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Design and Operation of the National Survey of Children's Health, 2007

Program and Collection Procedures

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Abstract

Objectives

This report presents the development, plan, and operation of the 2007 National Survey of Children's Health, a module of the State and Local Area Integrated Telephone Survey, conducted by the Centers for Disease Control and Prevention's National Center for Health Statistics. This survey was designed to produce national and state-specific prevalence estimates for a variety of physical, emotional, and behavioral health indicators and measures of children's experiences with the health care system. The survey also includes questions about the family (for example, parents' health status, stress and coping behaviors, family activities) and about respondents' perceptions of the neighborhoods where their children live. Funding and direction for this survey was provided by the Maternal and Child Health Bureau of the Health Resources and Services Administration.

Methods

A random-digit-dialed sample of households with children under age 18 years was selected from each of the 50 states and the District of Columbia. One child was randomly selected from all children in each identified household to be the subject of the survey. The respondent was a parent or guardian who knew about the child's health and health care.

Results

A total of 91,642 interviews were completed from April 2007 to July 2008. Nearly 80% of the interviews were completed in 2007. Interviews were completed in 66.0% of identified households with children. The weighted overall response rate was 46.7%. A data file has been released that contains demographic information on the selected child, substantive health and well-being data for the child and his or her family, and sampling weights. Estimates based on the sampling weights generalize to the noninstitutionalized population of children in each state and nationwide.

Keywords: Child health services • chronic disease • family functioning • medical home

Design and Operation of the National Survey of Children's Health, 2007

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Introduction

For nearly a century, the Maternal and Child Health Bureau (MCHB) of the Health Resources and Services Administration has been charged with the primary responsibility for promoting and improving the health of mothers and children in the United States. The mission of MCHB is to ensure the continued improvement in the health, safety, and well-being of America's women, infants, children, adolescents, and their families (1,2).

MCHB relies on data from population-based systems to evaluate progress toward its mission. National-level data on child health and well-being are available from a number of ongoing surveys. However, valid and reliable state-level statistical estimates generally cannot be made from these national datasets for all states. Recognizing the need for health and well-being data that could be meaningfully compared across states and nationally for all children, MCHB sponsored the first National Survey of Children's Health (NSCH) in 2003 through the State and Local Area Integrated Telephone Survey (SLAITS) program. To continue monitoring the health of U.S. children, MCHB sponsored the second administration of NSCH in 2007. This report documents the 2007 design and procedures.

SLAITS Program

The SLAITS program, conducted by the Centers for Disease Control and Prevention's (CDC) National Center for Health Statistics (NCHS), is a broad-based, ongoing surveillance system available at the state and local levels to track and monitor the health and well-being of children and adults. These surveys use the sampling frame of CDC's National Immunization Survey (NIS) and immediately follow NIS in selected households, using its sample for efficiency and economy. NIS is a large-scale random-digit-dialed (RDD) telephone survey that uses computer-assisted telephone interview (CATI) technology to contact over 1 million households each year, screen for the presence of young children in selected households, and collect immunization history information for eligible children. The process to identify this large number of households—most of which are ultimately age ineligible for NIS—offers an opportunity to administer other surveys on a range of health- and welfare-related topics in an operationally seamless, cost-effective, and statistically sound manner.

Surveys conducted as part of the SLAITS system vary in content, duration, and sample size based on the research needs of their sponsors. Sponsors work with NCHS to establish parameters including sample size, questionnaire design, and other survey

requirements. Since 2005, NORC at the University of Chicago has administered all aspects of survey operations. Their staff, in conjunction with SLAITS staff from NCHS, develops and tests the CATI instrument, recruits and trains interviewers, completes the targeted number of interviews, and prepares data files and final documentation. NCHS is responsible for all aspects of SLAITS administration.

SLAITS began in 1997 with a pilot test in two states: Iowa and Washington. This pilot survey included a series of questions on health, including issues of access to care, health status, and insurance (3). In 1998, a SLAITS module on child well-being and welfare issues was implemented using three samples: a general RDD sample of children in Texas, known Medicaid program participants in Texas, and known Medicaid or MinnesotaCare participants in Minnesota (3). In 2000, SLAITS fielded the National Survey of Early Childhood Health, which collected data on parents' perceptions of their young children's pediatric care, and examined relationships between health promotion in the pediatric office and at home (4).

SLAITS fielded the first National Survey of Children with Special Health Care Needs (NS–CSHCN) in 2001 and the first NSCH in 2003. NS–CSHCN was designed to produce national and state-specific estimates of the prevalence of children with special health care needs (CSHCN), describe the types of services that they need and use, assess aspects of the system of care for CSHCN, and evaluate the impact of their needs on their families (5). NSCH was designed to produce national and state-specific estimates of the health and well-being of all children, their families, and communities (6). These were the first SLAITS studies to take full advantage of the NIS sampling frame to produce estimates for each of the 50 states and the District of Columbia (DC). In 2003, SLAITS also fielded the National Asthma Survey, which examined the health, socioeconomic, behavioral, and environmental predictors that relate to better control of asthma (7). NS–CSHCN was repeated in

2005–2006 (8), and in 2007 NSCH was conducted for the second time.

NSCH

According to its vision statement, MCHB strives "for a society where children are wanted and born with optimal health, receive quality care, and are nurtured lovingly and sensitively as they mature into healthy, productive adults." MCHB also seeks to ensure that "there is equal access for all to quality health care in a supportive, culturally competent, family and community setting" (2). This effort is achieved by providing block grants that are matched by state funds (1).

NSCH was conducted to assess how well individual states, DC, and the United States as a whole meet MCHB's strategic plan goals and national performance measures. These goals call for MCHB to provide national leadership for maternal and child health; promote an environment that supports maternal and child health; eliminate health barriers and disparities; improve the health infrastructure and systems of care; assure quality care; work with states and communities to plan and implement policies and programs to improve the social, emotional, and physical environments; and acquire the best available evidence to develop and promote guidelines and practices to assure social, emotional, and physical environments that support the health and well-being of women and children. NSCH results support these goals by providing an objective basis for federal and state program planning and evaluation efforts (9).

NSCH content is intentionally broad, and addresses a variety of physical, emotional, and behavioral health indicators and measures of children's health experiences with the health care system. The survey includes an extensive battery of questions about the family, such as parental health, stress and coping, and family activities. The NSCH also asks respondents for their perceptions of the child's neighborhood. No other survey provides the breadth and depth of information about children, families, and

neighborhoods with sample sizes sufficient for state-level analyses in every state, collected in a manner that allows comparison among states (9).

National Survey of Adoptive Parents

In 2007, the Office of the Assistant Secretary for Planning and Evaluation (ASPE) and the Administration for Children and Families, both of the Department of Health and Human Services (HHS), collaborated with NCHS to develop the National Survey of Adoptive Parents (NSAP). NSAP focused on the characteristics and needs of adopted children and their adoptive families. The survey was tailored to collect data from three types of adoptive families: those who adopted through the U.S. foster care system, internationally, and through domestic private agencies.

Due to the relatively low prevalence rate of adoptive families in the United States, surveys of this population have typically been conducted using targeted lists, which may or may not provide samples that are representative of the national population of adopted children and their adoptive families. In contrast, the large sample size of the 2007 NSCH enabled NCHS to identify a nationally representative sample of approximately 2,000 adopted children.

NSCH identified households that contained at least one child under age 18 years and selected one child from that household as the subject of the detailed interview. When a selected child was identified as adopted, respondents were invited to also participate in the NSAP interview. The NSAP interview examined adoption agreements, postadoption financial services, and postadoption nonfinancial supports, as well as adoption-related measures of parent and child well-being. When combined with the NSCH data on the general health and well-being of children, their families, and their neighborhoods, the NSAP data provide researchers with previously unavailable insights into adopted children and their families. Details about NSAP are included in a separate NCHS report (10) and will not be further discussed here.

Influenza Vaccination Module

In 2007, ASPE also sponsored a study to assess influenza vaccination coverage in children and characteristics of children who did and did not receive the vaccine in accordance with recommendations from the Advisory Committee on Immunization Practices. The study assessed risk factors in children for which the immunization may be indicated, as well as selected risk factors for adults in the household, as they could also indicate the need for influenza immunizations in resident children. These questions were integrated into the 2007 NSCH questionnaire. The target sample size for the influenza vaccination module was approximately 21,000 completed interviews, so as to produce reliable estimates for the entire United States, each state, and DC. Details about this module will not be further discussed here.

Sample Design

Like all SLAITS modules, NSCH took advantage of the large number of screening calls required for NIS. To accomplish the goal of 1,700 completed NSCH interviews in each state, telephone numbers were initially selected from the telephone numbers randomly generated for the NIS screening effort. Therefore, the procedures for drawing the NIS sample were the first steps in the procedures for drawing the NSCH sample. There were, however, some states for which the NIS sample was not large enough to achieve the desired number of completed NSCH interviews. In these cases, an additional sample was drawn for the purpose of administering the NSCH interview without going through NIS first. This ''augmentation'' sample was independent of NIS, and as a result, it was not subject to NIS screening or interviewing.

The next two sections describe the basic NIS and NSCH sample designs, as well as the NSCH sample allocation

procedures. Appendices I, II, and III provide more technical descriptions of the NSCH sample design and weighting procedures. For more detail on the NIS sample design, readers are encouraged to refer to chapter 2 of the *2007 Methodology Report* for NIS (11), which is available from NCHS by request. Further information regarding NIS itself can be found in *National Immunization Survey: The Methodology of a Vaccination Surveillance System* (12) and online from http://www.cdc.gov/nis.

The NIS Sampling Plan

NIS monitors vaccination levels of very young children within states and local areas. These ''estimation areas'' are nonoverlapping and cover the United States. Each estimation area is within the borders of a single state, and every location in the United States is in one, and only one, estimation area. In effect, each quarter-year, NIS conducts a separate survey in each estimation area, using a common list-assisted RDD sample design (13,14). The target number of completed interviews in each estimation area reflects the goal of obtaining equally precise estimates in each estimation area. Thus, the national target for the total number of completed NIS interviews is the sum of the target number of completed interviews in each estimation area. If necessary, the target for an estimation area in a quarter is adjusted to compensate for its total shortfall or excess in previous quarters.

The target population for NIS is children aged 19–35 months, the primary target age for immunization programs. Because less than 5% of households in the United States contain children in this age range, NIS screens over 1 million households per year to identify a sufficient number of households with eligible children. SLAITS modules use this NIS screening sample.

NIS uses the list-assisted RDD method (13). This method selects a random sample of telephone numbers from ''banks'' of 100 consecutive telephone numbers (for example, 673-256-0000 through 673-256-0099) that contain at least one directory-listed landline residential

telephone number. The sampling frame of telephone numbers is updated each quarter to reflect new telephone exchanges and area codes.

Although the number of cellular telephone users in the United States has increased rapidly, most households with children continue to maintain landline telephone service (15). Also, most cellular telephone users pay for incoming calls. Therefore, the NIS sampling frame excluded cellular telephone banks in 2007.

NSCH Sample Design and Allocation

The goal of the NSCH sample design was to generate samples representative of populations of children within each state. An additional goal of NSCH was to obtain state-specific sample sizes that were sufficiently large to permit reasonably precise estimates of the health characteristics of children in each state.

To achieve these goals, state samples were designed to obtain a minimum of 1,700 completed interviews. The number of children to be selected in each NIS estimation area was determined by allocating the total of 1,700 children in the state to each NIS estimation area within the state in proportion to the total estimated number of households with children in the NIS estimation area. Given this allocation, the number of households that needed to be screened in each NIS estimation area was calculated using the expected proportion of households with children under age 18 years in the area. Then, the number of telephone numbers that needed to be called was computed using the expected working residential number rate, adjusted for expected nonresponse.

Drawing the Sample

After the number of telephone numbers necessary to achieve the target number of NSCH interviews in each area had been estimated, the samples were drawn. The sample draw proceeded in three steps. First, telephone

numbers were sampled for NIS in each area as previously described. Second, a portion of the telephone numbers in each area was flagged to be part of a supplemental NIS sample designed to assess the vaccination coverage for teenagers. [This supplemental NIS questionnaire of vaccination rates among teenagers began with a national sample in the final calendar quarter of 2007 (Q4/2007) and continued with a state-based sample in 2008.] Third, a portion of the telephone numbers in each area was flagged to be part of the NSCH sample.

After these three steps, every telephone number sampled for NIS fell into one of four categories: 1) NIS-only, 2) NIS and NIS-Teen, 3) NIS and NSCH, or 4) NIS, NIS-Teen, and NSCH. Households in the fourth group may have been eligible for all three surveys, depending on the ages of the children in the household. To minimize the number of households that would be asked to participate in all three surveys, an effort was made to flag as few NIS telephone numbers as possible for both NIS-Teen and NSCH. Still, it was necessary to have some overlap between the two interviews in the first quarter of 2008 (Q1/2008).

In nine states (Connecticut, Delaware, Idaho, Kansas, Mississippi, Montana, North Dakota, Oklahoma, and Utah), there were insufficient NIS samples available to obtain the desired number of NSCH completed interviews. Additional telephone numbers were drawn and categorized as NSCH-only sample. Table A shows the proportion of the overall NSCH sample that was augmented for each state.

Table A. Percentage of National Survey of Children's Health sample called only for the National Survey of Children's Health, by state

State	Percent
Connecticut	17.8
Delaware	4.9
Idaho	18.8
Kansas.	7.9
Mississippi.	2.6
Montana	8.5
North Dakota	10.8
Oklahoma	17.0
Utah	8.0

NOTE: Percentage for all other states and the District of Columbia was zero.

Conducting the NSCH Interviews

With the exception of the NSCH-only augmentation sample, each telephone number selected for NSCH was called and screened for residential status and presence of NIS age-eligible children (including NIS-Teen, if appropriate). NIS interviews were conducted if NIS age-eligible children lived in the household. If NIS age-eligible children did not live in the household, interviewers asked if there were any children younger than age 18 years who lived in the household. If only one child lived in the household, that child was the subject of the detailed NSCH interview. If there were multiple children in the household, one was randomly selected (that is, sampled) to be the subject of the detailed NSCH interview.

The sampling and interviewing process described above applied to the entire data collection period except for the first quarter of 2007 (Q1/2007). Households that screened as age ineligible for NIS, and households that screened as age eligible and completed the NIS interview, then moved directly—on the same call, where feasible—to the NSCH age screening and interview. However, in Q1/2007, the NSCH questionnaire was not finalized at the time the NIS was being fielded. Households contacted in Q1/2007 could not move on to NSCH screening and interviewing directly upon finishing the NIS.

As in other quarters, in Q1/2007 a portion of the NIS sample was flagged for NSCH. After the telephone numbers were called and after NIS had finished its interviewing efforts, a subsample of this initially selected sample was selected. This subsample was later dialed for NSCH interviewing. This sample is referred to as the ''banked'' sample. The subsampling scheme can be found in Appendix II.

Questionnaire

The framework for the 2003 NSCH was initially discussed in September 2001. A panel consisting of state and federal maternal and child health program directors, representatives of family organizations, child health services researchers, and survey design experts met to discuss content domains. Eight domains were selected for their epidemiological and policy importance, including: 1) demographics, 2) physical and mental health status, 3) health insurance, 4) health care utilization and access to health care, 5) medical home, 6) family functioning, 7) parents' health, and 8) neighborhood characteristics. In addition, age-specific modules were identified to capture the developmentally appropriate aspects of child health and well-being. A subset of this panel then assembled questions to capture these domains. Questionnaire items identified for inclusion were then assessed through reviews by outside experts and selected members of the community of potential data users. Upon final approval by MCHB, these questions were pretested in 2002 and fielded in 2003 as the first NSCH.

The 2003 questionnaire underwent revisions prior to implementation in 2007. Revisions to the questionnaire were initially proposed in December 2005 by the Advisory Committee for the Data Resource Center on Child and Adolescent Health, and in February 2006 by NSCH data users in response to a request for input distributed by e-mail to members of the SLAITS listserv. Additional input was received in early 2006 from researchers at CDC and at Child Trends. Beginning in March 2006, a technical expert panel reviewed each suggested revision, assembled questions to address newly proposed content areas, and provided recommendations to MCHB. (See Table B for a list of panel members.) New and significantly revised questions were pretested in December 2006, and the questionnaire was finalized by MCHB and NCHS shortly thereafter.

Content

The NSCH questionnaire was designed to immediately follow a completed NIS interview in households with an NIS-eligible child or the NIS screener in households without an

Table B. External (nongovernmental) technical expert panel members

Name	Affiliation (in 2006)
Maja Altarac, M.D., Ph.D.	University of Alabama at Birmingham
Christina Bethell, Ph.D., M.B.A., M.P.H.	Oregon Health and Science University
Neal Halfon, M.D.	University of California, Los Angeles
William Hollinshead, M.D.	Rhode Island Department of Health
Charles Irwin, M.D.	University of California, San Francisco
Jeffrey Lobas, M.D., M.P.A.	Iowa Child Health Specialty Clinics
Kristin Anderson Moore, Ph.D.	Child Trends
Paul Newacheck, Dr.P.H., M.P.P. (chairperson)	University of California, San Francisco
Lynn Olson, Ph.D..	American Academy of Pediatrics
Edward Schor, M.D.	The Commonwealth Fund
Judith Shaw, Ed.D., M.P.H., R.N.	University of Vermont

NIS-eligible child. The questionnaire was divided into 11 sections, summarized below.

1. **Age-eligibility screening and demographic characteristics**—This section consisted of the introduction to the interview and a question to determine if any children under age 18 years were living in the household. All children living in the household were rostered by age, and one child was randomly sampled for the detailed NSCH interview. In this section, respondents were asked questions about their relationship to the sampled child, the sex of the sampled child, and the primary language spoken in the household.

2. **Health and functional status**—The questions in this section were asked to determine whether the sampled child had acute or chronic physical, mental, behavioral, learning, or developmental conditions and, when present, the impact of these conditions upon the child's life. Respondents were asked additional questions to determine the presence of various acute and chronic health conditions. This section included the CSHCN Screener, a screening tool developed by the Child and Adolescent Health Measurement Initiative to identify special health care needs in children (16). The CSHCN Screener includes five stem questions on health care needs that could be the consequences of chronic health conditions. If a child currently experiences at least one of those consequences, follow-up questions determine whether each health care need is the result of a medical, behavioral, or other health condition that has lasted or is expected to last for 12 months or longer. Those with affirmative answers to the stem and the follow-up questions are considered to have special health care needs. This screener was also used for the National Survey of CSHCN (5,8). For identified CSHCN, NSCH also asked whether the children's condition or conditions limit their participation in activities.

3. **Health insurance coverage**—This section established whether the sampled child had adequate health care coverage, and whether there were any gaps in health care coverage during the 12 months prior to the interview. Adequacy was defined by whether the insurance (public or private) meets the child's needs at reasonable costs.

4. **Health care access and utilization**—Topics in this section included the availability of a usual place for care and a personal doctor or nurse, as well as the need for and use of medical, dental, and mental health services within the 12 months prior to the interview.

5. **Medical home**—The main goal of this section was to assess the quality of care from, and communication with, the child's doctors and other health care providers. Together, the items in this section permit an assessment of whether children have access to a "medical home," which is defined by the American Academy of Pediatrics as primary care that is accessible, continuous, comprehensive, family-centered, coordinated, compassionate, and culturally effective (17).

6. **Early childhood (0–5 years)**—This section, administered if the sampled child was aged 5 years or under, included questions about developmental screening, child care arrangements, injuries, breastfeeding, use of formula, and solid food introduction. In addition, this section asked about reading, telling stories, watching television, and play. This section included copyrighted questions from the Parent's Evaluation of Developmental Status (PEDS) Child Development Screening Test. PEDS is a tool to identify children at risk for developmental, behavioral, or social delays (18); therefore, it was used in this section as a risk assessment tool to identify children who either have or are more likely to have problems. Researchers interested in analyzing PEDS data should consult the PEDS documentation for scoring instructions. (Health care providers wishing to use PEDS in practice to assess risk status or to make decisions about developmental status for individual children must use the clinical version of the test, which can be obtained from Ellsworth & Vandermeer Press, LLC. The clinical version was not used for NSCH.)

7. **Middle childhood and adolescence (6–17 years)**—This section, administered if the sampled child was aged 6 years or over, focused on school enrollment, school engagement, activities outside school, social behaviors, and emotional difficulties. Respondents were also asked about their attendance at the sampled child's events and activities; whether they had met all, some, or none of the sampled child's friends; and the amount of time the sampled child spent caring for himself or herself. Questions also asked about reading, computing, and television watching. This section included the NSCH Social Competence Scale, an internally valid and reliable measure of social skills and behavior problems (19).

8. **Family functioning**—This section determined the frequency of family meals and attendance at religious services, as well as the level of stress on the family from the demands of parenting. Three parental stress questions (K8Q31, K8Q32, K8Q34) comprised the Aggravation in Parenting Scale, which was derived from the Parental Stress Index (20) and the Parental Attitudes about Childrearing Scale (21). It has been used previously in the Panel Survey of Income Dynamics, the Survey of Income and Program Participation, and the Survey of Program Dynamics.

9. **Parental health**—Questions in this section were designed to obtain the number and type of parents (or those acting as parents) who live with the child and to assess their physical, mental, and emotional health; exercise frequency; and smoking behavior.

10. **Neighborhood characteristics**—The primary goal of this section was to ascertain respondents' perceptions of their neighborhoods, reports about neighborhood amenities and conditions, and beliefs about their children's safety in the neighborhood and in school. Four of the questions in this section (K10Q30, K10Q31, K10Q32, K10Q34) consider parents' perceived level of neighborhood social capital, focusing specifically on positive aspects of social capital relating to children (22). This concept, alternatively called "social support," is similar to the concept of "social cohesion and trust," which is related to variations in violence among inner-city neighborhoods (23). These questions were originally developed for the Longitudinal Studies of Child Abuse and Neglect and have also been used for the Survey of Income and Program Participation.

11. **Additional demographic characteristics**—In this section, respondents were asked a series of demographic questions, including the number of times the family had moved since the child was born, household utilization of assistance from county welfare programs, and the household's ZIP Code. Additional questions determined the race and ethnicity of the child and whether the child and his or her parents were born in the United States. This section also included questions on family income. The annual family income was mapped to Department of Health and Human Services (HHS) poverty guidelines for households. This mapping made it possible to categorize the household's income relative to the federal poverty level.

A copy of the questionnaire appears in Appendix IV. Appendix V lists the key differences between the 2003 and 2007 questionnaires. Appendix VI lists changes made to the 2007 questionnaire during the data collection period. Appendix VII includes the HHS poverty guidelines tables used to determine household poverty status and a description of the process to assign poverty status to households. Appendix VIII contains state-specific health insurance program names used for health insurance questions in Section 3 of the questionnaire.

Programming the CATI

NSCH was conducted using a CATI system. This software presents the questionnaire on a computer screen to each interviewer and guides the interviewer through the questionnaire, automatically routing the interviewer to appropriate questions based on previous answers. Interviewers enter survey responses directly into the computer; the CATI program determines whether the selected response is within an allowable range and saves the responses in a survey data file. Online help screens and text are available to aid interviewers. This reduces the time required to transfer, process, and release data, and promotes data accuracy.

The NSCH questionnaire was programmed as an NIS module to integrate the two surveys into a single interview. The instrument made full use of the CATI system's ability to check whether a response was within a legitimate range, follow skip patterns, fill state-specific information in questions as applicable (for example, names of state health insurance programs), and employ "pick lists" for response categories. Certain household and demographic questions were identical in both surveys. If a respondent answered these questions during the NIS interview, these questions were not repeated in NSCH. Instead, answers to these NIS questions were copied to the NSCH data file, as appropriate.

Pretesting

Once initial programming was completed, the instrument underwent rigorous testing to ensure that the CATI system functioned correctly. In addition, a pretest of the CATI instrument was fielded in December 2006 with a national list sample of households likely to include children purchased from Survey Sampling International (SSI). Using this list, a total of 640 completed interviews were obtained over the course of 3 days. The administration time for the interview averaged 32 minutes and 37 seconds, with 40 interviews (6%) that lasted longer than 45 minutes. The targeted administration time was 25 minutes (not including the age screening and informed consent process). Based on results from the pretest, changes were made and the questionnaire was finalized.

Interviewer Training

NORC and its subcontractor conducted all interviews for the 2007 NSCH. Interviewer training was conducted by NORC staff at production centers located in Chicago, IL, and Las Vegas, NV. The use of multiple sites ensured continuous coverage in all time zones across the United States. The number of interviewers who completed training and certification in each month by location is shown in Table C.

The interviewer training sessions for both the pretest and main survey began with an introduction and project overview. Interviewers were informed

Table C. Number of interviewers trained and certified, by month and telephone center location

| Month and year | Location | | | | | |
| | Chicago, IL | | Las Vegas, NV | | Both locations | |
	Number trained	Number certified	Number trained	Number certified	Number trained	Number certified
2007						
March	184	183	103	101	287	284
April.	162	153	37	36	199	189
May	51	50	0	0	51	50
June	0	0	16	14	16	14
July	37	33	22	18	59	51
August	86	82	28	25	114	107
September	38	34	22	19	60	53
October	4	4	0	0	4	4
November	0	0	0	0	0	0
December	0	0	0	0	0	0
2008						
January	47	45	0	0	47	45
February	85	84	. . .	. . .	85	84
March	21	21	. . .	. . .	21	21
Total	715	689	228	213	943	902

. . . Category not applicable. Interviewing at the Las Vegas location ended on January 8, 2008.

about project goals, the study purpose and history, sponsors, and design. An overview of each questionnaire section was taught, with emphasis on quality data collection. The relationship between the NSCH and NIS was also covered.

Several exercises on gaining cooperation were conducted throughout training to ensure that interviewers were equipped to answer frequently asked questions (FAQs) and avert refusals. Part of the exercises included pronunciation of medical conditions, as well as a review of FAQs and other job aids provided for interviewers.

Two types of mock interviews were administered: trainer-led and dual-trainee interviews. The trainer-led mock interviews focused on gaining cooperation skills and the interviewer's project knowledge. The first dual-trainee mock interview was integrated into the section-by-section lecture that progressed through the questionnaire. The interviewers first listened to a lecture regarding each section, and then practiced moving through that section in CATI before discussing the next section. This method ensured that interviewers became acclimated to the questionnaire, could navigate CATI, and gained cooperation as new topics were introduced. Additional mock interviews were then conducted that simulated

more realistic interviewing situations in real time. Each mock interview was designed to highlight various sections of the screener and the main questionnaire, and to provide different scenarios for gaining cooperation.

At the conclusion of the training session, there was an opportunity for trainees to ask any final questions. The class then participated in an interactive game that emphasized project knowledge and FAQs, CATI skills, and common interview situations.

After training, interviewers completed a certification mock interview. This was administered by trained supervisors. It was approximately 30 minutes in length and standardized to ensure that all interviewers were assessed equally in project knowledge, ability to precisely read and correctly pronounce questionnaire items, and ability to answer respondent questions.

A written evaluation was also administered to reinforce what was learned during the training sessions. It was 16 questions in length and took 20 minutes to complete. The evaluation covered FAQs, survey procedures, and question-specific information. Interviewers had to pass both the written and certification mock interview to be certified to work NSCH cases.

Data Collection

Telephone interviewing began on April 5, 2007, and was completed on July 27, 2008. Interviews were completed for 90,557 children and partially completed for an additional 1,085 children. The interview was considered to be at least partially complete if Section 6: Early Childhood (for selected children aged 0–5 years) or Section 7: Middle Childhood and Adolescence (for selected children aged 6–17 years) was completed. See Table D for the total number of interviews completed and partially completed in each state.

Because 79% of the 91,642 total interviews were completed by the end of 2007, this survey is referred to as the 2007 NSCH. Table E shows the total number of interviews completed by month.

Advance Letters

Advance letters have been shown to decrease nonresponse; they confirm study legitimacy and communicate the value of the survey (24). When a mailing address could be identified for a sampled telephone number, an advance letter was mailed prior to any telephone calls. Letters were mailed for 58.8% of the telephone numbers eventually dialed by the interviewers, which was 31.0% of the total telephone numbers randomly generated. (Some known business and nonworking telephone numbers are removed from the sample of randomly generated telephone numbers prior to dialing.) Appendix IX includes a list of advance letters used over the course of data collection.

Because NSCH typically follows NIS, the advance letter sent to most households was the usual NIS advance letter. It asked recipients to participate in a voluntary study on the immunization status of their children and the types of health and related services that their children need and use. The letter also explained how their telephone number was selected, who was conducting the survey, and that their household would be contacted within the next 2 weeks. The letter included an additional page of

Table D. Number of interviews, by state

State	Completed	Partially completed	Total
National.	90,557	1,085	91,642
Alabama	1,737	24	1,761
Alaska.	1,714	25	1,739
Arizona	1,741	28	1,769
Arkansas	1,751	14	1,765
California	1,728	23	1,751
Colorado	1,780	21	1,801
Connecticut.	1,871	18	1,889
Delaware	1,786	19	1,805
District of Columbia.	1,779	22	1,801
Florida.	1,777	20	1,797
Georgia	1,766	16	1,782
Hawaii.	1,780	42	1,822
Idaho	1,755	13	1,768
Illinois	1,897	35	1,932
Indiana	1,749	15	1,764
Iowa	1,744	13	1,757
Kansas	1,784	19	1,803
Kentucky	1,782	21	1,803
Louisiana	1,832	36	1,868
Maine	1,735	17	1,752
Maryland	1,755	18	1,773
Massachusetts.	1,760	26	1,786
Michigan	1,847	14	1,861
Minnesota	1,753	14	1,767
Mississippi	1,880	38	1,918
Missouri.	1,830	17	1,847
Montana	1,768	20	1,788
Nebraska	1,806	21	1,827
Nevada	1,796	25	1,821
New Hampshire	1,758	15	1,773
New Jersey.	1,796	31	1,827
New Mexico	1,796	30	1,826
New York	1,751	42	1,793
North Carolina	1,758	24	1,782
North Dakota.	1,784	16	1,800
Ohio	1,746	19	1,765
Oklahoma.	1,797	19	1,816
Oregon	1,783	11	1,794
Pennsylvania.	1,744	23	1,767
Rhode Island.	1,740	16	1,756
South Carolina.	1,857	28	1,885
South Dakota	1,724	16	1,740
Tennessee	1,813	27	1,840
Texas	1,783	22	1,805
Utah	1,741	6	1,747
Vermont.	1,711	14	1,725
Virginia	1,755	19	1,774
Washington.	1,721	15	1,736
West Virginia.	1,746	20	1,766
Wisconsin.	1,841	19	1,860
Wyoming	1,729	19	1,748

FAQs covering topics such as confidentiality and the legitimacy of the survey. The letter provided toll-free telephone numbers for those with concerns or questions about the study and for respondents who wanted to participate immediately. Finally, the letter offered a website address for more information about NIS.

As described earlier, the NIS sample was augmented with additional sample in states where NIS samples were insufficient to complete the required number of NSCH interviews. These households were sent an advance letter specific to NSCH. The advance letter for this augmentation sample explained that the interview would include questions on health topics such as exercise, sleep, diet, and doctor visits for children and teenagers, and that this information would be used to help create programs for healthier children, schools, and communities. As with the NIS advance letter, recipients were advised that their telephone numbers had been chosen randomly and they might be called in the next few weeks. Households in the augmentation sample were given a unique NSCH-only toll-free number to call if they wished to participate immediately, or to learn more about the study. The letter did not mention anything about NIS or immunizations, and provided the address for the NCHS SLAITS website.

Toll-free Telephone Numbers

A toll-free telephone line offered respondents the flexibility to call at their convenience if they had questions about the survey or wanted to establish eligibility, complete the interview, or submit feedback. Advance letters, incentive letters, answering machine scripts, and closing scripts referenced this toll-free number, and interviewers provided the number to respondents who requested it during the interview.

The telephone line was answered by NSCH interviewers. During the course of data collection, 8,822 cases in the NSCH sample called the toll-free line. Out of these cases, 4,918 households were determined to be ineligible, and an additional 2,710 households were screened as eligible. Overall, respondents in 2,395 of these eligible households ultimately completed NSCH.

A second toll-free telephone number connected recipients of the letter to the NCHS Research Ethics Review Board (ERB) for answers to questions about survey legitimacy, confidentiality, and the rights of respondents. The ERB number was provided in the advance letters and in the closing interview script in case respondents had questions after completion.

Selection of Sampled Child

Households were screened for the presence of children under age 18 years. In households with children, the ages of

Table E. Number of interviews, by month

Month and year	Total[1]	Percent
April 2007	4,435	4.8
May 2007	9,074	9.9
June 2007	9,449	10.3
July 2007	10,538	11.5
August 2007	11,208	12.2
September 2007	8,679	9.5
October 2007	7,454	8.1
November 2007	6,137	6.7
December 2007	5,269	5.8
January 2008	5,472	6.0
February 2008	4,542	5.0
March 2008	5,331	5.8
April 2008	2,533	2.8
May 2008	849	0.9
June 2008	460	0.5
July 2008	212	0.2
All months	91,642	100.0

[1]Includes partially completed interviews.

all children living or staying in the household were then obtained. If a household only had one child, that child was selected as the focus of the interview by default. In households with multiple children, one child was randomly selected to be the focus of the interview.

Selection of Respondent

Interviewers requested to speak with a parent or guardian who lived in the household and who knew about the health and health care of the sampled child. The respondent was the mother or father for 94% of sampled children. Table F shows the frequency of respondents by their relationship with the sampled child.

An adult aged 18 or over was not identified in 2,843 households (0.5% of all known households contacted for NSCH). These households were not eligible to complete the screening portion of the interview. No interviews were conducted in these households even if a minor who lived there was the parent of a younger child.

Informed Consent

After the knowledgeable adult came to the telephone, or after the person who answered the telephone identified herself or himself as the knowledgeable adult, this respondent was informed of her or his rights as a survey participant. Verbal

consent for study participation was then obtained and documented in the CATI system. The informed consent script told respondents of the voluntary nature of the survey, assured them their responses would be kept confidential, indicated there was no penalty for not answering questions, and informed them about survey content and expected duration. If the respondent was eligible for a monetary incentive payment (see "Incentive Effort" below), they were also told that they would receive $10 or $15 in appreciation for their time. Finally, the respondent was also told the interview might be recorded and monitored by a supervisor for quality control.

In accordance with HHS regulations (45 CFR 46), the NCHS ERB and the NORC Institutional Review Board (IRB) approved all study procedures and modifications. The Office of Management and Budget control number for this collection of information was 0920–0406.

Assurance of Confidentiality

Participation in surveys conducted by NCHS is voluntary, and all data collected that could potentially identify an individual person are confidential. For NSCH, assurance of confidentiality was provided to potential respondents as part of the informed consent procedures. In the CATI system, interviewers acknowledged that they read the following statement to respondents:

Before we continue, I'd like you to know that taking part in this research is voluntary. You may choose not to answer any questions you don't wish to answer, or end the interview at any time. We are required by Federal law to develop and follow strict procedures to protect your information and use your answers only for statistical research. I can describe these laws if you wish. [In appreciation for your time, we will send you $10/$15.] The survey will take about 25 minutes. In order to review my work, my supervisor may record and listen as I ask the questions. I'd like to continue now unless you have any questions.

If respondents requested to hear more about these federal laws, they were read the following statements:

The Public Health Service Act is Volume 42 of the US Code, Section 242k. The collection of information in this survey is authorized by Section 306 of this Act. The confidentiality of your responses is assured by Section 308d of this Act and by the Confidential Information

Table F. Number and percentage of respondents, by relationship to sampled child

Relationship	Number	Percent
Total	91,642	100.0
Mother	67,388	73.5
Father	18,759	20.5
Grandparent	3,854	4.2
Aunt or uncle	609	0.7
Sister or brother	531	0.6
Other guardian	483	0.5
Don't know or refused	18	0.0

0.0 Quantity more than zero but less than 0.05.

Protection and Statistical Efficiency Act. Would you like me to read the Confidential Information Protection provisions to you?

If the respondent indicated that he or she would like to hear the Confidential Information Protection provisions, the interviewer read the following statement:

The information you provide will be used for statistical purposes only. In accordance with the Confidential Information Protection provisions of Title V, Subtitle A, Public Law 107–347 and other applicable Federal laws, your responses will be kept confidential and will not be disclosed in identifiable form to anyone other than employees or agents. By law, every employee of the National Center for Health Statistics, the National Center for Immunization and Respiratory Diseases, and its agent, the National Opinion Research Center who works on this survey has taken an oath and is subject to a jail term of up to 5 years, a fine of up to $250,000, or both, if he or she willingly discloses ANY identifiable information about you or your household members.

When NCHS (including its contractors and agents) collects personally identifiable information under a pledge of confidentiality for exclusively statistical purposes, Section 308d of the Public Health Service Act and Section 512b of the Confidential Information Protection and Statistical Efficiency Act (CIPSEA) require without exception that the confidentiality of the personally identifiable information be maintained throughout the research and thereafter. Strict procedures are used by NCHS, its data collection contractors, and other agents to prevent any disclosure of confidential data in survey operations and data dissemination.

Identification of Age-eligible Children for NIS

On occasion, a household indicated that there were no NIS-eligible children in the household, but upon rostering the children's ages in NSCH, potential NIS-eligible children were found. When this occurred, the interview returned to attempt to complete NIS first, prior to continuing with the NSCH interview. There were 201 such households identified in NSCH, and through rescreening in NIS, 146 of these households were determined to be age eligible for NIS. Of the 201 cases, 122 cases then returned to the NSCH interview after the NIS screening or the NIS interview was completed. Of these 122 cases that returned to NSCH, 82 completed the NSCH interview.

Spanish-language Interviewing

NSCH interviews were administered in Spanish as well as in English. A professional translator produced a Spanish-language version of the NSCH questionnaire, and an independent translator checked the accuracy of the original translation. A team of experienced Spanish-speaking telephone interviewers and supervisors at NORC reviewed the translation and evaluated it for accuracy and cultural appropriateness. Issues raised during this review were resolved in consultation with the original translator. Any necessary modifications were made, and the translated questionnaire was programmed into the CATI system for testing and eventual production.

All households were first called by an English-speaking interviewer. If a respondent answered the telephone in a language other than English, interviewers asked, "What language do you speak?" If it was determined that the respondent needed a Spanish-speaking interviewer, the case was placed in a Spanish calling queue. If the interviewer placing the initial call was a Spanish speaker and trained to administer the Spanish version of the questionnaire, the interviewer toggled to the Spanish questionnaire and continued the interview without interruption. If not, the call was terminated, the case was flagged in the CATI system as needing a Spanish interviewer, and all subsequent calls were made by Spanish-speaking interviewers. Nevertheless, the interview may have been conducted in English if a subsequent call by a Spanish interviewer reached an English-speaking respondent.

During data collection, 21,853 telephone numbers were placed in the Spanish calling queue. Of these, 18,067 were determined to reach households, and 14,813 of these households were screened for age eligibility. Of 7,923 households with age-eligible children, 4,828 completed the NSCH interview (4,672 full completes and 156 partial completes). Households placed in the Spanish queue comprised 5.9% of all screened households with children and 5.3% of all completed NSCH interviews. At the end of the NSCH interview, the interviewer recorded the language used to conduct the interview. Of the 4,672 full completes from cases placed in the Spanish queue, 4,407 completed the interview in Spanish.

Interviewing in Languages Other Than Spanish or English

Based on the experience of the 2005–2006 NS–CSHCN, four languages were identified as the most probable languages that interviewers would encounter other than English or Spanish: Mandarin, Cantonese, Vietnamese, and Korean. Independent translators converted the NSCH questionnaire into these Asian languages using the same procedures as were used for the Spanish questionnaire. Although the Spanish questionnaire was programmed into the CATI system, a different procedure was followed to screen and interview the Asian language households, given the expected low incidence of the other languages.

When a household was first identified as needing a language other than English or Spanish, the case was transferred to specially trained interviewers who would determine the necessary language with a language service used by NORC and Language Line Services. Language Line Services provides a real-time translation service in more than 170 languages. These households were then screened for NIS

age-eligible children. If they were eligible for NIS, the interviewer immediately conducted the NIS interview with the assistance of the Language Line interpreter. After a completed NIS interview, or after NIS age screening, if no NIS age-eligible children lived in the household, the interviewer (with the help of the interpreter) screened the household for children under age 18 years. If the household included children and spoke one of the four targeted Asian languages, the case was assigned to the appropriate language queue to be called by a specially trained interviewer who spoke that language. Special language interviewers entered the respondent's answers into the regular English CATI system, while using a book that contained the translated questionnaire. This allowed for the data to be captured immediately in the CATI system and to be subject to all computerized logic and validation checks.

Throughout the course of data collection, 416 households were identified as needing an interview in one of the four available Asian languages. Of these, 12 were determined to be age ineligible and 394 were determined to be age eligible. The NSCH interview was completed with 167 of the age-eligible households (156 full completes and 11 partial completes). Households identified as needing an

Asian language interviewer comprised 0.3% of all screened households with children, and 0.2% of all completed NSCH interviews. At the end of the NSCH interview, the interviewer recorded the languages used to conduct the interview. Of the 156 full completes from cases identified as needing an Asian language interview, 123 completed the interview in one of the Asian languages.

If the Language Line interpreter reported that a household included age-eligible children but did not speak English, Spanish, or one of these four Asian languages, the case was coded as "age eligible, interview incomplete" and the case was finalized. A total of 688 households with children were finalized due to language.

Interview Length

Mean and median interview length varied by NIS or NIS–Teen eligibility because some demographic and household questions necessary for NIS, NIS–Teen, and NSCH were administered as part of the NIS or NIS–Teen interview and not repeated during the NSCH interview. The average interview length for NIS-ineligible and NIS–Teen-ineligible households was 28 minutes, 5 seconds, and the median time was 26 minutes, 56 seconds. For NIS-eligible or NIS–Teen-eligible

households, the average interview length (excluding the NIS and NIS–Teen interviews) was 22 minutes, 55 seconds, and the median time was 21 minutes, 54 seconds. Mean and median interview lengths, by section and NIS and NIS–Teen eligibility, appear in Table G.

Interview Breakoffs

Households that terminated the interview before completion were placed into a queue that was worked by interviewers specially trained in refusal conversion strategies. These interviewers attempted to convert the incomplete interview into a completed interview. By the end of data collection, 12,619 interviews were completed with households that had refused to participate at least once after age eligibility was established (13.8% of completed interviews).

Interviews were not completed in 43,734 identified households with children (1.6% of the initial sample and 32.3% of identified households with children). Of these households, 3,138 broke off during the NIS interview and 840 broke off during the NIS–Teen interview. The remaining 39,756 cases reached the NSCH interview. The most common places in the NSCH interview where respondents broke off were during the screener at the rostering of children's ages and the sampling of a

Table G. Mean and median length of National Survey of Children's Health interview in minutes and seconds, by section and by National Immunization Survey eligibility

Section of interview	NIS-eligible or NIS–Teen-eligible households		NIS-ineligible and NIS–Teen-ineligible households	
	Mean	Median	Mean	Median
Overall	22:55	21:54	28:05	26:56
Screener: Age Eligiblity, Selection of Sampled Child and Informed Consent	0:58	0:47	1:39	1:28
Section 1: Initial Demographics	0:20	0:14	0:34	0:29
Section 2: Health and Functional Status	4:43	4:23	5:21	5:00
Section 3: Health Insurance Coverage	1:04	1:01	1:23	1:19
Section 4: Health Care Access and Utilization	2:13	2:06	2:20	2:12
Section 5: Medical Home	2:01	1:54	2:15	2:09
Section 6: Early Childhood (0–5 years)	4:38	4:24	5:20	5:06
Section 7: Middle Childhood and Adolescence (6–17 years) . .	5:42	5:20	5:54	5:32
Section 8: Family Functioning	1:32	1:24	1:43	1:35
Section 9: Parental Health	2:09	1:58	2:17	2:07
Section 10: Neighborhood and Community Characteristics . . .	1:57	1:49	2:03	1:54
Section 11: Additional Demographics	1:26	1:18	2:56	2:42

NOTES: NIS is National Immunization Survey. NIS eligibility refers to household eligibility. NIS-eligible households include at least one child aged 19–35 months; households eligible for the NIS-Teen interview include at least one child aged 13–17 years. The NIS-eligible child in the household may or may not have been the child sampled for the National Survey of Children's Health.

child (22.6% of such cases), during the question asking for a respondent knowledgeable about the health and health care of the sampled child (21.0%), or during the informed consent script (32.9%). Among the 9,336 cases that prematurely ended the interview after consenting to continue during the informed consent process, 4,649 cases broke off before the first question in Section 1 (11.7% of the breakoff cases). For the 4,687 cases (11.8% of the breakoff cases) that began the interview, there was little commonality in the location of the questionnaire where the interview was terminated.

Cases Pending at Close of Data Collection

Most of the cases pending at the end of data collection were those in which the telephone number had not yet been resolved as residential or nonresidential (79.1% of pending cases and 15.9% of the initial sample). Fewer cases had been resolved as households without age eligibility being determined (13.1% of pending cases and 2.6% of the initial sample). Finally, as noted previously, 32.3% of all age-eligible households had not completed the interview (7.8% of pending cases and 1.6% of the initial sample). See Table H and Appendix X for more information about final dispositions of cases.

Incentive Effort

In a proactive effort to address nonresponse by NSCH-eligible households, NSCH implemented a cash incentive plan shortly after data collection began in April 2007. A two-tiered incentive model was constructed based on the productive incentive efforts executed in the 2003 NSCH and the 2005–2006 NS–CSHCN.

Careful monitoring of key response rates during the first quarter of data collection identified a group of cases that were either not responsive to the initial incentive offer or had characteristics that precluded them from incentive eligibility. An expanded incentive effort to reach out differentially to these households with

Table H. Final disposition of the survey sample

Final disposition	Number of selected telephone lines	Percent of total selected telephone lines
Total	2,806,416	100.0
Not resolved as residential or nonresidential.	445,972	15.9
Out of scope (i.e., business, nonworking, fax, or modem) . . .	1,770,887	63.1
Known household, age eligibility not determined	74,051	2.6
Age-screened household, no child in age range	380,130	13.5
Known age-eligible household, interview not completed.	43,734	1.6
Known age-eligible household, partially completed interview . .	1,085	0.0
Known age-eligible household, completed interview	90,557	3.2

0.0 Quantity greater than zero but less than 0.05.

an incentive offer began in August 2007.

Interview completion rates were favorable for the two-tiered model and the expanded incentive model, with particularly high completion rates among the expanded incentive-eligible cases in the final two quarters of data collection. More detailed descriptions of the incentive models, the process by which cases were offered an incentive, and the completion rates are included in Appendix XI.

Response Rates

Response rates provide one measure of the potential for nonresponse bias—that is, the possibility that the sample interviewed differs from the target population in some meaningful way. The NSCH weighted response rate, calculated nationally and by state, reflects the potential for bias in the sample of children for whom the interview was completed.

The response rate was calculated in accordance with the American Association for Public Opinion Research's (AAPOR) standards for Response Rate 4 (25). This response rate calculation recognizes that some cases of unknown eligibility (for example, telephone lines that rang with no answer, or households in which the person answering the phone refused to say whether the household included children) were in fact eligible. In accordance with Council of American Survey Research Organizations guidelines, the proportion of eligible cases among those with unknown eligibility was assumed to be the same as the proportion of eligible cases

among those with known eligibility. The response rate was calculated as the product of component completion rates, which are discussed below.

An alternative set of completion rates and overall response rates were also provided. The alternative response rates were calculated similarly, with the exception that, in the calculation of the alternative rates, it was assumed that cases that were never contacted were not households.

Response rates are just one measure of the potential for nonresponse bias. A more formal examination of nonresponse bias will be published by NCHS shortly (26).

Resolution rate

Response rates for household telephone surveys are typically lower than response rates for household in-person surveys because some telephone numbers ring with no indication of whether the number belongs to a household or to a business. NSCH's national resolution rate, which measures the proportion of sampled telephone numbers that could be identified as residential or nonresidential, was 81.9%. Resolution rates for each state, which ranged from 77.2% to 89.2%, are given in Table J. When called, the majority of the unresolved telephone numbers rang with no answer. Most other unresolved numbers either reached persons or machines who ''hung up'' before identifying themselves or reached answering machines that provided no indication of whether the caller had reached a residence or a business.

