=4 Hispanic	Hispanic	Combined
SMKADV Doctor advise to quit smoking	Hispanic	Supplement
SMKADV Doctor advise to quit smoking	Black	Supplement
SPCHOCX=3 Neither Satisfied/Dissatisfied	Children	Supplement
SPCHOCX=3 Neither Satisfied/Dissatisfied	Hispanic	Supplement
SPCHOCX=3 Neither Satisfied/Dissatisfied	Black	Supplement
SPCHOCX=4 Somewhat Dissatisfied	Children	Supplement
SPCHOCX=4 Somewhat Dissatisfied	Hispanic	Supplement
SPCHOCX=4 Somewhat Dissatisfied	Black	Supplement
SPCHOCX=5 Very Dissatisfied	Children	Supplement
SPCHOCX=5 Very Dissatisfied	Hispanic	Supplement
SPCHOCX=5 Very Dissatisfied	Black	Supplement
TAKRISK=3 Neither Agree/Disagree	Hispanic	Supplement
TAKRISK=3 Neither Agree/Disagree	Black	Supplement
USCARE=1 Yes	Children	Supplement
USCARE=1 Yes	Hispanic	Supplement
USCARE=1 Yes	Black	Supplement
USCARE=3 More than 1 place	Children	Supplement
USCARE=3 More than 1 place	Hispanic	Supplement
USCARE=3 More than 1 place	Black	Supplement

TABLE C.1

OUTLIERS FOR NATIONAL PERSON-LEVEL ESTIMATES,
 OVERALL AND FOR SUBGROUPS, BY TYPE OF NATIONAL ESTIMATE:
 SITE SAMPLE, SUPPLEMENT, OR COMBINED

(Continued)

Description of Variable	Subgroup	Type of National Estimate
USCTYPE=5 Hospital Emergency Room	Children	Supplement
USCTYPE=5 Hospital Emergency Room	Hispanic	Supplement
USCTYPE=6 Other Place	Children	Supplement
USCTYPE=6 Other Place	Hispanic	Supplement
USCTYPE=6 Other Place	Black	Supplement

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 C.2

OUTLIERS FOR NATIONAL FAMILY-LEVEL ESTIMATES BY TYPE OF
NATIONAL ESTIMATE: SITE SAMPLE, SUPPLEMENT, OR COMBINED

Description of Variable	Subgroup	Type of National Estimate
MSACAT=2, Small metro under 200k	Hispanic	Site Sample
MSACAT=3, Nonmetropolitan area	Black	Combined
MSACAT=3, Nonmetropolitan area	Hispanic	Combined
MSACAT=3, Nonmetropolitan area	Overall	Combined
MSACAT=3, Nonmetropolitan area	Black	Site Sample
MSACAT=3, Nonmetropolitan area	Hispanic	Site Sample
MSACAT=3, Nonmetropolitan area	Overall	Site Sample
MSACAT=3, Nonmetropolitan area	Overall	Supplement
NADULT=3, 3 Adults	Black	Supplement
NADULT=3, 3 Adults	Hispanic	Supplement
NADULT=4, 4 Adults	Black	Combined
NADULT=4, 4 Adults	Hispanic	Combined
NADULT=4, 4 Adults	Black	Site Sample
NADULT=4, 4 Adults	Hispanic	Site Sample
NADULT=4, 4 Adults	Hispanic	Supplement
NADULT=5, 5 Adults	Overall	Combined
NADULT=5, 5 Adults	Overall	Site Sample
NADULT=5, 5 Adults	Overall	Supplement
NADULT=6, 6 Adults	Overall	Combined
NADULT=6, 6 Adults	Overall	Site Sample
NAGE65=2, 2 Persons	Black	Supplement
NAGE65=2, 2 Persons	Hispanic	Supplement
NSPER=4, 4 Persons	Black	Supplement
NSPER=4, 4 Persons	Hispanic	Supplement
NSPER=5, 5 Persons	Black	Combined
NSPER=5, 5 Persons	Hispanic	Combined
NSPER=5, 5 Persons	Black	Site Sample
NSPER=5, 5 Persons	Hispanic	Site Sample
NSPER=5, 5 Persons	Hispanic	Supplement
NSPER=5, 5 Persons	Overall	Supplement
NSPER=6, 6 Persons	Overall	Combined
NSPER=6, 6 Persons	Overall	Site Sample
NSPER=7, 7 Persons	Overall	Combined
NSPER=7, 7 Persons	Overall	Site Sample