Table J. Weighted response rates, nationally and by state

State	Resolution rate	Age-screener completion rate	Interview completion rate	Overall response rate[1]
National	81.9	86.4	66.0	46.7
Alabama	82.9	87.2	70.1	50.6
Alaska	85.4	88.9	68.8	52.2
Arizona	80.5	85.4	64.3	44.2
Arkansas	86.1	89.7	69.7	53.8
California	77.2	83.4	62.2	40.1
Colorado	83.3	87.8	67.3	49.2
Connecticut	79.2	84.6	65.0	43.5
Delaware	78.0	86.0	65.4	43.9
District of Columbia	80.4	86.6	67.8	47.2
Florida	80.5	85.5	61.4	42.2
Georgia	83.2	85.4	63.0	44.7
Hawaii	85.0	84.2	59.0	42.2
Idaho	84.5	89.1	71.9	54.1
Illinois	83.7	86.4	64.7	46.8
Indiana	85.6	88.8	69.9	53.1
Iowa	86.8	90.3	72.5	56.8
Kansas	85.9	89.3	69.9	53.7
Kentucky	84.5	88.5	65.9	49.2
Louisiana	86.1	85.6	67.9	50.0
Maine	82.6	88.9	71.5	52.5
Maryland	79.3	85.1	65.7	44.3
Massachusetts	78.5	84.8	67.3	44.8
Michigan	84.3	88.5	67.4	50.3
Minnesota	85.0	89.1	69.3	52.5
Mississippi	84.5	86.7	65.8	48.2
Missouri	85.7	89.4	67.7	51.9
Montana	87.3	89.6	73.2	57.2
Nebraska	88.1	89.5	74.4	58.6
Nevada	78.5	84.3	63.1	41.7
New Hampshire	79.5	87.2	67.8	47.0
New Jersey	77.7	83.8	60.5	39.4
New Mexico	83.8	86.6	68.4	49.6
New York	81.0	84.4	60.7	41.5
North Carolina	81.5	87.7	68.2	48.7
North Dakota	89.2	90.6	76.6	61.9
Ohio	84.3	88.1	68.1	50.6
Oklahoma	83.5	87.5	66.9	48.9
Oregon	85.0	88.9	66.6	50.3
Pennsylvania	81.1	87.8	68.7	48.9
Rhode Island	80.8	86.1	69.2	48.2
South Carolina	81.8	86.9	66.6	47.3
South Dakota	88.8	90.5	73.2	58.8
Tennessee	83.3	87.6	70.6	51.5
Texas	81.3	84.8	66.6	45.9
Utah	86.1	88.1	71.8	54.4
Vermont	82.7	89.9	72.2	53.6
Virginia	80.6	87.4	67.5	47.5
Washington	83.6	87.0	66.4	48.3
West Virginia	80.1	88.3	66.8	47.3
Wisconsin	84.0	89.7	70.8	53.4
Wyoming	82.6	89.5	73.8	54.5

[1]The overall response rate is the product of the resolution rate, the age-screener completion rate, and the interview completion rate.

Screener completion rate

After a telephone number had been determined to belong to a household, that household was screened for the presence of children under age 18 years. Each household (except for those in the augmentation sample) was first screened for NIS eligibility; that is, each household was screened for the presence of children aged 19–35 months (and, for some Q1/2008 sample, for children aged 13–17 years). If a household was age eligible for NIS, then the household was also considered to be age eligible for NSCH. If a household was age ineligible for NIS, then that household may or may not have been age eligible for NSCH, and so proceeded to the NSCH age screening. If the respondent then indicated that the household contained children under age 18 years (at question S_UNDR18), the household was considered to be age eligible for NSCH. If, during the NIS or NSCH age screeners, the household indicated that they had no children whatsoever, the household was considered to be age ineligible for NSCH.

For some households, it was never determined whether the household contained children under age 18 years; that is, some households did not complete the NSCH age screener. The screener completion rate is defined as the proportion of identified households for which it was determined whether or not the household contained children under age 18 years. The national screener completion rate was 86.4%. Screener completion rates for each state, which ranged from 83.4% to 90.6%, are listed in Table J.

Interview completion rate

After it had been determined that a household contained children under age 18 years, a child was randomly chosen from the household, and an attempt was made to conduct a full interview about the selected child. As noted previously, the interview was considered to be at least partially complete if Section 6: Early Childhood (for selected children aged 0–5 years) or Section 7: Middle Childhood and Adolescence (for selected children aged 6–17 years) was completed.

Not all households containing a child completed the NSCH interview. The interview completion rate is defined as the proportion of age-eligible households that completed Section 6 or Section 7 of the NSCH interview. The national interview completion rate was 66.0%. Interview completion rates for each state, which ranged from 60.5% to 76.6%, are listed in Table J.

Overall response rate

The overall response rate is the product of the resolution rate, the

screener completion rate, and the interview completion rate. At the national level, the response rate was 46.7%. Overall response rates for each state, which ranged from 39.4% to 61.9%, are listed in Table J.

Alternative Response Rates

The overall response rate just presented was based on a conservative approach to estimating the proportion of age-eligible households among the cases (that is, telephone numbers) of unknown eligibility. This approach assumed the same working residential rate for the unresolved telephone numbers as was observed among the resolved telephone numbers, and it assumed the same age-eligibility rate for the non-age-screened households as was observed among the age-screened households.

An alternative response rate that still meets the general criteria for AAPOR Response Rate 4 can be calculated by changing the assumption that the working residential rate for the unresolved telephone numbers was the same as was observed among the resolved telephone numbers. A less conservative assumption holds that all telephone numbers that resulted in no contact (that is, all attempts resulted in rings with no answer or in a busy signal) were not working residential numbers. Because each telephone number was dialed at least six times at different times on different days, the assumption that all of these "noncontact" numbers were not working residential numbers is somewhat tenable. A portion of all other unresolved cases were considered eligible, using the same working residential number rate as was observed among the resolved telephone numbers.

When this alternative assumption was applied nationally, the alternative resolution rate was 89.9%, which is necessarily higher than the 81.9% resolution rate in Table J because noncontact cases were assumed to be nonresidential. The component screener completion (86.4%) and interview completion (66.0%) rates remained the same because noncontact cases do not enter into the calculation of these rates. As a result, the alternative national overall response rate of 51.2% is higher than the 46.7% overall response rate. The alternative rates for each state, which ranged from 44.9% to 64.9%, are given in Table K.

Researchers choosing to report these alternative response rates should clearly state the assumption on which these alternative response rates are based. For example, researchers could include the following statement in written reports that use the alternative response rates: "Numbers that, with six or more call attempts on different days and times, rang with no answer or were busy on all attempts were assumed to be nonworking or nonresidential numbers."

Efforts to Maximize Response Rates

Advance letters, toll-free telephone numbers, cash incentives, refusal conversion efforts, and translated questionnaires were used to help maximize response rates. In addition, a pretest was conducted to understand how respondents would react to potentially personal questions and a lengthy interview, and to monitor respondent suspicions of legitimacy and confidentiality, among other issues. After the pretest results were analyzed, specific improvements were made based on these findings. After every quarter of data collection, NORC and NCHS reviewed and (if necessary) implemented interviewers' and supervisors' recommendations for potential changes to the questionnaire, data collection procedures, and calling rules. These changes were based on analysis of questionnaire breakoffs and reports from interviewers of problem areas within the questionnaire.

Quality Control of Interviewing

Telephone center supervisors were available to interviewing staff at all times to resolve any questions or concerns about a case. Supervisors regularly observed the data collection process to monitor interviewers informally. In addition, supervisory staff used remote telephone and computer-monitoring technology to evaluate whether interviewers performed according to project specifications. This formal monitoring was conducted to ensure that introductory materials were properly read, item wording and sequence of the questionnaire were followed correctly, respondent questions were answered properly, and any vague responses were properly probed. Computer monitoring also allowed supervisors to ascertain whether answers were entered accurately into the CATI system.

Supervisory staff monitored approximately 10% of all NSCH calls made. To avoid bias in selecting whom to monitor, the CATI monitoring system automatically selected the interviewers to monitor, using an algorithm that gave the highest priorities for selection to newly trained interviewers, those with the fewest monitoring sessions, and those with the weakest performance reviews. Experienced interviewers were prioritized for monitoring based upon the length of time since their last monitoring session and recent monitoring scores. Each interviewer was typically monitored at least once a week.

Throughout data collection, interviews were recorded (after obtaining agreement from respondents). These recordings were valuable tools for trainings, and when necessary, they allowed supervisors to document specific case-related performance issues.

Data Files

A SAS (version 9.1) data file was created using data from completed and partially completed interviews that were conducted in 2007 and 2008. The interview was considered to be at least partially complete if Section 6: Early Childhood (for selected children aged 0–5 years) or Section 7: Middle Childhood and Adolescence (for selected children aged 6–17 years) was completed. This file contains data on each sampled child's health and health care, health insurance, family functioning, parental health, and neighborhood or community

Table K. Alternative weighted response rates, nationally and by state

State	Resolution rate	Age-screener completion rate	Interview completion rate	Overall response rate
National.	89.9	86.4	66.0	51.2
Alabama	89.0	87.2	70.1	54.4
Alaska.	94.1	88.9	68.8	57.5
Arizona	89.4	85.4	64.3	49.1
Arkansas	92.0	89.7	69.7	57.5
California	88.2	83.4	62.2	45.8
Colorado	90.7	87.8	67.3	53.6
Connecticut.	87.3	84.6	65.0	48.0
Delaware	87.9	86.0	65.4	49.5
District of Columbia.	93.4	86.6	67.8	54.9
Florida.	88.4	85.5	61.4	46.4
Georgia	90.3	85.4	63.0	48.6
Hawaii.	91.3	84.2	59.0	45.4
Idaho	91.6	89.1	71.9	58.7
Illinois	91.8	86.4	64.7	51.3
Indiana	92.1	88.8	69.9	57.2
Iowa	91.9	90.3	72.5	60.1
Kansas	92.2	89.3	69.9	57.6
Kentucky	90.7	88.5	65.9	52.9
Louisiana	92.7	85.6	67.9	53.9
Maine	89.3	88.9	71.5	56.7
Maryland	89.2	85.1	65.7	49.9
Massachusetts.	86.4	84.8	67.3	49.4
Michigan	91.5	88.5	67.4	54.5
Minnesota	91.4	89.1	69.3	56.5
Mississippi	91.4	86.7	65.8	52.1
Missouri.	92.0	89.4	67.7	55.7
Montana	92.5	89.6	73.2	60.6
Nebraska	92.8	89.5	74.4	61.7
Nevada	87.6	84.3	63.1	46.6
New Hampshire	86.6	87.2	67.8	51.2
New Jersey.	88.6	83.8	60.5	44.9
New Mexico	90.2	86.6	68.4	53.4
New York	89.6	84.4	60.7	45.9
North Carolina	89.5	87.7	68.2	53.5
North Dakota.	93.4	90.6	76.6	64.9
Ohio	89.8	88.1	68.1	53.9
Oklahoma.	90.9	87.5	66.9	53.3
Oregon	91.3	88.9	66.6	54.1
Pennsylvania.	89.4	87.8	68.7	54.0
Rhode Island.	86.7	86.1	69.2	51.7
South Carolina.	89.5	86.9	66.6	51.8
South Dakota	93.2	90.5	73.2	61.8
Tennessee	90.4	87.6	70.6	55.9
Texas	89.9	84.8	66.6	50.7
Utah	92.0	88.1	71.8	58.2
Vermont.	89.7	89.9	72.2	58.2
Virginia	89.2	87.4	67.5	52.6
Washington.	90.1	87.0	66.4	52.0
West Virginia.	87.1	88.3	66.8	51.4
Wisconsin.	90.0	89.7	70.8	57.2
Wyoming	91.4	89.5	73.8	60.4

NOTE: The alternative resolution rate and overall response rate assume that all noncontact cases—telephone numbers for which all call outcomes were "ring, no answer" or busy signals—are not households. The overall response rate is the product of the resolution rate, the age-screener completion rate, and the interview completion rate.

characteristics. There is one record for each child that was randomly selected to be the subject of the interview. Each record contains all interview data for the sampled child and the household in which the child resides. Of the 91,642 records, 90,557 cases completed the full

interview, and 1,085 were partially completed interviews.

An additional SAS data file includes multiply imputed household poverty data. Details about the imputed poverty data are included in Appendix XII.

Editing

As discussed previously, the CATI system was designed to perform edits as an interviewer entered data into the computer system. To prevent interviewer error, the CATI system was developed to include range checks and consistency checks. If an interviewer entered a value that was "out of range," a warning screen would appear, instructing the interviewer that the value would not be accepted and that he or she would have to enter a different answer (and possibly re-ask the question). For example, a respondent might report three people living in the household, but if the respondent had earlier reported four children, a consistency check would appear saying that the number of people living in the household must be greater than the number of children.

Despite these range and consistency checks, some respondents still provided logically inconsistent responses. Interviewers were trained not to challenge respondents who gave logically inconsistent responses. Logically inconsistent responses given by the respondent were left inconsistent in the data files.

Data cleaning was necessary to delete invalid values and investigate missing values. Most missing values were the result of legitimate skip patterns within the questionnaire or the result of a partially completed interview. On rare occasions, certain data were not collected as expected. If, based on related questions, the missing data were easy to determine, the correct answers were added. Records that were missing responses for unknown reasons were left missing.

Missing Data

Missing data are not desirable when doing analyses, and are often ignored completely; however, it can be very helpful to know why data are missing. The SAS data file for NSCH includes special missing value codes for analysts who may wish to differentiate between different types of missing values. The following key provides a description of

the various codes that were used to represent missing data in the file.

(.N) Not in universe—Respondents skipped an entire section of questions based on eligibility criteria. For NSCH, sampled children aged 0–5 years were not eligible for Section 7 of the survey, and children aged 6–17 years were not eligible for Section 6 of the survey.

(.L) Legitimate skip—Variable is missing due to valid questionnaire paths based on a previous answer to a root question.

(.P) Partially completed interview—Variable is missing because the respondent ended the interview after completing Section 6 or Section 7, but before completing the full interview.

(.M) Missing in error—Variable is missing due to interviewer or system errors. In cases of interviewer error, the interviewer may have deleted the data by accident or simply may have not entered the response. In cases of system error, the response may not have been collected or saved properly after it was entered by the interviewer in the CATI system.

(.A) Added question—Variable is missing because this question was added after the start of data collection and the interview was conducted before the question was added.

(.D) Deleted question—Variable is missing because this question was removed after the start of data collection and the interview was conducted after the question was deleted.

Because SAS treats all of the above codes similarly in statistical analyses (that is, as missing data), analysts using SAS who are not interested in the reasons for the missing data may continue to analyze data as usual.

Note that derived variables (that is, new variables calculated from responses directly provided by the respondent) do not undergo detailed coding for missing data. All missing values for derived variables received ".M" codes regardless of the reason for the missing data. Similarly, ".M" was used when derived variables were suppressed to protect the confidentiality of the survey participants.

Data missing because the respondent did not know the answer or refused to provide the answer have been treated differently. Rather than assigning a missing value to these records, a numeric code was used to identify these responses. Typically, unknown answers are coded as "6," "96," or "996." Refused responses are coded as "7," "97," or "997." These codes may differ for specific variables; therefore, analysts are encouraged to consult the data documentation and frequency lists to identify the correct codes for each variable. Failure to do so may result in inappropriate calculations, especially for variables measured using ordinal, interval, or ratio scales.

Coding of Verbatim Answers Into Question Responses

For some questions in the NSCH interview, respondents provided a response that did not match any pre-existing category. If this occurred, the interviewer chose "other" and typed in the exact response provided by the respondent, to the extent possible. At the end of the data collection period, the verbatim responses were recoded as necessary into existing response categories.

This recoding occurred for respondents who did not choose one of the pre-existing categories when reporting race and ethnicity. This recoding also occurred for respondents who did not choose one of the pre-existing categories for the child's usual place of care when sick (K4Q02R).

Edits to Protect Confidentiality

NCHS takes extraordinary measures to assure that the identity of survey subjects cannot be disclosed. The risk of inadvertent disclosure of confidential information regarding individual respondents is higher with a publicly released dataset having detailed geography variables, a detailed and extensive set of survey observations, and a sizeable proportion of the total population of interest. Coarsening a dataset by suppressing survey variables, collapsing multiple variables into one, collapsing response categories, or introduction of noise in the data are common techniques to reduce the risk of inadvertent disclosure.

In these data files, the child's exact age (in months) has been suppressed, but the child's age (in years) has been reported, along with indicators to identify children under age 6 months (FLG_06_MNTH) and under age 18 months (FLG_18_MNTH). The specific relationship of the respondent to the child (RELATION) has been suppressed when the respondent was not the parent of the child. Household income has been suppressed, but a measure of income relative to the federal poverty level has been included (POVERTY_LEVELR). The date of the interview has been suppressed, but for those researchers concerned about seasonality effects in responses, an indicator (SUMMER) identifies those interviews that were completed when children were more likely to not be in school.

Geography

Geographic information that would identify the specific estimation area in states with multiple estimation areas has been suppressed. However, state identifiers are included. In addition, an indicator identifying whether or not the household resides inside or outside of a metropolitan statistical area (MSA) has been included for some states. This indicator, called MSA_STAT, was suppressed whenever the total population for all MSA areas in a given state was less than 500,000 persons, or whenever the total population for all the non-MSA areas in a given state was less than 500,000 persons. This resulted in the suppression of the MSA identifier in 16 states.

Because the MSA identifier is suppressed in 16 states, national

estimates by MSA status are not possible with the publicly available NSCH dataset, and analysts should use caution when including this variable in statistical models. Analysts may consider using imputation to assign an MSA indicator to children in states where the indicator was suppressed. One option for analyses at the national level is to assign MSA status to children in states that are predominately metropolitan and to assign non-MSA status to children in states that are predominately nonmetropolitan. If MSA status is imputed to all children in Alaska, Connecticut, Delaware, Hawaii, Idaho, Maine, Maryland, Massachusetts, New Hampshire, Nevada, and Rhode Island, the MSA identifier will be correct for 79% of the children (15,582 out of 19,684). If non-MSA status is imputed to all children in Montana, North Dakota, South Dakota, Vermont, and Wyoming, the MSA identifier will be correct for 63% of the children (5,509 out of 8,801). For weighted national analyses, this imputation procedure will result in erroneous classifications for 8.1% of children.

Race

Question K11Q02 asked about the sampled child's race. Respondents were permitted to identify all possible categories that described the child's race. If a race other than one of the seven existing categories was indicated, then a verbatim response was captured. Verbatim responses were reviewed and matched against a database of alternative race terminology maintained by the U.S. Census Bureau. Where possible, "other" race responses were backcoded into one of the seven existing categories. Once all possible verbatim responses were backcoded, a new race variable was created by collapsing the seven categories into one of six categories: white, black or African American, American Indian or Alaska Native, Asian, Native Hawaiian or Other Pacific Islander, and multiple race. "Multiple race" was reserved for those cases where more than one of the other five categories applied.

To protect the confidentiality of individual respondents and children,

responses for the race variable were further collapsed into four categories: white only, African American or black only, other race, and multiple race. This "other race" category includes children for whom only one of the other three categories (Asian, American Indian or Alaska Native, and Native Hawaiian or Other Pacific Islander) was reported. Children for whom more than one race was identified (for example, Asian as well as Native Hawaiian) were included in the "multiple race" category. If the respondent did not know or refused to provide the race, then race was coded as missing. Cases where a verbatim response could not be conclusively backcoded (for example, American, Indian, Jewish) and no other race was reported were also coded as missing. This new derived race variable (called RACER) is the only classification publicly available for all 50 states and DC.

In several states, however, minority group populations are sufficiently large that the release of additional race categories was possible while still protecting the confidentiality of the respondents and children. To identify these states, data from the 2007 American Community Survey (ACS) were examined to identify minority groups that comprise at least 5% of the total population of children in a specific state. Based on this criterion, the data files identify American Indian or Alaska Native children in Alaska, Arizona, Montana, New Mexico, North Dakota, Oklahoma, and South Dakota. This race classification variable is called RACEAIAN. Asian children's race is reported for children in California, Maryland, Massachusetts, Nevada, New Jersey, New York, Virginia, and Washington. This race classification variable is called RACEASIA. The data file identifies both Asian children and Native Hawaiian or Other Pacific Islander children in Hawaii. This race classification variable is called RACE_HI.

Note that national estimates for American Indian or Alaska Native children, for Asian children, and for Native Hawaiian or Other Pacific Islander children are not possible using the publicly available NSCH dataset.

Children with these race classifications are identified in selected states only. These race classifications were suppressed in other states for 583 American Indian or Alaska Native children, 1,245 Asian children, and 258 Native Hawaiian or Other Pacific Islander children. These children with suppressed race classifications represent 62.4% of American Indian or Alaska Native children, 37.1% of Asian children, and 85.9% of Native Hawaiian or Other Pacific Islander children nationally.

Language

Question K1Q03 collected data on the primary language spoken in the household. Of the 6,643 children living in households with a non-English language as the primary language (PLANGUAGE), 76.0% ($n = 5,052$) lived in Spanish-language households. Of the remaining non-English-language households, 352 (5.3%) spoke one of the four Asian languages in which the interview was conducted and 1,239 (18.7%) spoke another language. To protect confidentiality, the specific language spoken in non-English-language households and the specific language used for any non-English interview (OTH_LANG) have been suppressed.

Height and weight

Question K2Q02 permitted respondents to report the child's height in either feet and inches or in centimeters. Height reported in centimeters was recoded into inches (K2Q02R). Question K2Q03 permitted respondents to report the child's weight in either pounds or kilograms. Weight reported in kilograms was recoded into pounds (K2Q03R). Question K2Q04 permitted respondents to report the child's birth weight in either pounds, ounces, or grams. Weight reported in pounds and grams were recoded into ounces (K2Q04R).

To protect the confidentiality of individual children, very short heights, very tall heights, very low weights, and very high weights have been suppressed. Extreme values were identified within

each single-year age group and were recoded to less-extreme values. For example, for children aged 11 years, all reported heights shorter than 43 inches were recoded to 43 inches, and all reported heights taller than 68 inches were recoded to 68 inches. Two flags (HGHT_FLG and WGHT_FLG) have been added to the dataset to enable analysts to determine whether the values were reported or assigned.

Because suppression of height and weight variables may hinder calculations of body mass index (BMI), a four-category variable identifying underweight and overweight children (BMICLASS) has been added to the dataset. Children aged 10–17 years have been identified as having a BMI-for-age that is equal to the 5th percentile or lower, greater than the 5th percentile but lower than the 85th percentile, equal to the 85th percentile or greater but lower than the 95th percentile, and equal to the 95th percentile or greater. Percentiles are based on gender and age (27). For example, if the value of a child's BMI is equal to the 95th percentile, then that child is among the 95% of children of that age and sex whose BMI is less than or equal to that value. Percentiles were determined using the 2000 CDC growth charts and a SAS statistical analysis software program provided online by CDC (28). However, this program relies on the child's age in months; because age was only reported in years for this survey, children were assumed to be at the midpoint of the age-year (that is, a child aged 10 years was assumed to be aged 126 months) for purposes of calculating BMI-for-age.

Height and weight were based on parent report and were not independently measured. Researchers attempting to validate parent report of height and weight in the 2003 NSCH have concluded that parent-reported data should not be used to estimate overweight prevalence among preschool-aged and elementary school-aged children (29). Parents' reports significantly underestimated height; as a result, too many young children were classified as overweight in the 2003 NSCH. Due to concerns about the validity of the 2007 data, reported height (K2Q02R) and calculated BMI

categorizations (BMICLASS) have been suppressed for children less than age 10 years.

Family structure

To protect the confidentiality of individual children whose families have unique structural characteristics, a single measure of family structure (FAMSTRUCT) was created from K1Q02, K9Q00, K9Q10, K9Q11, and K9Q12. The family structure variable refers to parents living in the household. This variable has four levels: 1) two-parent household with both a biological or adoptive mother and a biological or adoptive father; 2) two-parent household with both a mother and a father that includes at least one stepparent; 3) one-parent household with a biological, step, foster, or adoptive mother and no father of any type present; 4) all other family structures. Any of these four family structures may include other people who act as parents, such as grandparents, aunts, uncles, or unmarried partners of the parents. Legal guardians were not considered to be mothers or fathers.

Households identified as having two mothers of the same type (biological, step, foster, or adoptive) have been classified as "other family structure." Households with an ambiguous structure (for example, where a father refused to indicate whether he was the biological father) were also coded as "other family structure."

In addition, variables were suppressed that could be used to identify households where the child's biological parents were still married to each other but not living together (K9Q17B_1, K9Q17C_1, K9Q17D_1), as well as the specific reasons for not living together (K9Q17B_2, K9Q17C_2, K9Q17D_2).

Top-coded and bottom-coded variables

Several other frequency variables have been top-coded or bottom-coded to suppress outliers at the high and low ends of the distributions of responses. Due to their unusual characteristics, cases including these outliers might have been more readily identifiable. The

minimum and maximum categories released on the publicly available data files are listed below.

- For the total number of children living in the household (TOTKIDS4), "4 or more" children is the maximum category released publicly.
- For the total number of adults living in the household (TOTADULT3), "3 or more" adults is the maximum category released publicly.
- For the child's birth weight (K2Q04R), "47 or fewer" ounces is the minimum category and "163 or more" ounces is the maximum category released publicly.
- For the number of visits to a doctor, nurse, or other health care professional for preventative medical care in the past year (K4Q20R), "20 or more" visits is the maximum category released publicly.
- For the number of visits to a dentist for preventative dental care in the past year (K4Q21R), "12 or more" visits is the maximum category released publicly.
- For the age of the child when breastfeeding stopped (K6Q41R), "1,095 or more" days (that is, 3 years or over) is the maximum category released publicly.
- For the number of days of school missed due to illness or injury in the past year (K7Q02R), "40 or more" days is the maximum category released publicly.
- For the number of times that the parent was contacted by the school during the past year (K7Q04R), "25 or more" times is the maximum category released publicly.
- For the frequency that the child attended religious services in the past year (K8Q12R), "daily or more often" is the maximum frequency released publicly.
- For the age of the child's mother (K9Q16R), "20 or fewer" years in the minimum category and "59 or more" years is the maximum category released publicly.
- For the length of time that the child or parent had been living in the United States (K11Q34AR through K11Q37AR), the variable has been

recoded as number of years, and ''one year or less'' is the minimum length of time released publicly. For parents, ''45 years or more'' is the maximum length of time released publicly.

- For the number of times that the child ever moved to a new address (K11Q43R), ''12 or more'' times is the maximum category released publicly.

- For the education level of the mother, father, and respondent (EDUC_MOMR, EDUC_DADR, and EDUC_RESR), post-high school study is the maximum category released publicly, and other responses have been collapsed into two additional categories (less than high school graduate, high school graduate or GED completed).

Data perturbations

Despite the modifications detailed above, there was lingering concern that the dataset may include children with unique combinations of identifiable characteristics. To investigate this concern, data from the 2007 ACS were used to calculate the ratio between the number of children with various combinations of observable demographic characteristics in the NSCH sample and the number of children with those combinations of characteristics in the general population. When the ratio was large or the population size was small, some of the identifiable characteristics in the NSCH data file were changed.

- For 87 children, the number of children living in the household (TOTKIDS4) was increased or decreased by one. This change also resulted in perturbation of the variable indicating the age of the sample child relative to other children living in the household (AGEPOS4).

- For 15 children, the number of adults living in the household (TOTADULT3) was increased by one.

- For 4 children whose mothers were not born in the United States, this variable (K11Q30R) was set to ''born in the U.S.''

- For 5 children whose fathers were not born in the United States, this variable (K11Q31R) was set to ''born in the U.S.''

- For 6 children who were not born in the United States, this variable (K11Q33R) was set to ''born in the U.S.'' In addition, for 698 children born in and adopted from a foreign country, this variable was also set to ''born in the U.S.''

- For 6 children living with a biological, step, foster, or adoptive mother and with no father of any type present, the family structure variable (FAMSTRUCT) was set to ''other.''

Analysts interested in working with data that were suppressed or perturbed to protect confidentiality may apply to access unmodified data files through the NCHS Research Data Centers (RDC). These facilities, designed for the researcher outside of NCHS, are located at NCHS headquarters in Hyattsville, Maryland, and at CDC headquarters in Atlanta, Georgia. Unmodified data files can also be made available through U.S. Census Bureau RDCs. Data files housed in an RDC may also be accessed remotely via e-mail. Analysts should visit their website at http://www.cdc.gov/rdc/ for more information.

Derived Variables

A number of derived variables appear on the data file. The definitions of these variables are provided below.

AGEPOS4—This variable represents the age of the sampled child, relative to the ages of the other children aged 17 years or under living in the household. Because it is not known if the sampled child was related to the other children living in the household, or if the child has siblings who do not live in the household, or if the child has siblings over age 17 years, this variable should not be interpreted as birth order.

AGEYR_CHILD—The child's age in years was recorded when the child was first identified as the sampled child (which may have been prior to the date when the actual interview was completed). Valid values for age are 0 through 17, where ''0'' means younger than age 1 year.

CSHCN—This variable is based on the CSHCN Screener (K2Q10, K2Q11, K2Q12, K2Q13, K2Q14, K2Q15, K2Q16, K2Q17, K2Q18, K2Q19, K2Q20, K2Q21, K2Q22, and K2Q23) and indicates whether or not the child has special health care needs.

EDUC_MOMR, EDUC_DADR, and EDUC_RESR—These variables reflecting the highest level of education completed by the mother, father, and respondent, respectively, were derived from data collected in variables K11Q20 through K11Q22.

HISPANIC—This indicator of whether the sampled child is of Hispanic or Latino origin was derived using data collected in variables K11Q01 and K11Q02_OS. Respondents who did not identify a Hispanic ethnicity during administration of K11Q01 but did provide an answer indicating Hispanic ethnicity as part of the verbatim response to the race question (K11Q02_OS) were coded with a value of ''1'' for the variable HISPANIC.

MARCOH_PAR—This variable indicates the marital or cohabitation status of the child's parent or parents who live in the household and is based on variables K9Q17A, K9Q17B, K9Q17B_3, K9Q17C, K9Q17_3, and K9Q17D. Parents living with the child were coded as either married, cohabiting, or neither married nor cohabiting. An additional category reflects that no parents lived in the household.

MARCOH_RESP—This variable indicates the marital or cohabitation status of the NSCH respondent and is based on variables K9Q17A, K9Q17B, K9Q17B_3, K9Q17C, K9Q17_3, and K9Q17D. This

variable can be used to impute a value for MARCOH_PAR for cases for which no parents live in the household. This variable is missing for 2,688 cases because one of the following circumstances was true: the respondent was not the mother, and the mother lived in the household with no father present; the respondent was not the father, and the father lived in the household with no mother present; or the respondent was neither the mother nor the father, and both mother and father lived in the household. For those cases, the respondent was asked about the marital or cohabitation status of the child's parents, not about their own marital or cohabitation status.

MARSTAT_PAR—This variable indicates the legal marital status of the child's parent or parents who live in the household and is based on variables K9Q17A, K9Q17B, K9Q17C, and K9Q17D. Parents living with the child were coded as married, separated, divorced, widowed, or never married. An additional category reflects that no parents lived in the household. There is some error associated with this variable: Divorcees who continued to live together after divorce could not be identified as divorced if the household contained a mother and a father, and "never married" includes some cases (4,400 out of 10,392 cases identified as "never married") for which it is unknown whether the parents were in fact "never" married or simply "not married."

MARSTAT_RESP—This variable indicates the legal marital status of the NSCH respondent and is based on variables K9Q17A, K9Q17B, K9Q17C, and K9Q17D. This variable can be used to impute a value for MARSTAT_PAR for cases for which no parents lived in the household. This variable is missing for 2,688 cases, for the same reasons as described above for MARCOH_RESP. For those cases, the respondent was asked about the marital status of the child's parents,

not about their own marital status. In addition, as with MARSTAT_PAR, there is some additional error associated with this variable because some divorcees continued to live together after divorce, and because "never married" includes some cases (4,263 out of 9,580 cases identified as "never married") for which it is unknown whether the respondents were in fact "never" married or simply "not married."

MSASTAT—This indicator identifying whether or not the household is inside or outside of an MSA was suppressed to protect confidentiality in 16 states.

OTH_LANG—This variable is based on LANG1 and indicates whether the interview was conducted in a language other than English.

PLANGUAGE—This variable was derived from K1Q03 and indicates whether the primary language spoken in the household was not English.

POVERTY_LEVELR—This indicator was created using total household members (K9Q00) and the household income value. If data for either of these two components were missing, refused, or had a "don't know" response, this measure was assigned a missing value code. The household income value was the actual dollar amount reported by respondents who reported an exact household income (K11Q51). However, when respondents did not supply a specific dollar amount for household income, it was necessary to go through a series of questions asking respondents whether the household income was below, exactly at, or above threshold amounts (K11Q52 through K11Q59A). If respondents did not complete the income cascade, either because they refused or did not know the answer to one of the cascade questions, this measure was assigned a missing value code. Once an income-to-household-size

measure was computed, it was compared with HHS poverty guidelines. More detail about the development of this poverty indicator is available in Appendix VII. Missing values for this poverty indicator were multiply imputed. Details about the development of the imputed values are included in Appendix XII.

RACER, RACEAIAN, RACEASIA, and RACE_HI—These race classification variables were derived from data collected in variables K11Q02X01 through K11Q02X08.

RELATION—Information collected in question K1Q02 regarding the relationship of the respondent to the sampled child has been collapsed into three categories.

SEX—This indicator was created from K1Q01.

SUMMER—This variable indicates that the interview was completed during June, July, or August.

TOTADULT3—The total number of adults in the household was derived by subtracting the total number of children in the household (S_UNDR18) from the total number of persons in the household (K9Q00). As noted previously, this variable was topcoded at three or more adults to protect confidentiality.

TOTKIDS4—This variable represents the total number of children aged 17 years and under living in the household. As noted previously, this variable was topcoded at four or more children to protect confidentiality.

Dummy Variables

When respondents were permitted to provide multiple answers for the same question, a variable was created for each possible answer. The values for these new dummy variables are "yes, this answer was given" and "no, this answer was not given." When respondents could not or did not provide an answer to the question, a value of

"don't know" or "refused" was reported for each of the dummy variables.

- K2Q45D is represented by K2Q45DX01 to K2Q45DX03.
- K4Q28 is represented by K4Q28X01 to K4Q28X04.
- K6Q20B is represented by K6Q20BX01 to K6Q20BX03.
- K6Q31 is represented by K6Q31X01 to K6Q31X03.

Additional Data Notes

The sampled child's age (AGEYR_CHILD) and the number of children in the household (TOTKIDS4) were updated for a small number of cases during data editing. Data from questions that were skipped due to the previously erroneous age classification were set to missing in error as needed.

On July 5, 2007, several questions related to special health care needs were added for children who were not identified as having special health care needs. These included K2Q12A, K2Q15A, K2Q18A, K2Q21A, K2QTEST1, and K2QTEST2. These questions were intended for methodological research only, and they are not included on the publicly available dataset. Interested researchers may send an e-mail to NCHS (slaits@cdc.gov) to obtain access to these data.

The question about whether or not doctors provided specific information to address parents' concerns (K6Q11) was intended to be asked for age-eligible children if any concerns were reported at K6Q01 through K6Q09. Due to a CATI programming error implemented on July 5, 2007, the question was asked only when parents reported concerns about the child's learning, development, or behavior (K6Q01) and also reported a concern at K6Q02 through K6Q09. As a result, 5,015 children have a missing value for K6Q11.

The age when the child was first fed formula (K6Q42) and the age when the child was first fed anything other than breast milk or formula (K6Q43) could be reported in days, weeks, months, or years. Ages reported in weeks, months, or years were recoded

into days (K6Q42R and K6Q43R, respectively).

As the result of a system error, a small number of cases have the variables for time spent reading (K7Q50; 32 cases), time spent computing (K7Q51; 54 cases), or frequency of religious service attendance (K8Q12R; 48 cases) set to "missing in error."

Several questions from the National Survey of Adoptive Parents were included on the NSCH for a subsample of NSCH households. Data from these questions about school performance (K7Q12 and K7Q13) and about the parent-child relationship (K8Q22 through K8Q26) are not included on the publicly available dataset due to the small sample size ($n = 2,022$). Interested researchers may contact NCHS (slaits@cdc.gov) to obtain access to these data.

Some respondents initially reported that the mother or father of the selected child does not live in the household (at K9Q11 and K9Q12), but later indicated (at K9Q17B_2 or K9Q17C_2) that the biological mother or father does live in the household. For these cases, the later information was used when deriving the family structure (FAMSTRUCT) and marital/cohabitation variables (for example, MARCOH_PAR). This initial reporting error occurred for mothers in 189 cases and for fathers in 533 cases. The logic for asking parent-specific questions later in the survey (such as health status of each parent and education level of each parent) was based on the initially erroneous K9Q11 and K9Q12 responses. Answers to these parent-specific questions were set to "missing in error" as appropriate.

The text fill at K9Q18 was revised midquarter in Q2/2007 to ask about the respondent's spouse or partner rather than the child's mother or father because this question could be misinterpreted by respondents in stepfamilies. Data collected prior to this revision were not suppressed during editing because it is unknown which respondents misunderstood the question.

There are 67 NSCH partial completes where the NIS interview was completed. Where applicable, responses from NIS demographic questions have

been filled into the corresponding NSCH questions.

Procedures for Developing Sampling Weights

This section provides a nontechnical overview of the weighting procedures for the NSCH sample. A more detailed and technical description can be found in Appendix III.

A single weight was generated for all analyses for NSCH. The steps to calculate this weight consist of the calculation of a base sampling weight, the development of full sample weights from quarterly sample weights, an adjustment for nonresolution of telephone numbers, adjustments for nonresponse, an adjustment for subsampling of age-eligible children, an adjustment for multiple telephone lines, an adjustment for noncoverage of children in households without landline telephones, and a raking adjustment to external control totals.

Base Weight

The goal of NSCH was to complete approximately 1,750 interviews in each state over five calendar quarters of data collection. The total number of telephone lines needed to obtain this number of completed interviews was estimated. Enough NIS sample was subsequently selected for most estimation areas to obtain the required number of completed cases for the NSCH for each quarter of data collection. Some estimation-area samples contained too few telephone numbers in the NIS sample to obtain the desired number of completed cases. In these areas, additional telephone numbers were randomly selected to reach the NSCH targets.

The telephone lines selected for screening for the NSCH represent a random sample in each geographic area of all possible telephone lines in noncellular banks of telephone numbers containing at least one residential-listed number. The probability that any given

telephone line will be selected from this population of possible telephone lines can be calculated by dividing the number of telephone lines selected for the study by the total number of possible telephone lines in a given area.

Each telephone line selected for the NSCH represented some larger number of telephone lines in that geographic area. This number can be calculated as the inverse of the probability of selection for any telephone line. This number is the base weight that is associated with each completed household interview in that geographic area.

In computing the base weight, a special adjustment was applied to accommodate the subsampling of the NSCH sample that occurred for Q1/2007. The final released sample for the NSCH in Q1/2007 was a subsample of the cases initially flagged for release. Therefore, the base weights for this banked sample were equal to the normal base weight times a factor equal to the inverse of the probability of being included in the subsample.

Computing Full Sample Weights From Quarterly Weights

In this step, all five quarterly samples were combined such that the samples from all quarters jointly represent the full population. Because the base weights were calculated for each quarter separately, the sum of the base weights in each quarter represents the full population for a geographic area. For each area, the full-sample weights were computed from quarterly base weights by applying composition factors proportional to the number of sampled and released telephone numbers in a quarter, adjusted for the design effect due to any differential sampling rates within the quarter.

First Form of Nonresponse: Unknown Household Status

When the selected telephone lines were called, three results were possible:

- The telephone line belonged to a household.
- The telephone line was not a working residential number but was a business number or a nonworking number.
- The status was undetermined because the telephone rang without being answered, the person answering the telephone hung up immediately, or the telephone-answering device did not indicate whether the telephone line belonged to a household.

This last category includes some household telephone lines, but the exact number of household telephone lines in this category is unknown. The households with resolved telephone numbers must represent the households in this unknown category. The size of this nonresponse adjustment is based on the observed size of the first two categories. The proportion of households in the unknown category is assumed to be the same as the proportion of households among all resolved telephone numbers. This adjustment varies based on socioeconomic and demographic characteristics of the population under a telephone exchange and whether the telephone line was directory listed. Based on the frequency of the nonresponse in a given adjustment cell, compensation is made for this nonresponse by proportionately increasing the weights for those households with resolved telephone numbers, so that the households with resolved telephone numbers represent the households in the unknown category.

Second Form of Nonresponse: Unknown Household Eligibility

When a household has been identified, three results are possible:

- The household includes an age-eligible child.
- The household does not include a child and is not eligible.
- The age-eligibility screener is not completed, and the eligibility of the household is unknown.

This last category includes some age-eligible households. However, the exact number of age-eligible households in this category is unknown. The households known to be age-eligible must represent the age-eligible households in this unknown category. This proportional adjustment is the second unit nonresponse adjustment. The size of the adjustment is based on the observed size of the first two categories. The proportion of age-eligible households in the unknown category is assumed to be the same as the proportion of age-eligible households among all households where the screening interview for the presence of children was completed. Similar to the previous step, this adjustment varies based on socioeconomic and demographic characteristics of the population under a telephone exchange and whether the telephone line was directory listed. Based on the frequency of nonresponse to the age-eligible screening interview in an adjustment cell, compensation is made for this nonresponse by proportionately increasing the weights for those households known to be age-eligible in that cell, thus representing the age-eligible households in the unknown category. The nonresponse adjustment for age screening was made within each state.

Adjustment for Households With More Than One Child

The unit of analysis now rotates to the child level from the household level. For households with more than one age-eligible child, only one child was selected randomly per household to be the subject of the NSCH interview. The randomly selected child represents all of the children in the household. Therefore, the sampling weight for this randomly selected child must be increased to reflect the fact that this child represents multiple children in that household. This adjustment multiplies the nonresponse adjusted household weight by the number of children in the household.

Third Form of Nonresponse: Sampled Children for Whom an Interview is Not Completed

When a child has been randomly selected (that is, sampled), two results are possible:

- An interview is completed or sufficiently partially completed.
- An interview is not completed.

The completed child interviews must also represent the children who were sampled but for whom an interview was not completed. This proportional adjustment is the third unit nonresponse adjustment. The size of the adjustment is based on the size of the two categories and is calculated simply as the ratio of the weighted total number of sampled children to the weighted number of completed interviews. In other words, based on the frequency of nonresponse among sampled children with certain sociodemographic characteristics in a given state, compensation is made for this nonresponse by proportionately increasing the weights for those interviews that could be completed in the adjustment cell. The completed interviews, therefore, also represent the sampled children with incomplete interviews.

Adjustment for Multiple Telephone Landlines

Among the households that complete the interview, some will report more than one landline telephone for home use (excluding lines used only for fax or computer). If a household has multiple telephone lines for home use, this household has a greater chance of being included in the survey than does a household with only a single telephone line. An adjustment to the weight is necessary to compensate for their multiple chances of selection. The adjusted child-level weight from the previous step was further adjusted by dividing the weight by the number of telephone landlines for home use.

Adjustment for Noncoverage of Children in Nonlandline Telephone Households

NSCH did not select households without a landline telephone at the time of the survey. To compensate for the noncoverage of children in nonlandline telephone households, an adjustment based on whether the child's household experienced an interruption in telephone service was applied. Households with interrupted telephone service were targeted in the weighting process because there is evidence that households with telephones at the time of the survey, but with interruptions in telephone service during the year, are more similar to households with no telephone service than are households with uninterrupted telephone service during the year (30–32). Therefore, noncoverage of households without a telephone can be somewhat compensated for by proportionately increasing the weights for those interviews that could be completed in households with interrupted service. In this way, completed interviews in households with interrupted service also represent the incomplete interviews in households without telephone service at the time of the interview.

To apply this adjustment, two groups were defined within each state depending on whether the household had an interruption in landline telephone service of more than one week or not during the past 12 months. The size of the adjustment was based on state-level estimates of the proportion of children in households with a landline telephone, derived based upon 3 years of National Health Interview Survey data.

Raking Adjustment

Despite the weighting efforts and the nonresponse adjustments, the estimated number of children is unlikely to perfectly match known population totals. Any discrepancies are likely to be due to random sampling error and nonrandom response biases. Raking adjusts the weights to match population control totals for key sociodemographic information obtained from external sources.

For the NSCH, the independent source was the 2006 and 2007 ACS. The total counts of children by state were obtained from the 2007 ACS, which corresponds to July 1, 2007. The midpoint of the NSCH data collection periods varied from state to state but, for deriving control totals, July 1, 2007, was used as the reference time point for all states. The counts by different subgroups within each state were derived by first estimating proportions in subgroups and then applying the estimated proportions to the total counts of children in the state. The ACS 2006 and 2007 files were combined to produce stable estimates of proportions by state for all but one variable. For the number of children in each state living in MSAs, the proportional distribution was obtained by combining three years (2005–2007) of Current Population Survey (CPS) data. ACS and CPS estimates were restricted to the noninstitutionalized population of children, which includes regular households and noninstitutionalized group quarters.

The raking adjustment was done in two steps: a short initial step and then the primary raking step with all essential control totals. At the initial step, the raking adjustment was done using various categories of the following marginal totals within each state and DC:

- Number of male and female children within each of four age groups
- Number of children in MSAs and non-MSA areas

The purpose of this initial step is to ensure that the input weights to the primary raking step were adjusted for MSA status. To accommodate other more important raking dimensions, the MSA dimension was not included in the primary raking step.

At the primary raking step, the adjustment was done using various categories of the following marginal totals within each state and DC:

- Number of male and female children within each of three age groups
- Number of children in various

nonoverlapping race and ethnicity categories, where the number of categories varied by state

- Number of children in households that have a highest reported level of education within each of three nonoverlapping categories
- Number of children in households that have a household income in each of five nonoverlapping categories
- Number of children in households with one child, in households with two children, and in households with three or more children

For raking purposes only, all missing variables used in the weighting process were imputed using a hot deck imputation procedure. The donors were selected by forming imputation classes for each imputed variable.

The various adjustments occasionally made some weights substantially larger than other weights. These extremely large weights were truncated to prevent a small number of cases with large weights from having undue influence on estimates. After any extreme weights were trimmed, the weights were re-raked. This process was iterated until there were no extreme weights after raking. The raking and trimming process yields a final weight for each child with a complete NSCH interview.

Quality Control

NORC staff compared the formulas for the weights and adjustments developed by the sampling statistician with the actual weights and adjustments constructed by the statistical programmer. An independent check was performed on the programmer's implementation of the statistician's weighting specifications.

Estimation and Hypothesis Testing

NSCH data were obtained through a complex sample design involving unequal probabilities of selection of children within households and stratification of households within states. To produce estimates that are representative of children nationally and within each state, sampling weights must be used. As described earlier, a single sampling weight (NSCHWT) has been developed for NSCH. This weight should be used for both national and state-level analyses.

Interpretation of Weighted Estimates

Estimates based on the sampling weights generalize only to the population of U.S. noninstitutionalized children aged 0–17 years at the time of the interview. These estimates do not generalize to the population of parents, the population of mothers, or the population of children's health care providers.

Two examples may help make this distinction clearer. Weighted estimates based on K8Q11 can be interpreted as the proportion of children whose families regularly eat meals together, but should not be interpreted as the proportion of families who regularly eat meals together. Similarly, weighted estimates based on K8Q30 can be interpreted as the proportion of children whose parents are coping well with the demands of parenthood, but should not be interpreted as the proportion of parents who are coping well.

Variables Used for Variance Estimation

Because of the complex design of NSCH, the interviewed cases have unequal weights. Therefore, statistical software programs that assume simple random sampling will most often compute standard errors that are too low. Tests of statistical hypotheses may then suggest statistically significant differences or associations that are misleading; however, computer programs are available that provide the capability of variance estimation for complex sample designs (for example, SUDAAN, Stata, and WesVar). To provide the user with the capability of estimating the complex sample variances for NSCH data, stratum identifiers and

primary sampling unit (PSU) codes on the data files were provided. These variables and the sample weights are necessary to properly calculate variances.

The strata identified on the publicly released dataset are not identical to the strata used to draw the sample. In states with multiple estimation areas, independent samples were selected from each estimation area in proportion to the total number of households with children in each estimation area; therefore, these estimation areas should be considered strata for variance estimation. Disclosure of the specific estimation area for each child (even if the code were scrambled) could increase the risk of disclosure of a child's or respondent's identity. For example, the estimation area with the lowest frequency of responses in New Jersey would be readily identifiable as Newark. In the absence of estimation area-specific identifiers, data users should use the state identifier (STATE) as the stratum identifier. By using the state identifier rather than the suppressed estimation area identifier, the standard errors for national and state estimates with key variables are affected only slightly, and not in a consistent direction. The PSU for NSCH is the household, represented on the datasets by the unique household identifier, IDNUMR.

The overall number of persons in this survey is sufficient for most statistical inference purposes. However, analyses of some rare responses and analyses of subclasses can lead to estimators that are unreliable. Small sample sizes used in the variance calculations may also produce unstable estimates of the variances. Consequently, these analyses require that the user pay particular attention to the variability of estimates of means, proportions, and totals.

Variance Estimation Using SUDAAN or STATA

Standard errors of NSCH estimates can be obtained using the Taylor series approximation method, available in software such as SUDAAN, SAS, and

STATA. The state is the stratum variable and the household is the PSU variable.

The simplifying assumption that PSUs have been sampled with replacement allows most complex survey sample design computer programs to calculate Taylor series standard errors in a straightforward way. This method requires no recoding of design variables, but is statistically less efficient (and therefore more conservative) than some other methods because the PSU unit is treated as being sampled with replacement within the stratum unit. For SUDAAN, the data file needs to be sorted by stratum (STATE) and PSU (IDNUMR) prior to invoking any procedures. The following example lists SUDAAN design statements that can be used to analyze the data:

- PROC . . . DESIGN = WR
- NEST STATE IDNUMR
- WEIGHT NSCHWT

For STATA, the following design statements are used:

- svyset strata STATE
- svyset psu IDNUMR
- svyset pweight NSCHWT
- svyset

Other variance estimation procedures are also applicable to the NSCH. Specifically, the jackknife method with replicate weights and the bootstrap resampling method with replicate weights can also be used (via software such as WesVar) to obtain standard errors that fully reflect the impact of the weighting adjustments on standard errors.

Variance Estimation for Subsets of the Data

Most analyses of NSCH data will focus on specific population subgroups, such as children in only one state or children who live in poverty. Some analysts will therefore be tempted to delete all records outside of the domain of interest in order to work with smaller data files and run computer jobs more quickly. This procedure of keeping only select records and deleting other records

is called subsetting the data. Subsetted data that are appropriately weighted can be used to generate correct point estimates (for example, estimates of population subgroup frequencies or means), but most software packages that analyze complex survey data will incorrectly compute standard errors for subsetted data. When complex survey data are subsetted, the sample design structure is often compromised because the complete design information is not available. Subsetting the data can delete important design information needed for variance estimation.

NSCH was designed to provide independent datasets for each of the 50 states and DC. Subsetting the survey data to a particular state does not compromise the design structure of the survey. That is, standard errors calculated in SUDAAN for a particular state will not be affected if the dataset has been subsetted to that particular state.

Subsetting to specific population subgroups (within or across states) can result in incorrect standard errors. For example, subsetting the data to children who live in poverty within a specific state will result in incorrectly calculated standard errors. Typically, the standard errors for subsetted data will be inflated, resulting in a higher probability of type II error (that is, failing to detect significant differences that do in fact exist). SUDAAN has a SUBPOPN option that allows the user to target specific subpopulations for analysis while retaining the full unsubsetted dataset that includes the full sample design information. Analysts interested in specific population subgroups must use SUBPOPN rather than subsetting the datasets.

Weighted Frequencies, Prevalence Estimates, and Standard Errors

Weighted frequencies, prevalence estimates, and standard errors for selected survey measures are available from the Data Resource Center for Child and Adolescent Health. This online center is led by the Child and

Adolescent Health Measurement Initiative at the Oregon Health and Science University, and is supported through a cooperative agreement with MCHB. The data resource center is available from http://www.nschdata.org or http://www.childhealthdata.org. Analysts may wish to replicate the online tables to determine if they are using the weights correctly.

Guidelines for Data Use

With the goal of mutual benefit, NCHS requests that recipients of data files cooperate in certain actions related to their use.

Any published material derived from the data should acknowledge NCHS as the original source. The suggested citation, ''Data Source: National Center for Health Statistics and Maternal and Child Health Bureau, National Survey of Children's Health, 2007'' should appear at the bottom of all tables. Published material derived from the data should also include a disclaimer that credits any analyses, interpretations, or conclusions reached to the author and not to NCHS, which is responsible only for the initial data. Consumers who wish to publish a technical description of the data should make a reasonable effort to ensure that the description is not inconsistent with that published by NCHS.

CIPSEA and the Public Health Service Act (Section 308d) provide that these data collected by NCHS may be used only for the purpose of health statistical reporting and analysis. Any effort to determine the identity of any reported case is prohibited by these laws. NCHS takes extraordinary measures to assure that the identity of survey subjects cannot be disclosed. All direct identifiers, as well as any characteristics that might lead to identification, have been omitted from the dataset. Any intentional identification or disclosure of a person or establishment violates the assurances of confidentiality given to the providers

of the information. Therefore, users must:

- Use the data in this dataset for statistical reporting and analysis only
- Make no use of the identity of any person discovered, inadvertently or otherwise, and advise the Director, NCHS, of any such discovery (301–458–4500)
- Not link this dataset with individually identifiable data from any other NCHS or non-NCHS datasets

Use of the dataset signifies users' agreement to comply with the above-stated statutory-based requirements.

Further Information

Data users can obtain the latest information about SLAITS by periodically checking the SLAITS website at http://www.cdc.gov/nchs/slaits.htm. This site features downloadable data files and documentation for SLAITS modules, as well as important information about any modifications and updates to data and/or documentation. Data users will also find current contact information if you have any additional questions. Data users with questions may also send e-mail to slaits@cdc.gov.

Researchers may also wish to join the SLAITS electronic mail listserv. To subscribe or unsubscribe, visit http://www.cdc.gov/nchs/slaits/slaits_listserv.htm and follow the directions listed. The listserv has approximately 1,000 subscribers around the world who use SLAITS data or are interested in SLAITS. Subscribers periodically receive e-mail containing news about SLAITS surveys (for example, new releases or modifications to existing data), publications, or related conferences. The listserv is moderated and listserv membership is private.

For more information about CDC, you may contact CDC's Information Contact Center (CDC–INFO) in English or Spanish by calling (800) CDC–INFO (800–232–4636) or e-mailing

cdcinfo@cdc.gov. Persons with hearing impairment may contact CDC–INFO with a TTY machine at 888–232–6348. The CDC–INFO fax machine line is 770–488–4760. Please note, however, that CDC–INFO cannot respond to questions about individual medical cases, provide second opinions, or make specific recommendations regarding therapy. These issues should be addressed directly with personal health care providers.

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Appendix I. Sample Design

The basic design objective of the National Survey of Children's Health (NSCH) sample was to interview a sample of 1,700 children under age 18 years in each state and the District of Columbia (DC). The sample was selected by identifying households with children under age 18. If only one child lived in the household, that child was the target of the interview. If more than one child was present, one child was randomly selected as the target.

National Immunization Survey Sample

With the exception of the NSCH-only augmentation sample, the sample of households selected to be screened for NSCH was predominately a subsample of the households screened for the National Immunization Survey (NIS), a continuous list-assisted random-digit-dialed (RDD) survey. Starting in 2007, the base NIS estimation areas included 56 regions (50 state or "rest of state" areas plus 6 grantee urban areas). The six grantee urban areas are: Chicago, IL; Philadelphia, PA; New York City, NY; Bexar County, TX; Houston County, TX; and Washington, DC. Also starting in 2007, state immunization programs could identify cities or counties of interest to be oversampled. Eight of those regions, which may change annually, were selected and added to the base NIS estimation areas to equal a total of 64 estimation areas. For more detail on the NIS sample design, readers are encouraged to obtain the *2007 Methodology Report* for NIS (11).

Associating Telephone Numbers with Estimation Areas

To draw a sample of telephone numbers in an NIS estimation area, a list of all telephone numbers that belong to that area must be compiled. For some estimation areas, this step is straightforward. For example, when the estimation area is a state, the list would consist of all telephone numbers within the central-office codes that are in service in the area codes assigned to that state. (Combined, an area code and a central-office code form a "prefix area." For example, 312–555–xxxx is the prefix area corresponding to the 555 central office in the 312 area code.)

For other estimation areas, however, this step encounters a number of complications. When the estimation area is a city or county, some prefix areas may cover part of the estimation area and part of an adjacent estimation area. In such situations, NIS applies a majority rule: If at least 50% of the directory-listed households in a prefix area fall inside an estimation area, the prefix area is assigned to that estimation area.

Drawing the Initial NIS Sample

The sampling frame for an estimation area consists of banks of 100 consecutive telephone numbers within the prefix areas assigned to the estimation area. Banks that contain only wireless (that is, cell phone) telephone numbers are excluded from the frame. Banks that contain zero directory-listed residential telephone numbers are also excluded from the frame because they have very little chance of containing working residential numbers.

To exclude banks that contain zero directory-listed residential telephone numbers, the GENESYS Sampling System [a proprietary product of Marketing Systems Group (MSG)] uses a file of directory-listed residential numbers from InfoUSA. The result is a file that lists the remaining banks (the "1+ working banks"). From the 1+ working banks, a random sample of complete 10-digit telephone numbers is drawn for each quarter in such a way that each number has a known probability of selection that is equal for all numbers in the same estimation area. Within each estimation area, the NIS sample is then segmented into replicates, or representative subsamples, with each replicate containing sample telephone numbers from each of the estimation areas. Segmenting the sample into replicates allows the release of telephone numbers over time in a controlled manner.

Updating the National Immunization Survey Sampling Frame

The set of telephone banks with at least one directory-listed residential telephone number changes over time. As a result, the NIS sampling frame needs to be updated on a quarterly basis. Area-code splits produce additional changes to the sampling frame. MSG maintains a separate sampling frame for each estimation area. Each quarter, MSG examines the database to determine whether any currently included banks should be assigned to different estimation areas and to assign newly included banks to estimation areas. The rules for assignment are the same as in the initial definitions of the estimation areas.

Once all modifications have been made to the database, a number of checks ensure that all changes have been applied correctly and that the new database produces samples consistent with those produced prior to the changes. These checks compare the numbers of active banks and RDD-selectable lines in each estimation area before and after the update. In parallel, the numbers of exchanges assigned to each estimation area before and after the update are compared. Small changes are expected, because new banks are put into service as new numbers are assigned. In the event of a major discrepancy in any of these checks, MSG is notified of the difference and asked to provide documentation of the reasons for the change.

Preparation of the Sample

Coordinated management of the sample follows a sequence of steps. The initial quarterly sample for each

estimation area is divided into replicates. Before a replicate is loaded into the computer-assisted telephone interview (CATI) system, several stages of processing remove as many businesses and nonworking numbers as possible. Telephone numbers on the NIS's "Do Not Call List" are not loaded into the CATI system. Also, at each quarter, any duplicate telephone numbers (that is, numbers that have appeared in the sample in any of the three prior quarters) are identified and excluded from dialing. For the 2007 NSCH, 52.7% of the telephone numbers in released replicates were loaded into the CATI system for calling. The remaining 47.3% of the telephone numbers in the released sample were resolved prior to dialing.

Forming National Immunization Survey sample replicates

NIS divides the sample in each estimation area into 26 representative subsamples or replicates. This procedure permits smoother release of the sample (at the rate of one or two replicates per week) for each estimation area separately, as needed. Toward the end of the quarter, half-size replicates allow tighter control over the total amount of sample released. The aim is to produce an even distribution of work in the telephone center over the course of each quarter of data collection.

Removing business and nonworking numbers

Over two-thirds of all selected telephone numbers are typically businesses or unassigned. Requiring interviewers to dial and classify all of these numbers would be inefficient. To prevent that potential expense, NIS uses another MSG product (a companion to the GENESYS Sampling System) to quickly and accurately reduce the size of this task.

First, the selected sample is matched against a GENESYS file containing telephone numbers that are directory-listed in a business Yellow Pages and are not directory-listed in a residential White Pages. Any business

numbers so identified are removed from the sample. Second, numbers listed in residential White Pages are identified and temporarily set aside.

Third, a hardware system (GENESYS-IDplus) screens the remaining sample to remove a portion of the nonworking numbers. Using personal computers with special hardware and software, this system (the "autodialer") automatically dials the telephone numbers to detect nonworking numbers, which are indicated by the familiar tritone signal for out-of-service numbers, by an extended period of silence, or by continuous noise on the line. Sometimes nonworking numbers ring one or more times before the tritone occurs; GENESYS-IDplus permits numbers to ring two times before hanging up. On a national basis, 15% to 20% of the dialed numbers ring and are answered. To minimize the number of answered calls, the system is used only during the day, when household members are less likely to be at home. Calls that are answered are routed to an attendant, who says, "Sorry, I must have dialed the wrong number."

Finally, the directory-listed residential numbers are combined with the numbers that were not removed by the autodialer to produce the NIS sample for the telephone center. The numbers removed within released replicates are themselves considered released. They are also considered prescreened and assigned disposition codes indicating that they are resolved, nonresidential numbers.

Ported wireless telephone numbers

A significant recent development in the telecommunications industry is the FCC regulation on portability. Local number portability allows wireless telephone customers to switch from one company to another while retaining the same telephone number. There are three ways in which consumers can take advantage of the new number portability provisions: 1) wireless-to-wireless, 2) wireless-to-landline, and 3) landline-to-wireless.

Wireless telephone numbers are not knowingly included in the RDD sampling frame. Therefore, the first way to make a number portable does not impact the RDD sampling strategy. The second way could result in the exclusion of a small number of households with landline telephone service from the RDD sampling frame. The third way—the porting of landline numbers to wireless service providers—creates the possibility of inadvertently including wireless telephone numbers in the RDD samples.

FCC rules (implementing the Telephone Consumer Protection Act of 1991) bar automated calls to wireless telephone numbers. To pre-identify landlines that have been ported to wireless telephones, the selected NIS sample is matched to the NeuStar database, which contains the national list of ported telephone numbers. Details on the database can be found at http://www.tcpacompliance.com. Each quarterly sample is compared to the database and the ported numbers flagged accordingly. The flagged numbers are assigned an out-of-scope disposition code and are not called. The numbers in released replicates are also matched to the NeuStar database on a daily basis to identify any new ports that have not already been finalized within the telephone center. If a number is dialed in NIS and found to have reached a wireless telephone number, the call is immediately terminated and classified as out of scope without seeking an interview.

"Do Not Call" requests

A file is maintained by NORC containing telephone numbers of people who have previously been contacted for NIS and have requested that they not be called again. Each quarter's sample is compared with this file, and numbers contained in the "Do Not Call List" are not included in the quarterly sample of numbers loaded into the CATI system.

Duplicate telephone numbers

Because of the repeated quarterly sampling operations in each estimation area, some telephone numbers were

selected more than once. To avoid any respondent problems created by recontacts for the same survey, a further sample preparation step identified duplicate numbers. Each quarterly NIS sample file was compared with all sample files for the three previous quarters, and the duplicate numbers were excluded. Thus, the quarterly samples were essentially selected by a method of without-replacement sampling. However, analysts are reminded to invoke with-replacement sampling in SUDAAN or Stata for accurate variance estimation.

Obtaining Addresses for Advance Letters

To obtain addresses that correspond to telephone numbers in the sample, the numbers for each replicate are sent to a vendor (TARGUSinfo) who maintains a large and frequently updated database of over 160 million residential and business telephone numbers, including unpublished telephone numbers. Sources for the data include call centers and companies in the telecommunications, consumer goods, insurance, and credit industries.

After the sample has been prepared, the use of this vendor's reverse-match system yielded addresses for about 58.8% of the telephone numbers loaded into the CATI system. Advance letters were sent to these addresses. The mailing was approximately 10 days, or two weekends, prior to the time when the telephone numbers in the corresponding replicates were scheduled to be called.

Appendix II. Banked Sample

In the usual State and Local Area Integrated Telephone Survey (SLAITS) operation, households either screen as ineligible for the National Immunization Survey (NIS), or as NIS eligible and complete the NIS interview. These households then move directly—on the same call, where feasible—on to the SLAITS portion of the computer-assisted telephone interview (CATI) instrument for SLAITS screening and interviewing. However, in the first quarter of 2007 (Q1/2007) the CATI instrument was not finalized at the time the NIS was being fielded; therefore, households could not move on to NSCH screening and interviewing directly upon finishing the NIS.

As in other quarters, in Q1/2007 a portion of the NIS sample was flagged for NSCH even though the National Survey of Children's Health (NSCH) screening and interviewing could not be done in Q1/2007. To take advantage of the NIS screening that was done in Q1/2007, a subsample of the initially flagged NSCH sample was drawn, using the outcomes of the NIS dialing operation as stratifiers to increase efficiency.

First, every NSCH-flagged case that finished NIS (either as NIS ineligible or as NIS eligible with a completed NIS interview) was included in the subsample with certainty. These cases were dialed for NSCH screening and interviewing between May and October 2007.

Next, the NSCH-flagged cases that did not finish NIS (that is, they did not complete the NIS age-eligibility screener or did not complete the NIS interview) were rescreened by GENESYS-IDplus in November of 2007 to identify cases that could be screened out as businesses or nonworking telephone numbers. Any case that was screened out by GENESYS-IDplus was included in the subsample with certainty. However, it was never dialed for NSCH screening and interviewing.

Finally, 10,000 cases were selected from among the NSCH-flagged cases that did not finish NIS and were not screened out by GENESYS-IDplus. The

cases were selected using state and NIS outcome as strata. The 10,000 cases were allocated to each state in proportion to the number of cases initially flagged for NSCH in the state. (For example, if 1/40 of Q1/2007 initially flagged NSCH cases fell within a particular state, then that state was allocated 1/40 of the 10,000 cases, or 250 cases.) Within each state, the cases were grouped into four strata according to the outcome of the NIS dialing effort in Q1/2007:

- Group 1: Screened for NIS age eligibility
- Group 2: Identified as a known household by NIS, but not screened for NIS age eligibility
- Group 3: Final NIS disposition of ''likely household'' or ''answering machine''
- Group 4: Final NIS disposition of ''noncontact,'' ''nonresidential,'' or ''nonworking telephone number''

Within each state, cases from Group 1 were selected with certainty, and cases in Groups 2, 3, and 4 were selected at an equal rate. This rate varied by state so as to yield the appropriate total number of cases selected in each state based on the state-level allocation of the 10,000 cases. Once the 10,000 cases were chosen in this way, the cases were dialed for NSCH screening and interviewing from December 2007 to April 2008.

In this way, the final Q1/2007 NSCH sample consisted of a subsample of the initially flagged Q1/2007 NSCH sample, in three pieces:

1. Cases that finished NIS either as NIS ineligible or NIS eligible with a completed NIS interview. These cases were included in the subsample with certainty (that is, probability equals 1).

2. Cases not in the first group that were screened as businesses or nonworking telephone numbers by GENESYS-IDplus. These cases were included in the subsample with certainty (that is, probability equals 1).

3. Cases (10,000) not in either of the first two groups that were selected using NIS outcomes as strata. These cases were included in the subsample with less than certain probability (that is, probability is less than 1).

Appendix III. Computing Sampling Weights

This section presents the methodology used to compute the sampling weights for the National Survey of Children's Health (NSCH) sample. The weighting scheme for the NSCH sample involved the following steps:

- Computing the base weight separately for each quarter;
- Combining all quarters and computing full sample weights;
- Adjustment for nonresolution of released telephone numbers by quarter;
- Adjustment for incomplete age-eligibility screener by quarter;
- Adjustment for subsampling of children within households;
- Adjustment for incomplete NSCH interviews;
- Adjustment for multiple telephone landlines;
- Adjustment for noncoverage of nontelephone households; and
- Raking adjustment to external control totals.

Base Weights

The base weight for the NSCH sample was the reciprocal of the selection probability of a sampled telephone number. Because the NSCH sample is generated from the National Immunization Survey (NIS) sampling process, the base weights were computed within each NIS sampling stratum (referred to as sampling area) as defined in relevant NIS survey quarters.

In computing the base weight, a special adjustment was applied to accommodate the subsampling of the NSCH sample in the first quarter of 2007 (Q1/2007). The final released sample for NSCH in Q1/2007 was a subsample of the cases initially flagged for release, which is called Q1BANK. Therefore, the base weights for the Q1BANK sample were equal to the normal base weight times a factor equal to the inverse of the probability of being included in the subsample.

The base weight for the k-th telephone number in the initially flagged or released sample, A, is defined by

$$W_{0k} = \frac{1}{\pi_k} = \frac{N_{aq}}{n_{aq}}, \quad k \in a, q,$$

where

π_k = probabilty of selecting the k-th telephone number in the inital release,

n_{aq} = sample size (in initial released replicates) in sampling area, a, in quarter, q,

N_{aq} = universe counts of telephone numbers in quarter, q, on the sampling frame in sampling area, a, as determined by GENESYS.

Note that if no sample was released in sampling area a in quarter q, the base weight is not calculated. The weight for subsampling in the Q1BANK can be defined by

$$Q_{0k} = \frac{1}{k} \quad if\ k \in Q1/2007,$$

where η_k is the subsampling probability for Q1BANK sampling.

Therefore, the combined final base weight for the k-th telephone number can be expressed as

$$W_{1k} = W_{0k}Q_{0k},$$

with

$$Q_{0k} = 1 \quad if\ k \notin Q1/2007$$

$$= \frac{1}{\eta_k} if\ k \in Q1/2007 \text{ and in Q1BANK}$$

$$= 0 \quad if\ k \notin Q1/2007 \text{ but not in Q1BANK.}$$

The final base weights for the cases initially flagged for release in Q1/2007 but not included in the Q1BANK are zero and were dropped from subsequent adjustments.

Computing Full Sample Weights From Quarterly Weights

In this step, all quarterly samples were combined by adjusting the quarterly base weights so that the samples from all quarters jointly represent the full population. Because the base weights were calculated for each quarter separately, the sum of base weights in each quarter represents the full population for a sampling area (assuming sample was released for the sampling area in quarter q). The full-sample weights were computed from quarterly weights by applying composition factors proportional to the number of released sample telephone numbers in a quarter. Given subsampling yielded variability in base weights for Q1BANK, sample sizes for QIBANK were adjusted by the design effect (DEFF) to reflect effective sample sizes.

The full sample weights were calculated as follows:

$$W_{2k} = \frac{W_{1k}}{R_{2aq}} \quad if\ k \in a, q,$$

where

$$R_{2aq} = \sum \frac{\frac{n'_{aq}}{D_{aq}}}{\frac{n'_{aq}}{D_{aq}}},$$

where

n'_{aq} = number of selected telephone numbers in sampling area a, in quarter q following Q1BANK subsampling

$n'_{aq} = n_{aq}$ if $q \neq Q1/2007$

     $< n_{aq}$ if $q = Q1/2007$

D_{aq} = DEFF for sampling area, a, in quarter, q

$$= \frac{\sum\limits_{k \in a,q} W_{lk}^2}{n'_{aq} \left(\dfrac{\sum\limits_{k \in a,q} W_{lk}^2}{n'_{aq}} \right)^2}$$

Adjustment for Nonresolution of Telephone Numbers

At the next step, an adjustment is made to the resolved cases to account for the cases for which the working residential number (WRN) status is unknown. To make the adjustment, a number of adjustment cells within each sampling area in each quarter were formed by controlling for known covariates. The adjustment in each cell was made by assuming that the rate of WRNs among unresolved numbers is the same as the rate of WRNs among resolved numbers. Within each sampling area, the adjusted weights were computed as

$$W_{3k} = \frac{W_{2k}}{R_{3\ell q}}, \ if \ k \in B \cap \ell, q$$
$$= 0, \ otherwise$$

where

$R_{3\ell q}$ = weighted resolution rate in the ℓ-th adjustment cell for quarter q

$$= \frac{\sum\limits_{k \in B \cap \ell, q} W_{2k}}{\sum\limits_{k \in A_l \cap \ell, q} W_2},$$

A = set of released telephone numbers (as mentioned above),

B = subset in A of resolved telephone numbers (WRN or non-WRN), and

$B \cap \ell$ = subset in B that belong to the ℓ-th adjustment cell.

For defining the adjustment cells (ℓ), within each sampling area in each quarter, the variables listed in Table I

were used. The covariates listed in Table I are dichotomous categorical variables (based on whether the value of a variable is greater or less than the median value) that were derived from continuous variables available on the frame. Different sets of covariates were used for sampling areas in different census regions. Moreover, for a specific sampling area, different adjustment cells were used depending on whether the sampled telephone number was listed or not. The adjustment cells need to include at least 20 resolved cases to enable stable estimation of the adjustment factor $R_{3\ell q}$. To achieve this goal when the number of resolved cases

was less than 20, adjustment cells were collapsed by dropping covariates in order of importance (that is, the least important covariate was collapsed first).

Adjustment for Incomplete Age-eligibility Screener

Among the resolved WRNs, the age-eligibility screener was incomplete for some telephone numbers. To compensate for this, the weights of the telephone numbers with the completed age-eligibility screener for adjustment cells within each state and quarter were adjusted. The adjusted weight for the

Table I. Covariates used to create nonresponse adjustment cells at different nonresponse adjustment stages

Census region, telephone number listing status, and nonresponse adjustment stage	Covariates[1]
Northeast	
Listed number within area:	
Nonresolution adjustment	Age[2], Education[3], Minority[4]
Age-eligibility screener nonresponse adjustment	Owner[5], Minority, Income[6], Age
Unlisted number within area:	
Nonresolution adjustment	Rent[7], MSA[8], Graduate[9], Owner
Age-eligibility screener nonresponse adjustment	Age, MSA, Education
Midwest	
Listed number within area:	
Nonresolution adjustment	Age, Owner, Minority
Age-eligibility screener nonresponse adjustment	Minority, Owner, Income
Unlisted number within area:	
Nonresolution adjustment	MSA, Owner, Minority, Rent
Age-eligibility screener nonresponse adjustment	Age, MSA, Graduate
South	
Listed numbers within area:	
Nonresolution adjustment	Age, Owner, Minority
Age-eligibility screener nonresponse adjustment	Owner, Income, Age, Rent
Unlisted numbers within area:	
Nonresolution adjustment	MSA, Rent, Minority
Age-eligibility screener nonresponse adjustment	Owner, Age, Education
West	
Listed numbers within area:	
Nonresolution adjustment	Age, Owner, Education
Age-eligibility screener nonresponse adjustment	Age, Owner, Education
Unlisted numbers within area:	
Nonresolution adjustment	Minority, Rent, MSA, Graduate
Age-eligibility screener nonresponse adjustment	Age, MSA, Owner, Minority

[1]Listed in order of importance within a group, based on the strength of the relationship between the covariate and observed nonresponse rates.
[2]Median age in years of the population in the telephone exchange; median = 36.18.
[3]Median years of education achieved for the population in the telephone exchange; median = 13.10.
[4]Percentage of population in the telephone exchange who are non-white; median = 19.70.
[5]Percentage of owner-occupied homes in the telephone exchange; median = 71.40.
[6]Median household income for the telephone exchange, in thousands of dollars; median = 48.49.
[7]Median monthly rent in the telephone exchange, in dollars; median = 541.00.
[8]Telephone number is or is not in a Metropolitan Statistical Area (MSA).
[9]Percentage of population in the telephone exchange who are college graduates; median = 23.30.

k-th number is given by

$$W_{4k} = \frac{W_{3k}}{R_{4\varphi q}}, \text{ if } k \in C \cap \phi, q$$

$$= 0, \quad \text{otherwise}$$

where

$R_{4\phi,q}$ = weighted screener completion rate in the ϕ-th adjustment cell for quarter q

$$= \frac{\sum\limits_{k \in C \cap \phi, q} W_{2k}}{\sum\limits_{k \in B_I \cap \phi, q} W_{2k}},$$

B_1 = subset of telephone numbers in B that are WRNs,

C = subset of WRNs in B_1 that complete the age screening interview,

$C \cap \phi$ = subset in C that belong to the ϕ-th adjustment cell.

As discussed previously, the adjustment cells (ϕ) were defined within each state in each quarter using the covariates listed in Table I. The adjustment for age screening was made within state (as opposed to sampling area as used for the nonresolution adjustment) due to smaller sample sizes at this stage. The adjustment cells needed to include at least 20 cases to enable stable estimation of the adjustment factor $R_{4\ell q}$. To achieve this goal when the number of responding cases was less than 20, adjustment cells were collapsed by dropping covariates in order of importance, with cells formed by the least important covariates collapsed first.

Adjustment for Subsampling of Age-eligible Children

The unit of analysis now rotates to child level from household level. In the households with more than one age-eligible child, only one child was selected randomly per household for the NSCH interview. As a result, the age screener weight was adjusted to account for the children that were not selected. The subsampling weight for the j-th

subsampled child was defined by

$$W_{5j} = n_k W_{4k}, \quad \text{if } j \in D,k$$

where

D = the set of the subsampled age-eligible children,

n'_k = the number of age-eligible children in household k, and

n_k = min (3, n'_k).

For the purpose of weight adjustment, the number of children was capped at three to control variability of the weights. The number of children was imputed for age-eligible households for which the total number of children was unknown.

Adjustment for Nonresponse to Interview

To compensate for nonresponse to the NSCH interview, the weights of the children with complete interviews were adjusted. The adjusted weight for the j-th child is given by

$$W_{6j} = \frac{W_{5j}}{R_{6\varphi}}, \text{ if } j \in E$$

$$= 0, \text{ otherwise}$$

where

$R_{6\varphi}$ = weighted interview completion rate in φ-th adjustment cell

$$= \frac{\sum\limits_{j \in E \cap \varphi} W_{5j}}{\sum\limits_{j \in D \cap \varphi} W_{5j}}$$

E = subset of subsampled children in D that completed the interview.

The interview nonresponse adjustment was made separately within each state. The adjustment cells were formed using the following variables listed in order of priority: state, age group, directory-listed status, metropolitan statistical area (MSA) status, and number of children in the household.

Note that at this step, unlike the adjustment for incomplete age-eligibility screener, adjustment cells were formed

within each state and not state within each quarter. Also, any missing values of age group and number of children in the household were imputed. As before, the cells where the number of responding cases was less than 20 were collapsed.

Adjustment for Multiple Telephone Landlines

For the children with completed interviews, information was obtained about the number of telephone landlines for home use excluding the lines used only for fax or computer (any missing values of the number of landline telephones in the household were imputed). The households of some children with completed interviews reported more than one telephone landline for home use. An adjustment to the weight was made at this stage for these children to compensate for their multiple chances of selection. The multiple telephone adjusted weight for the j-th child in E is defined by

$$W_{7j} = W_{6j} / t_j,$$

where

W_{6j} = the weight inherited by the j-th child from the previous step,

t_j = number of telephone landlines for home use reported by the household of the j-th interview completed children (it is assumed that in all but the very rarest case, only one telephone number has been selected per household).

Because the questionnaire only establishes whether the household has one, two, or three or more landline telephones, t_j had a maximum value of three. This cap is helpful both to control variability in weights and to guard against reporting bias.

For all adjustments up to this point, the sampling location of the household (as determined by GENESYS) was used, but now that the true location of the household can be determined based on the geographic information collected in the interview, the reported state and the MSA status derived from reported ZIP

code were used for the remaining adjustments.

Adjustment for Noncoverage of Children in Nonlandline Telephone Households

To compensate for the noncoverage of children in nonlandline telephone households, a poststratification adjustment based on whether the child's household experienced an interruption in telephone service was applied. The basic idea is to use households with an interruption in telephone service to represent not only themselves, but also households without a landline telephone.

To apply this adjustment, two poststrata cells (m) were defined within each state depending on whether the household had an interruption in landline telephone service of more than one week or not during the past 12 months: Let T_1 denote an estimate of the number of eligible children either without a landline telephone or with a landline telephone but with an interruption, and let T_2 denote an estimate of the total number of eligible children with a landline telephone and without an interruption, within a state. If E denotes the set of eligible children in the state for whom the interview is complete, then the poststratified weight for the j-th child in E is defined as

$$W_{8j} = \left(\frac{T_m}{\sum_{j \in E \cap m} W_{7j}} \right) W_{7j}, \text{ for } j \in E \cap m.$$

The independent estimates of the total number of eligible children in the state, T, were partitioned into the subtotals of landline telephone children and nonlandline telephone children. In turn, the subtotal of landline telephone children was partitioned into subtotals of children with an interruption in landline telephone service and children without an interruption. To express this mathematically, define

T_2 = number of eligible children in landline telephone households in the state with no

interruption in telephone service

$= T\alpha\beta$

and

T_1 = number of eligible children in nonlandline telephone households in the state plus children in landline telephone households with interruption in telephone service

$= T - T_2,$

where

α = proportion of children who are in landline telephone households in the state,

β = estimated proportion of eligible children in landline telephone households in the state with no interruption in telephone service, as obtained from the survey data

$$= \frac{\sum_{j \in E} \gamma_{8j} W_{7j}}{\sum_{j \in E} W_{7j}},$$

where

γ_{8j} = 1, if the j-th child's household had no interruption in landline telephone service

$= 0$, otherwise.

Raking Adjustment

Finally, a raking adjustment of weights was done such that the sum of the weights agrees with the important control totals. The raking adjustment was done in two steps—a short initial step and the main step with all essential control totals.

At the initial step, the raking adjustment was done using various categories of the following margins within each state and the District of Columbia (DC):

- Number of male and female children within each of four age groups: 0–2 years, 3–5 years, 6–11 years, and 12–17 years, and
- Number of children in MSA and non-MSA.

The purpose of this initial step is to ensure that the input weight to the main raking step is adjusted for MSA status. Because there is no estimation requirement by MSA status, to accommodate other more important raking dimensions, the MSA dimension was not included in the main raking step. So the sum of final raked weights by MSA status will not be exactly equal to the control totals, but this initial adjustment by MSA status will provide some degree of safeguard against a very wide difference between sum of weights and control totals by MSA status.

At the main raking step, the adjustment was done using various categories of the following margins within each state and DC:

- Number of male and female children within each of three age groups: 0–5 years, 6–11 years, and 12–17 years;
- Number of children in each of five race and ethnicity categories;
- Number of children in households where the highest reported education is less than high school, high school, and more than high school;
- Number of children in households that have a household income in each of five nonoverlapping categories; and
- Number of children in households with one child, households with two children, and households with three or more children.

Any missing values of the raking variables specified above were imputed. The categories of the raking dimensions were collapsed if the number of cases was not sufficient or if there was any difficulty in raking convergence.

Raking takes each variable in turn and applies a proportional adjustment to the current weights of the children who belong to the same category of the variables. After a number of iterations over all raking dimensions, the raked weights have totals that match all the desired control totals. The raked weights from the initial raking can be expressed as

$$W_{9j} = \varphi_j W_{8j}, \quad \text{for } j \in E,$$

where φ is the raking adjustment factor for the j-th child derived through the iteration process. Similarly, the weights

from the main raking can be expressed as

$$W_{10j} = \psi_j W_{9j}, \quad for \; j \in E,$$

where ψ_j is the main raking adjustment factor for the j-th child derived through the iteration process.

At this point, the weights were checked for extreme values. The weights that exceeded the median weight plus six times the interquartile range of the weights (in the state) were truncated to this cutoff. The raking step was applied again after the truncation of the weights and the weights were rechecked for extreme weights and truncated as before. The process was iterated until there was no extreme weight after raking.

The raking and truncation process yielded a final weight for each child with a complete NSCH interview.

National Estimates

Descriptive statistics for the state sampling weights are provided in Table II. The state sampling weights are used to obtain estimates for each state. To obtain national estimates of totals, state estimates should be aggregated. For computing national estimates of ratios, aggregate the state estimates and then divide this number by the total number of children in the United States, obtained by aggregating the state level total number of children.

Table II. Summary statistics for final child-level weights, nationally and by state

State	Unweighted sample size	Minimum weight	Maximum weight	Mean weight	Median weight	Sum of weights
National	91,642	0.5	34,724.4	804.9	324.7	73,758,616
Alabama	1,761	9.3	4,574.3	635.6	512.7	1,119,323
Alaska	1,739	2.9	728.2	104.8	84.8	182,287
Arizona	1,769	20.3	6,914.0	937.0	656.4	1,657,543
Arkansas	1,765	52.4	1,964.2	395.8	312.9	698,558
California	1,751	33.9	34,724.4	5,363.8	1,376.7	9,392,086
Colorado	1,801	5.9	4,854.3	659.4	434.3	1,187,560
Connecticut	1,889	36.4	2,206.9	430.7	381.9	813,675
Delaware	1,805	14.8	544.1	111.6	86.8	201,362
District of Columbia	1,801	5.8	311.5	63.2	40.8	113,827
Florida	1,797	13.0	16,266.8	2,235.9	448.8	4,017,889
Georgia	1,782	11.9	9,572.4	1,417.2	915.5	2,525,483
Hawaii	1,822	2.3	848.5	153.6	114.1	279,867
Idaho	1,768	8.0	1,266.0	232.9	189.6	411,741
Illinois	1,932	84.0	10,089.0	1,655.3	1,211.8	3,198,016
Indiana	1,764	24.2	7,329.8	901.7	601.1	1,590,598
Iowa	1,757	4.6	2,914.0	404.1	273.3	710,075
Kansas	1,803	10.7	2,355.1	387.7	322.3	699,044
Kentucky	1,803	58.9	2,753.4	562.1	446.8	1,013,459
Louisiana	1,868	15.3	4,089.5	578.3	393.6	1,080,350
Maine	1,752	6.0	852.1	162.2	134.3	284,110
Maryland	1,773	6.4	4,738.4	768.2	625.0	1,361,936
Massachusetts	1,786	12.9	5,100.8	801.5	640.2	1,431,554
Michigan	1,861	16.1	10,151.7	1,312.6	980.5	2,442,796
Minnesota	1,767	24.0	5,411.8	711.4	490.3	1,257,082
Mississippi	1,918	3.3	2,056.0	394.8	300.7	757,184
Missouri	1,847	15.5	4,615.4	764.5	615.1	1,412,037
Montana	1,788	18.9	664.8	127.5	110.6	227,966
Nebraska	1,827	7.2	1,750.1	250.6	190.3	457,857
Nevada	1,821	0.5	2,906.7	364.8	240.3	664,311
New Hampshire	1,773	2.6	857.2	168.3	145.9	298,439
New Jersey	1,827	12.1	6,685.0	1,121.6	880.6	2,049,175
New Mexico	1,826	5.2	2,077.9	270.3	182.4	493,495
New York	1,793	59.0	14,692.2	2,465.7	1,637.7	4,420,982
North Carolina	1,782	21.7	9,386.6	1,235.6	1,001.9	2,201,857
North Dakota	1,800	4.8	327.5	79.3	71.2	142,697
Ohio	1,765	45.9	11,962.5	1,550.0	1,142.0	2,735,724
Oklahoma	1,816	9.2	2,702.1	497.5	408.6	903,460
Oregon	1,794	15.9	3,589.1	479.0	355.9	859,256
Pennsylvania	1,767	35.7	12,406.5	1,581.3	793.5	2,794,078
Rhode Island	1,756	3.7	899.7	134.3	112.7	235,868
South Carolina	1,885	6.9	3,067.8	561.8	402.7	1,058,919
South Dakota	1,740	7.6	629.3	111.5	95.6	194,049
Tennessee	1,840	65.4	4,084.7	793.3	578.2	1,459,756
Texas	1,805	126.8	19,464.8	3,645.2	1,501.4	6,579,611
Utah	1,747	5.8	3,978.8	465.5	373.8	813,287
Vermont	1,725	2.6	584.2	75.8	51.6	130,729
Virginia	1,774	17.1	5,429.6	1,031.1	862.0	1,829,149
Washington	1,736	11.1	5,636.5	884.6	504.7	1,535,630
West Virginia	1,766	30.5	999.3	221.8	175.3	391,744
Wisconsin	1,860	19.7	3,910.4	706.9	559.5	1,314,848
Wyoming	1,748	2.4	403.9	72.2	62.9	126,287

Appendix IV. Questionnaire

Questionnaire Contents

National Survey of Children's Health, 2007

NIS Eligibility, Selection of Sample Child, and Informed Consent

INTRO_1   Hello, my name is _____. I'm calling on behalf of the Centers for Disease Control and Prevention. We're conducting a nationwide immunization study to find out how many children under 4 years of age are receiving all of the recommended vaccinations for childhood diseases. Your telephone number has been selected at random to be included in the study.

S1   Am I speaking to someone who lives in this household who is over 17 years old?

        (1) I AM THAT PERSON   **[SKIP TO S_NUMB]**
        (0) THIS IS A BUSINESS   **[TERMINATE]**
        (3) NEW PERSON COMES TO PHONE   **[SKIP BACK TO INTRO_1]**
        (8) DOES NOT LIVE IN HOUSEHOLD   **[SCHEDULE APPT]**
        (9) NO PERSON AT HOME WHO IS OVER 17   **[SCHEDULE APPT]**
        (7) REFUSED   **[TERMINATE]**

        HELP SCREEN (S1): IF NO, ASK "Is there someone who lives in this household who is over 17 that I may speak with?"

        GROUP QUARTERS SUCH AS BARRACKS, DORMITORIES, HOSPITALS, OR SCHOOLS SHOULD BE CODED AS "DOES NOT LIVE IN HOUSEHOLD."

S_NUMB   How many children between the ages of 12 months and 3 years old are living or staying in your household?

        ENTER NUMBER OF NIS-ELIGIBLE CHILDREN ____ ____

[**Augmentation Sample**---------------------

INTRO_AUG   IF SAMPLE_USE_CODE = 3, READ INTRO_AUG, ELSE SKIP TO S_UNDR18.

        USED ONLY FOR AUGMENTATION SAMPLE (SUC=3)

        Hello, my name is _____. I am calling on behalf of the Centers for Disease Control and Prevention. We are doing a nationwide survey about the health of children and teenagers. Your telephone number has been selected at random to be included in the study."

        GO TO S_UNDR18

S_UNDR18   **CATI INSTRUCTION (S_UNDR18):** IF S_NUMB > 0, SKIP TO NIS INTERVIEW. AFTER NIS INTERVIEW IS COMPLETE, GO TO AGE_GRID.
IF NIS DONE AND S_NUMB > 0, FILL S_UNDR18 FROM NIS DATA: S_UNDR18 = C1 - C1A. NOTE: C1-C1A CANNOT BE LE 0. IF THAT IS THE CASE, ASK S_UNDR18.

IF SAMPLE_USE_CODE = 4: FILL TIS_UNDER18 TO S_UNDR18

SET ELIGIBILITY DATE AT THIS POINT (ONCE IT IS ASKED OR FILLED)
TODAY_M_NSCH
TODAY_D_NSCH
TODAY_Y_NSCH

How many people less than 18 years old live in this household?

ENTER NUMBER OF CHILDREN ____ ____
IF = 0   **[GO TO NOCHILD]**
IF > 0   **[GO TO AGE_X]**

(6) DON'T KNOW   **[GO TO ASK_ANOTHER]**
(7) REFUSED   **[TERMINATE AND SET AS REFUSAL]**

HELP SCREEN (S_UNDER18): A CHILD IS COUNTED AS "LIVING IN THE HOUSEHOLD" IF THE CHILD:

- **HAS BEEN STAYING THERE (OR IS EXPECTED TO STAY THERE) FOR AT LEAST TWO MONTHS**

- **THE LENGTH OF THE CURRENT STAY IS UNKNOWN, BUT THERE IS NO OTHER PLACE WHERE THE CHILD USUALLY STAYS**

- **USUALLY STAYS IN THE HOUSEHOLD, BUT IS CURRENTLY AWAY FOR LESS THAN TWO MONTHS (WHETHER TRAVELING, IN THE HOSPITAL, OR AWAY FOR ANY OTHER REASON)**

- **USUALLY STAYS IN THE HOUSEHOLD, BUT IS CURRENTLY AWAY FOR TWO MONTHS OR MORE BECAUSE THEY ARE AT SCHOOL (COLLEGE, BOARDING SCHOOL, MILITARY ACADEMY, PREP SCHOOL, ETC.)**

- **ONLY LIVES PART-TIME IN THE HOUSEHOLD BECAUSE OF CUSTODY ISSUES, BUT IS STAYING THERE AT THE TIME OF THE CALL**

ASK_ANOTHER Is there anyone in your household who knows how many people in this household are less than 18 years old?

(1) NEW PERSON COMES TO PHONE **[GO TO S_UNDR18]**
(0) NO   **[GO TO NSCH_TERM]**

NSCH_TERM   Thank you, we'll try back another time.
TERMINATE > SET ITS = 61

NOCHILD   Those are all the questions I have. I'd like to thank you on behalf of the Centers for Disease Control and Prevention for the time and effort you've spent answering these questions.
TERMINATE > SET ITS = 61

AGE_X   **CATI INSTRUCTION (AGE_GRID):** IF S_UNDR18 = 1, FILL "age" AND "child". ELSE, FILL "ages" AND "children".

IF S_NUMB = 0, DISPLAY THIS TEXT WHEN ASKING ABOUT FIRST CHILD: "Many of my questions are only for children of certain ages. So, I'll know which questions to ask, please tell me the [age/ages] of the [child/children] less than 18 years old living in this household." FOR ALL SUBSEQUENT CHILDREN (LOOP UNTIL # OF CHILDREN=S_UNDR18) DISPLAY: READ IF NECESSARY: (Please tell me the age of the next child who lives in this household.)

ELSE IF (S_NUMB=S_UNDR18 then FILL AGE_1 (and AGE_1Y_X as needed) with age of child and skip to AGE_CONF

ELSE IF S_NUMB > 0 AND S_UNDR18 – S_NUMB > 0, FILL: "You have already given me (FILL NAME OF NIS-ELIGIBLE CHILD OR CHILDREN)'s birth date(s). Now, would you please tell me the [age/ages] of the other [IF S_UNDER18 - S_NUMB = 1, INSERT "child"; IF S_UNDR18 - S_NUMB > 1, INSERT "children"] living in this household." FOR ALL SUBSEQUENT CHILDREN (LOOP UNTIL # OF CHILDREN=S_UNDR18 - S_NUMB) DISPLAY: READ IF NECESSARY: (Please tell me the age of the next child who lives in this household.)

IF SAMPLE_USE_CODE = 4: FILL AGE ROSTER FROM TEEN ROSTER
FILL AGE_1 (and AGE_1_X) with age of NSCH SELECTED child taken from TIS_S3AGE_X
[IF 6 GO TO WHEN_CALL,
IF 7 GO TO AGE_REF]

_____ ENTER VALUE   AGES STORED IN AGE_1 – AGE_9

ENTER 6 FOR DON'T KNOW AND 7 FOR REFUSED

[IF 6 GO TO WHEN_CALL]
[IF 7 GO TO AGE_REF]

AGE1_X   _____(1) MONTHS
            _____(0) YEARS

WHEN_CALL   What would be a good time to reach a person who knows the child's age?

(1) SET APPOINTMENT FOR CALLBACK   **[GO TO CB1]**
(0) PERSON AVAILABLE   **[GO TO INTRO_AGE]**

AGE_REF   The reason we need your child's age is to know which health and health care questions to ask. The information you provide is completely confidential.

(1) YES   **[GO TO AGE_X]**
(0) NO   **[GO TO AGE_TERM]**

AGE_TERM   Those are all the questions I have. I'd like to thank you on behalf of the Centers for Disease Control and Prevention for the time and effort you've spent answering these questions.

INTRO_AGE   Hello, my name is _____. I'm calling on behalf of the Centers for Disease Control and Prevention. We are doing a nationwide survey about the health of children and teenagers, and I was told that you were the person to talk with about the health of the (IF S_UNDR18 =1, INSERT "child"; IF S_UNDR18 > 1 INSERT "children") in your household

(1) CONTINUE   **[RETURN TO AGE_X]**

AGE_CONF   So, you have a **[FILL WITH AGE IN YEARS FOR ALL CHILDREN 2 YEARS OLD OR OLDER, AND AGE IN MONTHS FOR ALL CHILDREN UNDER 24 MONTHS OLD. INCLUDE AGES FOR ANY NIS-ELIGIBLE CHILDREN]** living at this address all or most of the time. Is that correct?

(1) YES   **[SKIP TO MULTIAGE]**
(0) NO, WRONG AGES   **[RETURN TO AGE_X]**
(3) NO, WRONG NUMBER OF CHILDREN   **[RETURN TO S_UNDR18]**
(4) NO, NOT ALL CHILDREN LIVING AT THIS ADDRESS ALL OR MOST OF THE TIME

MULTIAGE   **CATI INSTRUCTION (MULTIAGE):** IF NO CHILDREN ARE THE SAME AGE, SKIP TO NSCH RANDOM SELECTION PROCESS.
ELSE ASK

Since you have more than one child who is **[FILL DUPLICATE AGES FROM AGE_CONF]**, I need a way to refer to each of them during the interview. Could you please tell me their first names or initials?

NAME_1 -NAME_9

What is the [first, second, third, etc.] child's name or initials?
NAME:

NSCH RANDOM SELECTION PROCESS

CATI INSTRUCTION: AT THIS POINT, A SAMPLE CHILD MUST BE SELECTED FOR THE REST OF THE INTERVIEW FROM ALL CHILDREN ROSTERED. IF ONLY ONE CHILD UNDER 18 YEARS OLD (AGE_GRID HAS 1 CHILD LISTED), THAT CHILD IS THE SAMPLE CHILD [S.C.] FROM THIS POINT. IF THERE IS MORE THAN ONE CHILD UNDER THE AGE OF 18 (AGE_GRID HAS > 1 CHILD LISTED), ONE OF THESE CHILDREN SHOULD BE RANDOMLY SAMPLED AND THAT CHILD IS THE SAMPLE CHILD [S.C.] FROM THIS POINT.

STORE SAMPLED CHILD IN VARIABLE: SC_NSCH (e.g., if 2nd child chosen, SC_NSCH = AGE_2)

AGE_NSCH (in months for SC) AGE_NSCH_Y (in years for SC)

S.C. = "your N month/year old" or name from NAME_1 - NAME_9

SCQ02   **CATI INSTRUCTION (SCQ02):** If NSCH_INCENT=<null>, then use $10, ELSE use NSCH_INCENT

IF S_NUMB=0 or SUC=3 or no ELIG_1-9 =1, SKIP TO SCQ05. IF SAMPLE_USE_CODE=4 AND NOT NIS OR TEEN ELIGIBLE, SKIP TO SCQ05.