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 C.3

OUTLIERS FOR PERSON-LEVEL HIGH-INTENSITY SITE-SPECIFIC ESTIMATES

Variable and Label	Subgroup
CRSAFX=3, Neither Satisfied/Dissatisfied	Adults
CRSAFX=3, Neither Satisfied/Dissatisfied	Black
CRSAFX=3, Neither Satisfied/Dissatisfied	Children
CRSAFX=3, Neither Satisfied/Dissatisfied	Hispanic
CRSAFX=3, Neither Satisfied/Dissatisfied	Overall
CRSAFX=4, Somewhat Dissatisfied	Black
CRSAFX=4, Somewhat Dissatisfied	Children
CRSAFX=4, Somewhat Dissatisfied	Hispanic
CRSAFX=5, Very Dissatisfied	Black
CRSAFX=5, Very Dissatisfied	Children
CRSAFX=5, Very Dissatisfied	Hispanic
DRCHOCX=3, Neither Satisfied/Dissatisfied	Black
DRCHOCX=3, Neither Satisfied/Dissatisfied	Children
DRCHOCX=3, Neither Satisfied/Dissatisfied	Hispanic
DRMETND=3, Neither Agree/Disagree	Adults
DRMETND=3, Neither Agree/Disagree	Black
DRMETND=3, Neither Agree/Disagree	Hispanic
DRMETND=3, Neither Agree/Disagree	Overall
DRMETND=4, Somewhat Disagree	Black
DRMETND=4, Somewhat Disagree	Hispanic
DRMETND=5, Strongly Disagree	Black
DRMETND=5, Strongly Disagree	Hispanic
DRMETND=7, N/A	Adults
DRMETND=7, N/A	Black
DRMETND=7, N/A	Hispanic
DRMETND=7, N/A	Overall

TABLE C.3

OUTLIERS FOR PERSON-LEVEL HIGH-INTENSITY SITE-SPECIFIC ESTIMATES
(Continued)

Variable and Label	Subgroup
EMPTYPX=2, Federal Government	Adults
EMPTYPX=2, Federal Government	Black
EMPTYPX=2, Federal Government	Hispanic
EMPTYPX=2, Federal Government	Overall
SEX=2, Female	Adults
SEX=2, Female	Black
SEX=2, Female	Hispanic
SEX=2, Female	Overall
FIRMSZX=3, 25-99	Black
FIRMSZX=5, 500-999	Hispanic
GENHLH=4, Fair	Black
GENHLH=4, Fair	Children
GENHLH=5, Poor	Black
GENHLH=5, Poor	Children
GENHLH=5, Poor	Hispanic
GETMED=2, Harder	Hispanic
HSPSTYN: Number of hospital stays	Black
INDSTRY=10, Services (recreational)	Hispanic
INDSTRY=12, Unclassified	Black
INDSTRY=2, Construction	Black
INDSTRY=2, Construction	Hispanic
INDSTRY=4, Transportation, public utility	Black
INDSTRY=4, Transportation, public utility	Hispanic
INDSTRY=6, Finance, insurance, real estate	Black
INDSTRY=6, Finance, insurance, real estate	Hispanic
INDSTRY=7, Services (professional)	Black
INDSTRY=7, Services (professional)	Hispanic
INDSTRY=8, Services (health)	Black
INDSTRY=8, Services (health)	Hispanic
INDSTRY=9, Services (education)	Black

TABLE C.3

OUTLIERS FOR PERSON-LEVEL HIGH-INTENSITY SITE-SPECIFIC ESTIMATES
(Continued)

Variable and Label	Subgroup
INDSTRY=9, Services (education)	Hispanic
INSTYPE=2, Medicare and Medigap	Black
INSTYPE=2, Medicare and Medigap	Children
INSTYPE=2, Medicare and Medigap	Hispanic
INSTYPE=3, Medicare and other public	Black
INSTYPE=3, Medicare and other public	Children
INSTYPE=3, Medicare and other public	Hispanic
INSTYPE=5, Private-direct purchase	Black
INSTYPE=5, Private-direct purchase	Children
INSTYPE=5, Private-direct purchase	Hispanic
INSTYPE=6, Private-cov outside the family	Adults
INSTYPE=6, Private-cov outside the family	Black
INSTYPE=6, Private-cov outside the family	Children
INSTYPE=6, Private-cov outside the family	Hispanic
INSTYPE=7, Military Insurance	Adults
INSTYPE=7, Military Insurance	Black
INSTYPE=7, Military Insurance	Children
INSTYPE=7, Military Insurance	Hispanic
INSTYPE=7, Military Insurance	Overall
INSTYPE=9, Other public coverage	Adults
INSTYPE=9, Other public coverage	Black
INSTYPE=9, Other public coverage	Children
INSTYPE=9, Other public coverage	Hispanic
INSTYPE=9, Other public coverage	Overall
LSTEXPL=2, Fair	Black
LSTEXPL=2, Fair	Children
LSTEXPL=2, Fair	Hispanic
LSTEXPL=7, N/A	Adults
LSTEXPL=7, N/A	Overall
MCARE: Covered by Medicare	Black
MCARE: Covered by Medicare	Children
MCARE: Covered by Medicare	Hispanic
MCHOICE=7, N/A	Adults

TABLE C.3

OUTLIERS FOR PERSON-LEVEL HIGH-INTENSITY SITE-SPECIFIC ESTIMATES
(Continued)