ELSE IF NIS INTERVIEW WAS CONDUCTED BUT [S.C.] WAS NOT NIS-ELIGIBLE, SKIP TO SCQ03. IF SAMPLE_USE_CODE=4 AND NIS OR TEEN DONE, BUT [S.C.] WAS NOT NIS OR TEEN-ELIGIBLE, SKIP TO SCQO3.

IF S_UNDR18 = 01, SAY: "Next, I have some other questions about the health and health care of [S.C.]. As before, you may choose not to answer any questions you don't wish to answer, or end the interview at any time. [IF (NSCH_INCENT_GRP=1 AND (NEITHER INTRO_1A NOR INTRO_1B HAS BEEN DISPLAYED)) DISPLAY: In appreciation for your time, we will send you [$10/$NSCH_INCENT].] This part of the survey will take about 25 minutes. I'd like to continue now unless you have any questions."

IF S_UNDR18 > 01, SAY: "I appreciate your answers about the immunizations of [NIS-ELIGIBLE CHILDREN, IF SAMPLE_USE_CODE=4 AND TEEN INTERVIEW COMPLETE FILL WITH TEEN SC, ELSE FILL WITH NIS-ELIGIBLE CHILDREN]. The next questions are about the health and health care of [S.C.]. As before, you may choose not to answer any questions you don't wish to answer, or end the interview at any time. [IF (NSCH_INCENT_GRP=1 AND (NEITHER INTRO_1A NOR INTRO_1B HAS BEEN DISPLAYED)) DISPLAY: In appreciation for your time, we will send you [$10/$NSCH_INCENT].] This part of the survey will take about 25 minutes. I'd like to continue now unless you have any questions."

(1) CONTINUE   **[SKIP TO K1Q01]**

SCQ03   I appreciate your answers about the immunizations of [IF SAMPLE_USE_CODE = 2 then fill with NIS-ELIGIBLE CHILDREN, IF SAMPLE_USE_CODE=4 AND NIS DONE BUT NO TEEN THEN FILL WITH NIS-ELIGIBLE CHILDREN, IF SAMPLE_USE_CODE=4 AND TEEN INTERVIEW DONE THEN FILL WITH ST]. The next questions are about the health and health care of [S.C.]. We need to talk to a parent or guardian who lives in this household who knows about the health and health care of [S.C.]. Who would that be?

(1) MYSELF   **[SKIP TO SCQ04]**
(0) SOMEONE ELSE   **[SKIP TO SCQ06]**

SCQ04   If NSCH_INCENT=<null>, then use $10, ELSE use NSCH_INCENT

As before, you may choose not to answer any questions you don't wish to answer, or end the interview at any time. [IF (NSCH_INCENT_GRP=1 AND (NEITHER INTRO_1A NOR INTRO_1B HAS BEEN DISPLAYED)) DISPLAY: In appreciation for your time, we will send you [$10/$NSCH_INCENT].] This part of the survey will take about 25 minutes. I'd like to continue now unless you have any questions.

(1) CONTINUE   **[SKIP TO K1Q01]**

SCQ05   Most of this survey will be about the health and health care of [S.C.]. We need to talk to a parent or guardian who lives in this household who knows about the health and health care of [S.C.]. Who would that be?

(1) MYSELF   **[SKIP TO S3_NSCH_LTR]**
(0) SOMEONE ELSE   **[SKIP TO SCQ06]**

SCQ06   May I speak with that person now?

        (1) YES   **[SKIP TO NEW_RESP]**
        (0) NO   **[SCHEDULE APPOINTMENT: POR is SCQ05]**

NEW_RESP   Hello, my name is _____. I'm calling on behalf of the Centers for Disease Control and Prevention. We are doing a nationwide survey about the health of children and teenagers, and I was told that you were the person to talk with about the health and health care of [S.C.].

        (1) CONTINUE

S3_NSCH_LTR   **CATI INSTRUCTION (S3_LTR):** IF NO ADVANCE LETTER SENT, THEN SKIP TO SL_INTRO.

A letter describing this survey may have been sent to your home recently. Do you remember seeing the letter?

        (1) YES
        (0) NO
        (6) DON'T KNOW
        (7) REFUSED

SL_INTRO   If NSCH_INCENT=<null>, then use $10, ELSE use NSCH_INCENT

Before we continue, I'd like you to know that taking part in this research is voluntary. You may choose not to answer any questions you don't wish to answer, or end the interview at any time. We are required by Federal law to develop and follow strict procedures to protect your information and use your answers only for statistical research. I can describe these laws if you wish. [IF (NSCH_INCENT_GRP=1 AND (NEITHER INTRO_1A NOR INTRO_1B HAS BEEN DISPLAYED)) DISPLAY: In appreciation for your time, we will send you [$10/$NSCH_INCENT].] The survey will take about 25 minutes. In order to review my work, my supervisor may record and listen as I ask the questions. I'd like to continue now unless you have any questions.

READ IF NECESSARY: The Public Health Service Act is Volume 42 of the US Code, Section 242k. The collection of information in this survey is authorized by Section 306 of this Act. The confidentiality of your responses is assured by Section 308d of this Act and by the Confidential Information Protection and Statistical Efficiency Act. Would you like me to read the Confidential Information Protection provisions to you?

IF RESPONDENT WOULD LIKE TO HEAR PROVISIONS, READ: The information you provide will be used for statistical purposes only. In accordance with the Confidential Information Protection provisions of Title V, Subtitle A, Public Law 107-347 and other applicable Federal laws, your responses will be kept confidential and will not be disclosed in identifiable form to anyone other than employees or agents. By law, every employee of the National Center for Health Statistics, the National Center for Immunization and Respiratory Diseases, and its agent, the National Opinion Research Center who works on this survey has taken an oath and is subject to a jail term of up to 5 years, a fine of up to $250,000, or both, if he or she willingly discloses ANY identifiable information about you or your household members.

        (1) CONTINUE, RECORDING ACCEPTABLE   **[SKIP TO K1Q01]**
        (0) CONTINUE, DO NOT RECORD   **[SKIP TO K1Q01]**

Section 1: Initial Demographics

K1Q01_INTRO **[SKIP TO K1Q01 IF NAME OF S.C. ALREADY GATHERED NAME_1-NAME_9 OR NIS INTERVIEW]**

I can continue to refer to your child as (your N month/year old) for the rest of the interview, or if you prefer, you could give me a first name or initials.

(1) CONTINUE TO USE AGE REFERENCE > GO TO K1Q01
(0) USE NAME > GO TO SELECTION1_NAME_A

SELECTION1_NAME_A   ENTER NAME/INITIALS: _____ > GO TO K1Q01

[FILL [S.C.] WITH THIS NAME FROM THIS POINT ON IN THE INTERVIEW]
(7) REFUSED > GO TO K1Q01 AND CONTINUE TO USE AGE REFERENCE

K1Q01   Is [S.C.] male or female?

(1) MALE
(2) FEMALE
(6) DON'T KNOW
(7) REFUSED

IF K1Q01 = 1, THEN ALL SUBSEQUENT GENDER FILLS = "HIS".
ELSE IF K1Q01 = 2, THEN ALL SUBSEQUENT GENDER FILLS = "HER".
ELSE, ALL SUBSEQUENT GENDER FILLS = "HIS OR HER".

K1Q02   What is your relationship to [S.C.]?

(1) MOTHER (BIOLOGICAL, STEP, FOSTER, ADOPTIVE)
(2) FATHER (BIOLOGICAL, STEP, FOSTER, ADOPTIVE)
(3) SISTER (STEP/FOSTER/HALF/ADOPTIVE)
(4) BROTHER (STEP/FOSTER/HALF/ADOPTIVE)
(5) IN-LAW OF ANY TYPE
(6) AUNT
(7) UNCLE
(8) GRANDPARENT
(9) OTHER FAMILY MEMBER
(10) OTHER NON-RELATIVE
(11) FEMALE GUARDIAN
(12) MALE GUARDIAN
(96) DON'T KNOW
(97) REFUSED

K1Q03   What is the primary language spoken in your home?
[READ AS NECESSARY]

(1) ENGLISH
(2) SPANISH
(3) ARABIC
(4) CHINESE
(5) FRENCH
(6) ITALIAN
(7) JAPANESE
(8) KOREAN
(9) POLISH
(10) RUSSIAN
(11) TAGALOG
(12) VIETNAMESE
(13) ANY OTHER LANGUAGE
(96) DON'T KNOW
(97) REFUSED

Section 2: Health and Functional Status

Subdomain 1:   **General health status**

K2Q01   In general, how would you describe [S.C.]'s health? Would you say [his/her] health is excellent, very good, good, fair, or poor?

(1) EXCELLENT
(2) VERY GOOD
(3) GOOD
(4) FAIR
(5) POOR
(6) DON'T KNOW
(7) REFUSED

K2Q01_D   **CATI INSTRUCTION (K2Q01_D):** IF AGE_NSCH < 12 MONTHS, SKIP TO K2Q02.

How would you describe the condition of [S.C.]'s teeth: excellent, very good, good, fair, or poor?

(1) EXCELLENT
(2) VERY GOOD
(3) GOOD
(4) FAIR
(5) POOR
(6) HAS NO NATURAL TEETH
(96) DON'T KNOW
(97) REFUSED

K2Q02   How tall is [S.C.] now?

IF RESPONDENT SAYS 'DON'T KNOW', PROBE FOR BEST ESTIMATE.

K2Q02_FEET   ___ FEET **[RANGE: 0-8, 96, 97]**
K2Q02_INCHES   ___ ___ INCHES
K2Q02_CENTIMETERS ___ ___ ___CENTIMETERS
(96) DON'T KNOW
(97) REFUSED

HELP SCREEN (K2Q02): IF RESPONDENT SAYS "DON'T KNOW", PROBE FOR BEST ESTIMATE.

K2Q03 How much does [S.C.] weigh now? ___ ___ ___

(996) DON'T KNOW
(997) REFUSED

ENTER WEIGHT

IF RESPONDENT SAYS 'DON'T KNOW', PROBE FOR BEST ESTIMATE.

K2Q03_UNIT
   ___ POUNDS **[RANGE CHECK: 001-500, 96, 97]**
   ___ KILOGRAMS **[RANGE CHECK: 001-230, 996, 997]**

HELP SCREEN (K2Q03): IF RESPONDENT SAYS "DON'T KNOW", PROBE FOR BEST ESTIMATE.

K2Q04 **CATI INSTRUCTION (K2Q04):** IF AGE_NSCH ≥ 72 MONTHS (6 YEARS) OLD, SKIP TO K2Q10_INTRO.

What was [S.C.]'s birth weight?

IF RESPONDENT SAYS 'DON'T KNOW', PROBE FOR BEST ESTIMATE.

K2Q04_POUNDS ___ ___ POUNDS **[RANGE CHECK: 01-15, 96, 97]**
K2Q04_OUNCES ___ ___ OUNCES **[RANGE CHECK: 00-15, 96, 97]**
K2Q04_GRAMS ___ ___ ___ ____ GRAMS **[RANGE CHECK: 500-5485, 9996, 9997]**
(96) DON'T KNOW
(97) REFUSED

INTERVIEWER INSTRUCTION: FOR POUNDS AND OUNCES, ENTER 0 IF R ANSWERS IN GRAMS

Subdomain 2:   **Presence of a special health care need**

QUESTIONS K2Q10-K2Q23 ARE THE CHILDREN WITH SPECIAL HEALTH CARE NEEDS SCREENER. SEE BETHELL ET AL. (2002, *AMBULATORY PEDIATRICS*, VOLUME 2) FOR FURTHER INFORMATION.

K2Q10_INTRO   The next questions are about any kind of health problems, concerns, or conditions that may affect [S.C.]'s behavior, learning, growth, or physical development.

K2Q10   Does [S.C.] currently need or use <u>medicine prescribed by a doctor</u>, other than vitamins?

(1) YES	**[SKIP TO K2Q11]**
(0) NO	**[SKIP TO K2Q13]**
(6) DON'T KNOW	**[SKIP TO K2Q13]**
(7) REFUSED	**[SKIP TO K2Q13]**

HELP SCREEN (K2Q10): This only applies to medications prescribed by a doctor. Over-the-counter medications such as cold or headache medication, or other vitamins, minerals, or supplements purchased without a prescription are not included.

K2Q11   Is [his/her] need for prescription medicine because of ANY medical, behavioral, or other health condition?

(1) YES	**[SKIP TO K2Q12]**
(0) NO	**[SKIP TO K2Q12A]**
(6) DON'T KNOW	**[SKIP TO K2Q12A]**
(7) REFUSED	**[SKIP TO K2Q12A]**

K2Q12   Is this a condition that has lasted or is expected to last 12 months or longer?

(1) YES	**[SKIP TO K2Q13]**
(0) NO	**[SKIP TO K2Q13]**
(6) DON'T KNOW	**[SKIP TO K2Q13]**
(7) REFUSED	**[SKIP TO K2Q13]**

K2Q12A.   Has [S.C.]'s need for prescription medication lasted or is it expected to last 12 months or longer?

(1) YES	**[SKIP TO K2Q13]**
(0) NO	**[SKIP TO K2Q13]**
(6) DON'T KNOW	**[SKIP TO K2Q13]**
(7) REFUSED	**[SKIP TO K2Q13]**

K2Q13   Does [S.C.] need or use more <u>medical care, mental health, or educational services</u> than is usual for most children of the same age?

(1) YES	**[SKIP TO K2Q14]**
(0) NO	**[SKIP TO K2Q16]**
(6) DON'T KNOW	**[SKIP TO K2Q16]**
(7) REFUSED	**[SKIP TO K2Q16]**

HELP SCREEN (K2Q13): The child requires more medical care, the use of more mental health services, or the use of more educational services than most children the same age.

K2Q14   Is [his/her] need for medical care, mental health or educational services because of ANY medical, behavioral, or other health condition?

           (1) YES   **[SKIP TO K2Q15]**
           (0) NO   **[SKIP TO K2Q15A]**
           (6) DON'T KNOW   **[SKIP TO K2Q15A]**
           (7) REFUSED   **[SKIP TO K2Q15A]**

K2Q15   Is this a condition that has lasted or is expected to last 12 months or longer?

           (1) YES   **[SKIP TO K2Q16]**
           (0) NO   **[SKIP TO K2Q16]**
           (6) DON'T KNOW   **[SKIP TO K2Q16]**
           (7) REFUSED   **[SKIP TO K2Q16]**

K2Q15A.   Has [S.C.]'s need for medical care, mental health, or educational services lasted or is it expected to last 12 months or longer?

           (1) YES   **[SKIP TO K2Q16]**
           (0) NO   **[SKIP TO K2Q16]**
           (7) DON'T KNOW   **[SKIP TO K2Q16]**
           (9) REFUSED   **[SKIP TO K2Q16]**

K2Q16   Is [S.C.] <u>limited or prevented</u> in any way in [his/her] ability to do the things most children of the same age can do?

           (1) YES   **[SKIP TO K2Q17]**
           (0) NO   **[SKIP TO K2Q19]**
           (6) DON'T KNOW   **[SKIP TO K2Q19]**
           (7) REFUSED   **[SKIP TO K2Q19]**

           HELP SCREEN (K2Q16): A child is limited or prevented when there are things the child can't do as much or can't do at all that most children the same age can.

K2Q17   Is [his/her] limitation in abilities because of ANY medical, behavioral, or other health condition?

           (1) YES   **[SKIP TO K2Q18]**
           (0) NO   **[SKIP TO K2Q18A]**
           (6) DON'T KNOW   **[SKIP TO K2Q18A]**
           (7) REFUSED   **[SKIP TO K2Q18A]**

K2Q18   Is this a condition that has lasted or is expected to last 12 months or longer?

           (1) YES   **[SKIP TO K2Q19]**
           (0) NO   **[SKIP TO K2Q19]**
           (6) DON'T KNOW   **[SKIP TO K2Q19]**
           (7) REFUSED   **[SKIP TO K2Q19]**

K2Q18A   Has (S.C)'s limitation in abilities lasted or is it expected to last 12 months or longer?

           (1) YES   **[SKIP TO K2Q19]**
           (0) NO   **[SKIP TO K2Q19]**
           (6) DON'T KNOW   **[SKIP TO K2Q19]**
           (7) REFUSED   **[SKIP TO K2Q19]**

K2Q19   Does [S.C.] need or get <u>special therapy</u>, such as physical, occupational, or speech therapy?

                (1) YES   **[SKIP TO K2Q20]**
                (0) NO   **[SKIP TO K2Q22]**
                (6) DON'T KNOW   **[SKIP TO K2Q22]**
                (7) REFUSED   **[SKIP TO K2Q22]**

                HELP SCREEN (K2Q19): Special therapy includes physical, occupational, or speech therapy. Do not include psychological therapy.

K2Q20   Is [his/her] need for special therapy because of ANY medical, behavioral, or other health condition?

                (1) YES   **[SKIP TO K2Q21]**
                (0) NO   **[SKIP TO K2Q21A]**
                (6) DON'T KNOW   **[SKIP TO K2Q21A]**
                (7) REFUSED   **[SKIP TO K2Q21A]**

K2Q21   Is this a condition that has lasted or is expected to last 12 months or longer?

                (1) YES   **[SKIP TO K2Q22]**
                (0) NO   **[SKIP TO K2Q22]**
                (6) DON'T KNOW   **[SKIP TO K2Q22]**
                (7) REFUSED   **[SKIP TO K2Q22]**

K2Q21A   Has [S.C.]'s need for special therapy lasted or is it expected to last 12 months or longer?

                (1) YES   **[SKIP TO K2Q22]**
                (0) NO   **[SKIP TO K2Q22]**
                (6) DON'T KNOW   **[SKIP TO K2Q22]**
                (7) REFUSED   **[SKIP TO K2Q22]**

K2Q22   Does [S.C.] have any kind of emotional, developmental, or behavioral problem for which [he/she] needs treatment or counseling?

                (1) YES   **[SKIP TO K2Q23]**
                (0) NO   **[SKIP TO CATI INSTRUCTION BELOW]**
                (6) DON'T KNOW   **[SKIP TO CATI INSTRUCTION BELOW]**
                (7) REFUSED   **[SKIP TO CATI INSTRUCTION BELOW]**

                HELP SCREEN (K2Q22): These are remedies, therapy, or guidance a child may receive for his/her emotional, developmental, or behavioral problem.

K2Q23   Has [his/her] emotional, developmental or behavioral problem lasted or is it expected to last 12 months or longer?

                (1) YES   **[SKIP TO CATI INSTRUCTION BELOW]**
                (0) NO   **[SKIP TO CATI INSTRUCTION BELOW]**
                (6) DON'T KNOW   **[SKIP TO CATI INSTRUCTION BELOW]**
                (7) REFUSED   **[SKIP TO CATI INSTRUCTION BELOW]**

CATI INSTRUCTION (SECTION 2, SUBDOMAIN 2): CREATE CATI SYSTEM FLAG (CSHCN) INDICATING WHETHER THE CHILD HAS A SPECIAL HEALTH CARE NEED. THIS FLAG SHOULD BE POSITIVE (CSHCN = 1) IF K2Q12 = 1, K2Q15 = 1, K2Q18 = 1, K2Q21 = 1, OR K2Q23 = 1.

Subdomain 3:   Common acute and chronic conditions

K2Q30A   <u>**CATI INSTRUCTION (K2Q30A):**</u> IF S.C. < 36 MONTHS, SKIP TO K2Q31_INTRO.

Has a doctor, health care provider, teacher, or school official ever told you [S.C.] had a learning disability?

(1) YES	**[SKIP TO K2Q30B]**
(0) NO	**[SKIP TO K2Q31_INTRO]**
(6) DON'T KNOW	**[SKIP TO K2Q31_INTRO]**
(7) REFUSED	**[SKIP TO K2Q31_INTRO]**

K2Q30B   Does [S.C.] currently have a learning disability?

(1) YES	**[SKIP TO K2Q30C]**
(0) NO	**[SKIP TO K2Q31_INTRO]**
(6) DON'T KNOW	**[SKIP TO K2Q31_INTRO]**
(7) REFUSED	**[SKIP TO K2Q31_INTRO]**

K2Q30C   Would you describe (his/her) learning disability as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REFUSED

K2Q30D   Because of (his/her) learning disability, does [S.C.] need or receive any special arrangements, adaptations, or accommodations in school (or day care)?

(1) YES	**[SKIP TO K2Q31_INTRO]**
(0) NO	**[SKIP TO K2Q31_INTRO]**
(6) DON'T KNOW	**[SKIP TO K2Q31_INTRO]**
(7) REFUSED	**[SKIP TO K2Q31_INTRO]**

HELP SCREEN (K2Q30D): Include modifications of class schedule, curriculum, and gym classes; professional tutors, resource rooms, special lunches, and special transportation; special equipment and adaptations that make the classroom accessible for the child's use.

K2Q31_INTRO Now I am going to read you a list of conditions. For each condition, please tell me if a doctor or other health care provider ever told you that [S.C.] had the condition, even if (he/she) does not have the condition now.

HELP SCREEN (K2Q31-K2Q44): IF THE RESPONDENT HAS NEVER HEARD OF THE MEDICAL CONDITION OR DOES NOT KNOW WHAT THE CONDITION IS, THEN A DOCTOR OR OTHER HEALTH CARE PROVIDER PROBABLY HAS NOT TOLD THE RESPONDENT THAT THE S.C. HAS THE CONDITION. IF A DOCTOR OR OTHER HEALTH CARE PROVIDER HAS NOT TOLD THE RESPONDENT THAT THE S.C. HAS THE CONDITION, BUT THE RESPONDENT INSISTS THAT THE S.C. HAS THE CONDITION, WE STILL NEED TO CODE THE ANSWER AS "NO."

CATI INSTRUCTION (K2Q31A-K2Q46A): **If** AGE_NSCH **< 24 MONTHS SKIP TO K2Q40A**

SCREENS FOR THESE QUESTIONS SHOULD INCLUDE THE FOLLOWING LANGUAGE:

(READ IF NECESSARY: Has a doctor or other health care provider ever told you that [S.C.] had…)

ANSWER CHOICES ARE:
(1) YES   (0) NO   (6) DON'T KNOW   (7) REFUSED

K2Q31A   Attention Deficit Disorder or Attention Deficit Hyperactive Disorder, that is, ADD or ADHD?

HELP SCREEN (K2Q31A): A child with Attention Deficit Disorder or Attention Deficit Hyperactive Disorder has problems paying attention or sitting still. It may cause the child to be easily distracted.

K2Q32A   Depression?

HELP SCREEN (K2Q32A): Depression is an illness that involves the body, mood, and thoughts. It is marked by persistent sadness or an anxious or empty mood. It affects how a person feels, and the way a person eats, sleeps, and functions.

K2Q33A   Anxiety problems?

HELP SCREEN (K2Q33A): Anxiety is a feeling of constant worrying. Children with severe anxiety problems may be diagnosed as having anxiety disorders. Anxiety disorders include panic disorder, obsessive-compulsive disorder, post-traumatic stress disorder, and phobias.

K2Q34A   Behavioral or conduct problems, such as oppositional defiant disorder or conduct disorder?

HELP SCREEN (K2Q34A): Oppositional defiant disorder is an ongoing pattern of defiant and hostile behavior that interferes with a child's life and daily activities.

K2Q35A   Autism, Asperger's Disorder, pervasive developmental disorder, or other autism spectrum disorder?

HELP SCREEN (K2Q35A): Children with autism have delays in language, communication, and social skills. Children with Asperger's disorder have impaired social skills but do not have speech or language delays. They often have an intense interest in a single subject or topic. Children with pervasive developmental disorder have severe and persistent delays in language, communication, and social skills.

K2Q36A   Any developmental delay that affects (his/her) ability to learn?

HELP SCREEN (K2Q36A): A child with a developmental delay does not achieve certain skills as quickly other children of the same age. A developmental delay is a major delay in motor, language, social, or thinking skills.

K2Q37A   Stuttering, stammering, or other speech problems?

K2Q40A   Asthma?

HELP SCREEN (K2Q40A): Asthma is a disease that causes swelling in the tubes that carry air to the lungs. Sometimes asthma blocks or restricts the airways making it difficult to breathe.

K2Q41A Diabetes?

     HELP SCREEN (K2Q41A): Diabetes is a disease in which the body does not properly make or use insulin.

K2Q38A Tourette Syndrome?

     HELP SCREEN (K2Q38A): Tourette Syndrome is a disorder that causes frequent sudden movements or sounds.

K2Q42A Epilepsy or seizure disorder?

     HELP SCREEN (K2Q42A): Epilepsy is a brain disease that involves recurrent seizures.

K2Q43A Hearing problems?

K2Q44A Vision problems that cannot be corrected with glasses or contact lenses?

K2Q45A Bone, joint, or muscle problems?

K2Q46A A brain injury or concussion?

     HELP SCREEN (K2Q46A): A concussion is an injury of the brain that causes a brief disruption in brain function. BRAIN TUMORS SHOULD NOT BE CONSIDERED BRAIN INJURIES.

K2Q31B **CATI INSTRUCTION (K2Q31B)**: IF K2Q31A IS NOT "1," THEN SKIP TO K2Q32B.

     Does [S.C.] currently have ADD or ADHD?

     (1) YES
     (0) NO   **[SKIP TO K2Q32B]**
     (6) DON'T KNOW **[SKIP TO K2Q32B]**
     (7) REF   **[SKIP TO K2Q32B]**

K2Q31C Would you describe (his/her) ADD or ADHD as mild, moderate, or severe?

     (1) MILD
     (2) MODERATE
     (3) SEVERE
     (6) DON'T KNOW
     (7) REF

K2Q31D Is [S.C.] currently taking medication for ADD or ADHD?

     (1) YES
     (0) NO
     (6) DON'T KNOW
     (7) REF

K2Q32B **CATI INSTRUCTION (K2Q32B)**: IF K2Q32A IS NOT "1," THEN SKIP TO K2Q33B.

Does [S.C.] currently have depression?

(1) YES
(0) NO **[SKIP TO K2Q33B]**
(6) DON'T KNOW **[SKIP TO K2Q33B]**
(7) REF **[SKIP TO K2Q33B]**

K2Q32C Would you describe (his/her) depression as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q33B **CATI INSTRUCTION (K2Q33B)**: IF K2Q33A IS NOT "1," THEN SKIP TO K2Q34B.

Does [S.C.] currently have anxiety problems?

(1) YES
(0) NO **[SKIP TO K2Q34B]**
(6) DON'T KNOW **[SKIP TO K2Q34B]**
(7) REF **[SKIP TO K2Q34B]**

K2Q33C Would you describe (his/her) anxiety problems as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q34B **CATI INSTRUCTION (K2Q34B)**: IF K2Q34A IS NOT "1," THEN SKIP TO K2Q35B.

Does [S.C.] currently have behavioral or conduct problems?

(1) YES
(0) NO **[SKIP TO K2Q35B]**
(6) DON'T KNOW **[SKIP TO K2Q35B]**
(7) REF **[SKIP TO K2Q35B]**

K2Q34C Would you describe (his/her) behavioral or conduct problems as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q35B   **CATI INSTRUCTION (K2Q35B)**: IF K2Q35A IS NOT "1," THEN SKIP TO K2Q36B.

Does [S.C.] currently have Autism or ASD?

(1) YES
(0) NO   **[SKIP TO K2Q36B]**
(6) DON'T KNOW   **[SKIP TO K2Q36B]**
(7) REF   **[SKIP TO K2Q36B]**

K2Q35C   Would you describe (his/her) Autism or ASD as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q36B   **CATI INSTRUCTION (K2Q36B)**: IF K2Q36A IS NOT "1," THEN SKIP TO K2Q37B.

Does [S.C.] currently have developmental delay problems?

(1) YES
(0) NO   **[SKIP TO K2Q37B]**
(6) DON'T KNOW   **[SKIP TO K2Q37B]**
(7) REF   **[SKIP TO K2Q37B]**

K2Q36C   Would you describe (his/her) developmental delay problems as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q37B   **CATI INSTRUCTION (K2Q37B)**: IF K2Q37A IS NOT "1," THEN SKIP TO K2Q38B.

Does [S.C.] currently have speech problems?

(1) YES
(0) NO   **[SKIP TO K2Q38B]**
(6) DON'T KNOW   **[SKIP TO K2Q38B]**
(7) REF   **[SKIP TO K2Q38B]**

K2Q37C   Would you describe (his/her) speech problems as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q40B **<u>CATI INSTRUCTION (K2Q40B)</u>**: IF K2Q40A IS NOT "1," THEN SKIP TO K2Q41B.

Does [S.C.] currently have asthma?

(1) YES
(0) NO   **[SKIP TO K2Q41B]**
(6) DON'T KNOW **[SKIP TO K2Q41B]**
(7) REF   **[SKIP TO K2Q41B]**

K2Q40C Would you describe (his/her) asthma as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q41B **<u>CATI INSTRUCTION (K2Q41B)</u>**: IF K2Q41A IS NOT "1," THEN SKIP TO K2Q42B.

Does [S.C.] currently have diabetes?

(1) YES
(0) NO   **[SKIP TO K2Q42B]**
(6) DON'T KNOW **[SKIP TO K2Q42B]**
(7) REF   **[SKIP TO K2Q42B]**

K2Q41C Would you describe (his/her) diabetes as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q38B **<u>CATI INSTRUCTION (K2Q38B)</u>**: IF K2Q38A IS NOT "1," THEN SKIP TO K2Q40B.

Does [S.C.] currently have Tourette Syndrome?

(1) YES
(0) NO   **[SKIP TO K2Q40B]**
(6) DON'T KNOW **[SKIP TO K2Q40B]**
(7) REF   **[SKIP TO K2Q40B]**

K2Q38C Would you describe (his/her) Tourette Syndrome as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q42B   **CATI INSTRUCTION (K2Q42B)**: IF K2Q42A IS NOT "1," THEN SKIP TO K2Q43B.

Does [S.C.] currently have epilepsy or seizure disorder?

(1) YES
(0) NO   **[SKIP TO K2Q43B]**
(6) DON'T KNOW   **[SKIP TO K2Q43B]**
(7) REF   **[SKIP TO K2Q43B]**

K2Q42C   Would you describe (his/her) epilepsy or seizure disorder as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q43B   **CATI INSTRUCTION (K2Q43B)**: IF K2Q43A IS NOT "1," THEN SKIP TO K2Q44B.

Does [S.C.] currently have hearing problems?

(1) YES
(0) NO   **[SKIP TO K2Q44B]**
(6) DON'T KNOW   **[SKIP TO K2Q44B]**
(7) REF   **[SKIP TO K2Q44B]**

K2Q43C   Would you describe (his/her) hearing problems as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q44B   **CATI INSTRUCTION (K2Q44B)**: IF K2Q44A IS NOT "1," THEN SKIP TO K2Q45B.

Does [S.C.] currently have vision problems?

(1) YES
(0) NO   **[SKIP TO K2Q45B]**
(6) DON'T KNOW   **[SKIP TO K2Q45B]**
(7) REF   **[SKIP TO K2Q45B]**

K2Q44C   Would you describe (his/her) vision problems as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q45B   **CATI INSTRUCTION (K2Q45B)**: IF K2Q45A IS NOT "1," THEN SKIP TO K2Q46B.

Does [S.C.] currently have bone, joint, or muscle problems?

(1) YES
(0) NO   **[SKIP TO K2Q46B]**
(6) DON'T KNOW   **[SKIP TO K2Q46B]**
(7) REF   **[SKIP TO K2Q46B]**

K2Q45C   Would you describe (his/her) bone, joint, or muscle problems as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q45D   Are (S.C)'s current problems related to (his/her) bones, (his/her) joints, or (his/her) muscles?
[MARK ALL THAT APPLY]

(1) BONES
(2) JOINTS
(3) MUSCLES
(6) DON'T KNOW
(7) REF

K2Q46B   **CATI INSTRUCTION (K2Q46B)**: IF K2Q46A IS NOT "1," THEN SKIP TO K2Q47_INTRO.
Does [S.C.] currently have a brain injury?

(1) YES
(0) NO   **[SKIP TO K2Q47_INTRO]**
(6) DON'T KNOW   **[SKIP TO K2Q47_INTRO]**
(7) REF   **[SKIP TO K2Q47_INTRO]**

K2Q46C   Would you describe (his/her) brain injury as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2QTEST1   **CATI INSTRUCTION (K2QTEST1): IF SAMPLE CHILD DOES NOT HAVE SPECIAL HEALTH CARE NEEDS AND K2Q31B = 1 AND K2Q31D = 2;**

OR IF SAMPLE CHILD DOES NOT HAVE SPECIAL HEALTH CARE NEEDS AND ANY (K2Q32B, K2Q33B, K2Q34B, K2Q35B, K2Q36B, K2Q37B, K2Q38B, K2Q40B, K2Q41B, K2Q42B, K2Q43B, K2Q44B, K2Q45B, K2Q46B) = 1,

THEN ASK K2QTEST1.

ELSE, SKIP TO K2Q47_INTRO.

During the past 12 months, how many times did [S.C.] see a doctor or other health care provider because of (his/her) [FILL CONDITION NAMES]?

___ ___ ___ TIMES   **[IF ≥ 1, SKIP TO K2Q47_INTRO]**
(000) ZERO   **[SKIP TO K2QTEST2]**
(996) DON'T KNOW   **[SKIP TO K2Q47_INTRO]**
(997) REFUSED   **[SKIP TO K2Q47_INTRO]**

FOR CONDITION NAMES FILL,
IF K2Q31B = 1 AND K2Q31D = 2, FILL "ADD or ADHD, "
IF K2Q32B = 1, FILL "depression, "
IF K2Q33B = 1, FILL "anxiety problems, "
IF K2Q34B = 1, FILL "behavioral or conduct problems, "
IF K2Q35B = 1, FILL "autism or ASD, "
IF K2Q36B = 1, FILL "developmental delay, "
IF K2Q37B = 1, FILL "speech problems, "
IF K2Q38B = 1, FILL "Tourette Syndrome, "
IF K2Q40B = 1, FILL "asthma, "
IF K2Q41B = 1, FILL "diabetes, "
IF K2Q42B = 1, FILL "epilepsy or seizure disorder, "
IF K2Q43B = 1, FILL "hearing problems, "
IF K2Q44B = 1, FILL "vision problems, "
IF K2Q45D = 1, FILL "bone problems, "
IF K2Q45D = 2, FILL "joint problems, "
IF K2Q45D = 3, FILL "muscle problems, "
IF K2Q45D = 7 or 9, FILL "bone, joint, or muscle problems, "
IF K2Q46B = 1, FILL "brain injury, "

K2QTEST2   **CATI INSTRUCTION (K2QTEST2): IF THE ANSWER TO K2QTEST1 IS ZERO, THEN ASK K2QTEST2. ELSE, SKIP TO K2Q47_INTRO.**

Why didn't [S.C.] see a doctor or other health care provider regarding (his/her) [FILL CONDITION NAMES]? [MARK ALL THAT APPLY]

(1) NO DOCTOR VISIT NEEDED
(2) CONDITION IS UNDER CONTROL
(3) CONDITION IS NOT SEVERE
(4) CARE COSTS TOO MUCH
(5) NO INSURANCE
(6) HEALTH PLAN PROBLEM
(7) CAN'T FIND PROVIDER WHO ACCEPTS CHILD'S INSURANCE
(8) NO REFERRAL
(9) NOT AVAILABLE IN AREA/TRANSPORT PROBLEMS
(10) DID NOT KNOW WHERE TO GO FOR TREATMENT
(11) PROVIDER DID NOT KNOW HOW TO TREAT OR PROVIDE CARE
(12) DISSATISFACTION WITH PROVIDER
(13) NOT CONVENIENT TIMES/COULD NOT GET APPOINTMENT
(14) DID NOT GO TO APPT/NEGLECTED APPT/FORGOT APPT
(15) CHILD REFUSED TO GO
(16) OTHER
(96) DON'T KNOW
(97) REFUSED

AFTER K2QTEST2, ALL SKIP TO K2Q47_INTRO.

K2Q47_INTRO   **CATI INSTRUCTION (K2Q47_INTRO):**

IF AGE_NSCH IS LESS THAN 12 MONTHS OLD AND NO K2Q31A-K2Q46A = 1 THEN SKIP TO K2Q47A.

IF AGE_NSCH IS EQUAL TO 12 MONTHS OF AGE OR OLDER, READ:

The next set of questions asks about conditions [S.C.] may have had over the past 12 months. For each condition, please tell me if a doctor or other health care provider told you that [S.C.] had the condition at some time during the past 12 months, even if (he/she) does not have the condition now.

IF AGE_NSCH IS LESS THAN 12 MONTHS OLD AND ANY K2Q31A-K2Q46A = 1, READ:

Now I am going to read you another list of conditions. Again for each condition, please tell me if a doctor or other health care provider ever told you that [S.C.] had the condition, even if (he/she) does not have the condition now.

CATI INSTRUCTION (K2Q47A-K2Q51A):

SCREENS FOR THESE QUESTIONS SHOULD INCLUDE THE FOLLOWING LANGUAGE FOR CHILDREN 12 MONTHS OF AGE OR OLDER:

(READ IF NECESSARY: During the past 12 months, have you been told by a doctor or other health care provider that (he/she) had…)

SCREENS FOR THESE QUESTIONS SHOULD INCLUDE THE FOLLOWING LANGUAGE FOR CHILDREN LESS THAN 12 MONTHS OF AGE:

(READ IF NECESSARY: Has a doctor or other health care provider ever told you that [S.C.] had…)

ANSWER CHOICES ARE:
(1) YES   (0) NO   (6) DON'T KNOW   (7) REFUSED

K2Q47A   Hay fever or any kind of respiratory allergy?

HELP SCREEN (K2Q47A): Hay fever is an allergic reaction to pollen that causes sneezing, runny nose, and itching of the eyes.

K2Q48A   Any kind of food or digestive allergy?

K2Q49A   Eczema or any kind of skin allergy?

HELP SCREEN (K2Q49A): Eczema is a skin condition characterized by redness, itching, and dry, flaky, scaly skin.

K2Q50A   **CATI INSTRUCTION (K2Q50A):** IF AGE_NSCH < 72 MONTHS, SKIP TO K2Q51A

Migraine headaches?

HELP SCREEN (K2Q50A): Migraine headaches are recurrent severe headaches, often along with nausea and vomiting.

K2Q51A   Three or more ear infections?

K2Q47C   **CATI INSTRUCTION (K2Q47C)**: IF K2Q47A IS NOT "1," THEN SKIP TO K2Q48C.

Would you describe (his/her) respiratory allergy as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q48C   **CATI INSTRUCTION (K2Q47C)**: IF K2Q48A IS NOT "1," THEN SKIP TO K2Q49C.

Would you describe (his/her) food or digestive allergy as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q49C   **CATI INSTRUCTION (K2Q47C)**: IF K2Q49A IS NOT "1," THEN SKIP TO K2Q50C.

Would you describe (his/her) eczema or skin allergy as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q50C   **CATI INSTRUCTION (K2Q47C)**: IF K2Q50A IS NOT "1," THEN SKIP TO K2Q51C.

Would you describe (his/her) headaches as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q51C   **CATI INSTRUCTION (K2Q47C)**: IF K2Q51A IS NOT "1," THEN SKIP TO K2Q52_INTRO.

Would you describe (his/her) ear infections as mild, moderate, or severe?

(1) MILD
(2) MODERATE
(3) SEVERE
(6) DON'T KNOW
(7) REF

K2Q52_INTRO **CATI INSTRUCTION (K2Q52_INTRO):** IF AGE_NSCH < 12 MONTHS, SKIP TO K2Q56_INTRO.

I have just a few more questions about health conditions that [S.C.] may have, and then we'll move on to other topics. To the best of your knowledge, has (he/she) had any of the following conditions within the past 6 months?

CATI INSTRUCTION (K2Q52 – K2Q56G):

SCREENS FOR THESE QUESTIONS SHOULD INCLUDE THE FOLLOWING LANGUAGE:

(READ IF NECESSARY: To the best of your knowledge, did [S.C.] have … within the past 6 months?)

ANSWER CHOICES ARE:
(1) YES   (0) NO   (6) DON'T KNOW   (7) REFUSED

K2Q52   A toothache?

K2Q53   Decayed teeth or cavities?

K2Q54   Broken teeth?

K2Q55   Bleeding gums?

Subdomain 4:   Limits on participation in activities

K2Q60_INTRO **CATI INSTRUCTION (K2Q60_INTRO):** IF SAMPLE CHILD DOES NOT HAVE SPECIAL HEALTH CARE NEEDS (CSHCN=0), SKIP TO K2Q81. (i.e., IF CSHCN = 0, SKIP TO K2Q81)

Do (S.C)'s medical, behavioral or other health conditions interfere with (his/her) ability to do any of the following things?

CATI INSTRUCTION (K2Q60A – K2Q61D): EACH SCREEN SHOULD INCLUDE THE FOLLOWING:

(READ IF NECESSARY: Do [S.C.]'s medical, behavioral, or other health conditions interfere with (his/her) ability to…)

K2Q60A   **CATI INSTRUCTION (K2Q60A):** IF AGE_NSCH <12 months, SKIP TO K2Q60B. IF AGE_NSCH_Y IS 6 YEARS OF AGE OR OLDER, SKIP TO K2Q61A. ELSE READ

Participate in play with other children?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K2Q60B   Go on outings, such as to the park, library, zoo, shopping, church, restaurants, or family gatherings?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K2Q60C   **CATI INSTRUCTION (K2Q60C):** IF AGE_NSCH <36 months, SKIP TO K2Q81

Make friends?

(1) YES   **[SKIP TO K2Q81]**
(0) NO   **[SKIP TO K2Q81]**
(6) DON'T KNOW   **[SKIP TO K2Q81]**
(7) REFUSED   **[SKIP TO K2Q81]**

K2Q61A   Attend school on a regular basis?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K2Q61B   Participate in sports, clubs, or other organized activities?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K2Q61C   Make friends?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

Subdomain 5:   Immunizations

K2Q81   **CATI INSTRUCTION (K2Q81)**: IF AGE_NSCH_Y < 12 YEARS, SKIP TO K2Q90.

Has [S.C.] received a tetanus booster shot or Td or Tdap shot since (he/she) turned 11 years of age? Booster shots are given after a child completes the primary infant shots.

HELP SCREEN (K2Q81): Primary infant shots are given between birth and 6 years of age.

(1) YES
(2) NO
(3) CHILD IS UP TO DATE ON ALL SHOTS
(6) DON'T KNOW
(7) REFUSED

K2Q82   Has [S.C.] ever received a meningitis shot, sometimes called MENACTRA or MENOMUNE?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K2Q83   **CATI INSTRUCTION (K2Q83)**: IF CHILD IS MALE (K1Q01 = 1), THEN SKIP TO K2Q90.

The human papillomavirus is a common virus known to cause genital warts and some cancers, such as cervical cancer in women. A vaccine to prevent HPV infection is available and is called the cervical cancer vaccine, HPV shot, GARDASIL or CERVARIX.

Has [S.C.] ever received any HPV shots?

(1) YES   **[SKIP TO K2Q84]**
(0) NO   **[SKIP TO K2Q85]**
(3) CHILD IS UP TO DATE ON ALL SHOTS   **[SKIP TO K2Q85]**
(6) DON'T KNOW   **[SKIP TO K2Q85]**
(7) REFUSED   **[SKIP TO K2Q85]**

K2Q84   Please tell me how many HPV shots [S.C] has received.

(1) ONE
(2) TWO
(3) THREE OR MORE
(4) ALL SHOTS THAT ARE RECOMMENDED
(6) DON'T KNOW
(7) REFUSED

K2Q85   Did a doctor or health care provider recommend that [S.C.] receive HPV shots?

(1) YES
(2) NO
(3) CHILD HAS NOT BEEN TO THE DOCTOR SINCE THE VACCINE HAS BEEN APPROVED
(6) DON'T KNOW
(7) REFUSED

Section 3: Health Insurance Coverage

Subdomain 1: **Current coverage and past year coverage**

K3Q01_INTRO The next questions are about health insurance.

K3Q01 Does [S.C.] have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or government plans such as Medicaid?

(1) YES	**[SKIP TO K3Q02]**
(0) NO	**[SKIP TO K3Q04]**
(6) DON'T KNOW	**[SKIP TO K3Q02]**
(7) REFUSED	**[SKIP TO K3Q02]**

READ IF NECESSARY (K3Q01): Medicaid refers to a medical assistance program that provides health care coverage to low-income and disabled persons. The Medicaid program is a joint federal-state program that is administered by the states. HMO is Health Maintenance Organization.

K3Q02 **CATI INSTRUCTION (K3Q02):**

IF K3Q01 = 1 THEN FILL "Is that coverage". ELSE, fill "Is [he/she] insured by…]

[Is that coverage/Is [he/she] insured by] Medicaid or the State Children's Health Insurance Program, S-CHIP? In this state, the program is sometimes called [FILL MEDICAID NAME, SCHIP NAME].

(1) YES   (0) NO   (6) DON'T KNOW   (7) REFUSED

HELP SCREEN (K3Q02): S-CHIP is a type of state-sponsored health insurance coverage that a child may have. The name of the plan varies from state-to-state. CATI WILL AUTOMATICALLY FILL IN THE NAMES FOR YOU.

IF K3Q01 IN (6, 7) AND K3Q02 IN (0, 6, 7),   **[SKIP TO K3Q04]**
ELSE,   **[SKIP TO K3Q03]**

K3Q03 (IF SC > 12 MONTHS OLD "During the past 12 months", ELSE "Since [his/her] birth"), was there any time when [he/she] was not covered by ANY health insurance?

(1) YES	**[SKIP TO K3Q20]**
(0) NO	**[SKIP TO K3Q20]**
(6) DON'T KNOW	**[SKIP TO K3Q20]**
(7) REFUSED	**[SKIP TO K3Q20]**

K3Q04 (IF SC > 12 months OLD: "During the past 12 months" ELSE "Since (his/her) birth"), was there anytime when (he/she) had health care coverage?

(1) YES	**[SKIP TO K4Q01]**
(0) NO	**[SKIP TO K4Q01]**
(6) DON'T KNOW	**[SKIP TO K4Q01]**
(7) REFUSED	**[SKIP TO K4Q01]**

Subdomain 2:   Adequacy of health insurance

K3Q20   The next questions are about **[S.C.]**'s health insurance or health care plans. Does **[S.C.]**'s health insurance offer benefits or cover services that meet **(his/her)** needs? Would you say:

(1) NEVER
(2) SOMETIMES
(3) USUALLY
(4) ALWAYS
(6)   DON'T KNOW
(7)   REFUSED

K3Q22   Does **[S.C.]**'s health insurance allow **(him/her)** to see the health care providers **(he/she)** needs? Would you say:

(1) NEVER
(2) SOMETIMES
(3) USUALLY
(4) ALWAYS
(6) DON'T KNOW
(7) REFUSED

K3Q21A   Not including health insurance premiums or costs that are covered by insurance, do you pay any money for [S.C.]'s health care?

HELP SCREEN (K3Q21A): Include out-of-pocket payments for all types of health-related needs such as co-payments, dental or vision care, medications, and any kind of therapy.

(1) YES   **[SKIP TO K3Q21B]**
(0) NO   **[SKIP TO K4Q01]**
(6) DON'T KNOW   **[SKIP TO K4Q01]**
(7) REFUSED   **[SKIP TO K4Q01]**

K3Q21B   How often are these costs reasonable? Would you say sometimes, always, usually or always?

(1) NEVER
(2) SOMETIMES
(3) USUALLY
(4) ALWAYS
(5) NO OUT OF POCKET COSTS
(6)   DON'T KNOW
(7)   REFUSED

HELP SCREEN (K3Q21B): IF THE PARENT SEEMS CONFUSED BY HOW TO ANSWER, ASK: Do you have any out-of-pocket costs for your child's health care? IF YES, THEN ASK: How often are those costs reasonable?

Section 4: Health Care Access and Utilization

Subdomain 1:   Usual place for care

K4Q01   Is there a place that **[S.C.]** USUALLY goes when **(he/she)** is sick or you need advice about **(his/her)** health?

(1) YES
(2) NO   **[SKIP TO K4Q04]**
(3) THERE IS MORE THAN ONE PLACE
(6) DON'T KNOW   **[SKIP TO K4Q04]**
(7) REFUSED   **[SKIP TO K4Q04]**

K4Q02   **IF K4Q01 = 1, SAY "**What kind of place is it?**"**
                    IF K4Q01 = 3, SAY "What kind of place does **[S.C.]** go to most often?**"**
                    Is it a doctor's office, emergency room, hospital outpatient department, clinic, or some other place?

(1) DOCTOR'S OFFICE   **[SKIP TO K4Q04]**
(2) HOSPITAL EMERGENCY ROOM   **[SKIP TO K4Q04]**
(3) HOSPITAL OUTPATIENT DEPARTMENT   **[SKIP TO K4Q04]**
(4) CLINIC OR HEALTH CENTER   **[SKIP TO K4Q04]**
(5) SCHOOL (NURSE'S OFFICE, ATHLETIC TRAINER'S OFFICE, ETC)
                                                                                 [SKIP TO K4Q04]
(6) FRIEND/RELATIVE   **[SKIP TO K4Q04]**
(7) MEXICO/OTHER LOCATIONS OUT OF US   **[SKIP TO K4Q04]**
(8) SOME OTHER PLACE   **[SKIP TO K4Q03]**
(9) DOES NOT GO TO ONE PLACE MOST OFTEN   **[SKIP TO K4Q04]**
(96) DON'T KNOW   [**FILL 6 IN K4Q01 AND SKIP TO K4Q04]**
(97) REFUSED   **[FILL 7 IN K4Q01 AND SKIP TO K4Q04]**

K4Q03   READ IF NECESSARY: (IF K4Q01 = 1, READ "WHAT KIND OF PLACE IS IT?"; IF K4Q01 = 3, READ: "WHAT KIND OF PLACE DOES [S.C.] GO TO MOST OFTEN?")

RECORD VERBATIM RESPONSE_____

K4Q04   A personal doctor or nurse is a health professional who knows your child well and is familiar with your child's health history. This can be a general doctor, a pediatrician, a specialist doctor, a nurse practitioner, or a physician's assistant. Do you have one or more persons you think of as **[S.C.]**'s personal doctor or nurse?

(1) YES, ONE PERSON
(2) YES, MORE THAN ONE PERSON
(3) NO
(6) DON'T KNOW
(7) REFUSED

Subdomain 2:   Utilization of services

K4Q20   [During the past 12 months/Since [his/her] birth], how many times did [S.C.] see a doctor, nurse, or other health care provider for preventive medical care such as a physical exam or well-child checkup?

    ___ ___ ___ TIMES   **[RANGE CHECK: 0-999]**
    (996) DON'T KNOW
    (997) REFUSED

K4Q21   [During the past 12 months/Since [his/her] birth], how many times did [S.C.] see a dentist for preventive dental care, such as check-ups and dental cleanings?

    ___ ___ ___ TIMES
    (996) DON'T KNOW
    (997) REFUSED

K4Q22   **CATI INSTRUCTION (K4Q22):** IF AGE_NSCH < 24 MONTHS, SKIP TO K4Q24.

Mental health professionals include psychiatrists, psychologists, psychiatric nurses, and clinical social workers. During the past 12 months, has [S.C.] received any treatment or counseling from a mental health professional?

    (1) YES
    (0) NO
    (6) DON'T KNOW
    (7) REFUSED

K4Q23   **CATI INSTRUCTION (K4Q23):** IF K2Q31D = 1, SKIP TO K4Q24.

During the past 12 months, has [S.C.] taken any medication because of difficulties with (his/her) emotions, concentration, or behavior?

    (1) YES
    (0) NO
    (6) DON'T KNOW
    (7) REFUSED

K4Q24   Specialists are doctors like surgeons, heart doctors, allergy doctors, skin doctors, and others who specialize in one area of health care. [During the past 12 months/Since [his/her] birth], did [S.C.] see a specialist [IF K4Q22 = 1, THEN INSERT: other than a mental health professional]?

    (1) YES   **[SKIP TO K4Q26]**
    (0) NO
    (6) DON'T KNOW
    (7) REFUSED

K4Q25   [During the past 12 months/Since [his/her] birth], did you or a doctor think that [he/she] needed to see a specialist?

    (1) YES
    (0) NO   **[SKIP TO K4Q27]**
    (6) DON'T KNOW   **[SKIP TO K4Q27]**
    (7) REFUSED   **[SKIP TO K4Q27]**

K4Q26 [During the past 12 months/Since [his/her] birth], how much of a problem, if any, was it to get the care from the specialists that [S.C.] needed? Would you say it was a big problem, a small problem, or not a problem?

    (1) BIG PROBLEM
    (2) SMALL PROBLEM
    (3) NOT A PROBLEM
    (6) DON'T KNOW
    (7) REFUSED

K4Q27 Sometimes people have difficulty getting health care when they need it. By health care, I mean medical care as well as other kinds of care like dental care and mental health services. [During the past 12 months/Since [his/her] birth], was there any time when [S.C.] needed health care but it was delayed or not received?

    (1) YES
    (0) NO   **[SKIP TO K5Q10]**
    (6) DON'T KNOW   **[SKIP TO K5Q10]**
    (7) REFUSED   **[SKIP TO K5Q10]**

K4Q28 What type of care was delayed or not received? Was it medical care, dental care, mental health services, or something else? **[MARK ALL THAT APPLY]**

    (1) MEDICAL CARE
    (2) DENTAL CARE
    (3) MENTAL HEALTH SERVICES
    (4) SOMETHING ELSE
    (6) DON'T KNOW
    (7) REFUSED

Section 5: Medical Home

Subdomain 1: **Referrals**

K5Q10 **[IF** AGE_NSCH **>= 12 MONTHS OLD, "During the past 12 months", ELSE "Since (his/her) birth"],** did **[S.C.]** need a referral to see any doctors or receive any services?

(1) YES
(0) NO   **[SKIP TO K5Q20]**
(6) DON'T KNOW   **[SKIP TO K5Q20]**
(7) REFUSED   **[SKIP TO K5Q20]**

K5Q11 Was getting referrals a big problem, a small problem, or not a problem?

(1) BIG PROBLEM
(2) SMALL PROBLEM
(3) NOT A PROBLEM
(6) DON'T KNOW
(7) REFUSED

Subdomain 2: **Care coordination**

CATI INSTRUCTION: Sum up the number of services from Section 4, Subdomain 2

DEFINE VARIABLE NUMB_SERVICES = 0.
IF K4Q20 ≥ 1, NUMB_SERVICES = NUMB_SERVICES + 1
IF K4Q21 ≥ 1, NUMB_SERVICES = NUMB_SERVICES + 1
IF K4Q22 = 1, NUMB_SERVICES = NUMB_SERVICES + 1
IF K4Q24 = 1,   NUMB_SERVICES = NUMB_SERVICES + 1
IF K4Q25 = 1, NUMB_SERVICES = NUMB_SERVICES + 1

E.G. If K4Q20=1, K4Q21=2, and K4Q24=1, then NUMB_SERVICES=3

K5Q20 **CATI INSTRUCTION (K5Q20):** IF NUMB_SERVICES IS < 2, THEN SKIP TO K5Q31.

Does anyone help you arrange or coordinate **[S.C.]**'s care among the different doctors or services that **(he/she)** uses?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

READ IF NECESSARY: By "arrange or coordinate," I mean: Is there anyone who helps you make sure that [S.C.] gets all the health care and services (he/she) needs, that health care providers share information, and that these services fit together and are paid for in a way that works for you?

READ IF NECESSARY: Anyone means anyone.

K5Q21   [IF AGE_NSCH >= 12 MONTHS OLD, "During the past 12 months", ELSE "since (his/her) birth"], have you felt that you could have used extra help arranging or coordinating **[S.C.]**'s care among the different health care providers or services?

    (1) YES
    (0) NO   **[SKIP TO K5Q30]**
    (6) DON'T KNOW   **[SKIP TO K5Q30]**
    (7) REFUSED   **[SKIP TO K5Q30]**

K5Q22   [IF AGE_NSCH >= 12 MONTHS OLD, "During the past 12 months", ELSE "since (his/her) birth"], how often did you get as much help as you wanted with arranging or coordinating **[S.C.]**'s care? Would you say never, sometimes, or usually?

    (1)   NEVER
    (2)   SOMETIMES
    (3)   USUALLY
    (6)   DON'T KNOW
    (7)   REFUSED

Subdomain 3:   Provider communication

K5Q30   Overall, are you very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied with the communication among **[S.C.]**'s doctors and other health care providers?

    (1) VERY SATISFIED
    (2) SOMEWHAT SATISFIED
    (3) SOMEWHAT DISSATISFIED
    (4) VERY DISSATISFIED
    (5) NO COMMUNICATION NEEDED OR WANTED
    (6) DON'T KNOW
    (7) REFUSED

K5Q31   **CATI INSTRUCTION (K5Q31)**: IF NUMB_SERVICES = 0 THEN SKIP TO K5Q45.

Do **[S.C.]**'s doctors or other health care providers need to communicate with **(his/her)**

[IF AGE_NSCH < 36 MONTHS, INSERT: child care providers or early intervention program?]

[IF AGE_NSCH ≥ 36 MONTHS AND < 72 MONTHS, INSERT: child care providers, school, or special education program?]

[IF AGE_NSCH ≥72 MONTHS AND CHILD DOES NOT HAVE SPECIAL HEALTH CARE NEEDS, INSERT: school or special education program?]

[IF AGE_NSCH ≥ 72 MONTHS AND < 144 MONTHS AND CHILD DOES HAVE SPECIAL HEALTH CARE NEEDS, INSERT: school or special education program?]

[IF AGE_NSCH ≥ 144 MONTHS AND CHILD DOES HAVE SPECIAL HEALTH CARE NEEDS, INSERT: school, special education program, or vocational education program?]

    (1) YES
    (0) NO   **[SKIP TO K5Q40]**
    (6) DON'T KNOW   **[SKIP TO K5Q40]**
    (7) REFUSED   **[SKIP TO K5Q40]**

K5Q32   Overall, are you very satisfied, somewhat satisfied, somewhat dissatisfied, or very dissatisfied with that communication?

(1) VERY SATISFIED
(2) SOMEWHAT SATISFIED
(3) SOMEWHAT DISSATISFIED
(4) VERY DISSATISFIED
(5) NO COMMUNICATION NEEDED OR WANTED
(6) DON'T KNOW
(7) REFUSED

Subdomain 4:   Compassionate, culturally effective, family centered care

K5Q40   [IF AGE_NSCH >= 12 MONTHS OLD, "During the past 12 months", ELSE "Since (his/her) birth"], how often did **[S.C.]**'s doctors and other health care providers spend enough time with **(him/her)**? Would you say never, sometimes, usually, or always?

(1) NEVER   (2) SOMETIMES   (3) USUALLY
(4) ALWAYS   (6) DON'T KNOW   (7) REFUSED

K5Q41   [IF AGE_NSCH >= 12 MONTHS OLD, "During the past 12 months", ELSE "Since (his/her) birth"], how often did **[S.C.]**'s doctors and other health care providers listen carefully to you? Would you say never, sometimes, usually, or always?

(1) NEVER   (2) SOMETIMES   (3) USUALLY
(4) ALWAYS   (6) DON'T KNOW   (7) REFUSED

K5Q42   When **[S.C.]** is seen by doctors or other health care providers, how often are they sensitive to your family's values and customs? Would you say never, sometimes, usually, or always?

(1) NEVER   (2) SOMETIMES   (3) USUALLY
(4) ALWAYS   (6) DON'T KNOW   (7) REFUSED

K5Q43   Information about a child's health or health care can include things such as the causes of any health problems, how to care for a child now, and what changes to expect in the future. [IF AGE_NSCH >= 12 MONTHS OLD, "During the past 12 months", ELSE "Since (his/her) birth"], how often did you get the specific information you needed from **[S.C.]**'s doctors and other health care providers? Would you say never, sometimes, usually, or always?

(1) NEVER   (2) SOMETIMES   (3) USUALLY
(4) ALWAYS   (6) DON'T KNOW   (7) REFUSED

K5Q44   [IF AGE_NSCH >= 12 MONTHS OLD, "During the past 12 months", ELSE "Since (his/her) birth"], how often did **[S.C.]**'s doctors or other health care providers help you feel like a partner in **(his/her)** care? Would you say never, sometimes, usually, or always?

(1) NEVER   (2) SOMETIMES   (3) USUALLY
(4) ALWAYS   (6) DON'T KNOW   (7) REFUSED

K5Q45   **CATI INSTRUCTION (K5Q45):** IF K1Q03 = (1, 6, or 7) [I.E. LANGUAGE ENGLISH OR UNKNOWN] AND AGE_NSCH_Y ≤ 5 YEARS, THEN SKIP TO K6Q01. IF K1Q03 = (1, 6, or 7) [I.E. LANGUAGE ENGLISH OR UNKNOWN] AND AGE_NSCH_Y ≥ 6 YEARS, THEN SKIP TO K7Q01.

IF AGE_NSCH ≥ 36 MONTHS, FILL [or S.C.]. ELSE, NO FILL.

An interpreter is someone who repeats what one person says in a language used by another person. (IF AGE_NSCH >=12 MONTHS, "During the past 12 months" ELSE "Since [S.C.]'s birth"), did you **(or S.C.)** need an interpreter to help speak with **(his/her)** doctors or other health care providers?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K5Q46   **CATI INSTRUCTION (K5Q46):** IF (K5Q45 = 0, 6, OR 7) AND AGE_NSCH _Y ≤ 5 YEARS, THEN SKIP TO K6Q01. IF K5Q45 = (0, 6, OR 7) AND AGE_NSCH_Y ≥ 6 YEARS, THEN SKIP TO K7Q01. IF AGE_NSCH ≥ 36 MONTHS, FILL [or S.C.]. ELSE, DO NOT FILL.

When you **(or S.C.)** needed an interpreter, how often were you able to get someone other than a family member to help you speak with **(his/her)** doctors or other health care providers? Would you say never, sometimes, usually, or always?

(1) NEVER	(2) SOMETIMES	(3) USUALLY
(4) ALWAYS	(6) DON'T KNOW	(7) REFUSED

[IF AGE_NSCH_Y **≤ 5 YEARS, SKIP TO K6Q01. IF** AGE_NSCH_Y **≥ 6 YEARS, SKIP TO K7Q01.]**

Section 6: Early Childhood (0-5 years)

Subdomain 1:   Developmental screening

QUESTIONS K6Q01-K6Q09 ARE FROM THE PARENT'S EVALUATION OF DEVELOPMENTAL STATUS (PEDS) CHILD DEVELOPMENT SCREENING TEST. THE PEDS IS PROTECTED BY U.S. AND INTERNATIONAL COPYRIGHT LAW. ALL RIGHTS ARE RESERVED BY FRANCES PAGE GLASCOE. PERMISSION TO USE THESE ITEMS IN THE NSCH HAS BEEN GRANTED BY DR. GLASCOE. PERMISSION MUST BE REQUESTED FROM THE PUBLISHER (FOREPATH.ORG, PO BOX 23186, WASHINGTON, DC, 20026, WWW.FOREPATH.ORG, SUPPORT@FOREPATH.ORG) BEFORE USING THESE ITEMS FOR OTHER PURPOSES.

K6Q01   Do you have any concerns about [S.C.]'s learning, development, or behavior?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K6Q02_INTRO   **CATI INSTRUCTION (K6Q02_INTRO):** IF AGE_NSCH < 4 MONTHS, SKIP TO K6Q10.

[IF K6Q01 = 0, READ: Although you told me you have no concerns, I need to ask a few specific questions about concerns that some parents may have. Please tell me if you are currently concerned a lot, a little, or not at all about the following.]

[ELSE, READ: The next section asks about specific concerns some parents may have. Please tell me if you are currently concerned a lot, a little, or not at all about the following.]

QUESTION STEM: [Are you concerned a lot, a little, or not at all about…]

(1) A LOT
(2) A LITTLE
(3) NOT AT ALL
(6) DON'T KNOW
(7) REFUSED

[CATI: DISPLAY QUESTION STEM FOR EACH OF THE FOLLOWING SCREENS.]

K6Q02   How [S.C.] talks and makes speech sounds?

K6Q03   How [he/she] understands what you say?

K6Q04   How [he/she] uses [his/her] hands and fingers to do things?

K6Q05   How [he/she] uses [his/her] arms and legs?

K6Q06   How [he/she] behaves?

K6Q07   How [he/she] gets along with others?

K6Q08 **CATI INSTRUCTION (K6Q08):** IF AGE_NSCH < 10 MONTHS, SKIP TO K6Q10.

How [he/she] is learning to do things for (himself/herself)?

K6Q09 **CATI INSTRUCTION (K6Q09):** IF AGE_NSCH < 18 MONTHS, SKIP TO K6Q10.

How [he/she] is learning pre-school or school skills?

K6Q10 **CATI INSTRUCTION (K6Q10):** IF NUMB_SERVICES = 0, THEN SKIP TO K6Q15.

[IF AGE_NSCH >= 12 MONTHS OLD< "During the past 12 months", ELSE "Since [S.C.]'s birth"], did [S.C.]'s doctors or other health care providers ask if you have concerns about [his/her] learning, development, or behavior?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K6Q11 **CATI INSTRUCTION (K6Q11):** IF K6Q01=1 AND ANY OF QUESTIONS K6Q02 - K6Q09 HAVE A VALUE OF 1 OR 2, ASK K6Q11.

[IF AGE_NSCH >= 12 MONTHS OLD "During the past 12 months", ELSE "Since [S.C.]'s birth"], did [his/her] doctors or other health care providers give you specific information to address your concerns about [his/her] learning, development, or behavior?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K6Q12 **CATI INSTRUCTION (K6Q12):** IF AGE_NSCH < 10 MONTHS, SKIP TO K6Q15.

Sometimes a child's doctor or other health care provider will ask a parent to fill out a questionnaire at home or during their child's visit. During the past 12 months, did a doctor or other health care provider have you fill out a questionnaire about specific concerns or observations you may have about [S.C.]'s development, communication, or social behaviors?

(1) YES
(0) NO   **[SKIP TO K6Q15]**
(6) DON'T KNOW   **[SKIP TO K6Q15]**
(7) REFUSED   **[SKIP TO K6Q15]**

HELP SCREEN (K6Q12): IF ANOTHER PERSON READ THE QUESTIONNAIRE TO THE PARENT AND FILLED IN THE ANSWERS FOR THE PARENT, THEN THIS QUESTION SHOULD BE ANSWERED YES. BUT IF A DOCTOR OR NURSE JUST ASKED ABOUT CONCERNS AND DID NOT FILL OUT A QUESTIONNAIRE, THEN THIS QUESTION SHOULD BE ANSWERED NO.

K6Q13A   **CATI INSTRUCTION (K6Q13A):** IF AGE_NSCH = 24-71 MONTHS, SKIP TO K6Q14A.

Did this questionnaire ask about your concerns or observations about how [S.C.] talks or makes speech sounds?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K6Q13B   Did this questionnaire ask about your concerns or observations about how [S.C.] interacts with you and others?

(1) YES   **[SKIP TO K6Q15]**
(0) NO   **[SKIP TO K6Q15]**
(6) DON'T KNOW **[SKIP TO K6Q15]**
(7) REFUSED   **[SKIP TO K6Q15]**

K6Q14A   Did this questionnaire ask about your concerns or observations about words and phrases [S.C.] uses and understands?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K6Q14B   Did this questionnaire ask about your concerns or observations about how [S.C.] behaves and gets along with you and others?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K6Q15   Does [S.C.] have any developmental problems for which (he/she) has a written intervention plan called an [IF AGE_NSCH < 36 MONTHS, INSERT: Individualized Family Services Plan or an IFSP?; IF AGE_NSCH ≥ 36 MONTHS, INSERT: Individualized Education Program or IEP?]

HELP SCREEN (K6Q15): Some young children have developmental delays or other problems for which they receive services from a program called Early Intervention Services or Special Education. Children receiving these services have a written intervention plan called an IFSP if the child is 3 or under, or an IEP if older than about 3 years. Services on an IFSP or an IEP might include things such as special instruction; speech language therapy; vision and hearing services; psychological services; health services; social work services; family counseling and support; transportation; service coordination or other services needed to support the child's development.

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

Subdomain 2:   Child care

K6Q20   The next questions are about child care. Does [S.C.] receive care for at least 10 hours per week from someone not related to (him/her)? This could be a day care center, preschool, Head Start program, nanny, au pair, or any other nonrelative..

        (1) YES   **[SKIP TO K6Q20B]**
        (0) NO   **[SKIP TO K6Q21]**
        (6) DON'T KNOW   **[SKIP TO K6Q21]**
        (7) REFUSED   **[SKIP TO K6Q21]**

HELP SCREEN (K6Q20): Child care should be reported regardless of whether care is paid or unpaid, or provided by certified or uncertified providers. Occasional babysitting is not included.

Head Start is a federally-funded program to help young children from low-income families get ready for kindergarten and grade school. Children who participate are usually between three and five years old, but there are Head Start programs for even younger children.

K6Q20B   Was this care provided in your home, in someone else's home, or in a center such as a school or day care facility? **[MARK ALL THAT APPLY]**

        (1) OWN HOME
        (2) SOMEONE ELSE'S HOME
        (3) CENTER
        (6) DON'T KNOW
        (7) REFUSED

K6Q21   **CATI INSTRUCTION (K6Q21):** IF K1Q02 does not = (01, 02, 11, 12), THEN FILL "you or".

Does [S.C.] receive care for at least 10 hours per week from a relative other than (you or) (his/her) parents or guardians?

        (1) YES   **[SKIP TO K6Q22]**
        (0) NO   **[SKIP TO K6Q25A]**
        (6) DON'T KNOW   **[SKIP TO K6Q25A]**
        (7) REFUSED   **[SKIP TO K6Q25A]**

HELP SCREEN (K6Q21): Child care should be reported regardless of whether care is paid or unpaid, or provided by certified or uncertified providers. Occasional babysitting is not included.

K6Q22   Was this care provided in your home or somewhere else?

        (1) OWN HOME
        (2) SOMEWHERE ELSE
        (3) BOTH / VARIES
        (6) DON'T KNOW
        (7) REFUSED

K6Q25A **CATI INSTRUCTION (K6Q25A):** IF K6Q20 = 1 OR K6Q21 = 1, THEN SKIP TO K6Q25B.

HELP SCREEN: Do not include need for occasional babysitting.

During the past month, did you need child care for [S.C.]?

(1) YES   **[SKIP TO K6Q25B]**
(0) NO   **[SKIP TO K6Q27]**
(6) DON'T KNOW **[SKIP TO K6Q27]**
(7) REFUSED   **[SKIP TO K6Q27]**

K6Q25B **CATI INSTRUCTION (K6Q25B):** IF SAMPLE CHILD DOES NOT HAVE SPECIAL HEALTH CARE NEEDS, SKIP TO K6Q26. (i.e., IF CSHCN = 0, SKIP TO K6Q26)

Does [S.C.]'s behavior limit your ability to find child care for (him/her)?

(1) YES   **[SKIP TO K6Q25C]**
(0) NO   **[SKIP TO K6Q25C]**
(6) DON'T KNOW **[SKIP TO K6Q25C]**
(7) REFUSED   **[SKIP TO K6Q25C]**

K6Q25C Does [S.C.]'s health limit your ability to find child care for (him/her)?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K6Q26 During the past month, how many times have you had to make different arrangements for child care at the last minute due to circumstances beyond your control?

___ ___ ___ NUMBER OF TIMES

DON'T KNOW   (996)
REFUSED   (997)

HELP SCREEN: EXAMPLES OF CIRCUMSTANCES BEYOND ONE'S CONTROL INCLUDE A CHILD BECOMING ILL, OR A CHILD CARE PROVIDER CHANGING HIS/HER PLANS OR SCHEDULE SUDDENLY.

K6Q27 [IF AGE_NSCH >= 12 MONTHS OLD "During the past 12 months", ELSE "Since [S.C]'s birth"], did you or anyone in the family have to quit a job, not take a job, or greatly change your job because of problems with child care for [S.C.]?

(1) YES   **[SKIP TO K6Q30]**
(0) NO   **[SKIP TO K6Q30]**
(6) DON'T KNOW **[SKIP TO K6Q30]**
(7) REFUSED   **[SKIP TO K6Q30]**

Subdomain 3: **Injuries**

K6Q30   [IF AGE_NSCH >= 12 MONTHS OLD "During the past 12 months", ELSE "Since [S.C.]'s birth"] has [S.C.] been injured and required medical attention?

    (1) YES   **[SKIP TO K6Q31]**
    (0) NO   **[SKIP TO K6Q40]**
    (6) DON'T KNOW **[SKIP TO K6Q40]**
    (7) REFUSED   **[SKIP TO K6Q40]**

    HELP SCREEN (K6Q30): MEDICAL ATTENTION HERE IS NOT LIMITED TO EMERGENCY ROOM VISITS, OR ATTENTION THAT REQUIRES A DOCTOR. THIS INCLUDES SITUATIONS WHERE THE PARENT IS ABLE TO PROVIDE THE MEDICAL ATTENTION THEMSELVES, OR WHERE A CALL IS PLACED TO A DOCTOR, BUT THE CARE IS ADMINISTERED BY THE PARENT, ETC.

K6Q31   Did the injury occur at home, at child-care, or some other place? **[MARK ALL THAT APPLY]**

    K6Q31X01 Home (1) YES (0) NO (6) DON'T KNOW (7) REFUSED
    K6Q31X02 Child-care (1) YES (0) NO (6) DON'T KNOW (7) REFUSED
    K6Q31X03 Some other place
                (1) YES (0) NO (6) DON'T KNOW (7) REFUSED

Subdomain 4: **Breastfeeding**

K6Q40   Was [S.C.] ever breastfed or fed breast milk?

    (1) YES   **[SKIP TO K6Q41]**
    (0) NO   **[SKIP TO K6Q60]**
    (6) DON'T KNOW **[SKIP TO K6Q60]**
    (7) REFUSED   **[SKIP TO K6Q60]**

K6Q41   How old was [he/she] when [he/she] completely stopped breastfeeding or being fed breast milk?

    ENTER
    666 FOR STILL BREASTFEEDING
    996 FOR DON'T KNOW
    997 FOR REFUSED

    ___ ___ ___ [ENTER NUMBER]   **[RANGE CHECK: cannot be < AGE_NSCH]**

    IF K6Q41 = (666, 996, or 997) [SKIP TO K6Q42]
    ELSE, GO TO K6Q41A

K6Q41A   [MARK PERIOD]

    (1) DAYS   (2) WEEKS   (3) MONTHS
    (4) YEARS   (6) DON'T KNOW (7) REFUSED

K6Q42   How old was [S.C.] when [he/she] was first fed formula?

___ ___ ___ [ENTER NUMBER]

(555) AT BIRTH
(666) CHILD HAS NEVER BEEN FED FORMULA
(996) DON'T KNOW
(997) REFUSED

IF K6Q42 IN (555, 666, 996, 997) **[SKIP TO K6Q43]**
ELSE,   **[SKIP TO K6Q42A]**

K6Q42A   [MARK PERIOD]

(1) DAYS   (2) WEEKS   (3) MONTHS
(4) YEARS   (6) DON'T KNOW   (7) REFUSED

K6Q43   This next question is about the first thing that [S.C.] was given other than breast milk or formula. Please include juice, cow's milk, sugar water, baby food, or anything else that [S.C.] might have been given, even water. How old was [S.C.] when (he/she) was first fed anything other than breast milk or formula?

___ ___ ___ [ENTER NUMBER]

(555) AT BIRTH
(666) CHILD HAS NEVER BEEN FED ANYTHING OTHER THAN BREAST MILK OR FORMULA
(996) DON'T KNOW
(997) REFUSED

IF K6Q43 IN (555, 666, 996, 997) **[SKIP TO K6Q60]**
ELSE,   **[SKIP TO K6Q43A]**

K6Q43A   [MARK PERIOD]

(1) DAYS   (2) WEEKS   (3) MONTHS
(4) YEARS   (6) DON'T KNOW   (7) REFUSED

Subdomain 5:   **Reading, storytelling, singing, watching television, playing, and going out**

K6Q60   During the past week, how many days did you or other family members read to [S.C.]?

____ ____ NUMBER OF DAYS   **[RANGE CHECK: 0-7, 96, 97]**
(96) DON'T KNOW
(97) REFUSED

HELP SCREEN (K6Q60): READING STORIES INCLUDES BOOKS WITH WORDS OR PICTURES BUT NOT BOOKS READ BY OR WITH THE ASSISTANCE OF AN AUDIO TAPE, RECORD, CD, OR COMPUTER.

K6Q61 During the past week, how many days did you or other family members tell stories or sing songs to [S.C.]?

    ____ ____ NUMBER OF DAYS **[RANGE CHECK: 0-7, 96, 97]**
    (96) DON'T KNOW
    (97) REFUSED

K6Q63 During the past week, how many days did [S.C.] play with other children (his/her) age?

    ____ ____ NUMBER OF DAYS **[RANGE CHECK: 0-7, 96, 97]**
    (96) DON'T KNOW
    (97) REFUSED

K6Q64 During the past week, how many days did you or any family member take [S.C.] on any kind of outing, such as to the park, library, zoo, shopping, church, restaurants, or family gatherings?

    ___ ___ NUMBER OF DAYS **[RANGE CHECK: 0-7, 96, 97]**
    (96) DON'T KNOW
    (97) REFUSED

K6Q65 On an average weekday, about how much time does [S.C.] usually watch TV or watch videos?

    ___ ___ ___ ENTER NUMBER
    (666) DON'T OWN TV OR VIDEO PLAYER
    (996) DON'T KNOW
    (997) REFUSED

    HELP SCREEN (K6Q65): DO NOT INCLUDE TELEVISION OR VIDEO WATCHING AT SCHOOL.

    IF K6Q65 IN (000, 666, 996, 997) **[SKIP TO K8Q12]**
    ELSE,   **[SKIP TO K6Q65A]**

K6Q65A [MARK PERIOD]

    (1) HOURS
    (2) MINUTES
    (6) DON'T KNOW
    (7) REFUSED

    IF HOURS > 12, OR MINUTES > 720, **[DISPLAY WARNING TEXT]**
    ELSE,   **[SKIP TO K8Q12]**

    [WARNING TEXT: THE ANSWER CANNOT BE MORE THAN 12 HOURS OR 720 MINUTES A DAY]

Section 7: Middle Childhood and Adolescence (6-17 years)

Subdomain 1: School enrollment and engagement

K7Q01   **CATI INSTRUCTION (K7Q01):** IF CURRENT DATE ≥ 6/01/YYYY AND ≤ 09/01/YYYY
THEN FILL "During the last school year, what kind of school was [S.C.] enrolled in? Is it a public
school, private school, or home-school?
ELSE FILL "What kind of school is [S.C.] currently enrolled in? Is it a public school, private
school, or home-school?

     (1) PUBLIC   **[SKIP TO K7Q02]**
     (2) PRIVATE   **[SKIP TO K7Q02]**
     (3) HOME-SCHOOLED   **[SKIP TO K7Q02]**
     (4) [S.C.] IS NOT ENROLLED IN SCHOOL.   **[SKIP TO K7Q01F]**
     (6) DON'T KNOW   **[SKIP TO K7Q02]**
     (7) REFUSED   **[SKIP TO K7Q02]**

     **HELP SCREEN (K7Q01): IF THE CHILD WAS ENROLLED IN MORE THAN ONE
TYPE OF SCHOOL DURING THE CURRENT OR LAST SCHOOL YEAR, ASK THE
TYPE OF SCHOOL THAT THE CHILD HAS MOST RECENTLY ATTENDED.**

K7Q01F   At any time during the past 12 months, was [S.C.] enrolled in a public school, a private school, or
home school?

     (1) YES   **[SKIP TO K7Q02]**
     (0) NO   **[SKIP TO K7Q05]**
     (6) DON'T KNOW   **[SKIP TO K7Q05]**
     (7) REFUSED   **[SKIP TO K7Q05]**

K7Q02   During the past 12 months, that is since [**FILL: CURRENT MONTH, 1 YEAR AGO**], about
how many days did [S.C.] miss school because of illness or injury?

     ___ ___ ___   DAYS   **[RANGE CHECK: 000-180, 555, 666, 996, 997]**
     (000) NONE
     (180) ENTIRE SCHOOL YEAR
     (555) HOME SCHOOLED
     (666) DID NOT GO TO SCHOOL
     (996) DON'T KNOW
     (997) REFUSED

     IF K7Q02 > 20   **[SKIP TO K7Q03]**
     ELSE IF K7Q02 IN (555, 666)   **[SKIP TO K7Q05]**
     ELSE   **[SKIP TO K7Q04]**

K7Q03   I have **[FILL ANSWER FROM K7Q02]** days. Is that correct?

     (1) YES   **[SKIP TO K7Q04]**
     (0) NO   **[SKIP TO K7Q02]**

K7Q04   **CATI INSTRUCTION (K7Q04):** IF K7Q01F = 2, 6, or 7, OR K7Q02 = 555, 666, OR K7Q01 = 3 [I.E., NOT ENROLLED IN PAST 12 MONTHS/HOME-SCHOOLED], SKIP TO K7Q05.

During the past 12 months, how many times has [S.C.]'s school contacted you or another adult in your household about any problems [he/she] is having with school?

ENTER 96 FOR DON'T KNOW OR 97 FOR REFUSED

____ _____ TIMES   **[RANGE CHECK: 0-99]**

INTERVIEWER INSTRUCTION: THIS INCLUDES SCHOOL RELATED PROBLEMS BUT NOT HEALTH RELATED PROBLEMS.

K7Q05   Since starting kindergarten, has [he/she] repeated any grades?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K7Q11   Does [S.C.] have a health problem, condition, or disability for which (he/she) has a written intervention plan called an Individualized Education Program or IEP?

HELP SCREEN (K7Q11): Some children have difficulty in school because of a health problem, condition, or a disability. These children may receive services from a program called Special Education and have a written intervention plan called an Individualized Education Program or IEP. Services on an IEP might include things such as special instruction; speech language therapy; vision and hearing services; psychological services; health services; social work services; family counseling and support; transportation; or other services needed to support the child's educational performance.

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K7Q12***NSAP**   **CATI INSTRUCTION (K7Q12):** THE NEXT TWO QUESTIONS ARE FOR THE BIOLOGICAL PARENT COMPARISON SAMPLE. IF THIS HOUSEHOLD IS NOT PART OF THAT SAMPLE, SKIP TO K7Q30. (IF NSAP_CTRL = 0, SKIP TO K7Q30.)

How would you describe [S.C.]'s school performance in reading and language arts? Would you say excellent, very good, good, fair, or poor?

(1) EXCELLENT
(2) VERY GOOD
(3) GOOD
(4) FAIR
(5) POOR
(6) DON'T KNOW
(7) REFUSED

K7Q13*^{NSAP} How about [S.C.]'s school performance in math? (READ IF NECESSARY: Would you say excellent, very good, good, fair, or poor?)

(1) EXCELLENT
(2) VERY GOOD
(3) GOOD
(4) FAIR
(5) POOR
(6) DON'T KNOW
(7) REFUSED

Subdomain 2: After-school activities and parental involvement

K7Q30 During the past 12 months, was [S.C.] on a sports team or did [he/she] take sports lessons after school or on weekends?

HELP SCREEN (K7Q30): INCLUDE ANY TEAMS RUN BY YOUR CHILD'S SCHOOL OR COMMUNITY GROUPS.

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K7Q31 During the past 12 months, did [he/she] participate in any clubs or organizations after school or on weekends?

HELP SCREEN (K7Q31): EXAMPLES OF CLUBS OR ORGANIZATIONS ARE SCOUTS, ARTS, RELIGIOUS GROUPS, AND BOYS/GIRLS CLUBS.

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K7Q32 **CATI INSTRUCTION (K7Q32):** IF K7Q30 = 1 OR K7Q31 = 1, THEN SKIP TO K7Q33.

During the past 12 months, did [he/she] participate in any other organized events or activities?

HELP SCREEN (K7Q32): THIS QUESTION CAN INCLUDE ORGANIZED LESSONS IN MUSIC, DANCE, FOREIGN LANGUAGES, PERFORMING ARTS, COMPUTERS, ETC.

(1) YES
(0) NO   **[SKIP TO K7Q34]**
(6) DON'T KNOW **[SKIP TO K7Q34]**
(7) REFUSED   **[SKIP TO K7Q34]**

K7Q33   During the past 12 months, how often did you attend events or activities that [S.C.] participated in? Would you say never, sometimes, usually or always?

(1) NEVER
(2) SOMETIMES
(3) USUALLY
(4) ALWAYS
(6) DON'T KNOW
(7) REFUSED

K7Q34   Regarding [S.C.]'s friends, would you say that you have met all of [his/her] friends, most of [his/her] friends, some of [his/her] friends, or none of [his/her] friends?

(1) ALL OF [HIS/HER] FRIENDS
(2) MOST OF [HIS/HER] FRIENDS
(3) SOME OF [HIS/HER] FRIENDS
(4) NONE OF [HIS/HER] FRIENDS
(5) CHILD HAS NO FRIENDS
(6) DON'T KNOW
(7) REFUSED

K7Q35   **CATI INSTRUCTION (K7Q35):** IF AGE_NSCH ≥ 144 MONTHS (12 YEARS), SKIP TO K7Q37.

Sometimes it is difficult to make arrangements to look after children all the time. During the past week, did [S.C.] take care of (himself/herself) or stay alone without an adult or teenager, even for a small amount of time?

(1) YES   **[SKIP TO K7Q36]**
(0) NO   **[SKIP TO K7Q40]**
(6) DON'T KNOW   **[SKIP TO K7Q40]**
(7) REFUSED   **[SKIP TO K7Q40]**

K7Q36   During the past week, how many hours did [S.C] take care of (himself/herself)?

__ __ __ NUMBER OF HOURS   **[RANGE CHECK: 001-168, 666, 996, 997]**
(666) MORE THAN ZERO, LESS THAN 1 HOUR
(996) DON'T KNOW
(997) REFUSED

K7Q37   **CATI INSTRUCTION (K7Q37):** IF AGE_NSCH < 144 MONTHS, SKIP TO K7Q40.

During the past 12 months, how often has [S.C.] been involved in any type of community service or volunteer work at school, church, or in the community? Would you say once a week or more, a few times a month, a few times a year, or never?

(1) ONCE A WEEK OR MORE
(2) A FEW TIMES A MONTH
(3) A FEW TIMES A YEAR
(4) NEVER
(6) DON'T KNOW
(7) REFUSED

K7Q38   During the past week, did [S.C.] earn money from any work, including regular jobs as well as babysitting, cutting grass, or other occasional work?

(1) YES   **[SKIP TO K7Q39]**
(0) NO   **[SKIP TO K7Q40]**
(6) DON'T KNOW   **[SKIP TO K7Q40]**
(7) REFUSED   **[SKIP TO K7Q40]**

HELP SCREEN (K7Q38): DO NOT INCLUDE HOUSEHOLD CHORES.

K7Q39   During the past week, how many hours did [S.C.] work for pay?

__ __ __ NUMBER OF HOURS   **[RANGE CHECK: 000-168, 666, 996, 997]**
(666) MORE THAN ZERO, LESS THAN 1 HOUR
(996) DON'T KNOW
(997) REFUSED

Subdomain 3:   Sleep and exercise

K7Q40   During the past week, on how many nights did [S.C.] get enough sleep for a child (his/her) age?

____ ____ NUMBER OF NIGHTS   **[RANGE CHECK: 00-07, 96, 97]**
(96) DON'T KNOW
(97) REFUSED

HELP SCREEN (K7Q40): "Enough sleep" is whatever you define it as for this child.

K7Q41   During the past week, on how many days did [S.C.] exercise, play a sport, or participate in physical activity for at least 20 minutes that made [him/her] sweat and breathe hard?

____ ____ NUMBER OF DAYS   **[RANGE CHECK: 00-07, 96, 97]**
(96) DON'T KNOW
(97) REFUSED

HELP SCREEN: Include active sports such as baseball, softball, basketball, swimming, soccer, tennis, or football; riding a bike or rollerskating; walking or jogging; jumping rope; gymnastics; and active dance such as ballet.

Subdomain 4: Reading and computing

K7Q50 On an average weekday, about how much time does [he/she] usually spend reading for pleasure?

  ___ ___ ___ ENTER NUMBER
  (666) CHILD CANT READ
  (996) DON'T KNOW
  (997) REFUSED

  HELP SCREEN: TIME SPENT READING INCLUDES THE TIME A CHILD SPENDS READING TO THEMSELVES OR BEING READ TO BY ANOTHER PERSON. IT DOES NOT INCLUDE TIME SPENT LISTENING TO BOOKS READ BY OR WITH THE ASSISTANCE OF AN AUDIO TAPE, RECORD, CD, OR COMPUTER.

  IF K7Q50 IN (000, 666, 996, 997) **[SKIP TO K7Q51]**
  ELSE, **[SKIP TO K7Q50A]**

K7Q50A [MARK PERIOD]

  (1) HOURS   (2) MINUTES
  (6) DON'T KNOW (7) REFUSED

  IF HOURS > 12, OR MINUTES > 720, **[DISPLAY WARNING TEXT]**
  ELSE, **[SKIP TO K7Q51]**
  [WARNING TEXT: THE ANSWER CANNOT BE MORE THAN 12 HOURS OR 720 MINUTES A DAY]

K7Q51 On an average weekday, about how much time does [S.C.] use a computer for purposes other than schoolwork?

  ___ ___ ___ ENTER NUMBER
  (666) DON'T OWN COMPUTER
  (996) DON'T KNOW
  (997) REFUSED

  IF K7Q51 IN (000, 666, 996, 997) **[SKIP TO K7Q60]**
  ELSE, **[SKIP TO K7Q51A]**

K7Q51A [MARK PERIOD]

  (1) HOURS   (2) MINUTES
  (6) DON'T KNOW (7) REFUSED

  IF HOURS > 12, OR MINUTES > 720, **[DISPLAY WARNING TEXT]**
  ELSE, **[SKIP TO K7Q60]**
  [WARNING TEXT: THE ANSWER CANNOT BE MORE THAN 12 HOURS OR 720 MINUTES A DAY]

Subdomain 5:   **Television**

K7Q60   On an average weekday, about how much time does [S.C.] usually watch TV, watch videos, or play video games?

           ___ ___ ___ ENTER NUMBER

           (666) DON'T OWN TV, VIDEO PLAYER, OR VIDEO GAMES
           (996) DON'T KNOW
           (997) REFUSED

           HELP SCREEN (K7Q60): DO NOT INCLUDE TELEVISION OR VIDEO WATCHING AT SCHOOL.

           IF K7Q60 IN (000, 996, 997)   **[SKIP TO K7Q61]**
           IF K7Q60 = 666   **[SKIP TO K7Q70_INTRO]**
           ELSE,   **[SKIP TO K7Q60A]**

K7Q60A   [MARK PERIOD]

           (1) HOURS   (2) MINUTES
           (6) DON'T KNOW   (7) REFUSED

           IF HOURS > 12, OR MINUTES > 720,   **[DISPLAY WARNING TEXT]**
           ELSE,   **[SKIP TO K7Q61]**
           [WARNING TEXT: THE ANSWER CANNOT BE MORE THAN 12 HOURS OR 720 MINUTES A DAY]

K7Q61   Are there family rules about what television programs [he/she] is allowed to watch?

           (1) YES
           (0) NO
           (6) DON'T KNOW
           (7) REFUSED

K7Q62   Is there a television in [S.C.]'s bedroom?

           (1) YES
           (0) NO
           (6) DON'T KNOW
           (7) REFUSED

Subdomain 6:   **Social behavior, emotional difficulties, and school engagement**

K7Q70_INTRO   I am going to read a list of items that sometimes describe children. For each item, please tell me how often this was true for [S.C.] during the past month. Would you say never, rarely, sometimes, usually, or always?

QUESTION STEM: [Please tell me if this statement was never, rarely, sometimes, usually, or always true for [S.C.] during the past month.]

(1) NEVER
(2) RARELY
(3) SOMETIMES
(4) USUALLY
(5) ALWAYS
(6) DON'T KNOW
(7) REFUSED

[CATI: DISPLAY QUESTION STEM FOR EACH OF THE FOLLOWING SCREENS.]

K7Q70   [He/She] argues too much.

K7Q71   [He/She] bullies or is cruel or mean to others.

K7Q72   [He/She] shows respect for teachers and neighbors.

K7Q73   [He/She] gets along well with other children.

K7Q74   [He/She] is disobedient.

K7Q75   [He/She] is stubborn, sullen, or irritable.

K7Q76   [He/She] tries to understand other people's feelings.

K7Q77   [He/She] tries to resolve conflicts with classmates, family, or friends.

K7Q78   [He/She] feels worthless or inferior.

K7Q79   [He/She] is unhappy, sad, or depressed.

K7Q80   [He/She] is withdrawn, and does not get involved with others.

K7Q82   [He/She] cares about doing well in school.

K7Q83   [He/She] does all required homework.

Section 8: Family Functioning

Subdomain 1: **Family activities**

K8Q12 About how often does [S.C.] attend a religious service?

____ ____ ____ [ENTER NUMBER]

(0) NEVER OR ZERO TIMES OR DOES NOT ATTEND
(996) DON'T KNOW
(997) REFUSED

IF K8Q12 IN (0, 996, 997) **[SKIP TO K8Q11]**
ELSE, **[SKIP TO K8Q12A]**

K8Q12A [MARK PERIOD]

(1) PER DAY (2) PER WEEK (3) PER MONTH
(4) PER YEAR (6) DON'T KNOW (7) REFUSED

K8Q11 During the past week, on how many days did all the family members who live in the household eat a meal together?

____ ____ DAYS **[RANGE CHECK: 00-07, 96, 97]**
(96) DON'T KNOW
(97) REFUSED

Subdomain 2: **Parent/child relationship**

K8Q21 **CATI INSTRUCTION (K8Q21):** IF AGE_NSCH < 72 MONTHS (6 YEARS), SKIP TO K8Q22.

How well can you and [S.C.] share ideas or talk about things that really matter? Would you say very well, somewhat well, not very well, or not very well at all?

(1) VERY WELL
(2) SOMEWHAT WELL
(3) NOT VERY WELL
(4) NOT VERY WELL AT ALL
(6) DON'T KNOW
(7) REFUSED

K8Q22*^NSAP **CATI INSTRUCTION (K8Q22)**: THE NEXT FIVE QUESTIONS ARE FOR THE BIOLOGICAL PARENT COMPARISON SAMPLE. IF THIS HOUSEHOLD IS NOT PART OF THAT SAMPLE, SKIP TO K8Q30.

How would you describe your relationship to [S.C.]? Would you say:

(1)   VERY WARM AND CLOSE
(2)   SOMEWHAT WARM AND CLOSE
(3)   SOMEWHAT DISTANT, OR
(4)   VERY DISTANT
(6)   DON'T KNOW
(7)   REFUSED

K8Q23*^NSAP **CATI INSTRUCTION (K8Q23)**: IF AGE_NSCH < 6 MONTHS, SKIP TO K8Q30.

How often is [S.C.] affectionate or tender with you? Would you say:

(1) NEVER   (2) RARELY   (3) SOMETIMES
(4) USUALLY   (5) ALWAYS
(6) DON'T KNOW   (7) REFUSED

K8Q24*^NSAP **CATI INSTRUCTION (K8Q24)**: IF AGE_NSCH_Y < 5 YEARS, SKIP TO K8Q30.

During the past month, how often have you felt that you just did not understand [S.C.]? Would you say never, rarely, sometimes, usually, or always?

(1) NEVER   (2) RARELY   (3) SOMETIMES
(4) USUALLY   (5) ALWAYS
(6) DON'T KNOW   (7) REFUSED

K8Q25*^NSAP During the past month, how often have you felt that you can really trust [S.C.]? Would you say never, rarely, sometimes, usually, or always?

(1) NEVER   (2) RARELY   (3) SOMETIMES
(4) USUALLY   (5) ALWAYS
(6) DON'T KNOW   (7) REFUSED

K8Q26*^NSAP **CATI INSTRUCTION (K8Q26)**: IF AGE_NSCH_Y < 13 YEARS, SKIP TO K8Q30.

Do you feel that [S.C.] and you make decisions about (his/her) life together? Would you say never, rarely, sometimes, usually, or always?

(1) NEVER   (2) RARELY   (3) SOMETIMES
(4) USUALLY   (5) ALWAYS
(6) DON'T KNOW   (7) REFUSED

Subdomain 3:   Family stress

K8Q30   **CATI INSTRUCTION (K8Q30):** IF K1Q02 = (1) Mother OR (0) FATHER FILL "parenthood".
ELSE FILL "raising children".

In general, how well do you feel you are coping with the day to day demands of parenthood?
Would you say that you are coping very well, somewhat well, not very well, or not well at all?

(1) VERY WELL
(2) SOMEWHAT WELL
(3) NOT VERY WELL
(4) NOT VERY WELL AT ALL
(6) DON'T KNOW
(7) REFUSED

K8Q31   During the past month, how often have you felt [S.C.] is much harder to care for than most
children (his/her) age? Would you say never, rarely, sometimes, usually, or always?

(1) NEVER   (2) RARELY   (3) SOMETIMES
(4) USUALLY   (5) ALWAYS
(6) DON'T KNOW   (7) REFUSED

K8Q32   During the past month, how often have you felt [he/she] does things that really bother you a lot?
[**READ IF NECESSARY:** Would you say never, rarely sometimes, usually, or always?]

(1) NEVER   (2) RARELY   (3) SOMETIMES
(4) USUALLY   (5) ALWAYS
(6) DON'T KNOW   (7) REFUSED

K8Q34   During the past month, how often have you felt angry with [him/her]?
[**READ IF NECESSARY**: Would you say never, rarely, sometimes, usually, or always?]