Variable and Label	Subgroup
MCHOICE=7, N/A	Black
MCHOICE=7, N/A	Hispanic
MCHOICE=7, N/A	Overall
MCRLSTP=2, Book/directory/list	Adults
MCRLSTP=2, Book/directory/list	Overall
MENTAL: Any mental health visits	Black
MENTAL: Any mental health visits	Children
MENTAL: Any mental health visits	Hispanic
MPVISNX: Numbr medical profssonal visits	Children
MPVISNX: Numbr medical profssonal visits	Hispanic
OFFERED=2, Offered, eligible, not covered	Black
OFRMULT=3, Unknown offered multiple plan	Adults
OFRMULT=3, Unknown offered multiple plan	Overall
OFRMULT=5, Self-Employed	Hispanic
OFRMULT=6, Working elderly	Black
PRECOVX=1, Medicare/Medicaid/Military/Oth	Black
PRECOVX=1, Medicare/Medicaid/Military/Oth	Children
PRECOVX=1, Medicare/Medicaid/Military/Oth	Hispanic
PRECOVX=5, N/A	Adults
PRECOVX=5, N/A	Overall
PRIVDIR: Cov by priv insur buy directly	Black
PRIVDIR: Cov by priv insur buy directly	Children
PRIVDIR: Cov by priv insur buy directly	Hispanic
PRIVOTH: Cov by priv insur by others	Adults
PRIVOTH: Cov by priv insur by others	Black
PRIVOTH: Cov by priv insur by others	Children
PRIVOTH: Cov by priv insur by others	Hispanic

TABLE C.3

OUTLIERS FOR PERSON-LEVEL HIGH-INTENSITY SITE-SPECIFIC ESTIMATES
(Continued)

Variable and Label	Subgroup
PVLST1P: Private plan1, list of doctors	Black
PVLST1P: Private plan1, list of doctors	Children
PVLST1P: Private plan1, list of doctors	Hispanic
RACEREX=2, African American	Black
RACEREX=2, African American	Children
RACEREX=4, Hispanic	Hispanic
SPCHOCX=2, Somewhat Satisfied	Children
SPCHOCX=3, Neither Satisfied/Dissatisfied	Adults
SPCHOCX=3, Neither Satisfied/Dissatisfied	Black
SPCHOCX=3, Neither Satisfied/Dissatisfied	Hispanic
SPCHOCX=3, Neither Satisfied/Dissatisfied	Overall
TAKRISK=3, Neither Agree/Disagree	Adults
TAKRISK=3, Neither Agree/Disagree	Black
TAKRISK=3, Neither Agree/Disagree	Hispanic
TAKRISK=3, Neither Agree/Disagree	Overall
USCARE=1, Yes	Adults
USCARE=1, Yes	Black
USCARE=1, Yes	Children
USCARE=1, Yes	Hispanic
USCARE=1, Yes	Overall
USCARE=3, More than 1 place	Adults
USCARE=3, More than 1 place	Black
USCARE=3, More than 1 place	Children
USCARE=3, More than 1 place	Hispanic
USCARE=3, More than 1 place	Overall
USCTYPE=2, HMO	Black
USCTYPE=2, HMO	Children
USCTYPE=2, HMO	Hispanic
USCTYPE=3, Hospital Outpatient	Black
USCTYPE=3, Hospital Outpatient	Children
USCTYPE=3, Hospital Outpatient	Hispanic
USCTYPE=5, Hospital Emergency Room	Black

TABLE C.3

OUTLIERS FOR PERSON-LEVEL HIGH-INTENSITY SITE-SPECIFIC ESTIMATES
(Continued)

Variable and Label	Subgroup
USCTYPE=5, Hospital Emergency Room	Children
USCTYPE=5, Hospital Emergency Room	Hispanic
USCTYPE=6, Other Place	Black
USCTYPE=6, Other Place	Children
USCTYPE=6, Other Place	Hispanic

Note: All had relative standard errors of more than 0.30 for the specified subgroups in one or more high-intensity site.

Appendix D

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 for all versions, 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, 3.3, and 3.4 from Chapter 3, which indicate the appropriate weights for person- and family-level analyses. Table 4.16 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 56,798 persons (55,344 persons if using a self-response module variable) or 30,787 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 54,371 persons (52,971 persons if using a Self-Response Module [SRM] variable) or 29,456 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 6,075 persons (5,914 persons if using a SRM variable) or 3,276 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 60,446 persons (58,885 persons if using a self-response module variable) or 32,732 families if making family-level estimates.

Preprocessing or recoding may be required for some variables because of missing or nonpositive data. Missing data in the Restricted Use File were 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 or negative weights will automatically be excluded from the estimates produced in SUDAAN procedures.

In using SUDAAN, the full sample must be in the file being processed even when analyses are for subgroups or subpopulations.¹ 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. If the file is reduced to a specific subpopulation, the sampling variance estimates SUDAAN computes may be wrong.

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.

¹ 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.

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 wtperl;
  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. The SRM weight for producing national estimates from the combined samples is used, since UNMET and PUTOFF are variables from the SRM.

```
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 wtsrm4;
  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";
```

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";
```