(1) NEVER   (2) RARELY   (3) SOMETIMES
(4) USUALLY   (5) ALWAYS
(6) DON'T KNOW   (7) REFUSED

K8Q35   **CATI INSTRUCTION (K8Q35):** IF K1Q02 = (1) Mother OR (2) FATHER FILL "parenthood".
ELSE FILL "raising children".

Is there someone that you can turn to for day-to-day emotional help with [parenthood/raising
children]?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

HELP SCREEN (K8Q35): THIS CAN BE ANY PERSON, INCLUDING THEIR SPOUSE.

Section 9: Parental Health

Subdomain 1: Household composition and nonresident parents

K9Q00 Including the adults and all the children, how many people live in this household?

   ____ ____   **[RANGE: 02-18, 96, 97]**
(96) DON'T KNOW
(97) REFUSED

Answer must be > S_UNDR18 to proceed.

HELP SCREEN (K9Q00): EACH PERSON IN THE HOUSEHOLD MUST BE A CURRENT RESIDENT OF THE HOUSEHOLD. A CURRENT RESIDENCE IS DEFINED AS A PLACE WHERE THE PERSON IS STAYING FOR MORE THAN TWO MONTHS AT THE TIME OF THE SURVEY CONTACT. IF A PERSON HAS NO PLACE WHERE HE OR SHE USUALLY STAYS, THE PERSON SHOULD BE CONSIDERED A CURRENT RESIDENT REGARDLESS OF THE LENGTH OF THE CURRENT STAY.

PERSONS AWAY FROM THEIR RESIDENCE FOR TWO MONTHS OR LESS, WHETHER TRAVELING OR IN THE HOSPITAL, ARE CONSIDERED "IN RESIDENCE."

PERSONS AWAY FROM THEIR RESIDENCE FOR MORE THAN TWO MONTHS ARE CONSIDERED "NOT IN RESIDENCE" UNLESS THE PERSON IS AWAY AT SCHOOL (I.E., BOARDING SCHOOL, MILITARY ACADEMY, PREP SCHOOL, ETC.).

CHILDREN WHO ONLY LIVE PART-TIME IN THE HOUSEHOLD BECAUSE OF CUSTODY ISSUES SHOULD BE INCLUDED IF THEY ARE STAYING THERE WHEN CONTACT WITH THE HOUSEHOLD IS MADE.

K9Q10_INTRO The next few questions are about [S.C.]'s parents. Before I ask them, I need to know which parents live in this household with (S.C).

K9Q10 **CATI INSTRUCTION (K9Q10):** IF K1Q02 IS NOT MOTHER (1) OR FATHER (2), SKIP TO K9Q11. IF K1Q02 = 1, REMOVE RESPONSE CATEGORIES 05-08. ELSE IF K1Q02 = 2, REMOVE RESPONSE CATEGORIES 01-04.

Earlier you told me you are [S.C.]'s (Mother/Father). Are you [S.C.]'s biological, adoptive, step, or foster (mother/father)]?

(1) BIOLOGICAL MOTHER
(2) STEP MOTHER
(3) FOSTER MOTHER
(4) ADOPTIVE MOTHER
(5) BIOLOGICAL FATHER
(6) STEP FATHER
(7) FOSTER FATHER
(8) ADOPTIVE FATHER
(9) OTHER
(96) DON'T KNOW
(97) REFUSED

K9Q11   **CATI INSTRUCTION (K9Q11):** IF K1Q02 = 1 OR 2, AND K9Q00 = S_UNDR18 + 1 [I.E., IF THERE IS ONLY ONE ADULT IN HOUSEHOLD AND THAT ADULT IS A MOTHER OR FATHER], SKIP TO K9Q12_A.

IF K1Q02= 1, 2, 96, OR 97, DO NOT READ THE
FIRST SENTENCE. ELSE, FILL THE FIRST SENTENCE ACCORDING TO THE
FOLLOWING RULES:

IF K1Q02= 3, 4, FILL 'sibling';
IF K1Q02= 5, 6, 7, 9 FILL 'relative';
IF K1Q02= 8, FILL 'grandparent';
IF K1Q02= 10, FILL 'friend';
IF K1Q02= 10, 11, 12 FILL 'guardian';

IF K1Q02 = 1 OR 2, FILL THE SECOND SENTENCE WITH THE FIRST "other".
IF K1Q02 NE 1 OR 2, FILL THE SECOND SENTENCE WITH THE SECOND "other."

[Earlier you told me you are [S.C.]'s (ANSWER TO K1Q02).] Does [S.C.] have any (other) parents, or (other) people who act as (his/her) parents, living here?

(1) YES
(0) NO   **[SKIP TO K9Q12_A]**
(6) DON'T KNOW   **[SKIP TO K9Q12_A]**
(7) REFUSED   **[SKIP TO K9Q12_A]**

K9Q12   What is their relationship to [S.C.]? **[MARK ALL THAT APPLY.]**

HELP SCREEN (K9Q12): IF RESPONDENT ANSWERS "MOTHER" OR "FATHER," THEN ASK: 'Is that (his/her) biological, adoptive, step, or foster (mother/father)?'

[MORE THAN ONE OPTION CAN BE SELECTED IF BETWEEN 1 AND 19, BUT 6 AND 7 MUST BE SELECTED ALONE]

IF K9Q10=1 AND K9Q12 = 1, THEN DISPLAY WARNING TEXT 2.
IF K9Q10=5 AND K9Q12 = 5, THEN DISPLAY WARNING TEXT 2.

WARNING TEXT 2: SELECTED CHILD CAN NOT HAVE TWO BIOLOGICAL MOTHERS OR TWO BIOLOGICAL FATHERS. CONFIRM RESPONSES FOR THE LAST THREE QUESTIONS.
[Return to K9Q12]

IF NUMBER OF SELECTIONS IN K9Q12 > K9Q00 - S_UNDR18), GO TO K9Q12_CONF ELSE [SKIP TO K9Q12_A]

K9Q12X01	BIOLOGICAL MOTHER
K9Q12X02	STEP MOTHER
K9Q12X03	FOSTER MOTHER
K9Q12X04	ADOPTIVE MOTHER
K9Q12X05	BIOLOGICAL FATHER
K9Q12X06	STEP FATHER
K9Q12X07	FOSTER FATHER
K9Q12X08	ADOPTIVE FATHER
K9Q12X09	SISTER OR BROTHER (STEP/FOSTER/HALF/ADOPTIVE)
K9Q12X10	IN-LAW OF ANY TYPE
K9Q12X11	AUNT/UNCLE
K9Q12X12	GRANDMOTHER
K9Q12X13	GRANDFATHER
K9Q12X14	OTHER FAMILY MEMBER
K9Q12X15	FEMALE GUARDIAN
K9Q12X16	MALE GUARDIAN
K9Q12X17	RESPONDENT'S PARTNER OR BOY/GIRLFRIEND
K9Q12X18	OTHER NON-RELATIVE
K9Q12X19	TWO OR MORE OF THE SAME RELATIONSHIP TYPE

(1) YES   (0) NO   (6) DON'T KNOW   (7) REFUSED

IF NUMBER OF SELECTIONS IN **K9Q12 INDEX** > K9Q00 - S_UNDR18),
                                         [DISPLAY WARNING TEXT]
ELSE IF K9Q12X19 = 1,   **[SKIP TO K9Q12_T]**
ELSE   **[SKIP TO K9Q12_A]**

K9Q12_CONF   IF K9Q10 = (1,2,3,4,5,6,7, or 8) then DISPLAY: Just to confirm, you're the [FILL RESPONSE FROM K9Q10], and your child's [FILL ALL RESPONSES FROM K9Q12, WITH "AND" BEFORE THE LAST RESPONSE] also live in the household?

ELSE DISPLAY: Just to confirm, your child's [FILL ALL RESPONSES FROM K9Q12, WITH "AND" BEFORE THE LAST RESPONSE] live in the household?

(1) YES, CONTINUE
(0) NO
(6) DON'T KNOW
(7) REFUSED

IF K9Q12 = 19, [SKIP TO K9Q12_T], ELSE SKIP TO K9Q12_A

K9Q12_T   ENTER RELATIVE OR RELATIVES_____.

ENTER THE NUMBER AND TYPE OF PERSON REPORTED. FOR EXAMPLE: "2 BROTHERS". IF ONE OF THE RELATIVES IS ALREADY LISTED IN THE PICKLIST, DO NOT INCLUDE AGAIN HERE.

K9Q12_A   **CATI INSTRUCTION (K9Q12_A):** IF ANY BIOLOGICAL MOTHER OR BIOLOGICAL FATHER IN HH [(K9Q10 = 1 OR K9Q10 = 5) OR (K9Q12=1 OR K9Q12=5)], SKIP TO K9Q16. IF RESPONDENT IS ADOPTIVE MOTHER OR ADOPTIVE FATHER (K9Q10 = 4 OR K9Q10 = 8), SKIP TO K9Q16.

ELSE, ASK K9Q12_A

Have you legally adopted [S.C.]?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K9Q16   **CATI INSTRUCTION (K9Q16):** IF K1Q02 = 1 OR ANY VALUE FOR K9Q12X01-K9Q12X04 = 1 (K9Q12 = 1, 2, 3, or 4), ASK K9Q16. ELSE, SKIP TO K9Q17A.

IF K1Q02 = 1, FILL "are you". ELSE, FILL "is [S.C.]'s [MOTHER TYPE]"

How old [are you / is [S.C.]'s [MOTHER TYPE]]?

____ ____ YEARS   **[RANGE CHECK: 18-99, 996, 997]**

(996) DON'T KNOW
(997) REFUSED

HELP SCREEN (K9Q16): AT THIS QUESTION, COLLECT INFORMATION ABOUT THE MOTHER (BIOLOGICAL, STEP, FOSTER, ADOPTIVE) LIVING IN THIS HOUSE.

K9Q17A   **CATI INSTRUCTION (K9Q17A)**: IF HOUSEHOLD INCLUDES A MOTHER (K1Q02 = 1 OR ANY VALUE FOR K9Q12X01-K9Q12X04 = 1) AND A FATHER (K1Q02 = 2 OR ANY VALUE FOR K9Q12X05-K9Q12X08 = 1), ASK K9Q17A. ELSE, SKIP TO K9Q17B.

IF THE RESPONDENT IS THE MOTHER (K1Q02 = 1), THEN READ: Are you and [S.C.]'s [FATHER TYPE] currently married or living together as partners?

IF THE RESPONDENT IS THE FATHER (K1Q02 = 2), THEN READ: Are you and [S.C.]'s [MOTHER TYPE] currently married or living together as partners?

IF THE RESPONDENT IS NEITHER THE MOTHER NOR THE FATHER, THEN READ: Are [S.C.]'s [MOTHER TYPE] and [FATHER TYPE] currently married or living together as partners?

(1) MARRIED   **[SKIP TO K9Q18]**
(2) LIVING TOGETHER AS PARTNERS   **[SKIP TO K9Q18]**
(3) NOT MARRIED AND NOT LIVING TOGETHER AS PARTNERS **[SKIP TO K9Q20]**
(6) DON'T KNOW   **[SKIP TO K9Q20]**
(7) REFUSED   **[SKIP TO K9Q20]**

K9Q17B   **CATI INSTRUCTION (K9Q17B)**: IF HOUSEHOLD INCLUDES A MOTHER (K1Q02 = 1 OR ANY VALUE FOR K9Q12X01-K9Q12X04 = 1) BUT NOT A FATHER (NO VALUE FOR K9Q12X05-K9Q12X08 = 1), ASK K9Q17B. ELSE, SKIP TO K9Q17C.

IF THE RESPONDENT IS THE MOTHER (K1Q02 = 1), THEN READ: Are you currently married, separated, divorced, widowed, or never married?

IF THE RESPONDENT IS NOT THE MOTHER, THEN READ: Is [S.C.]'s [MOTHER TYPE] currently married, separated, divorced, widowed, or never married?

(1) MARRIED   **[SKIP TO K9Q17B_1]**
(2) SEPARATED   **[SKIP TO K9Q17B_3]**
(3) DIVORCED   **[SKIP TO K9Q17B_3]**
(4) WIDOWED   **[SKIP TO K9Q17B_3]**
(5) NEVER MARRIED **[SKIP TO K9Q17B_3]**
(6) DON'T KNOW   **[SKIP TO K9Q17B_3]**
(7) REFUSED   **[SKIP TO K9Q17B_3]**

K9Q17B_1   **CATI INSTRUCTION (K9Q17B_1)**: IF MOTHER TYPE IS FOSTER OR ADOPTIVE (K9Q10 = 3 OR 4, OR K9Q12X03 = 1, OR K9Q12X04 = 1), THEN SKIP TO K9Q18. ELSE, IF RESPONDENT IS THE MOTHER (K1Q02 = 1) FILL "Are you"; ELSE FILL "Is [S.C.]'S [MOTHER TYPE]".

(Are you / Is [S.C.]'s [MOTHER TYPE]) married to [S.C.]'s biological father?

(1) YES
(0) NO   **[SKIP TO K9Q18]**
(6) DON'T KNOW   **[SKIP TO K9Q18]**
(7) REFUSED   **[SKIP TO K9Q18]**

K9Q17B_2   **CATI INSTRUCTION (K9Q17B_2)**: IF K9Q17B_1 = 1 THEN FILL "(S.C)'s biological father". IF K9Q17B_1 = (0,6,7,<NULL>) AND K1Q02 = 1 THEN FILL "your spouse". ELSE FILL "[S.C.]'s [MOTHER TYPE]'s spouse".

Why doesn't [(S.C)'s biological father/your spouse/[S.C.]'s [MOTHER TYPE]'s spouse] currently live in the household?

ENTER REASON: _____ **[SKIP TO K9Q18]**

K9Q17B_3   **CATI INSTRUCTION (K9Q17B_3)**: IF RESPONDENT IS THE MOTHER (K1Q02 = 1) FILL "Are you"; ELSE FILL "Is [S.C.]'S [MOTHER TYPE]".

(Are you / Is [S.C.]'s [MOTHER TYPE]) currently living with a partner?

(1) YES   **[SKIP TO K9Q18]**
(0) NO   **[SKIP TO K9Q20]**
(6) DON'T KNOW   **[SKIP TO K9Q20]**
(7) REFUSED   **[SKIP TO K9Q20]**

K9Q17C   **CATI INSTRUCTION (K9Q17C)**: IF HOUSEHOLD INCLUDES A FATHER (K1Q02 = 2 OR ANY VALUE FOR K9Q12X05-K9Q12X08 = 1) BUT NOT A MOTHER (NO VALUE FOR K9Q12X01-K9Q12X04 = 1), ASK K9Q17C. ELSE, SKIP TO K9Q17D.

IF THE RESPONDENT IS THE FATHER (K1Q02 = 2), THEN READ: Are you currently married, separated, divorced, widowed, or never married?

IF THE RESPONDENT IS NOT THE FATHER, THEN READ: Is [S.C.]'s [FATHER TYPE] currently married, separated, divorced, widowed, or never married?

(1) MARRIED   **[SKIP TO K9Q17C_1]**
(2) SEPARATED   **[SKIP TO K9Q17C_3]**
(3) DIVORCED   **[SKIP TO K9Q17C_3]**
(4) WIDOWED   **[SKIP TO K9Q17C_3]**
(5) NEVER MARRIED   **[SKIP TO K9Q17C_3]**
(6) DON'T KNOW   **[SKIP TO K9Q17C_3]**
(7) REFUSED   **[SKIP TO K9Q17C_3]**

K9Q17C_1   **CATI INSTRUCTION (K9Q17C_1)**: IF FATHER TYPE IS FOSTER OR ADOPTIVE (K9Q10 = 7 OR 8, OR K9Q12X07 = 1, OR K9Q12X08 = 1), THEN SKIP TO K9Q18. ELSE, IF RESPONDENT IS THE FATHER (K1Q02 = 2) FILL "Are you"; ELSE FILL "Is [S.C.]'S [FATHER TYPE]".

(Are you / Is [S.C.]'s [FATHER TYPE]) married to [S.C.]'s biological mother?

(1) YES
(0) NO   **[SKIP TO K9Q18]**
(6) DON'T KNOW   **[SKIP TO K9Q18]**
(7) REFUSED   **[SKIP TO K9Q18]**

K9Q17C_2   **CATI INSTRUCTION (K9Q17C_2)**: IF K9Q17C_1 = 1 THEN FILL "(S.C)'s biological mother". IF K9Q17B_1 = (0,6,7) AND K1Q02 = 2 THEN FILL "your spouse". ELSE FILL "[S.C.]'s [FATHER TYPE]'s spouse".

Why doesn't [(S.C)'s biological mother/your spouse/[S.C.]'s [FATHER TYPE]'s spouse] currently live in the household?

ENTER REASON: _____ **[SKIP TO K9Q18]**

K9Q17C_3   **CATI INSTRUCTION (K9Q17C_3)**: IF RESPONDENT IS THE FATHER (K1Q02 = 2) FILL "Are you"; ELSE FILL "Is [S.C.]'S [FATHER TYPE]".

(Are you / Is [S.C.]'s [FATHER TYPE]) currently living with a partner?

    (1) YES   **[SKIP TO K9Q18]**
    (0) NO   **[SKIP TO K9Q20]**
    (6) DON'T KNOW   **[SKIP TO K9Q20]**
    (7) REFUSED   **[SKIP TO K9Q20]**

K9Q17D   Are you currently married, separated, divorced, widowed, or never married?

    (1) MARRIED   **[SKIP TO K9Q17D_1]**
    (2) SEPARATED   **[SKIP TO K9Q17D_3]**
    (3) DIVORCED   **[SKIP TO K9Q17D_3]**
    (4) WIDOWED   **[SKIP TO K9Q17D_3]**
    (5) NEVER MARRIED   **[SKIP TO K9Q17D_3]**
    (6) DON'T KNOW   **[SKIP TO K9Q17D_3]**
    (7) REFUSED   **[SKIP TO K9Q17D_3]**

K9Q17D_1   Does your spouse currently live in the household with [S.C.]?

    (1) YES   **[SKIP TO K9Q18]**
    (0) NO   **[SKIP TO K9Q17D_2]**
    (6) DON'T KNOW   **[SKIP TO K9Q18]**
    (7) REFUSED   **[SKIP TO K9Q18]**

K9Q17D_2   Why doesn't your spouse currently live in the household?

ENTER REASON: _____ **[SKIP TO K9Q18]**

K9Q17D_3   Are you currently living with a partner?

    (1) YES   **[SKIP TO K9Q18]**
    (0) NO   **[SKIP TO K9Q20]**
    (6) DON'T KNOW   **[SKIP TO K9Q20]**
    (7) REFUSED   **[SKIP TO K9Q20]**

K9Q18   **CATI INSTRUCTION (K9Q18):**

IF K9Q17A = (1,2,3,6,7) AND K1Q02 = 1, or
IF K9Q17A = (1,2,3,6,7) AND K1Q02 = 2, or
IF K9Q17B = 1 AND K1Q02 = 1 AND K9Q17B_1 = 1, or
IF K9Q17B = 1 AND K1Q02 = 1 AND K9Q17B_1 ≠ 1, or
IF K9Q17B_3 = 1 AND K1Q02 = 1, or
IF K9Q17C = 1 AND K1Q02 = 2 AND K9Q17C_1 = 1, or
IF K9Q17C = 1 AND K1Q02 = 2 AND K9Q17C_1 ≠ 1, or
IF K9Q17C_3 = 1 AND K1Q02 = 2, or
IF K9Q17D = 1, or
IF K9Q17D_3 = 1,
THEN FILL WITH "your spouse or partner".

IF NONE OF THE ABOVE IS TRUE, SKIP TO K9Q20.

The next question is about your relationship with [TEXTFILL]. Would you say that your relationship is completely happy, very happy, fairly happy, or not too happy?
(1) COMPLETELY HAPPY
(2) VERY HAPPY
(3) FAIRLY HAPPY
(4) NOT TOO HAPPY
(6) DON'T KNOW
(7) REFUSED

Subdomain 2:   **General health status**

K9Q20   **CATI INSTRUCTION (K9Q20):** IF K1Q02 = 1 OR ANY VALUE FOR K9Q12X01-K9Q12X04 = 1, ASK K9Q20. ELSE, SKIP TO K9Q21.

IF K1Q02 = 1, FILL "your". ELSE, FILL [IF K9Q12 = 1, then "mother", ELSE IF K9Q12 = 2, then "step mother," ELSEIF K9Q12 = 3, then "foster mother," ELSEIF K9Q12=4, then "adoptive mother"].

Would you say that, in general, ([S.C.]'s [MOTHER TYPE]/your) health is excellent, very good, good, fair, or poor?

(1) EXCELLENT	(2) VERY GOOD	(3) GOOD
(4) FAIR	(5) POOR	
(6) DON'T KNOW	(7) REFUSED	

HELP SCREEN (K9Q20): AT THIS QUESTION, COLLECT INFORMATION ABOUT THE MOTHER (BIOLOGICAL, STEP, FOSTER, ADOPTIVE) LIVING IN THIS HOUSE.

K9Q21   **CATI INSTRUCTION (K9Q21):** IF K1Q02 = 2 OR ANY VALUE FOR K9Q12X05-K9Q12X08 = 1, ASK K9Q21. ELSE, SKIP TO K9Q22.

IF K1Q02 = 2, FILL "your". ELSE, FILL [IF K9Q12 = 5, then "father", ELSEIF K9Q12 = 6, then "step father," ELSEIF K9Q12 = 7, then "foster father," ELSEIF K9Q12=8, then "adoptive father"].

Would you say that, in general, ([S.C.]'s [FATHER TYPE]/your) health is excellent, very good, good, fair, or poor?

(1) EXCELLENT   (2) VERY GOOD   (3) GOOD
(4) FAIR   (5) POOR
(6) DON'T KNOW   (7) REFUSED

HELP SCREEN (K9Q21): AT THIS QUESTION, COLLECT INFORMATION ABOUT THE FATHER (BIOLOGICAL, STEP, FOSTER, ADOPTIVE) LIVING IN THIS HOUSE.

K9Q22   **CATI INSTRUCTION (K9Q22):** IF K1Q02 NE (1, 2), ASK K9Q22. ELSE SKIP TO K9Q23.

Would you say that, in general, your health is excellent, very good, good, fair, or poor?

(1) EXCELLENT   (2) VERY GOOD   (3) GOOD
(4) FAIR   (5) POOR
(6) DON'T KNOW   (7) REFUSED

HELP SCREEN (K9Q22): AT THIS QUESTION, COLLECT INFORMATION ABOUT THE [textfill: answer from K1Q02] LIVING IN THIS HOUSE.

TEXTFILL Logic:
IF K1Q02= 3 Fill with "SISTER (STEP/FOSTER/HALF/ADOPTIVE)"
ELSE IF K1Q02= 4 Fill with "BROTHER (STEP/FOSTER/HALF/ADOPTIVE)"
ELSE IF K1Q02= 5 Fill with "IN-LAW OF ANY TYPE"
ELSE IF K1Q02= 6 Fill with "AUNT"
ELSE IF K1Q02= 7 Fill with "UNCLE"
ELSE IF K1Q02= 8 Fill with "GRANDPARENT"
ELSE IF K1Q02= 9 Fill with "OTHER FAMILY MEMBER"
ELSE IF K1Q02= 10 Fill with "OTHER NON-RELATIVE"
ELSE IF K1Q02= 11 Fill with "FEMALE GUARDIAN"
ELSE IF K1Q02= 12 Fill with "MALE GUARDIAN"
ELSE IF K1Q02= 96 Fill with "RESPONDENT ON THE TELEPHONE"
ELSE IF K1Q02= 97 Fill with "RESPONDENT ON THE TELEPHONE"

K9Q23   **CATI INSTRUCTION (K9Q23):** IF K1Q02 = 1 OR ANY VALUE FOR K9Q12X01-K9Q12X04 = 1, ASK K9Q23. ELSE, SKIP TO K9Q24.

IF K1Q02 = 01, FILL "your". ELSE, FILL [MOTHER TYPE].

Would you say that, in general, ([S.C.]'s [MOTHER TYPE]/your) mental and emotional health is excellent, very good, good, fair, or poor?

(1) EXCELLENT   (2) VERY GOOD   (3) GOOD
(4) FAIR   (5) POOR
(6) DON'T KNOW   (7) REFUSED

HELP SCREEN (K9Q23): AT THIS QUESTION, COLLECT INFORMATION ABOUT THE MOTHER (BIOLOGICAL, STEP, FOSTER, ADOPTIVE) LIVING IN THIS HOUSE.

K9Q24   **CATI INSTRUCTION (K9Q24):** IF K1Q02 = 2 OR ANY VALUE FOR K9Q12X05-K9Q12X08 = 1, ASK K9Q24. ELSE, SKIP TO K9Q25.

IF K1Q02 = 2, FILL "your". ELSE, FILL [FATHER TYPE].

Would you say that, in general, ([S.C.]'s [FATHER TYPE]/your) mental and emotional health is excellent, very good, good, fair, or poor?

(1) EXCELLENT   (2) VERY GOOD   (3) GOOD
(4) FAIR   (5) POOR
(6) DON'T KNOW   (7) REFUSED

HELP SCREEN (K9Q24): AT THIS QUESTION, COLLECT INFORMATION ABOUT THE FATHER (BIOLOGICAL, STEP, FOSTER, ADOPTIVE) LIVING IN THIS HOUSE.

K9Q25   **CATI INSTRUCTION (K9Q25):** IF K1Q02 NE (1, 2), ASK K9Q25. ELSE SKIP TO K9Q30.

Would you say that, in general, your mental and emotional health is excellent, very good, good, fair, or poor?

(1) EXCELLENT   (2) VERY GOOD   (3) GOOD
(4) FAIR   (5) POOR
(6) DON'T KNOW   (7) REFUSED

HELP SCREEN (K9Q25): AT THIS QUESTION, COLLECT INFORMATION ABOUT THE [textfill: answer from K1Q02] LIVING IN THIS HOUSE.

Subdomain 3: **Exercise**

K9Q30   **CATI INSTRUCTION (K9Q30):** IF K1Q02 = 1 OR ANY VALUE FOR K9Q12X01-K9Q12X04 = 1, ASK K9Q30. ELSE, SKIP TO K9Q31.

IF K1Q02 = 1, FILL (1) you (0) you (3) your (4) you.
ELSE, FILL (1) S.C.'s [MOTHER TYPE] (0) her (3) her (4) her.
During the past week, on how many days did [you/S.C.'s MOTHER TYPE] exercise, play sports, or participate in physical activity for at least 20 minutes that made [you/her] sweat and breathe hard?

____ ____ NUMBER OF DAYS   **[RANGE CHECK: 00-07, 96, 97]**
(96) DON'T KNOW
(97) REFUSED

HELP SCREEN (K9Q30): AT THIS QUESTION, COLLECT INFORMATION ABOUT THE MOTHER (BIOLOGICAL, STEP, FOSTER, ADOPTIVE) LIVING IN THIS HOUSE.

K9Q31   **CATI INSTRUCTION (K9Q31):** IF K1Q02 = 2 OR (K9Q12 = 5, 6, 7, or 8), ASK K9Q31. ELSE, SKIP TO K9Q32.

IF K9Q30 NOT BLANK AND K1Q02 = 2, ASK: "And how about you?"

READ AS NECESSARY: "During the past week, on how many days did you exercise, play sports, or participate in physical activity for at least 20 minutes that made you sweat and breathe hard?""

IF K9Q30 NOT BLANK AND K1Q02 NE (2), ASK: "And how about [S.C.]'s [FATHER TYPE]?"

READ AS NECESSARY: "During the past week, on how many days did [FATHER TYPE] exercise, play sports, or participate in physical activity for at least 20 minutes that made him sweat and breathe hard?"

IF K9Q30 IS BLANK AND K1Q02 = 2, ASK: "During the past week, on how many days did you exercise, play sports, or participate in physical activity for at least 20 minutes that made you sweat and breathe hard?"

IF K9Q30 IS BLANK AND K1Q02 NE (2), ASK: "During the past week, on how many days did [FATHER TYPE] exercise, play sports, or participate in physical activity for at least 20 minutes that made him sweat and breathe hard?"

____ ____ NUMBER OF DAYS   **[RANGE CHECK: 00-07, 96, 97]**
(96) DON'T KNOW
(97) REFUSED

HELP SCREEN (K9Q31): AT THIS QUESTION, COLLECT INFORMATION ABOUT THE FATHER (BIOLOGICAL, STEP, FOSTER, ADOPTIVE) LIVING IN THIS HOUSE.

K9Q32   **CATI INSTRUCTION (K9Q32):** IF K1Q02 NE (1, 2), ASK K9Q32. ELSE SKIP TO K9Q40.

IF K9Q30 OR K9Q31 ARE NOT BLANK,
ASK: "And how about you?"

READ AS NECESSARY: "During the past week, on how many days did you exercise, play sports, or participate in physical activity for at least 20 minutes that made you sweat and breathe hard?"

IF K9Q30 AND K9Q31 ARE BLANK, ASK: "During the past week, on how many days did you exercise, play sports, or participate in physical activity for at least 20 minutes that made you sweat and breathe hard?"

____ ____ NUMBER OF DAYS   **[RANGE CHECK: 00-07, 96, 97]**
(96) DON'T KNOW
(97) REFUSED

HELP SCREEN (K9Q32): AT THIS QUESTION, COLLECT INFORMATION ABOUT THE [textfill: answer from K1Q02] LIVING IN THIS HOUSE.

Subdomain 4:   **Smoking**

K9Q40   Does anyone living in your household use cigarettes, cigars, or pipe tobacco?

(1) YES
(0) NO   **[SKIP TO K9Q50]**
(6) DON'T KNOW   **[SKIP TO K9Q50]**
(7) REFUSED   **[SKIP TO K9Q50]**

K9Q41   Does anyone smoke inside [S.C.]'s home?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

Section 10: Neighborhood and Community Characteristics

Subdomain 1: **Neighborhood amenities**

K10Q01_INTRO Now, I have a few questions about your neighborhood and community. Please tell me if the following places and things are available to children in your neighborhood, even if [S.C.] does not actually use them.

K10Q11 Sidewalks or walking paths?

[**READ IF NECESSARY:** Do those exist in your neighborhood?**]**

(1) YES   (0) NO   (6) DON'T KNOW   (7) REFUSED

K10Q12 A park or playground area?

[**READ IF NECESSARY:** Does that exist in your neighborhood?**]**

(1) YES   (0) NO   (6) DON'T KNOW   (7) REFUSED

K10Q13 A recreation center, community center, or boys' or girls' club?

[**READ IF NECESSARY:** Does that exist in your community?**]**

(1) YES   (0) NO   (6) DON'T KNOW   (7) REFUSED

K10Q14 A library or bookmobile?

[**READ IF NECESSARY:** Does that exist in your community?**]**

(1) YES   (0) NO   (6) DON'T KNOW   (7) REFUSED

Subdomain 2: **Neighborhood condition**

K10Q20 In your neighborhood, is there litter or garbage on the street or sidewalk?

(1) YES   (0) NO   (6) DON'T KNOW   (7) REFUSED

K10Q22 How about poorly kept or rundown housing?

[**READ IF NECESSARY:** Does that exist in your neighborhood?]

(1) YES   (0) NO   (6) DON'T KNOW   (7) REFUSED

K10Q23 How about vandalism such as broken windows or graffiti?

[**READ IF NECESSARY:** Does that exist in your neighborhood?]

(1) YES   (0) NO   (6) DON'T KNOW   (7) REFUSED

Subdomain 3:   Social capital

K10Q30_INTRO Now, for the next four questions, I am going to ask how much you agree or disagree with each of these statements about your neighborhood or community.

K10Q30   "People in this neighborhood help each other out." Would you say that you definitely agree, somewhat agree, somewhat disagree, or definitely disagree with this statement?

(1) DEFINITELY AGREE   (2) SOMEWHAT AGREE
(3) SOMEWHAT DISAGREE   (4) DEFINITELY DISAGREE
(6) DON'T KNOW   (7) REFUSED

K10Q31   "We watch out for each other's children in this neighborhood."

[**READ ONLY WHEN NEEDED:** Would you say that you definitely agree, somewhat agree, somewhat disagree, or definitely disagree with this statement?]

(1) DEFINITELY AGREE   (2) SOMEWHAT AGREE
(3) SOMEWHAT DISAGREE   (4) DEFINITELY DISAGREE
(6) DON'T KNOW   (7) REFUSED

K10Q32   "There are people I can count on in this neighborhood."

[**READ ONLY WHEN NEEDED:** Would you say that you definitely agree, somewhat agree, somewhat disagree, or definitely disagree with this statement?]

(1) DEFINITELY AGREE   (2) SOMEWHAT AGREE
(3) SOMEWHAT DISAGREE   (4) DEFINITELY DISAGREE
(6) DON'T KNOW   (7) REFUSED

K10Q34   "If my child were outside playing and got hurt or scared, there are adults nearby who I trust to help my child."

[**READ ONLY WHEN NEEDED:** Would you say that you definitely agree, somewhat agree, somewhat disagree, or definitely disagree with this statement?]

HELP SCREEN (K10Q34): IF RESPONDENT SAYS THEIR CHILD IS TOO YOUNG TO PLAY OUTSIDE, SAY: "Please answer the question as IF your child were playing outside."

(1) DEFINITELY AGREE   (2) SOMEWHAT AGREE
(3) SOMEWHAT DISAGREE   (4) DEFINITELY DISAGREE
(6) DON'T KNOW   (7) REFUSED

Subdomain 4:   Perceived safety

K10Q40   How often do you feel [S.C.] is safe in your community or neighborhood? Would you say never, sometimes, usually, or always?

(1) NEVER
(2) SOMETIMES
(3) USUALLY
(4) ALWAYS
(6) DON'T KNOW
(7) REFUSED

K10Q41   **CATI INSTRUCTION (K10Q41):** IF AGE_NSCH < 6 YEARS, SKIP TO K11Q01_INTRO. IF K7Q01F = 0, 6, 7, OR K7Q02 = 555, 666, OR K7Q01 = 3 [I.E. NOT ENROLLED IN PAST 12 MONTHS/HOME-SCHOOLED], SKIP TO K11Q01_INTRO.

How often do you feel [he/she] is safe at school? Would you say never, sometimes, usually, or always?

(1) NEVER
(2) SOMETIMES
(3) USUALLY
(4) ALWAYS
(6) DON'T KNOW
(7) REFUSED

Section 11: Additional Demographics

Subdomain 1:   Race and ethnicity of child

K11Q01_INTRO Now I have a few more general questions about [S.C.] and your household.

K11Q01   Is [S.C.] of Hispanic or Latino origin?

                (1) YES
                (0) NO
                (6) DON'T KNOW
                (7) REFUSED

                HELP SCREEN (K11Q01): HISPANIC OR LATINO INCLUDES MEXICAN, MEXICAN-AMERICAN, CENTRAL AMERICAN, SOUTH AMERICAN OR PUERTO RICAN, CUBAN, OR OTHER SPANISH-CARIBBEAN.

K11Q02**EX**   Now, I'm going to read a list of categories. Please choose one or more of the following categories to describe [S.C.]'s race. Is [S.C.] White, Black or African American, American Indian, Alaska Native, Asian, or Native Hawaiian or other Pacific Islander? **[MARK ALL THAT APPLY]**

                K11Q02X01 WHITE   (1) YES (0) NO (6) DK (7) REF
                K11Q02X02 BLACK/AFRICAN-AMERICAN   (1) YES (0) NO (6) DK (7) REF
                K11Q02X03 AMERICAN INDIAN   (1) YES (0) NO (6) DK (7) REF
                K11Q02X04 ALASKA NATIVE   (1) YES (0) NO (6) DK (7) REF
                K11Q02X05 ASIAN   (1) YES (0) NO (6) DK (7) REF
                K11Q02X06 NATIVE HAWAIIAN   (1) YES (0) NO (6) DK (7) REF
                K11Q02X07 PACIFIC ISLANDER   (1) YES (0) NO (6) DK (7) REF
                K11Q02X08 OTHER   (1) YES (0) NO (6) DK (7) REF
                (6) DON'T KNOW
                (7) REFUSED

                HELP SCREEN (K11Q02): BE SURE TO READ THE ENTIRE QUESTION AS WRITTEN, INCLUDING ALL RESPONSE CATEGORIES. RACE INFORMATION IS COLLECTED BY SELF-IDENTIFICATION. IT IS "WHATEVER RACE YOU CONSIDER YOURSELF TO BE." DO NOT TRY TO EXPLAIN OR DEFINE ANY OF THE GROUPS. MULTIPLE RACES MAY BE SELECTED.

                IF K11Q02X08 = 1,   **[SKIP TO K11Q02_OS]**
                ELSE,   **[SKIP TO K11Q03]**

K11Q02_OS   ENTER RACE_____

K11Q03   **CATI INSTRUCTION (K11Q03):** IF K11Q02X03 = 1 OR K11Q02X04 = 1 THEN ASK K11Q03. ELSE, SKIP TO K11Q20.

                At any time during the past 12 months, did [S.C.] receive services from any Indian Health Service hospital or clinic?

                (1) YES
                (0) NO
                (6) DON'T KNOW
                (7) REFUSED

Subdomain 2:   Education of parents

K11Q20   **CATI INSTRUCTION (K11Q20):** IF K1Q02 = 1 OR ANY VALUE FOR K9Q12X01-
K9Q12X04 = 1, ASK K11Q20. ELSE, SKIP TO K11Q21. IF K1Q02 = 1, FILL "you have".
ELSE, FILL "[S.C.]'s [MOTHER TYPE] has"

What is the highest grade or year of school [you have / [S.C.]'s [MOTHER TYPE] has]
completed?

(1) 8th GRADE OR LESS
(2) 9th-12th GRADE NO DIPLOMA
(3) HIGH SCHOOL GRADUATE OR GED COMPLETED
(4) COMPLETED A VOCATIONAL, TRADE, OR BUSINESS SCHOOL PROGRAM
(5) SOME COLLEGE CREDIT BUT NO DEGREE
(6) ASSOCIATE DEGREE (AA, AS)
(7) BACHELOR'S DEGREE (BA, BS, AB)
(8) MASTER'S DEGREE (MA, MS, MSW, MBA)
(9) DOCTORATE (PhD, EdD) or PROFESSIONAL DEGREE (MD, DDS, DVM, JD)
(96) DON'T KNOW
(97) REFUSED

**HELP SCREEN (K11Q20): AT THIS QUESTION, COLLECT INFORMATION ABOUT
THE MOTHER (BIOLOGICAL, STEP, FOSTER, ADOPTIVE) LIVING IN THIS HOUSE.**

K11Q21   **CATI INSTRUCTION (K11Q21):** IF K1Q02 = 2 OR ANY VALUE FOR K9Q12X05-
K9Q12X08 = 1, ASK K11Q21. ELSE, SKIP TO K11Q22.

IF K11Q20 NOT BLANK AND K1Q02 = 2, ASK: "And how about you?"
READ AS NECESSARY: "What is the highest grade or year of school you have completed?"

IF K11Q20 NOT BLANK AND K1Q02 NE (2), ASK: "And how about [S.C.]'s [FATHER
TYPE]?"
READ AS NECESSARY: "What is the highest grade or year of school [S.C.]'s [FATHER TYPE]
has completed?"

IF K11Q20 IS BLANK AND K1Q02 = 2, ASK: "What is the highest grade or year of school you
have completed?"

IF K11Q20 IS BLANK AND K1Q02 NE (2), ASK: "What is the highest grade or year of school
[S.C.]'s [FATHER TYPE] has completed?"

(1) 8th GRADE OR LESS
(2) 9th-12th GRADE NO DIPLOMA
(3) HIGH SCHOOL GRADUATE OR GED COMPLETED
(4) COMPLETED A VOCATIONAL, TRADE, OR BUSINESS SCHOOL PROGRAM
(5) SOME COLLEGE CREDIT BUT NO DEGREE
(6) ASSOCIATE DEGREE (AA, AS)
(7) BACHELOR'S DEGREE (BA, BS, AB)
(8) MASTER'S DEGREE (MA, MS, MSW, MBA)
(9) DOCTORATE (PhD, EdD) or PROFESSIONAL DEGREE (MD, DDS, DVM, JD)
(96) DON'T KNOW
(97) REFUSED

**HELP SCREEN (K11Q21): AT THIS QUESTION, COLLECT INFORMATION ABOUT
THE FATHER (BIOLOGICAL, STEP, FOSTER, ADOPTIVE) LIVING IN THIS HOUSE.**

K11Q22   **CATI INSTRUCTION (K11Q22):** IF K1Q02 NE (1, 2), ASK K11Q22. ELSE SKIP TO K11Q30.

IF K11Q20 OR K11Q21 ARE NOT BLANK, ASK: "And how about you?"
READ AS NECESSARY: "What is the highest grade or year of school you have completed?"

IF K11Q20 AND K11Q21 ARE BLANK, ASK: "What is the highest grade or year of school you have completed?"

(1) 8th GRADE OR LESS
(2) 9th-12th GRADE NO DIPLOMA
(3) HIGH SCHOOL GRADUATE OR GED COMPLETED
(4) COMPLETED A VOCATIONAL, TRADE, OR BUSINESS SCHOOL PROGRAM
(5) SOME COLLEGE CREDIT BUT NO DEGREE
(6) ASSOCIATE DEGREE (AA, AS)
(7) BACHELOR'S DEGREE (BA, BS, AB)
(8) MASTER'S DEGREE (MA, MS, MSW, MBA)
(9) DOCTORATE (PhD, EdD) or PROFESSIONAL DEGREE (MD, DDS, DVM, JD)
(96) DON'T KNOW
(97) REFUSED

HELP SCREEN (K11Q22): AT THIS QUESTION, COLLECT INFORMATION ABOUT THE [textfill: answer from K1Q02] LIVING IN THIS HOUSE.

Subdomain 3:   **Birthplace of child and parents**

K11Q30   **CATI INSTRUCTION (K11Q20):** IF K1Q02 = 1 OR ANY VALUE FOR K9Q12X01-K9Q12X04 = 1, ASK K11Q30. ELSE, SKIP TO K11Q31.

IF K1Q02 = 1, FILL "you have". ELSE, FILL "[S.C.]'s [MOTHER TYPE] has"

[Were you / Was [S.C.]'s [MOTHER TYPE]] born in the United States?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

HELP SCREEN (K11Q30): AT THIS QUESTION, COLLECT INFORMATION ABOUT THE MOTHER (BIOLOGICAL, STEP, FOSTER, ADOPTIVE) LIVING IN THIS HOUSE.

K11Q31   **CATI INSTRUCTION (K11Q31):** IF K1Q02 = 2 OR ANY VALUE FOR K9Q12X05-K9Q12X08 = 1, ASK K11Q31. ELSE, SKIP TO K11Q32.

IF K11Q30 NOT BLANK AND K1Q02 = 2, ASK: "And how about you?"
READ AS NECESSARY: "Were you born in the United States?"

IF K11Q30 NOT BLANK AND K1Q02 NE (2), ASK: "And how about [S.C.]'s [FATHER TYPE]?"
READ AS NECESSARY: "Was [S.C.]'s [FATHER TYPE] born in the United States?"

IF K11Q30 IS BLANK AND K1Q02 = 2, ASK: "Were you born in the United States?"

IF K11Q30 IS BLANK AND K1Q02 NE (2), ASK: "Was [S.C.]'s [FATHER TYPE] born in the United States?"

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

HELP SCREEN (K11Q31): AT THIS QUESTION, COLLECT INFORMATION ABOUT THE FATHER (BIOLOGICAL, STEP, FOSTER, ADOPTIVE) LIVING IN THIS HOUSE.

K11Q32   **CATI INSTRUCTION (K11Q32):** IF K1Q02 NE (1, 2), ASK K11Q32. ELSE SKIP TO K11Q33.

IF K11Q30 OR K11Q31 ARE NOT BLANK, ASK: "And how about you?"
READ AS NECESSARY: "Were you born in the United States?"

IF K11Q30 AND K11Q31 ARE BLANK, ASK: "Were you born in the United States?"

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

HELP SCREEN (K11Q32): AT THIS QUESTION, COLLECT INFORMATION ABOUT THE [textfill: answer from K1Q02] LIVING IN THIS HOUSE.

K11Q33   And how about [S.C.]?
READ AS NECESSARY: Was [S.C.] born in the United States?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K11Q34A   **CATI INSTRUCTION (K11Q34A):** IF K1Q02 = 1 OR ANY VALUE FOR K9Q12X01-K9Q12X04 = 1, AND K11Q30 = 0, ASK K11Q34A. ELSE, SKIP TO K11Q35A.

IF K1Q02 = 01, FILL "you have". ELSE, FILL "[S.C.]'s [MOTHER TYPE] has"

How long [have you / has [S.C.]'s [MOTHER TYPE]] been in the United States?

      ___ ____ ____ [ENTER NUMBER]
      (996) DON'T KNOW
      (997) REFUSED

HELP SCREEN (K11Q34A): AT THIS QUESTION, COLLECT INFORMATION ABOUT THE MOTHER (BIOLOGICAL, STEP, FOSTER, ADOPTIVE) LIVING IN THIS HOUSE.

K11Q34B   [MARK PERIOD]

       (1) DAYS   (2) WEEKS   (3) MONTHS   (4) YEARS

K11Q35A   **CATI INSTRUCTION (K11Q35A):** IF K1Q02 = 2 OR ANY VALUE FOR K9Q12X05-K9Q12X08 = 1, ASK K11Q35A. ELSE, SKIP TO K11Q36A.

IF K11Q34A NOT BLANK AND K1Q02 = 2, ASK: "And how about you?"
 READ AS NECESSARY: "How long have you been in the United States?"

IF K11Q34A NOT BLANK AND K1Q02 NE (2), ASK: "And how about [S.C.]'s [FATHER TYPE]?"
READ AS NECESSARY: "How long has [S.C.]'s [FATHER TYPE] been in the United States?"

IF K11Q34A IS BLANK AND K1Q02 = 2, ASK: "How long have you been in the United States?"

IF K11Q34A IS BLANK AND K1Q02 NE (2), ASK: "How long has [S.C.]'s [FATHER TYPE] been in the United States?"

      ___ ____ ____ [ENTER NUMBER]
      (996) DON'T KNOW
      (997) REFUSED

HELP SCREEN (K11Q35A): AT THIS QUESTION, COLLECT INFORMATION ABOUT THE FATHER (BIOLOGICAL, STEP, FOSTER, ADOPTIVE) LIVING IN THIS HOUSE.

K11Q35B   [MARK PERIOD]

       (1) DAYS   (2) WEEKS   (3) MONTHS   (4) YEARS

K11Q36A   **CATI INSTRUCTION (K11Q36A):** IF K1Q02 NE (1, 2) AND K11Q32 = 0, ASK K11Q36A. ELSE SKIP TO K11Q37A.

IF K11Q34A OR K11Q35A ARE NOT BLANK, ASK: "And how about you?"
READ AS NECESSARY: "How long have you been in the United States?"

IF K11Q34A AND K11Q35A ARE BLANK, ASK: "How long have you been in the United States?"

         ___ ____ ____ [ENTER NUMBER]
         (996) DON'T KNOW
         (997) REFUSED

HELP SCREEN (K11Q36A): AT THIS QUESTION, COLLECT INFORMATION ABOUT THE [textfill: answer from K1Q02] LIVING IN THIS HOUSE.

K11Q36B   [MARK PERIOD]

         (1) DAYS   (2) WEEKS   (3) MONTHS   (4) YEARS

K11Q37A   **CATI INSTRUCTION (K11Q37A):** IF K11Q33 = 0, ASK K11Q37A. ELSE SKIP TO K11Q40

IF K11Q34A, K11Q35A, OR K11Q36A ARE NOT BLANK, ASK: "And how about [S.C.]?"
READ AS NECESSARY: "How long has [S.C.] been in the United States?"

IF K11Q34A, K11Q35A, AND K11Q36A ARE BLANK, ASK: "How long has [S.C.] been in the United States?"

___ ____ ____ [ENTER NUMBER]
(996) DON'T KNOW
(997) REFUSED

K11Q37B   [MARK PERIOD]

         (1) DAYS   (2) WEEKS   (3) MONTHS   (4) YEARS

K11Q38   **CATI INSTRUCTION (K11Q38):** IF ANY BIOLOGICAL MOTHER OR BIOLOGICAL FATHER IN HH (K9Q10 = 1 OR K9Q10 = 5 OR K9Q12X01 = 1 OR K9Q12X05 = 1), SKIP TO K11Q43. IF NO BIOLOGICAL PARENT IN HH AND IF ANY ADOPTIVE PARENT OR GUARDIAN IN HOUSEHOLD (K9Q10 = 4 OR K9Q10 = 8 OR K9Q12X04 = 1 OR K9Q12X08 = 1 OR K9Q12_A = 1), ASK K11Q38. ELSE, SKIP TO K11Q43.

Was [S.C.] adopted from another country?

(1) YES   **[SKIP TO K11Q41]**
(0) NO   **[SKIP TO K11Q40]**
(6) DON'T KNOW   **[SKIP TO K11Q40]**
(7) REFUSED   **[SKIP TO K11Q40]**

Subdomain 4:   Residential mobility

K11Q40   **CATI INSTRUCTION (K11Q40):** IF ANY BIOLOGICAL MOTHER OR BIOLOGICAL FATHER IN HH (K9Q10 = 1 OR K9Q10 = 5 OR K9Q12X01 = 1 OR K9Q12X05 = 1), SKIP TO K11Q43. IF NO BIOLOGICAL PARENT IN HH AND IF ANY ADOPTIVE PARENT OR GUARDIAN IN HOUSEHOLD (K9Q10 = 4 OR K9Q10 = 8 OR K9Q12X04 = 1 OR K9Q12X08 = 1 OR K9Q12_A = 1), ASK K11Q40. ELSE, SKIP TO K11Q43.

Prior to being adopted, was [S.C.] in the legal custody of a state or county child welfare agency in the United States? That is, was [S.C.] in the U.S. foster care system?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K11Q41   Has [S.C.]'s adoption been finalized?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

ADOPT_TYPE   **CATI INSTRUCTION: CREATE VARIABLE ADOPT_TYPE:**
IF K11Q41 = 0, ADOPT_TYPE = <NULL>
ELSE IF K11Q38 = 1, ADOPT_TYPE = INTERNATIONAL
ELSE IF K11Q40 = 1, ADOPT_TYPE = FOSTER CARE
ELSE IF K11Q40 = 0, 6, OR 7, ADOPT_TYPE = PRIVATE

K11Q43   [IF CHILD WAS ADOPTED (ADOPT_TYPE NE <NULL>), INSERT: Since (he/she) was adopted,] How many times has [S.C.] ever moved to a new address?

___ ___ ___ MOVES
(996) DON'T KNOW
(997) REFUSED

HELP SCREEN (K11Q42): PLEASE INCLUDE ANY AND ALL TIMES A CHILD HAS CHANGED THEIR PRIMARY RESIDENCE. DO NOT INCLUDE TEMPORARY CHANGES IN RESIDENCE SUCH AS A CHILD VISITING ANOTHER RESIDENCE DURING SUMMER VACATION OR OTHER BREAKS IN THE SCHOOL YEAR.

Subdomain 5: **Employment and income**

K11Q50   Was anyone in the household employed at least 50 weeks out of the past 52 weeks?

            (1) YES
            (0) NO
            (6) DON'T KNOW
            (7) REFUSED

K11Q51   Now I am going to ask you a few questions about your income. Please think about your total combined FAMILY income during **(CATI: FILL LAST CALENDAR YEAR)** for all members of the family. Can you tell me that amount before taxes?

            RECORD INCOME $_____   **[SKIP TO K11Q51_CONF]**
            DON'T KNOW   (96)   **[SKIP TO S11_CASCADE]**
            REFUSED   (97)   **[SKIP TO S11_CASCADE]**

            HELP SCREEN (K11Q51): INCLUDE MONEY FROM JOBS, CHILD SUPPORT, SOCIAL SECURITY, RETIREMENT INCOME, UNEMPLOYMENT PAYMENTS, PUBLIC ASSISTANCE, AND SO FORTH. ALSO, INCLUDE INCOME FROM INTEREST, DIVIDENDS, NET INCOME FROM BUSINESS, FARM, OR RENT, AND ANY OTHER MONEY INCOME RECEIVED.

K11Q51_CONF Just to confirm that I entered it correctly, your income was **[AMOUNT FROM K11Q51]**. Is that correct?

            (1) YES   **[SKIP TO K11Q60]**
            (0) NO   **[SKIP TO K11Q51]**

K11Q52   For the purposes of this survey, it is important to get at least a range for the total income received by all members of your household in [FILL LAST CALENDAR YEAR]. Would you say that the total combined income, before taxes, was above or below $20,000?

            (1) MORE THAN $20,000   **[SKIP TO K11Q56]**
            (2) $20,000   **[SKIP TO K11Q60]**
            (3) LESS THAN $20,000   **[SKIP TO K11Q53]**
            (6) DON'T KNOW   **[SKIP TO K11Q60]**
            (7) REFUSED   **[SKIP TO K11Q60]**

K11Q53   Was the total combined household income more or less than $10,000?

            (1) MORE THAN $10,000   **[SKIP TO K11Q55]**
            (2) $10,000   **[SKIP TO K11Q60]**
            (3) LESS THAN $10,000   **[SKIP TO K11Q54]**
            (6) DON'T KNOW   **[SKIP TO K11Q60]**
            (7) REFUSED   **[SKIP TO K11Q60]**

K11Q54   Was it more than $7,500?
            (1) YES   **[SKIP TO K11Q59]**
            (0) NO   **[SKIP TO K11Q59]**
            (6) DON'T KNOW   **[SKIP TO K11Q60]**
            (7) REFUSED   **[SKIP TO K11Q60]**

K11Q55   Was it more than $15,000?

               (1) YES   **[SKIP TO K11Q55A]**
               (0) NO   **[SKIP BACK TO K11Q55B]**
               (6) DON'T KNOW   **[SKIP TO K11Q60]**
               (7) REFUSED   **[SKIP TO K11Q60]**

K11Q55A   Was it more than $17,500?

               (1) YES   **[SKIP TO K11Q59]**
               (0) NO   **[SKIP BACK TO K11Q59]**
               (6) DON'T KNOW   **[SKIP TO K11Q60]**
               (7) REFUSED   **[SKIP TO K11Q60]**

K11Q55B   Was it more than $12,500?

               (1) YES   **[SKIP TO K11Q59]**
               (0) NO   **[SKIP BACK TO K11Q59]**
               (6) DON'T KNOW   **[SKIP TO K11Q60]**
               (7) REFUSED   **[SKIP TO K11Q60]**

K11Q56   (READ IF NECESSARY: Was the total combined household income) more or less than $40,000?

               (1) MORE THAN $40,000   **[SKIP TO K11Q56A]**
               (2) $40,000   **[SKIP TO K11Q60]**
               (3) LESS THAN $40,000   **[SKIP TO K11Q57]**
               (6) DON'T KNOW   **[SKIP TO K11Q60]**
               (7) REFUSED   **[SKIP TO K11Q60]**

K11Q56A   (READ IF NECESSARY: Was the total combined household income) more or less than $60,000?

               (1) MORE THAN $60,000   **[SKIP TO K11Q58]**
               (2) $60,000   **[SKIP TO K11Q60]**
               (3) LESS THAN $60,000   **[SKIP TO K11Q56B]**
               (6) DON'T KNOW   **[SKIP TO K11Q60]**
               (7) REFUSED   **[SKIP TO K11Q60]**

K11Q56B   (READ IF NECESSARY: Was the total combined household income) more or less than $50,000?

               (1) MORE THAN $50,000   **[SKIP TO K11Q59]**
               (2) $50,000   **[SKIP TO K11Q60]**
               (3) LESS THAN $50,000   **[SKIP TO K11Q56C]**
               (6) DON'T KNOW   **[SKIP TO K11Q60]**
               (7) REFUSED   **[SKIP TO K11Q60]**

K11Q56C   (READ IF NECESSARY: Was the total combined household income) more or less than $45,000?

               (1) MORE THAN $45,000   **[SKIP TO K11Q59]**
               (2) $45,000   **[SKIP TO K11Q60]**
               (3) LESS THAN $45,000   **[SKIP TO K11Q59]**
               (6) DON'T KNOW   **[SKIP TO K11Q60]**
               (7) REFUSED   **[SKIP TO K11Q60]**

K11Q57   (READ IF NECESSARY: Was the total combined household income) more or less than $30,000?

      (1) MORE THAN $30,000   **[SKIP TO K11Q57A]**
      (2) $30,000   **[SKIP TO K11Q60]**
      (3) LESS THAN $30,000   **[SKIP TO K11Q57B]**
      (6) DON'T KNOW   **[SKIP TO K11Q60]**
      (7) REFUSED   **[SKIP TO K11Q60]**

K11Q57A   (READ IF NECESSARY: Was the total combined household income) more or less than $35,000?

      (1) MORE THAN $35,000   **[SKIP TO K11Q59]**
      (2) $35,000   **[SKIP TO K11Q60]**
      (3) LESS THAN $35,000   **[SKIP TO K11Q59]**
      (6) DON'T KNOW   **[SKIP TO K11Q60]**
      (7) REFUSED   **[SKIP TO K11Q60]**

K11Q57B   (READ IF NECESSARY: Was the total combined household income) more or less than $25,000?

      (1) MORE THAN $25,000   **[SKIP TO K11Q59]**
      (2) $25,000   **[SKIP TO K11Q60]**
      (3) LESS THAN $25,000   **[SKIP TO K11Q59]**
      (6) DON'T KNOW   **[SKIP TO K11Q60]**
      (7) REFUSED   **[SKIP TO K11Q60]**

K11Q58   (READ IF NECESSARY: Was the total combined household income) more or less than $75,000?

      (1) MORE THAN $75,000   **[SKIP TO K11Q59]**
      (2) $75,000   **[SKIP TO K11Q60]**
      (3) LESS THAN $75,000   **[SKIP TO K11Q59]**
      (6) DON'T KNOW   **[SKIP TO K11Q60]**
      (7) REFUSED   **[SKIP TO K11Q60]**

K11Q59   Was the total combined household income more or less than [$REF]?

NOTE: IF NIS COMPLETED, INCOME VALUES HERE WERE FILLED FROM NIS AS APPROPRIATE, AND THESE ADDITIONAL QUESTIONS NEED TO BE ASKED TO DETERMINE POVERTY LEVEL, THE DECISION WAS MADE NOT TO ASK THESE QUESTIONS BECAUSE THE TRANSITION IS DIFFICULT AND THE QUESTIONS SEEM OUT OF PLACE. THIS QUESTION WILL ONLY APPEAR IN THE TEEN OVERLAP SAMPLE; IT WON'T BE ANSWERED IN NIS-NSCH OVERLAP SAMPLE.

      (1) MORE THAN [$REF]   **[WHEN THERE ARE TWO VALUES IN POVERTY REFERENCE TABLE, THEN ASK K11Q59A. ELSE SKIP TO K11Q60]**
      (2) EXACTLY [$REF]   **[SKIP TO K11Q60]**
      (3) LESS THAN [$REF]   **[SKIP TO K11Q60]**
      (6) DON'T KNOW   **[SKIP TO K11Q60]**
      (7) REFUSED   **[SKIP TO K11Q60]**

POV_PCT   **CATI INSTRUCTION: STORE POVERTY CATEGORY BASED ON POVERTY GUIDELINES TABLE**

K11Q59A   Would you say this income was MORE or LESS than [$REF]?

(1) MORE THAN [$REF]
(2) EXACTLY [$REF]
(3) LESS THAN [$REF]
(6) DON'T KNOW
(7) REFUSED

Subdomain 6:   Program participation

K11Q60   **CATI INSTRUCTION (K11Q60):** CALCULATE HOUSEHOLD POVERTY LEVEL FROM HOUSEHOLD SIZE (K9Q00) AND REPORTED INCOME (K11Q51), OR FROM THE INCOME CASCADE. IF HH POVERTY LEVEL IS > 300%, SKIP TO K11Q70. IF HOUSEHOLD POVERTY LEVEL CANNOT BE DETERMINED, OR IF HOUSEHOLD POVERTY LEVEL IS ≤ 300%, ASK K11Q60.

At any time during the past 12 months, even for one month, did anyone in this household receive any cash assistance from a state or county welfare program, such as **[state TANF name]?**

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K11Q61   **CATI INSTRUCTION (K11Q61):** IF S_UNDR18 > 1, FILL "any child in the household". ELSE, FILL [S.C.].

During the past 12 months, did [[S.C.]/ any child in the household] receive Food Stamps?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

K11Q62   **CATI INSTRUCTION (K11Q62): IF S_UNDR18 = 1 and AGE_NSCH < 24 months, GO TO K11Q70.** IF S_UNDR18 > 1, FILL "any child in the household". ELSE, FILL [S.C.].

During the past 12 months, did [[S.C.]/any child in the household] receive free or reduced-cost breakfasts or lunches at school?

(1) YES
(0) NO
(6) DON'T KNOW
(7) REFUSED

Subdomain 7: Telephone line information

K11Q70 The next few questions are about the telephone numbers in your household. Do you have more than one telephone number in your household? Do not include cell phones or numbers that are only used by a computer or fax machine.

        (1) YES   **[SKIP TO K11Q71]**
        (0) NO   **[SKIP TO K11Q76]**
        (6) DON'T KNOW   **[SKIP TO K11Q76]**
        (7) REFUSED   **[SKIP TO K11Q76]**

HELP SCREEN (K11Q70): READ IF NECESSARY: "I'd like to know about the telephone numbers, not telephone extensions, that ring to this household." COUNT BUSINESS TELEPHONE NUMBERS THAT RING TO THE HOUSEHOLD IF THEY ARE USED OCCASIONALLY FOR HOME USE.

K11Q71 How many telephone numbers are residential numbers?

        (1) ONE
        (2) TWO
        (3) THREE OR MORE
        (6) DON'T KNOW
        (7) REFUSED

HELP SCREEN (K11Q71): THIS QUESTION IS ASKING FOR THE TOTAL NUMBER OF HOME TELEPHONE NUMBERS (INCLUDING THE NUMBER WE CALLED). COUNT BUSINESS TELEPHONE NUMBERS THAT RING TO THE HOUSEHOLD IF THEY ARE USED OCCASIONALLY FOR HOME USE.

K11Q76 Not including cellular telephones, has your family been without telephone service for 1 week or more during the past 12 months? Do not include interruptions of phone service due to weather or natural disasters.

        (1) YES   **[SKIP TO K11Q76A]**
        (0) NO   **[SKIP TO K11Q80]**
        (6) DON'T KNOW   **[SKIP TO K11Q80]**
        (7) REFUSED   **[SKIP TO K11Q80]**

K11Q76A For how long was your household without telephone service in the past 12 months?

        ENTER NUMBER ___ ___ ___

        (996) DON'T KNOW
        (997) REFUSED

        IF K11Q76A > 365 AND NOT IN (996, 997)   **[DISPLAY WARNING TEXT]**
        ELSE, IF K11Q76A IN (996, 997)   **[SKIP TO K11Q77]**
        ELSE   **[SKIP TO K11Q76B]**

K11Q76B   [ENTER PERIOD]

               (1) DAYS
               (2) WEEK(S)
               (3) MONTH(S)
               (6) DON'T KNOW
               (7) REFUSED

               IF K11Q76B = 2 AND K11Q76A > 52,   **[DISPLAY WARNING TEXT]**
               ELSE, IF K11Q76B = 33 AND K11Q76A > 12,   **[DISPLAY WARNING TEXT]**

               WARNING: ANSWER IS MORE THAN 12 MONTHS, RETURN TO QUESTION AND
               CORRECT.

K11Q77   When your household was without telephone service, did someone in your household have a
               working cell phone?

               (1) YES
               (0) NO
               (6) DON'T KNOW
               (7) REFUSED

Subdomain 8:   ZIP Code

K11Q80   Please tell me your zip code.

               _____ _____ _____ ____ _____ (00001-99996)

               (99996) DON'T KNOW   **[SKIP TO K11Q83]**
               (99997) REFUSED   **[SKIP TO K11Q83]**

K11Q81   **CATI INSTRUCTION (K11Q81):** USE "ZIP CODE BY STATE" TABLE TO RECORD
               STATE IN K11Q80_STATE. IF K11Q80_STATE = STATE, THEN GO TO K_END. IF
               K11Q80_STATE ≠ STATE, THEN SKIP TO K11Q82. ELSE, IF K11Q80 NOT IN TABLE,
               THEN GO TO K11Q81.

               I entered [FILL K11Q80]. Is that correct?

               (1) YES   **[GO TO K11Q83]**
               (0) NO   **[GO TO K11Q80]**

K11Q82   I entered [FILL K11Q80]. Is that correct?

               (1) YES   **[GO TO K_PROMPT]**
               (0) NO   **[GO TO K11Q80]**
               (6) DON'T KNOW **[GO TO K11Q83]**
               (7) REF   **[GO TO K11Q83]**

K11Q83   **CATI INSTRUCTION (K11Q83):** PRESENT DROP DOWN MENU OF STATE NAMES. DO NOT USE THE INFORMATION COLLECTED IN THIS QUESTION TO CHANGE 'STATE' FROM THE SAMPLE PRE-FILL TABLE. "US TERRITORIES" SHOULD APPEAR AS AN OPTION IN THE DROP DOWN MENU.

What state do you live in?

_____

HELP SCREEN (K11Q83): IF A RESPONDENT HAS DIFFICULTY DECIDING BETWEEN MULTIPLE STATES, ASK: "Where is your primary residence? That is, where do you live most of the time?"

INTERVIEWER INSTRUCTION (K11Q83): IF R LIVES IN PUERTO RICO, US VIRGIN ISLANDS, GUAM, OR NORTHERN MARIANAS, CODE AS US TERRITORIES.

K_PROMPT If (NSCH_INCENT_GROUP=0 AND INCENTIVE =0), skip to K_END

Else if (NSCH_INCENT_GROUP = 0 AND INCENTIVE > 0)
[If INCENT_GRP=1 USE $10, IF INCENT_GRP = 2 USE $15]
DISPLAY:

(If ADOPT_TYPE = <null> DISPLAY: "Those are all the questions I have. Before I go,") I'll need to verify your mailing address so we can send you $[10/15] as a token of our appreciation for taking the time to answer questions for the National Immunization Study. You may have already received this money in the mail.

HELP SCREEN: IF R SAYS THAT HE/SHE HAS RECEIVED THE MONEY, ASK R TO VERIFY THAT WE HAVE THE ADDRESS RECORDED CORRECTLY IN CASE WE NEED TO CONTACT THEM IN THE FUTURE.

Else if (NSCH_INCENT_GROUP = 1)
[FOR FIRST FILL: IF NSCH_INCENT=<null>, then use $10, ELSE use NSCH_INCENT]
[FOR SECOND FILL: If INCENT_GRP=1 USE $10, IF INCENT_GRP = 2 USE $15]
DISPLAY:

(If ADOPT_TYPE = <null> DISPLAY: "Those are all the questions I have. Before I go,") I'll need to verify your mailing address so we can send you $[10/NSCH_INCENT] as a token of our appreciation for taking the time to answer questions for the National Survey of Children's Health. (If INCENTIVE > 0 and AC_NIS_INCENT_EXIT not previously read, read: In addition, the National Immunization Study will be sending you $[10/15], which you may have already received.)

(1) READ TO RESPONDENT

IF ADOPT_TYPE = <NULL> GO TO K_END,
ELSE SKIP TO NSAP_1A

K_END   **CATI INSTRUCTIONS (K_END):** IF ADOPT_TYPE = <NULL> OR (ADOPT_TYPE NE <NULL> and NSCH_LANG=2), READ K_END. ELSE IF ADOPT_TYPE NE <NULL> AND NSCH_LANG = 1, SKIP TO NSAP_1A.

Those are all the questions I have. You may be re-contacted in the future to participate in related studies. If you are contacted to participate in future surveys, you have the right to refuse. I'd like to thank you on behalf of the Centers for Disease Control and Prevention for the time and effort you've spent answering these questions. If you have any questions about this survey, you may call my supervisor toll-free at [TEXTFILL: If Sample Use Code = 1 or 2: 1-8 6 6 – 9 9 9 – 3 3 4 0, if sample use code = 3: 1 - 8 8 8 – 9 9 0 – 9 9 8 6]. If you have questions about your rights as a survey participant, you may call the chairman of the Research Ethics Review Board at 1-800-223-8118. Thank you again.

[ALL SKIP TO LANG1.]

NSAP_1A   **CATI INSTRUCTIONS (NSAP_1A):** IF RESPONDENT IS AN ADOPTIVE PARENT OR GUARDIAN (K9Q10 = 4 OR K9Q10 = 8 OR K9Q12_A = 1), ASK NSAP_1A. ELSE, SKIP TO NSAP_2A.

ONLY DISPLAY AND ALLOW OPTION 3 IF THE INTERVIEWER HAS THE NSAP RESOURCE (I.E. THE INTERVIEWER HAS ACCESS TO THE NSAP SURVEY)

IF <BLUE X, ABANDON> USED FROM THIS PAGE, THEN ALL ITS OUTCOMES RESULTING IN SCHEDULING FOR A CALLBACK SHOULD SET THE POINT OF RETURN TO NSAP_INTRO (SAME CALLBACK PATH AS IF RESPONSE 1 OR 2 WERE USED)

Thank you for the time you have spent answering these questions. Before I go, I want to make you aware of another survey you are eligible for. Because you indicated that you are [S.C.]'s adoptive parent, you are eligible to be part of The National Survey of Adoptive Parents – the first national survey of its kind about the health and well-being of adopted children and their families. The adoption survey will ask questions related to post-adoption services and other adoption-specific topics. Participation in the adoption survey is voluntary and you would receive payment of $25 for your participation. Because you have already spent time with us on the phone, we would be happy to call you back for this interview. It would take about half an hour of your time.

When would be a convenient time for you to participate in the National Survey of Adoptive Parents?

(1) R GIVES SPECIFIC TIME > SCHEDULE APPOINTMENT AND THEN GO TO K_END2
(2) R DOES NOT GIVE SPECIFIC TIME > GO TO NSAP_1B
(3) CONTINUE TO NSAP > GO TO CONSENT_INTRO

NSAP_1B   That's fine. I can call back later to discuss your participation in the adoption survey. You can call also us at [TEXTFILL: If Sample Use Code = 1 or 2: 1-8 6 6 – 9 9 9 – 3 3 4 0, if sample use code = 3: 1 - 8 8 8 – 9 9 0 – 9 9 8 6] to schedule an interview.

[GO TO K_END2.]

NSAP_2A   ONLY DISPLAY AND ALLOW OPTION 3 IF THE INTERVIEWER HAS THE NSAP
              RESOURCE (I.E. THE INTERVIEWER HAS ACCESS TO THE NSAP SURVEY)

              IF <BLUE X, ABANDON> USED FROM THIS PAGE, THEN ALL ITS OUTCOMES
              RESULTING IN SCHEDULING FOR A CALLBACK SHOULD SET THE POINT OF
              RETURN TO NSAP_INTRO (SAME CALLBACK PATH AS IF RESPONSE 1 OR 2 WERE
              USED)

              Thank you for the time you have spent answering these questions.   Before I go, I want to make
              you aware of another survey your household is eligible for. Because you indicated that another
              member of the household is [S.C.]'s adoptive parent, your household is eligible to be part of The
              National Survey of Adoptive Parents – the first national survey of its kind about the health and
              well-being of adopted children and their families. The adoption survey will ask questions related
              to post-adoption services and other adoption-specific topics. Participation in the adoption survey
              is voluntary and (he/she) would receive payment of $25 for (his/her) participation. Because you
              have already spent time with us on the phone, we would be happy to call [S.C.]'s adoptive parent
              back for this interview. It would take about half an hour of (his/her) time.

              When would be a convenient time for [S.C.]'s adoptive parent to participate in the National
              Survey of Adoptive Parents?

              (1) R GIVES SPECIFIC TIME > SCHEDULE APPOINTMENT AND THEN GO TO K_END2
              (0) R DOES NOT GIVE SPECIFIC TIME > GO TO NSAP_1B
              (3) CONTINUE TO NSAP > GO TO CONSENT_INTRO

NSAP_2B   That's fine. I can call back later to discuss (his/her) participation in the adoption survey. You can
              also let [S.C.]'s adoptive parent know that (he/she) can call us at [TEXTFILL: If Sample Use
              Code = 1 or 2: 1-8 6 6 – 9 9 9 – 3 3 4 0, if sample use code = 3: 1 - 8 8 8 – 9 9 0 – 9 9 8 6] to
              schedule an interview.

              [SKIP TO K_END2.]

K_END2   Those are all the questions I have at this time. I'd like to thank you on behalf of the Centers for
              Disease Control and Prevention for the time and effort you've spent answering these questions. If
              you have any questions about this survey, you may call my supervisor toll-free at [TEXTFILL: If
              Sample Use Code = 1 or 2: 1-8 6 6 – 9 9 9 – 3 3 4 0, if sample use code = 3: 1 - 8 8 8 – 9 9 0 – 9 9
              8 6]. If you have questions about your rights as a survey participant, you may call the chairman of
              the Research Ethics Review Board at 1- 800 - 223 - 8118. Thank you again. **[SKIP TO LANG1]**

K_END3   Those are all the questions I have. I'd like to thank you on behalf of the Centers for Disease
              Control and Prevention for the time and effort you've spent answering these questions. If you have
              any questions about this survey, you may call my supervisor toll-free at [TEXTFILL: If Sample
              Use Code = 1 or 2: 1-8 6 6 – 9 9 9 – 3 3 4 0, if sample use code = 3: 1 - 8 8 8 – 9 9 0 – 9 9 8 6]. If
              you have questions about your rights as a survey participant, you may call the chairman of the
              Research Ethics Review Board at 1- 800 - 223 - 8118. Thank you again. **[SKIP TO LANG1]**

LANG1   **CATI INSTRUCTION (LANG1):** THIS FIELD MUST BE FILLED IN. DO NOT ALLOW INTERVIEWER TO SKIP AHEAD OR CALLBACKS TO BE SET. THIS FIELD APPEARS AFTER COMPLETED INTERVIEWS ONLY.

         INTERVIEWER: WAS THIS INTERVIEW COMPLETED USING ENGLISH ONLY?
         (1) YES   **[TERMINATE INTERVIEW. GO TO COMMENTS.]**
         (0) NO   **[SKIP TO LANG2]**

LANG2   **INTERVIEWER: WHICH LANGUAGES WERE NEEDED TO COMPLETE THIS INTERVIEW?**

         LANG2X01 ENGLISH   [SKIP TO LANG3]
         LANG2X02 SPANISH   [SKIP TO LANG3]
         LANG2X04 CANTONESE   [SKIP TO LANG3]
         LANG2X08 KOREAN   [SKIP TO LANG3]
         LANG2X09 MANDARIN   [SKIP TO LANG3]
         LANG2X13 VIETNAMESE   [SKIP TO LANG3]
         LANG2X14 ANOTHER LANGUAGE   [SKIP TO LANG2_OTHER]

LANG2_
OTHER   _____ OTHER LANGUAGE

LANG3   **CATI INSTRUCTION (LANG3)**: IF LANG2=1 AND ANY LANG2=2 - 14 SELECTED > GO TO LANG3. ELSE TERMINATE INTERVIEW, IF ITS <> 67 AND GO TO COMMENTS.

         INTERVIEWER: WAS THIS INTERVIEW COMPLETED "MOSTLY IN ENGLISH" OR "MOSTLY IN OTHER LANGUAGE"?

         (1) MOSTLY IN ENGLISH
         (2) MOSTLY IN OTHER LANGUAGE
         (3) ABOUT HALF AND HALF

         [TERMINATE INTERVIEW. GO TO COMMENTS.]

Appendix V. Summary of Key Differences Between the 2003 and 2007 Questionnaires

Section 1

The question that asked the highest level of education attained by any member of the household (S1Q05A) was dropped from the 2007 version of the questionnaire; however, questions about the mother's, father's, or respondent's highest level of education can be found in Section 11 (K11Q20–22).

Section 2

The 2003 survey included a single question about specific dental problems (S2Q55 INDEX) that was asked only when parents reported that the child's teeth were in fair or poor condition. For 2007, new questions about specific dental problems (K2Q52–55) were asked for all children aged 12 months or over regardless of the reported condition of the child's teeth. Also for 2007, the question about the condition of the child's teeth (K2Q01_D) was moved earlier in the interview and away from the questions about specific problems.

For 2007, a new question was added to ascertain the child's birth weight (K2Q04). This question was asked only for children under age 6 years because of concerns about the reliability of parent recall for older children.

The 2003 survey included questions that asked whether a doctor or other health professional had ever told the parent that the child had various chronic health conditions. For 2007, new follow-up questions asked parents to report whether the child still had each condition.

The 2003 survey grouped depression and anxiety problems (S2Q22) and hearing problems and vision problems (S2Q20). For 2007, questions asked about each of these conditions separately (K2Q32A, K2Q33A, K2Q43A, K2Q44A). In addition, for 2007, new questions were added to determine whether a child had

Tourette syndrome (K2Q38A) or epilepsy (K2Q42A).

The 2003 survey included a single question that assessed the overall severity of all conditions for all children who had ever been diagnosed with one or more of the chronic conditions included in the survey. For 2007, separate questions about severity were asked for each health problem that the child was reported to have.

Several questions in the 2003 survey about asthma and mental and emotional health were dropped for 2007. These questions included whether or not the child had emotional, concentration, or behavior difficulties (S2Q59); the degree to which the child's asthma (S2Q51) or mental and emotional health (S2Q61) placed a burden on the family; hospitalization due to asthma (S2Q53); asthma attacks (S2Q52A); health difficulties due to asthma (S2Q50); and asthma medication use (S2Q52).

For 2007, new questions on activity limitations (K2Q60A-K2Q61C) were asked for children with special health care needs (CSHCN).

The 2003 survey included questions about immunizations for Hepatitis A (S4Q27-S4Q30). These questions were dropped for 2007. For 2007, questions were added about immunizations for adolescents aged 12–17 years (K2Q81-K2Q85). Questions were asked about receipt of the tetanus booster (Td or Tdap), meningitis shot (Menactra or Menomune), and the human papillomavirus shot (Gardasil or Cervarix).

Section 3

The 2003 survey included a question about dental insurance coverage (S3Q03). This question was dropped for 2007.

For 2007, questions about the adequacy of the child's health insurance coverage were added (K3Q20-K3Q21B)

for those children insured at the time of the interview.

Section 4

This section was substantially revised for 2007. The 2003 survey included questions that determined the number of times the child visited an emergency room (S4Q04), whether the child needed prescription medications (S4Q15-S4Q16), and why the child did not receive certain kinds of care (S4Q08 INDEX, S4Q14 INDEX, and S4Q18 INDEX). These questions were dropped for 2007.

For 2007, several new questions were added to ascertain whether the child has a usual place for care (K4Q01-K4Q03). Additional new questions asked about access and utilization of care from mental health professionals (K4Q22) and specialty doctors (K4Q24-K4Q28).

The 2003 survey included a question asking if the child received all needed routine preventive dental care (S4Q13). For 2007, this question was modified to ask how many times the child saw a dentist for preventive dental care (K4Q21).

For 2007, a question was added to ascertain whether children used any medication because of difficulties with emotions, concentration, or behavior (K4Q23).

Section 5

This section was substantially revised for 2007. Nearly all of the questions in the 2003 survey focused on the availability of, and the quality of care received from, the child's personal doctor or nurse; these questions (S5Q02-S5Q09, S5Q09B-S5Q10C) were dropped.

For 2007, this section included many of the same questions used to assess the medical home in the

2005–2006 National Survey of Children with Special Health Care Needs. These questions determined the ease of obtaining needed referrals (K5Q10-K5Q11), the need for care coordination (K5Q20-K5Q22), the satisfaction with health care providers' communication (K5Q30-K5Q32), and the receipt of family-centered care (K5Q40-K5Q44).

Section 6

For 2007, new questions were added regarding the receipt of a formal developmental screening (K6Q12-K6Q14B) and whether the child had an Individualized Family Service Plan or Individualized Education Program (K6Q15).

The 2003 survey included questions about accidental poisoning (S6Q57–58 INDEX). These questions were dropped for 2007.

The 2003 survey included questions about five different types of child care (S6Q48-S6Q52). For 2007, these questions were dropped in favor of new questions that determined whether child care was received from relatives or nonrelatives and whether that care was provided in the child's home, another home-based setting, or a center (K6Q20-K6Q22).

For 2007, new questions were added for CSHCN to determine whether their health or behavior limits the parents' ability to find child care (K6Q25B-K6Q25C).

The 2003 survey asked all respondents about the need to make different arrangements for child care at the last minute (S6Q53). For 2007, this question was limited to children for whom child care was used or needed.

The 2003 survey included questions about the duration of breastfeeding. For 2007, additional questions were added about exclusive breastfeeding, including the age when the child was first fed formula (K6Q42) and the age when the child was first fed anything other than breast milk or formula (K6Q43).

The 2003 survey asked one question about reading stories to the young child. For 2007, a new question was added about telling stories and singing songs (K6Q61), to better address cultural variations in early literacy activities.

For 2007, new questions were added to determine how often young children play with other children their age (K6Q63) and how often young children watch television or videos (K6Q65).

Section 7

For 2007, new questions were added to determine whether the child had an Individualized Education Program (K7Q11).

The 2003 survey included a question regarding the number of days that the child participated in clubs, organizations, or sports teams (S7Q12). For 2007, this question was dropped.

For 2007, the question about self-care was modified to more clearly state that this question refers to time spent alone without an adult or teenager due to difficulties in making care arrangements (K7Q35).

For 2007, the response options for the question about volunteer work (K7Q37) were modified to ascertain the frequency of such work.

For 2007, the question about the number of hours that the child works for pay (K7Q39) was preceded by a new question asking whether the child earns money for work (K7Q38). This new question also clarified that occasional work should be included along with regular jobs.

The 2003 survey included questions about helmet use (S7Q22-S7Q23). For 2007, these questions were dropped.

For 2007, a new question was added to determine whether there is a television in the child's bedroom (K7Q62).

The 2003 survey included questions about the respondent's specific concerns regarding the child (S7Q30-S7Q39). For 2007, these questions were dropped.

For 2007, the answer choices for the NSCH Social Competence Scale (K7Q70-K7Q77) and for three questions about depressed mood (K7Q78-K7Q80) were modified to include ''rarely'' as an option.

For 2007, two new questions were added to determine the child's level of school engagement (K7Q82-K7Q83).

Section 8

The 2003 survey included questions about the degree of closeness in the respondent's relationship with the child (S8Q04) and about how members of the household deal with serious disagreements (S8Q12–15). For 2007, these questions were dropped.

For 2007, the answer choices for the Aggravation in Parenting Scale (K8Q31-K8Q34) were modified to include ''rarely'' as an option. Also, one of the aggravation questions included in the 2003 survey (S8Q09) was dropped for 2007 due to limited cultural validity among Spanish-speaking Latino parents. These parents were more likely to positively regard the need to give more to meet the child's needs than they had expected.

Section 9

For 2007, new questions were added to determine whether the respondent had legally adopted the child (for children not living with any biological parent; K9Q12_A), the age of the child's mother (K9Q16), the respondent's marital status (K9Q17A-K9Q17D-3) and marital happiness (K9Q18), and tobacco smoking inside the child's home (K9Q41).

The 2003 survey included a question for children not living with a biological parent that asked how often the child had seen his or her nonresident biological parent in the past 12 months (S9Q05-S9Q05A). For 2007, this question was dropped.

The 2003 survey included questions about the health insurance coverage of the child's parents (S9Q15C-S9Q15E). These questions were dropped for 2007.

Section 10

For 2007, new questions were added regarding neighborhood amenities (K10Q11-K10Q14) and the neighborhood condition (K10Q20-K10Q23).

The 2003 survey included questions about people in the neighborhood who might be a ''bad influence'' on the child (S10Q04) and about perceptions of the child's safety at home (S10Q08). For

2007, these questions were dropped.

Section 11

For 2007, a new question was added for American Indian or Alaska Native children to determine whether services had been received from any Indian Health Service hospital or clinic during the prior 12 months (K11Q03).

For 2007, three adoption-related questions were added to determine whether the child was adopted from another country (K11Q38) or from the U.S. foster care system (K11Q40), and whether the child's adoption had been finalized (K11Q41).

The 2003 survey included a question about receipt of benefits from the Women, Infants, and Children program (S9Q34). For 2007, this question was dropped.

For 2007, new questions were added to confirm the respondent's ZIP Code (K11Q81–82) and state of residence (K11Q83).

Appendix VI. Summary of Questionnaire Changes During Data Collection

On May 2, 2007, changes were made to the following questions:

- K3Q04 was changed from "During the past 12 months, has he/she had health care coverage?" to "During the past 12 months, was there any time when he/she had health care coverage?"
- The skip patterns in questions K9Q17B_1 and K9Q17C_1 were adjusted to skip to K9Q18 if the respondent answered no, don't know, or refused to these questions. The questions previously skipped to K9Q17B_2 and K9Q17C_2, respectively.
- The following questions were adjusted to allow answers from the National Immunization Survey (NIS) to be filled when appropriate: K11Q02, K11Q02_OS, and K11Q20.
- Interviewer help text was added at K6Q25A to help clarify that "need for occasional babysitting" should not be included when reporting whether child care was needed.
- A system check was added at K9Q00 to ensure that the total number of people in the household was not equal to or less than the total number of children indicated in the household.

On July 5, 2007, the following changes were made:

- A question for the interviewers was added at the end of the National Survey of Children's Health (NSCH) interview to ensure that non-English cases did not continue on to the National Survey of Adoptive Parents interview.
- The text at K2Q45D was adapted from "Are (S.C.)'s current problems related to his/her bones, joints, or muscles?" to "Are (S.C.)'s current problems related to his/her bones, his/her joints, or his/her muscles?" to make the response options clearer for respondents.
- The skip logic at K2Q60A was revised to allow this question for children aged 12–71 months.

Previously, the question was asked for all children under age 6 years (72 months).

- The skip logic at K2Q60C was revised to allow this question for children aged 36–71 months. Previously, the question was asked for all children under age 6 years (72 months).
- Text fills for K9Q11 were changed to add "other" where appropriate based on the relationship of the respondent to the child: "Does (S.C.) have any other parents, or other people who act as his/her parents, living here?"
- Wording at K9Q1159A was changed from "Would you say this income was above or below $ (dollar amount)?" to "Would you say this income was more or less than $(dollar amount)?"
- The response option "U.S. territories" was added as an option at question K11Q83.
- The skip logic at K6Q11 was erroneously modified so that K6Q11 was asked only when parents reported concerns at K6Q01 and also reported a concern at K6Q02 through K6Q09. Previously, K6Q11 was asked for age-eligible children if any concerns were reported at K6Q01 through K6Q09. This error was not identified until after data collection had been completed.
- The text at K10Q22 was modified from "How about poorly kept or dilapidated housing?" to "How about poorly kept or rundown housing?" to aid respondents' understanding of the question.
- K2Q38A was moved after K2Q41A (from before K2Q40A) to facilitate questionnaire flow.
- The system was adapted to allow answers to the health insurance questions from the NIS to be filled for NSCH when appropriate (that is, when the selected child in NSCH was an NIS child).
- Six questions related to special health care needs were added for

children who were not identified as having special health care needs. These included K2Q12A, K2Q15A, K2Q18A, K2Q21A, K2QTEST1, and K2QTEST2.

- K2Q30D was added.
- For questions K6Q65, K7Q50, K7Q51, and K7Q60, interviewer instructions (regarding "average weekdays recently") were added to account for the transition from school year to summer activities.
- A system soft check was added at S_UNDR18 to verify entries less than S_NUMB (the NIS variable capturing how many NIS-eligible children were in the household).

On July 18, 2007, the following changes were made:

- In SCQ02, SCQ04, and SL_INTRO, the sentences were rearranged so that the estimated interview length was provided after the respondent was offered a monetary incentive, if applicable.
- The response options for question K8Q23 were changed from "very often, sometimes, not very often, almost never, or never" to "never, rarely, sometimes, usually, or always."
- The skip logic at K8Q26 was revised to allow this question for children aged 13 years and over. Previously, the question was asked for children aged 12 years and over.

On October 5, 2007, the following changes were made:

- Interviewer instructions were added at K9Q20, K9Q21, K9Q22, K9Q23, K9Q24, K9Q25, K9Q30, K9Q31, K9Q32, K11Q20, K11Q21, K11Q22, K11Q30, K11Q31, K11Q32, K11Q34A, K11Q35A, and K11Q36A to clarify exactly who the question was referring to in cases where the respondent switched or a data entry error had occurred.
- The consent language was changed at SCQ02, SCQ04, and SL_INTRO from "You may choose not to

answer any question you don't wish to answer or stop at any time without penalty" to "You may choose not to answer any questions you don't wish to answer, or end the interview at any time." In addition, at SL_INTRO, the language was changed from "We will take all possible steps to protect your privacy and are required by law to use your answers only for statistical research" to "We are required by Federal law to develop and follow strict procedures to protect your information and use your answers only for statistical research."

On January 3, 2008, the following changes were made:

- Language in SCQ02 and SCQ03 was adjusted to allow for smooth transitions from the NIS-Teen questionnaire into NSCH. In addition, the system was programmed to allow answers from the NIS-Teen survey to be filled for NSCH when appropriate.
- The skip logic before K9Q11 was changed so that single-mother and single-father households skipped to K9Q12_A rather than K9Q16.

Appendix VII. Procedures for Assigning Poverty Status

The U.S. Department of Health and Human Services (HHS) publishes poverty guidelines for the determination of household poverty status (http://aspe.hhs.gov/poverty). These guidelines are produced annually and developed separately for three groups: the 48 contiguous states (plus the District of Columbia), Alaska, and Hawaii.

The 2007 National Survey of Children's Health (NSCH) used HHS guidelines to assign household poverty status. Year 2007 guidelines (Tables III, IV, and V) were used with 2006 income for interviews conducted from April 5, 2007 through December 31, 2007, and with 2007 income for interviews conducted from January 1, 2008 through July 27, 2008. The tables were used to group households into the following poverty status categories:

- Category AA—At or below 50% of poverty level
- Category A— Above 50% to at or below 100% of poverty level
- Category B— Above 100% to at or below 133% of poverty level
- Category C— Above 133% to at or below 150% of poverty level
- Category D— Above 150% to at or below 185% of poverty level
- Category E— Above 185% to at or below 200% of poverty level

- Category F— Above 200% to at or below 300% of poverty level
- Category G— Above 300% to at or below 400% of poverty level
- Category H— Above 400% of poverty level

Two variables were used to determine household poverty status: the number of people residing in a household and the total household income during the prior year. It was possible for income data to be gathered using one of three different methods. A respondent could provide an exact income, provide an income range based on a closed-ended series of questions, or provide an income range using a set of cascade questions revised to allow exact determination of household poverty status in cases where that would not otherwise be possible. A brief description of each method and the household poverty status assignment process is as follows:

Respondent reported exact income—Refers to when a respondent reported an exact income, and poverty status was then assigned by simply comparing the number of household members and the exact income reported with the appropriate guidelines table.

Respondent reported income range based on a closed-ended series of questions—Refers to when respondents did not supply a specific dollar amount for household income, and it was then necessary to ask a series of questions to determine whether the household income was below, exactly at, or above threshold amounts. A matrix (Tables VI, VII, and VIII) was created to categorize these responses. Each cell in the matrix was assigned to one of the following income categories:

- $0–$7,500
- $7,501– $10,000
- $10,001– $12,500
- $12,501– $15,000
- $15,001– $17,500
- $17,501– $20,000
- $20,001– $25,000
- $25,001– $30,000
- $30,001– $35,000
- $35,001– $40,000
- $40,001– $45,000
- $45,001– $50,000
- $50,001– $60,000
- $60,001– $75,000
- $75,001 or higher

Respondents who went through the cascade of income questions were assigned a household poverty status by comparing the number of household members and the income range obtained through the income cascade with the appropriate poverty level guidelines table. When respondents did not complete the income cascade, either because they refused or did not know the answer to one of the cascade questions, household poverty status could not be assigned.

Respondent reported income range based on revised series of cascade questions—In some cases, the income categories described previously encompassed one or more income breaks for determining household poverty status. In such cases, additional income cascade questions beyond the standard set were asked to permit definitive assignment of poverty status. For

Table III. Year 2007 guidelines for poverty ranges based on total family members for families in the 48 contiguous states and the District of Columbia

Family size	Percent of federal poverty level							
	50	100	133	150	185	200	300	400
2	$ 6,845	13,690	18,208	20,535	25,327	27,380	41,070	54,760
3	$ 8,585	17,170	22,836	25,755	31,765	34,340	51,510	68,680
4	$10,325	20,650	27,465	30,975	38,203	41,300	61,950	82,600
5	$12,065	24,130	32,093	36,195	44,641	48,260	72,390	96,520
6	$13,805	27,610	36,721	41,415	51,079	55,220	82,830	110,440
7	$15,545	31,090	41,350	46,635	57,517	62,180	93,270	124,360
8	$17,285	34,570	45,978	51,855	63,955	69,140	103,710	138,280
9	$19,025	38,050	50,607	57,075	70,393	76,100	114,150	152,200
10	$20,765	41,530	55,235	62,295	76,831	83,060	124,590	166,120
11	$22,505	45,010	59,863	67,515	83,269	90,020	135,030	180,040
12	$24,245	48,490	64,492	72,735	89,707	96,980	145,470	193,960
13	$25,985	51,970	69,120	77,955	96,145	103,940	155,910	207,880
14	$27,725	55,450	73,749	83,175	102,583	110,900	166,350	221,800
15	$29,465	58,930	78,377	88,395	109,021	117,860	176,790	235,720
16	$31,205	62,410	83,005	93,615	115,459	124,820	187,230	249,640
17	$32,945	65,890	87,634	98,835	121,897	131,780	197,670	263,560
18	$34,685	69,370	92,262	104,055	128,335	138,740	208,110	277,480

Table IV. Year 2007 guidelines for poverty ranges based on total family members for families in Hawaii

Family size	Percent of federal poverty level							
	50	100	133	150	185	200	300	400
2	$ 7,875	15,750	20,948	23,625	29,138	31,500	47,250	63,000
3	$ 9,875	19,750	26,268	29,625	36,538	39,500	59,250	79,000
4	$11,875	23,750	31,588	35,625	43,938	47,500	71,250	95,000
5	$13,875	27,750	36,908	41,625	51,338	55,500	83,250	111,000
6	$15,875	31,750	42,228	47,625	58,738	63,500	95,250	127,000
7	$17,875	35,750	47,548	53,625	66,138	71,500	107,250	143,000
8	$19,875	39,750	52,868	59,625	73,538	79,500	119,250	159,000
9	$21,875	43,750	58,188	65,625	80,938	87,500	131,250	175,000
10	$23,875	47,750	63,508	71,625	88,338	95,500	143,250	191,000
11	$25,875	51,750	68,828	77,625	95,738	103,500	155,250	207,000
12	$27,875	55,750	74,148	83,625	103,138	111,500	167,250	223,000
13	$29,875	59,750	79,468	89,625	110,538	119,500	179,250	239,000
14	$31,875	63,750	84,788	95,625	117,938	127,500	191,250	255,000
15	$33,875	67,750	90,108	101,625	125,338	135,500	203,250	271,000
16	$35,875	71,750	95,428	107,625	132,738	143,500	215,250	287,000
17	$37,875	75,750	100,748	113,625	140,138	151,500	227,250	303,000
18	$39,875	79,750	106,068	119,625	147,538	159,500	239,250	319,000

Table V. Year 2007 guidelines for poverty ranges based on total family members for families in Alaska

Family size	Percent of federal poverty level							
	50	100	133	150	185	200	300	400
2	$ 8,560	17,120	22,770	25,680	31,672	34,240	51,360	68,480
3	$10,735	21,470	28,555	32,205	39,720	42,940	64,410	85,880
4	$12,910	25,820	34,341	38,730	47,767	51,640	77,460	103,280
5	$15,085	30,170	40,126	45,255	55,815	60,340	90,510	120,680
6	$17,260	34,520	45,912	51,780	63,862	69,040	103,560	138,080
7	$19,435	38,870	51,697	58,305	71,910	77,740	116,610	155,480
8	$21,610	43,220	57,483	64,830	79,957	86,440	129,660	172,880
9	$23,785	47,570	63,268	71,355	88,005	95,140	142,710	190,280
10	$25,960	51,920	69,054	77,880	96,052	103,840	155,760	207,680
11	$28,135	56,270	74,839	84,405	104,100	112,540	168,810	225,080
12	$30,310	60,620	80,625	90,930	112,147	121,240	181,860	242,480
13	$32,485	64,970	86,410	97,455	120,195	129,940	194,910	259,880
14	$34,660	69,320	92,196	103,980	128,242	138,640	207,960	277,280
15	$36,835	73,670	97,981	110,505	136,290	147,340	221,010	294,680
16	$39,010	78,020	103,767	117,030	144,337	156,040	234,060	312,080
17	$41,185	82,370	109,552	123,555	152,385	164,740	247,110	329,480
18	$43,360	86,720	115,338	130,080	160,432	173,440	260,160	346,880

example, the income break indicating that a two-person household in the contiguous 48 states was below 50% of poverty (using the 2007 guidelines) was $6,845. This income break is encompassed in the income category of "$0 to $7,500." Therefore, an additional cascade question asked whether the household income was more than, exactly, or less than $6,800 (a reference value based on rounding rules described in the notes to the poverty guidelines tables). Based on the answers to these additional questions, the reported income ranges no longer encompassed poverty status breaks. Household poverty status was assigned by comparing the number of household members and the income range with the appropriate guidelines table.

Using HHS guidelines and NSCH-specific rounding rules, tables were developed to provide reference values for the additional income cascade questions. These reference values are presented in Tables VI, VII, and VIII.

Table VI. Year 2007 reference value table for additional income cascade questions for households in the 48 contiguous states and the District of Columbia

Household size	Reported range of total household income														
	Less than $7,500	$7,500–$9,999	$10,000–$12,499	$12,500–$14,999	$15,000–$17,499	$17,500–$19,999	$20,000–24,999	$25,000–$29,999	$30,000–$34,999	$35,000–$39,999	$40,000–$44,999	$45,000–$49,999	$50,000–$59,999	$60,000–$74,999	$75,000 and over
2	$6,800	A	A	$13,700	B	$18,200	D	$27,400	F	F	$41,100	G	$54,800	H	H
3	AA	$8,600	A	A	A	B	$22,800	D	$31,800	F	F	F	$51,500	$68,700	H
4	AA	AA	A	A	A	A	B	$27,500	$31,000	$38,200	$41,300	F	F	$62,000	$85,000
5	AA	AA	AA	A	A	A	A	B	$32,100	$36,200	D	$48,300	F	$72,400	$100,000
6													$51,100		
7	AA	AA	AA	$13,800	A	A	A	$27,600	B	$36,700	$41,400	D	$55,200	F	$85,000/ $110,000
8	AA	AA	AA	AA	A	A	A	A	$31,100	B	$41,400	$46,600	$57,500	$62,200	$95,000/ $125,000
9														$64,000	
10	AA	AA	AA	AA	AA	A	A	A	A	B	B	$46,000	$51,900	$69,100	$105,000/ $140,000
11	AA	AA	AA	AA	AA	$19,000	A	A	A	$38,100	B	B	$57,100	$70,400	$75,000/ $115,000
12	AA	AA	AA	AA	AA	AA	A	A	A	A	$41,500	B	$55,200	$62,300	$85,000/ $125,000
13	AA	AA	AA	AA	AA	AA	$22,500	A	A	A	A	B	B	$67,500	$90,000/ $135,000
14	AA	AA	AA	AA	AA	AA	AA	A	A	A	A	$48,500	B	$64,500/ $72,700	$95,000/ $145,000
15	AA	AA	AA	AA	AA	AA	AA	$26,000	A	A	A	A	$52,000	$69,100	$105,000/ $155,000
16	AA	AA	AA	AA	AA	AA	AA	$27,700	A	A	A	A	$55,500	$73,700	$110,000/ $165,000
17	AA	AA	AA	AA	AA	AA	AA	AA	A	A	A	A	$59,000	B	$120,000/ $175,000
18	AA	AA	AA	AA	AA	AA	AA	AA	$31,200	A	A	A	A	$62,400	$125,000/ $185,000

NOTES: When the reported range of household income was included within two or more poverty ranges, additional questions (K11Q59 and K11Q59A) were asked to determine the poverty range for the household. Values within the body of this table represent the border between two poverty ranges. Additional income questions were asked with this value ("Would you say this income was more or less than [value]?") to identify the proper poverty range for the household. Values were rounded to the nearest $100 if income was below $75,000 and to the nearest $5,000 if income was over $75,000. When income was less than $20,000, the additional income questions were not asked if the value (i.e., the range border) was less than $900 from either endpoint of the reported range of household income. Letters rather than values signify that the reported range of household income was entirely within one poverty range. The poverty range for each letter shown is listed in the first bulleted section under "Procedures for Assigning Household Poverty Status" of Appendix VII.

Table VII. Year 2007 reference value table for additional income cascade questions for households in Alaska

Household size	Reported range of total household income														
	Less than $7,500	$7,500–$9,999	$10,000–$12,499	$12,500–$14,999	$15,000–$17,499	$17,500–$19,999	$20,000–24,999	$25,000–$29,999	$30,000–$34,999	$35,000–$39,999	$40,000–$44,999	$45,000–$49,999	$50,000–$59,999	$60,000–$74,999	$75,000 and over
2	AA	$8,600	A	A	A	B	$22,800	D	$31,700	F	F	F	$51,400	$68,500	H
3	AA	AA	$10,700	A	A	A	$21,500	$28,600	$32,200	D	$42,900	F	F	$64,400	$85,000
4	AA	AA	AA	A	A	A	A	B	B	$38,700	D	$47,800	$51,600	F	$75,000/$105,000
5	AA	AA	AA	AA	A	A	A	A	B	B	C	D	$55,800	F	$90,000/$120,000
6	AA	AA	AA	AA	AA	A	A	A	A	B	B	C	$51,800	$63,900/$69,000	$105,000/$140,000
7	AA	AA	AA	AA	AA	$19,400	A	A	A	$38,900	B	B	$51,700/$58,300	$71,900	$115,000/$155,000
8	AA	AA	AA	AA	AA	AA	$21,600	A	A	A	$43,200	B	$57,500	$64,800	$85,000/$130,000
9	AA	AA	AA	AA	AA	AA	$23,800	A	A	A	A	$47,600	B	$63,300	$95,000/$140,000
10	AA	AA	AA	AA	AA	AA	AA	$26,000	A	A	A	A	$51,900	$69,000	$105,000/$155,000
11	AA	AA	AA	AA	AA	AA	AA	$28,100	A	A	A	A	$56,300	$74,800	$115,000/$170,000
12	AA	AA	AA	AA	AA	AA	AA	AA	A	A	A	A	A	B	$120,000/$180,000
13	AA	AA	AA	AA	AA	AA	AA	AA	$32,500	A	A	A	A	$65,000	$125,000/$195,000
14	AA	AA	AA	AA	AA	AA	AA	AA	AA	A	A	A	A	$69,300	$140,000/$210,000
15	AA	AA	AA	AA	AA	AA	AA	AA	AA	$36,800	A	A	A	$73,700	$145,000/$220,000
16	AA	AA	AA	AA	AA	AA	AA	AA	AA	$39,000	A	A	A	A	$155,000/$235,000
17	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	$41,200	A	A	A	$165,000/$245,000
18	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	$43,400	A	A	A	$175,000/$260,000

NOTES: When the reported range of household income was included within two or more poverty ranges, additional questions (K11Q59 and K11Q59A) were asked to determine the poverty range for the household. Values within the body of this table represent the border between two poverty ranges. Additional income questions were asked with this value ("Would you say this income was more or less than [value]?") to identify the proper poverty range for the household. Values were rounded to the nearest $100 if income was below $75,000 and to the nearest $5,000 if income was over $75,000. When income was less than $20,000, the additional income questions were not asked if the value (i.e., the range border) was less than $900 from either endpoint of the reported range of household income. Letters rather than values signify that the reported range of household income was entirely within one poverty range. The poverty range for each letter shown is listed in the first bulleted section under "Procedures for Assigning Household Poverty Status" of Appendix VII.

Table VIII. Year 2007 reference value table for additional income cascade questions for households in Hawaii

Household size	Reported range of total household income														
	Less than $7,500	$7,500–$9,999	$10,000–$12,499	$12,500–$14,999	$15,000–$17,499	$17,500–$19,999	$20,000–24,999	$25,000–$29,999	$30,000–$34,999	$35,000–$39,999	$40,000–$44,999	$45,000–$49,999	$50,000–$59,999	$60,000–$74,999	$75,000 and over
2	AA	A	A	A	$15,800	B	$23,600	D	$31,500	F	F	$47,300	G	$63,000	H
3	AA	$9,900	A	A	A	A	B	$26,300	D	$36,500	F	F	F	G	$79,000
4	AA	AA	$11,900	A	A	A	$23,800	B	$31,600	D	$43,900	$47,500	F	$71,300	$95,000
5	AA	AA	AA	$13,900	A	A	A	$27,800	B	$36,900	$41,600	D	$51,300/$55,500	F	$85,000/$110,000
6	AA	AA	AA	AA	$15,900	A	A	A	$31,800	B	$42,200	$47,600	$58,700	$63,500	$95,000/$125,000
7	AA	AA	AA	AA	AA	A	A	A	A	B	B	$47,500	$53,600	$66,100/$71,500	$110,000/$145,000
8	AA	AA	AA	AA	AA	AA	A	A	A	A	B	B	$52,900	$73,500	$80,000/$120,000
9	AA	AA	AA	AA	AA	AA	$21,900	A	A	A	$43,800	B	$58,200	$65,600	$90,000/$130,000
10	AA	AA	AA	AA	AA	AA	$23,900	A	A	A	A	$47,800	B	$63,500/$71,600	$95,000/$145,000
11	AA	AA	AA	AA	AA	AA	AA	A	A	A	A	A	$51,800	$68,800	$105,000/$155,000
12	AA	AA	AA	AA	AA	AA	AA	$27,900	A	A	A	A	$55,800	B	$110,000/$170,000
13	AA	AA	AA	AA	AA	AA	AA	AA	A	A	A	A	A	B	$120,000/$180,000
14	AA	AA	AA	AA	AA	AA	AA	AA	$31,900	A	A	A	A	$63,800	$130,000/$190,000
15	AA	AA	AA	AA	AA	AA	AA	AA	$33,900	A	A	A	A	$67,800	$135,000/$205,000
16	AA	AA	AA	AA	AA	AA	AA	AA	AA	A	A	A	A	$71,800	$145,000/$215,000
17	AA	AA	AA	AA	AA	AA	AA	AA	AA	$37,900	A	A	A	A	$150,000/$230,000
18	AA	AA	AA	AA	AA	AA	AA	AA	AA	AA	A	A	A	A	$160,000/$240,000

NOTES: When the reported range of household income was included within two or more poverty ranges, additional questions (K11Q59 and K11Q59A) were asked to determine the poverty range for the household. Values within the body of this table represent the border between two poverty ranges. Additional income questions were asked with this value ("Would you say this income was more or less than [value]?") to identify the proper poverty range for the household. Values were rounded to the nearest $100 if income was below $75,000 and to the nearest $5,000 if income was over $75,000. When income was less than $20,000, the additional income questions were not asked if the value (i.e., the range border) was less than $900 from either endpoint of the reported range of household income. Letters rather than values signify that the reported range of household income was entirely within one poverty range. The poverty range for each letter shown is listed in the first bulleted section under "Procedures for Assigning Household Poverty Status" of Appendix VII.

Appendix VIII. Program Names Used for Medicaid and Children's Health Insurance Program Questions

For questions regarding Medicaid and Children's Health Insurance Program (CHIP), the state-specific program names for each type of coverage were included in the question text, in case respondents recognized the state program name but not the national program affiliation. These program names are shown in Table IX. Because a single question (K3Q02) was asked about both Medicaid and CHIP, survey analysts will not be able to distinguish between Medicaid and CHIP coverage in national or regional analyses. Analysts may be required to report on "public" insurance only.

Table IX. State-specific insurance program names used for questions about Medicaid and the Children's Health Insurance Program

State	Program name
Alabama	Patient 1st Program; ALL Kids
Alaska	Denali KidCare
Arizona	AHCCCS; KidsCare
Arkansas	ConnectCare; ARKids First
California	Medi-Cal; Healthy Families Program
Colorado	MAC Card or the Primary Care Physician Program; Child Health Plan Plus
Connecticut	HUSKY Plan
Delaware	Diamond State Health Plan; Delaware Healthy Children Program
District of Columbia	DC Healthy Families
Florida	Florida KidCare, which includes the Healthy Kids and Medi-Kids programs
Georgia	Georgia Better Health Care Program and Georgia Healthy Families; PeachCare for Kids
Hawaii	Hawaii-QUEST
Idaho	Healthy Connections; Children's Health Insurance Program (CHIP)
Illinois	All Kids
Indiana	Hoosier Healthwise program
Iowa	MediPASS; Healthy and Well Kids in Iowa (HAWK-I)
Kansas	HealthConnect Kansas; HealthWave
Kentucky	KyHealth Choices or KENPAC; Kentucky Children's Health Insurance Program (K-CHIP)
Louisiana	CommunityCARE program; Louisiana CHIP
Maine	Maine Care
Maryland	Medical Assistance Program; HealthChoice; Maryland Children's Health Program
Massachusetts	MassHealth
Michigan	Healthy Kids Program; MI-Child Program
Minnesota	Medical Assistance; MinnesotaCare
Mississippi	Mississippi CHIP
Missouri	MC-Plus; MC-Plus For Kids
Montana	Passport to Health program; Montana CHIP
Nebraska	Kids Connection; Nebraska Health Connection program
Nevada	Nevada Check Up
New Hampshire	Healthy Kids Gold; Health Kids Silver
New Jersey	New Jersey FamilyCare
New Mexico	SALUD!; New MexiKids
New York	Child Health Plus
North Carolina	Carolina ACCESS; North Carolina Health Choice for Children
North Dakota	Healthy Steps program
Ohio	Healthy Start and Healthy Families
Oklahoma	SoonerCare
Oregon	Oregon Health Plan; Oregon CHIP
Pennsylvania	HealthChoices; ACCESS Card; CHIP
Rhode Island	RIte Care
South Carolina	Partners for Healthy Children
South Dakota	PRIME; CHIP
Tennessee	TennCare
Texas	State of Texas Access Reform (STAR); Texas CHIP
Utah	Utah Children's Health Insurance Program; CHIP
Vermont	Dr. Dynasaur
Virginia	Medallion program; Family Access to Medical Insurance Security Plan (FAMIS)
Washington	Healthy Options; Basic Health Plus; Washington State's CHIP
West Virginia	West Virginia Physician Assured Access System; Mountain Health Trust program; West Virginia CHIP
Wisconsin	BadgerCare
Wyoming	EqualityCare; Wyoming KidCare

Appendix IX. Letters Sent to Sampled Households

Nine advance letters, follow-up letters, and thank you letters were used over the course of data collection:

1. NIS advance letter for the second quarter of 2007 (Q2/2007). This letter was also used for some NIS households in Q3/2007 and Q4/2007.

2. NIS advance letter for Q1/2007. This letter was one of two experimental letters used for some NIS households in Q3/2007 and Q4/2007.

3. NIS experimental advance letter for Q3/2007 and Q4/2007.

4. Advance letter for banked sample [with mention of the National Immunization Survey (NIS)].

5. Advance letter for banked sample (without mention of the NIS).

6. Advance letter for National Survey of Children's Health (NSCH)-only "augmentation" households.

7. Follow-up letter when incentives were offered to households that had refused twice.

8. Follow-up letter when incentives were offered to households that could not be successfully contacted over a period of time.

9. Thank you letter when incentive was mailed. The amount of the incentive listed was either $10 or $15, depending on whether the household already received $5 in an advance letter.

Because NSCH typically follows NIS, the advance letter sent to most households was the usual NIS advance letter. In the second half of 2007, NIS studied whether response rates were affected when the advance letter was altered to improve readability and respondent comprehension. (The primary content of the advance letter remained unchanged.) The experiment utilized three letters in Q3/2007 and Q4/2007: the original NIS letter that was used in Q2/2007 and two experimental letters. The first experimental letter included changes to the overall tone and formatting, as well as placement of confidentiality content based on recommendations of the U.S. Census Bureau's 2001 report on the Survey of Income and Program Participation advance letter (33). The second experimental letter provided short paragraphs about the study on the front, followed by labeled sections to address common questions and provide full information about the study on the back. To evaluate the experiment, NIS considered age-eligibility rates, cooperation rates, and response rates. None of the three letters consistently produced the highest rates. NIS adopted the first experimental letter as the NIS advance letter beginning in Q1/2008.

For the Q1/2007 banked sample, significant time had elapsed since cases received the NIS advance letter. Therefore, an NSCH-specific advance letter was sent to all cases with an available address. An experiment comparing two different letters was conducted to determine whether referencing NIS and that survey's previous call attempts would trigger a memory for the respondent and whether that would be an asset or a detriment to NSCH. The letter mentioning NIS included the following text as the first paragraph:

> Recently, the Centers for Disease Control and Prevention (CDC) asked your household to take part in the National Immunization Survey (NIS). Thank you for the time you took to respond to that survey. We now need your help with another important health survey about children across the U.S.

Beyond this language, the letters had no significant differences. No significant difference in response rates between the two letters was found.

Appendix X. Disposition Code Frequencies and Response Rate Calculation

This section consists of Table X and Table XI.

Table X. Frequencies of disposition codes

Disposition code by name	Disposition category	Frequency	Percent of total
Total number of telephone lines in sample		2,806,416	100.00
Not attempted	UH	7	0.00
No contact	UH	191,956	6.84
Answering machine; residential status unknown	UH	82,561	2.94
Spanish case; residential status unknown.	UH	210	0.00
Appointment at introduction; residential status unknown	UH	1,628	0.06
Callback at introduction; residential status unknown.	UH	10,475	0.37
Hang-up during introduction; residential status unknown	UH	87,920	3.13
Refusal at introduction; residential status unknown	UH	71,133	2.53
Other Introduction; residential status unknown	UH	82	0.00
Answering machine; known household.	UO	2,317	0.08
Appointment; known household (NIS screening pending)	UO	8,468	0.30
Callback; known household (NIS screening pending).	UO	23,435	0.84
Refusal; known household (NIS screening pending)	UO	25,110	0.89
Other; known household (NIS screening pending).	UO	488	0.00
Appointment prior to NSCH Item S_UNDR18 (NSCH screening pending)	UO	621	0.00
Callback prior to NSCH Item S_UNDR18 (NSCH screening pending).	UO	3,761	0.13
Refusal prior to NSCH Item S_UNDR18 (NSCH screening pending)	UO	9,530	0.34
Other prior to NSCH Item S_UNDR18 (NSCH screening pending).	UO	312	0.00
Prefinalized Do Not Call List	UO	9	0.00
Minor HH.	X	2,843	0.10
Age ineligible	X	377,287	13.44
NIS-level appointment (NIS eligible)	R	114	0.00
NIS-level callback (NIS eligible)	R	52	0.00
NIS-level refusal (NIS eligible)	R	1,159	0.00
NIS-level other (NIS eligible)	R	9	0.00
NIS-finalized eligible for SLAITS redialing, recontact unsuccessful.	R	1,748	0.06
Teen-level appointment (Teen screening pending).	R	41	0.00
Teen-level callback (Teen screening pending)	R	102	0.00
Teen-level refusal (Teen screening pending)	R	317	0.00
Teen-level other (Teen screening pending)	R	10	0.00
Teen-level appointment (Teen eligible)	R	6	0.00
Teen-level callback (Teen eligible).	R	5	0.00
Teen-level refusal (Teen eligible)	R	121	0.00
Teen-level other (Teen eligible)	R	1	0.00
Teen-finalized eligible for SLAITS redialing, recontact unsuccessful	R	237	0.00
Appointment prior to NSCH Item K8Q12.	R	7,602	0.27
Callback prior to NSCH Item K8Q12	R	9,673	0.34
Refusal prior to NSCH Item K8Q12.	R	21,762	0.78
NIS-finalized eligible for SLAITS redialing, ended prior to NSCH Item K8Q12.	R	274	0.00
Teen-finalized eligible for SLAITS redialing, ended prior to NSCH Item K8Q12	R	38	0.00
Other prior to NSCH Item K8Q12	R	463	0.00
Appointment-partial interview.	P	309	0.00
Callback-partial interview	P	350	0.00
Refusal-partial interview.	P	413	0.00
Other-partial interview	P	5	0.00
NIS-finalized eligible for SLAITS redialing; partial interview	P	7	0.00
Teen-finalized eligible for SLAITS redialing; partial interview	P	1	0.00
Completed household interview	I	71,388	2.54
Converted household interview from refusal	I	18,712	0.67
Converted household interview; NIS-finalized eligible for SLAITS redialing.	I	407	0.00
Converted household interview; Teen-finalized eligible for SLAITS redialing	I	50	0.00
Three or more fax or modem prior to contact.	Z	35,575	1.27
Three or more fast busy prior to contact.	Z	14,810	0.53
Three or more other technological problem prior to contact	Z	630	0.00
Two or more not in service	Z	250,155	8.91
Nonworking	Z	22,451	0.80
Number changed	Z	806	0.00
Not residential.	Z	119,746	4.27
GENESYS-resolved telephone numbers (nonworking, business, and fax or modem)	Z	1,326,714	47.27

0.00 Quantity more than zero, but less than 0.05.

Table XI. Unweighted response rate calculations

Disposition categories and response rates	Frequency or calculated rate	Code or formula
Summary of disposition categories		
Not resolved as residential or nonresidential	445,972	UH
Known household; age eligibility undetermined	74,051	UO
Out of scope (business, nonworking, fax, or modem)	1,770,887	Z
Age-screened household; no child in range	380,130	X
Known age-eligible household	43,734	R
Eligible household; partially completed interview	1,085	P
Eligible household; completed interview	90,557	I
Total	2,806,416	. . .
Calculation of response rates		
Resolution rate (RR)	84.1	(I + P + R + X + UO + Z)/(I + P + R + X + UO + Z + UH)
Screener completion rate (SCR)	87.4	(I + P + R + X)/(I + P + R + X + UO)
Interview completion rate (ICR)	67.7	(I + P)/(I + P + R)
Overall response rate	49.8	(ICR)(SCR)(RR)

. . . Category not applicable.

NOTE: See Table X for code definitions.

Appendix XI. Incentive Effort

To improve the likelihood that age-eligible households would participate in the National Survey of Children's Health (NSCH) and would contribute to a more complete dataset, an incentive plan was developed and executed during NSCH data collection. This plan was guided by previously successful incentive efforts in the National Immunization Survey (NIS) and the 2005–2006 National Survey of Children with Special Health Care Needs. Although initial consideration was given to offering an incentive payment to all age-eligible NSCH households who completed the interview, cost constraints prohibited the application of this model in light of the significant number of targeted interviews planned for NSCH.

Eligibility

A two-tiered incentive model was constructed to offer incentives to age-eligible households that refused participation in NSCH. The first refusal could have occurred during NIS, NIS–Teen, or NSCH. Once a case refused, it became eligible for Tier 1 of the incentive model: A $10 incentive for NSCH interview participation was offered to the household during the next call attempt. If the case refused a second time without completing the interview, the case became eligible for Tier 2 of the incentive model: An additional $5 was offered to the household. Households that refused after this additional incentive offer without completing the interview were finalized (that is, given a final disposition code) and not called again.

Eligibility for an NSCH incentive was initially limited to age-eligible households that had refused participation (that is, an active refusal). However, nonresponse analyses of age-eligible households following implementation of the two-tiered incentive model led to the application of an expanded incentive effort. This analysis of age-eligible cases that had neither finalized nor finished the NSCH interview revealed two groups of cases with similar patterns of nonresponse. The first group consisted of households that had not refused participation, but multiple attempts to contact these households over 21 or more days had resulted in no contact. The second group consisted of households that had refused participation once and had become eligible for the Tier 1 incentive, yet multiple attempts to recontact these households over 21 or more days had resulted in no contact. These patterns of continued nonresponse despite repeated attempts at contact with the household were classified as passive refusals. The Tier 2 incentive ($15), typically reserved for active refusal cases, was offered to passive refusal cases to ensure they were not underrepresented in NSCH data and to maximize the likelihood of contact with these households.

Following the passive incentive offer, both types of passive refusal cases remained active until they accumulated two refusals in their call history. Passive refusal cases with one previous active refusal were finalized after one subsequent refusal; passive refusals with no previous active refusals were finalized after the second subsequent refusal. At the point of their second refusal, both groups of passive incentive cases were finalized and were not called again.

If, at any time, a household refused participation in a hostile manner or requested to be removed from the calling list, the case was deactivated and not called again. The case was not eligible for Tier 1 or Tier 2 incentives.

Procedure for Offering Tier 1 Incentives

Once a household met the criteria for the Tier 1 incentive, the incentive offer of $10 was introduced in the consent script, callback script, and/or answering machine script, depending on the point at which the refusal occurred. For households that were ineligible for the NIS interview and had refused prior to the informed consent process, the following script was read by the interviewer:

Before we continue, I'd like you to know that taking part in this research is voluntary. You may choose not to answer any questions you don't wish to answer, or end the interview at any time. We are required by Federal law to develop and follow strict procedures to protect your information and use your answers only for statistical research. I can describe these laws if you wish. In appreciation for your time, we will send you $10. The survey will take about 25 minutes. In order to review my work, my supervisor may record and listen as I ask the questions. I'd like to continue now unless you have any questions.

Prior to July 18, 2007, the monetary incentive payment was offered to respondents after informing them of the expected interview duration. Beginning on July 18, 2007, the monetary incentive was offered immediately before informing respondents of the interview duration (as shown in the previous script). Consent scripts were tailored for cases that had already completed the NIS or NIS–Teen and had heard the NIS or NIS-Teen informed consent script.

For cases that had refused after completing part of the NSCH interview, the interviewers read the following script:

Hello, my name is _____. I'm calling on behalf of the Centers for Disease Control and Prevention. Earlier, someone in your household started an interview about the health of children and teenagers, and we began talking about one child in your household. I'm calling back now to continue the interview. In appreciation for your time, we will send you $10.

Information about the incentive also was left as part of the answering machine message:

Hello. I am calling on behalf of the Centers for Disease Control and Prevention regarding a nationwide study about the health of children and teenagers. When we spoke previously about this important study, you requested that we call you back at this time. I'm sorry that we've missed you. We'll try to contact you again soon but please feel free to return our call anytime at 1–866–999–3340. In appreciation for your time, we will send you $10. If you have any questions, that number again is 1–866–999–3340. Thank you.

If a household completed the NSCH interview, or if a respondent requested the incentive without completing the interview, address information for the household was either confirmed or collected. The $10 cash payment was mailed to the household, along with a letter expressing appreciation for the respondent's time and effort spent participating in the interview. Incentive-eligible households that completed the NSCH interview, but declined to confirm or provide address information, were not mailed the incentive payment.

Procedure for Offering Tier 2 Incentives

Households that met criteria for the Tier 2 active refusal incentive or the passive refusal incentive were approached in a different manner. Upon delivering their second refusal or meeting eligibility criteria for either passive refusal group, cases were temporarily suspended within the computer-assisted telephone interview (CATI) system.

For households with an available address, a letter was mailed with $5 cash enclosed. The letter explained that attempts had been made to contact the household via telephone to complete the NSCH interview. It also briefly described the NSCH, included a frequently asked questions section on the survey, and mentioned that $10 would be mailed upon continued participation in NSCH. Approximately 2–4 weeks after temporary suspension,

the cases eligible for the Tier 2 incentive were reactivated. Households that had received the $5 incentive in the mail were offered $10 by telephone; households without an available address that had not received the $5 incentive in the mail were offered the total $15 incentive by telephone. The incentive offer was mentioned by the interviewer, using scripts similar to those used to offer the Tier 1 incentive.

If any Tier 2 incentive-eligible household completed the NSCH interview, or if a respondent requested the incentive without completing the interview, address information for the household was either confirmed or collected. A final cash payment of $10 was mailed to households that had already received $5 in the mail, and a final cash payment of $15 was mailed to households that had not yet received any incentive by mail. In addition, a letter expressing appreciation for the respondent's participation accompanied each final incentive payment. Incentive-eligible households that completed the NSCH interview, but declined to confirm or provide address information, were not mailed the incentive payment.

Interview Completion Rates

The incentive offers for active refusals (Tier 1 and Tier 2) were first implemented on May 15, 2007. The expanded incentive effort for passive refusals (Tier 2) began on August 2, 2007. Active and passive refusals from all quarters of data collection [including the banked sample from the first quarter of 2007 (Q1/2007)] were eligible.

A total of 66,365 cases became eligible for some type of an incentive during the NSCH. Nearly one-half (47.9%) of these cases completed the interview subsequent to incentive eligibility. Information on interview completion rates by incentive type is displayed in Table XII.

In Table XII, note that any case with one refusal that did not respond to the $10 incentive in Tier 1 could become eligible for Tier 2 as either an active or passive refusal. The 19,087

completed cases in Tier 1 finished the interview after the $10 incentive was offered and were not eligible for additional incentives. Of the 40,865 eligible Tier 1 cases that did not complete the interview after the $10 incentive was offered, 32,885 were offered the $15 incentive: 28,297 as active refusals and 4,588 as passive refusals (with one active refusal). The remaining 1,824 cases classified as active refusals in Tier 2 were eligible because they refused twice during the NIS or NIS-Teen interview.

The expanded incentive effort for passive refusals was more successful in achieving completed interviews, relative to the two-tier incentive effort for active refusals. However, this difference was largely the result of considerable success completing interviews with households that had never refused participation but had been very difficult to contact. Passive refusal incentive-eligible cases may be less resistant to completing the survey than cases that more actively refuse participation.

Table XIII presents completion rates by quarter of data collection for each incentive type. From Q2/2007 to Q1/2008, the completion rates improved for each incentive type. The high rates for the Q1/2007 banked sample may be attributed, in part, to the extended "cooling off" period between the NIS screening or interview and the start of NSCH interviewing.

Table XII. Completion rates, by incentive eligibility type

| | Initial incentive model | | Expanded incentive effort ($15) | | | Total (any incentive) |
	Tier 1 ($10)	Tier 2 ($15)	Overall	No refusal	One refusal	
Eligible cases.	59,952	30,121	9,177	4,589	4,588	66,365
Completed cases	19,087	9,408	3,293	1,881	1,412	31,788
Completion rate	31.8	31.2	35.9	41.0	30.8	47.9

Table XIII. Completion rates, by incentive eligibility type and quarter

Incentive eligibility type	Quarter 1 2007 banked sample	Quarter 2 2007	Quarter 3 2007	Quarter 4 2007	Quarter 1 2008
Initial incentive model					
Tier 1 ($10)	34.0	28.9	32.2	32.4	33.1
Tier 2 ($15).	32.7	29.7	30.6	32.1	32.7
Expanded incentive effort ($15)					
Overall.	41.5	26.4	32.7	39.4	42.0
No refusal.	47.5	28.0	38.0	46.3	47.4
One refusal	35.0	24.9	27.7	32.2	36.5

Appendix XII. Multiple Imputation of Household Poverty Level

The 2007 National Survey of Children's Health (NSCH) provides a rich source of data for studying the relationships between income and health and for monitoring health, health care, and well-being for children at different income levels. However, as is common for most household interview surveys, nonresponse rates were high for the question on total combined household income for the previous calendar year. Answers to this question, along with answers to a question about the number of people living in the household, are used to create an index of income relative to the Department of Health and Human Services federal poverty guidelines. If data for either of these two components were missing, refused, or had a ''don't know'' response, the household poverty status indicator was assigned a missing value code in the publicly released datasets. (Further details about the procedures for assigning household poverty status are available in Appendix VII.)

For the 2007 NSCH, poverty status is missing for 8.5% of the households (7,817 of 91,642 households). Missing values for poverty status were predominately the result of missing data for income rather than missing data for household size. Only 394 households did not report household size.

A nonresponse analysis shows that missingness is related to several variables, including items pertaining to health, neighborhood and community characteristics, and demographics. Thus, the respondents cannot be treated as a random subset of the original sample. It follows that the most common method for handling missing data in software packages, ''complete-case analysis'' (also known as ''listwise deletion''), will generally be biased because this method deletes cases that are missing any of the variables involved in the analysis. Moreover, since deletion of incomplete cases discards some of the observed data, complete-case analysis is generally inefficient as well; that is, it produces inferences that are less precise than those produced by methods that use all of the observed data.

Imputation is a more appropriate approach to handling nonresponse on items in a survey for several reasons. First, imputation adjusts for observed differences between item nonrespondents and item respondents; such an adjustment is generally not made by complete-case analysis. Second, imputation results in a completed dataset, so that the data can be analyzed using standard software packages without discarding any observed values. Third, when a dataset is being produced for analysis by the public, imputation by the data producer allows the incorporation of specialized knowledge about the reasons for missing data in the imputation procedure, including confidential information that cannot be released to the public. Moreover, the nonresponse problem is addressed in the same way for all users, so that analyses will be consistent across users.

Although single imputation, that is, imputing one value for each missing datum, enjoys the positive attributes just mentioned, analysis of a singly imputed dataset using standard software generally fails to reflect the uncertainty stemming from the fact that the imputed values are plausible replacements for the missing values but are not the true values themselves. As a result, analyses of singly imputed data tend to produce estimated standard errors that are too small, confidence intervals that are too narrow, and significance tests that reject the null hypothesis too often when it is true.

Multiple imputation is a technique that seeks to retain the advantages of single imputation while also allowing the uncertainty due to imputation to be reflected in the analysis (34). The idea is to first simulate $M > 1$ plausible sets of replacements for the missing values, which are then combined with the nonmissing values to generate M complete datasets. The M complete datasets are then analyzed separately using a standard method for analyzing complete data, and finally the results of the M analyses are combined in a way that reflects the uncertainty due to

imputation. For public-use data, M is not usually larger than five, which is the value that has been used here in multiply imputing missing data for NSCH.

This section describes the procedures used in multiply imputing household income and household size for NSCH. Household poverty status is expressed as a percentage; households with income less than 100% of the federal poverty level are considered to be living in poverty. For each of the multiply imputed datasets, household poverty status was derived from the imputed values for household income and household size.

Imputation Procedures

Income and household size were each imputed five times, creating five imputed datasets. The literature on multiple imputation suggests that this is a sufficient number of imputations unless the amount of missing information is extreme (34). As noted earlier, the number of survey records with missing household size values was much smaller than the number of survey records with missing household income values. Because there was very little missingness in household size to explain, predictors for household size were not explored separately from predictors for household income. Therefore, household size was imputed using the same predictors used for household income. When both household size and household income were missing for a single case, five pairs of imputed values were produced.

The imputation of household income and household size was complicated by two issues. First, neither household income nor household size was normally distributed. This is a disadvantage because linear regression modeling assumes that the dependent variable being modeled has a normal distribution. Therefore, transformed variables for modeling and imputation were used. To determine the suitable transformation for income and household size to conform to the

normality assumption in the imputation model, Box-Cox transformations were estimated from the observed data. For household size, the log transformation led to normality. For income, the optimal transformation was to the 0.22 power, which was rounded to the quarter-root (0.25). After the imputation procedure was completed, the imputed values were transformed back to their original scale.

Second, in some cases, the imputed values of household income and household size needed to be constrained within certain bounds. Household respondents were asked to provide an exact household income. However, when respondents did not provide an exact household income, a series (that is, cascade) of questions asking whether the household income was below, exactly at, or above threshold amounts were then asked. The multiple imputation procedures employed for NSCH needed to impute the income value so that it was consistent with any information gathered from the cascade questions. For households with missing data on household size, the imputed values needed to be restricted so that they were consistent with other information provided in the survey (for example, household size is greater than the number of children in the household).

The software IVEware, available from http://www.isr.umich.edu/src/smp/ive, allows analysts to specify lower and upper limits of imputed values, constraining the imputation distribution from which draws are made. This software has been used to impute family income and family earnings for the National Health Interview Survey and to impute household income and household size (to derive household poverty status) for the 2001 and 2005–2006 National Surveys of Children with Special Health Care Needs and the 2003 NSCH.

IVEware uses sequential regression multivariate imputation (SRMI). With sequential regression imputations, income and household size had separate models that used the same covariates, including each other. This technique was not as robust as some other imputation techniques that specify a joint model for both income and household size conditional on the predictor variables

(35,36). However, this slight disadvantage of using SRMI is outweighed by IVEware's ability to constrain the imputed values within specified lower and upper limits.

IVEware builds regression models, and then multiply imputes variables based on the models built. For understanding relationships between variables, parsimony is desired, but in prediction (imputation can be thought of as "predicting" the missing values), more complicated models are often better for two reasons. First, using more variables leads to a higher correlation between the observed and predicted values for a model. Second, the validity of analyses conducted on multiply imputed datasets is broader when more variables are included in the model.

In the imputation model, as many predictors as possible were included. To produce high-quality imputations, variables that were potentially related to household income and potentially related to the missingness of household income were included. Another important consideration was to include variables that account for features of the sampling design. Inclusion of variables to reflect the sampling design was necessary so that approximately valid inferences will be obtained when the multiply imputed data are analyzed.

The imputation model included variables related to the questionnaire items on demographics (for the child and family), health and functional status of the child, health insurance coverage, health care access and utilization, medical home, and neighborhood characteristics. Variables related to early childhood and middle childhood were not included, as these items, being targeted to a subset of the sample, had large percentages of missing values. For most of the variables, the "refused" or "don't know" answers were recoded as missing. For some variables having logical skips, logical imputation was used to obtain more complete variables. For example, the variable K11Q60 (receipt of cash assistance) is missing when the household's income does not qualify for the cash assistance. Therefore, it was recoded as a "no" response for such households. Also, many categorical variables were recoded

with top-coding or bottom-coding to reduce the number of rarer categories. For example, for the variable K4Q20 (number of doctor visits), the values range from 0 to 365 with small frequencies for values greater than 10. The number of categories was reduced to 11 with category "10" defined as 10 or more visits. Another consideration used while building the imputation model was to not include covariates having more than 5% missing values.

Because fitting the regressions in the SRMI procedure does not automatically account for features of the sample design, variables reflecting the design were included as predictors in the regression models. The strata for this design were the 50 states and the District of Columbia. To account for the stratum effect, states, in the form of 50 indicator variables, and state-level income summary variables (mean and standard deviation with log transformation) were considered as possible covariates in the imputation model. The state indicator variables were dropped before the final imputations were carried out, but retained the state-level income summary variables. Survey weights were also included as covariates in the model, after transforming the weights to a logarithmic scale.

Results of Modeling

Table XIV shows the 47 variables (other than survey weight) chosen for the model by stepwise regression. Most, but not all, have a significant relationship with income. Those with negative parameters decrease predicted income, whereas those with positive parameters increase predicted income. The model was highly significant, $F(47, 70,105) = 1,113.50$, $p < .0001$. The R squared and adjusted R-squared values for this model are both 0.43.

Note that the imputed values for family income were not obtained from this regression model. The imputed values were drawn from the posterior distribution of missing family income based on the model derived from this regression.

Table XIV also shows which of the 47 variables (except for the two

Table XIV. Parameter estimates for a linear regression model predicting reported household income values and relative odds from a logistic regression model predicting whether income was not reported

Variable	Parameters of linear regression model to predict household income values				Relative odds of having missing income based on a logistic regression model	
	Estimate	Standard error	t statistic	p value	Odds ratio	95% confidence interval
Intercept.	−6.71	0.67	−10.06	<0.01	. . .	. . .
Child is black.	−0.50	0.04	−11.88	<0.01	1.02	0.94–1.11
Child is white.	0.05	0.03	1.69	0.09	1.13	1.06–1.21
Education of respondent.	0.81	0.01	62.81	<0.01	0.94	0.91–0.96
Household size (base-10 log transformed).	3.39	0.15	22.87	<0.01	1.45	1.09–1.93
MSA status	−0.54	0.02	−23.08	<0.01	1.20	1.14–1.26
S_UNDR18	−0.55	0.04	−15.64	<0.01	0.88	0.83–0.95
K1Q01	−0.02	0.02	−1.20	0.23	0.98	0.94–1.02
K1Q03	−0.47	0.05	−9.01	<0.01	1.33	1.21–1.46
K2Q01	−0.19	0.02	−12.69	<0.01	1.04	1.01–1.07
K2Q13	0.06	0.04	1.57	0.12	0.86	0.79–0.92
K2Q19	−0.18	0.05	−3.77	<0.01	1.08	0.98–1.18
K2Q22	0.03	0.05	0.68	0.50	0.90	0.81–1.00
K2Q32A	−0.03	0.06	−0.46	0.64	0.93	0.82–1.06
K2Q33A	0.07	0.05	1.41	0.16	0.97	0.87–1.08
K2Q34A	0.00	0.06	−0.01	0.99	1.03	0.91–1.16
K2Q37A	0.07	0.05	1.46	0.14	0.94	0.86–1.04
K2Q40A	0.07	0.03	2.27	0.02	0.97	0.92–1.03
K2Q41A	0.22	0.14	1.54	0.12	0.98	0.73–1.30
K2Q42A	−0.07	0.10	−0.70	0.48	1.04	0.86–1.26
K2Q43A	−0.05	0.06	−0.85	0.39	1.04	0.92–1.17
K2Q44A	0.02	0.08	0.19	0.85	1.12	0.97–1.31
K2Q45A	0.09	0.06	1.62	0.11	1.05	0.94–1.17
K2Q46A	0.06	0.07	0.87	0.38	1.12	0.99–1.27
K3Q01	0.70	0.04	17.15	<0.01	0.85	0.79–0.92
K3Q21A	0.61	0.02	24.75	<0.01	0.94	0.90–0.99
K4Q20	−0.03	0.01	−4.70	<0.01	1.00	0.99–1.01
K4Q21	0.14	0.01	18.34	<0.01	1.03	1.01–1.04
K4Q27	−0.41	0.04	−9.41	<0.01	0.84	0.77–0.92
K5Q10	0.07	0.03	2.50	0.01	0.96	0.91–1.01
K9Q00	−0.43	0.04	−11.36	<0.01	1.03	0.96–1.10
K9Q40	−0.19	0.02	−7.87	<0.01	0.72	0.68–0.75
K10Q12	−0.04	0.03	−1.49	0.14	0.94	0.90–0.99
K10Q13	0.22	0.02	9.99	<0.01	0.98	0.93–1.02
K10Q14	−0.01	0.03	−0.17	0.86	0.94	0.89–1.00
K10Q23	−0.18	0.03	−5.36	<0.01	0.84	0.78–0.90
K10Q40	0.21	0.01	15.20	<0.01	0.97	0.95–1.00
K11Q01	−0.20	0.04	−5.55	<0.01	0.90	0.84–0.97
K11Q33	0.26	0.07	3.86	<0.01	0.83	0.74–0.93
K11Q38	1.05	0.13	7.96	<0.01	1.19	0.94–1.49
K11Q50	1.17	0.04	29.81	<0.01	0.66	0.62–0.71
K11Q60	−0.60	0.06	−10.04	<0.01	1.24	1.12–1.38
K11Q61	−1.70	0.04	−39.43	<0.01	1.31	1.21–1.42
K11Q62	−1.92	0.03	−60.00	<0.01	0.98	0.92–1.04
K11Q70	0.77	0.03	24.31	<0.01	1.19	1.12–1.26
K11Q76A (days)	−0.12	0.02	−7.62	<0.01	0.95	0.92–0.98
Mean household income, by state	1.65	0.07	22.74	<0.01	. . .	. . .
Standard deviation of income, by state	−0.24	0.02	−13.58	<0.01	. . .	. . .

. . . Category not applicable.

Table XV. Unweighted and weighted estimates of the frequency and prevalence of children with excellent or very good health

State	Total unweighted number of children	Total weighted estimate of number of children	Unweighted number of children with excellent or very good health	Weighted estimate of number of children with excellent or very good health	Standard error of weighted estimate of number of children with excellent or very good health	Percent of children who have excellent or very good health	Standard error of percent of children who have excellent or very good health
National	91,642	73,758,616	80,456	62,216,654	458,838	84.35	0.347
Alabama.	1,761	1,119,323	1,524	947,115	35,054	84.61	1.317
Alaska	1,739	182,287	1,546	162,052	5,624	88.90	1.057
Arizona	1,769	1,657,543	1,505	1,337,038	50,813	80.66	1.549
Arkansas	1,765	698,558	1,507	574,474	18,031	82.24	1.262
California	1,751	9,392,086	1,427	7,300,335	359,746	77.73	1.952
Colorado	1,801	1,187,560	1,597	1,001,551	38,710	84.34	1.580
Connecticut	1,889	813,675	1,706	717,021	20,863	88.12	1.030
Delaware	1,805	201,362	1,555	170,122	5,445	84.49	1.168
District of Columbia	1,801	113,827	1,558	95,602	3,269	83.99	1.212
Florida	1,797	4,017,889	1,528	3,571,983	166,312	88.90	1.319
Georgia	1,782	2,525,483	1,588	2,177,204	83,832	86.21	1.381
Hawaii	1,822	279,867	1,599	241,938	7,915	86.45	1.155
Idaho.	1,768	411,741	1,549	354,123	11,380	86.01	1.115
Illinois	1,932	3,198,016	1,650	2,715,176	86,471	84.90	1.131
Indiana.	1,764	1,590,598	1,505	1,357,295	49,965	85.33	1.206
Iowa	1,757	710,075	1,577	620,713	21,836	87.42	1.229
Kansas	1,803	699,044	1,580	596,113	19,451	85.28	1.168
Kentucky	1,803	1,013,459	1,567	874,230	27,097	86.26	1.036
Louisiana	1,868	1,080,350	1,591	868,362	31,348	80.38	1.510
Maine	1,752	284,110	1,608	258,153	8,054	90.86	0.934
Maryland	1,773	1,361,936	1,619	1,227,016	41,221	90.09	1.085
Massachusetts	1,786	1,431,554	1,620	1,264,383	42,866	88.32	1.190
Michigan.	1,861	2,442,796	1,639	2,110,493	75,077	86.40	1.317
Minnesota.	1,767	1,257,082	1,617	1,148,535	41,370	91.37	0.987
Mississippi	1,918	757,184	1,619	622,709	20,157	82.24	1.208
Missouri	1,847	1,412,037	1,633	1,232,395	39,520	87.28	1.059
Montana.	1,788	227,966	1,604	201,191	5,953	88.25	1.022
Nebraska	1,827	457,857	1,644	395,150	13,584	86.30	1.317
Nevada	1,821	664,311	1,486	530,170	20,737	79.81	1.484
New Hampshire	1,773	298,439	1,636	270,414	8,373	90.61	0.995
New Jersey.	1,827	2,049,175	1,633	1,756,053	58,927	85.70	1.268
New Mexico	1,826	493,495	1,558	420,042	16,220	85.12	1.194
New York	1,793	4,420,982	1,520	3,684,697	128,478	83.35	1.313
North Carolina	1,782	2,201,857	1,554	1,905,359	67,353	86.53	1.214
North Dakota	1,800	142,697	1,640	129,226	3,647	90.56	0.849
Ohio	1,765	2,735,724	1,586	2,363,238	84,518	86.38	1.390
Oklahoma.	1,816	903,460	1,586	774,945	25,340	85.78	1.087
Oregon	1,794	859,256	1,562	741,477	25,744	86.29	1.171
Pennsylvania	1,767	2,794,078	1,553	2,478,407	96,904	88.70	1.184
Rhode Island	1,756	235,868	1,564	203,057	7,039	86.09	1.304
South Carolina	1,885	1,058,919	1,642	894,640	29,473	84.49	1.190
South Dakota.	1,740	194,049	1,580	174,735	5,456	90.05	0.943
Tennessee	1,840	1,459,756	1,622	1,230,196	40,015	84.27	1.267
Texas	1,805	6,579,611	1,444	5,141,109	229,426	78.14	1.633
Utah	1,747	813,287	1,592	732,234	24,699	90.03	1.058
Vermont	1,725	130,729	1,604	120,723	4,276	92.35	0.938
Virginia	1,774	1,829,149	1,583	1,608,914	52,654	87.96	1.075
Washington	1,736	1,535,630	1,516	1,316,713	51,968	85.74	1.303
West Virginia	1,766	391,744	1,544	339,619	10,404	86.69	1.039
Wisconsin.	1,860	1,314,848	1,643	1,147,422	36,436	87.27	1.082
Wyoming	1,748	126,287	1,546	110,793	3,671	87.73	1.020

NOTES: Denominator includes children for whom health status was not reported because the respondent did not know or refused to answer the health status question. Estimates are derived from the publicly released data file.

continuous state-level income variables) were significant predictors of nonresponse. These results are based on odds ratios derived after fitting a logistic regression predicting whether income was missing. Odds ratios greater than one indicate that an affirmative response on the variable is associated with higher rates of missingness. Just over one-half (24 out of 45) of the variables were significant predictors of nonresponse.

Use of Multiply Imputed Values

The derived poverty level variable that is available for public use was calculated from household income and household size. When either or both were missing, the derived poverty level was calculated from the imputed values. Regardless of whether the derived poverty level was based on reported or imputed values, the variable has been given the same name (POVLEVEL_I). A flag (FLAG_I) indicates whether the derived poverty level was based on reported or imputed values.

When missing, household income and household size were imputed five times. Therefore, the resulting dataset contains five times as many observations as were in the original dataset. For the 2007 NSCH, the datasets have 5(91,642) = 458,210 records. Each complete set of derived poverty level values is distinguished by the SAS variable IMPUTATION. Therefore, each IDNUMR appears five times in the file, with IMPUTATION having values of 1, 2, 3, 4, and 5 corresponding to the five separate complete sets of derived poverty level values.

The NSCH public-use data files do not include household income, to protect against inadvertent disclosure of survey subjects' identities. Only poverty level is reported on the public-use data files. Similarly, imputed household income will not be released as public-use data. Researchers interested in accessing the original and imputed household income data may access the data through the NCHS Research Data Centers.

There are three possible ways to analyze the data. One invalid way to use the data that should not be attempted is also described.

Considering the possible ways first, a complete-case (only) analysis is the simplest, which uses only the cases with observed values. This can be done by using the poverty level variable (POVERTY_LEVELR) in the NSCH data file. Any analysis using this variable could be biased due to nonresponse, and the variability will be larger because of the missing values.

The second possible way of using the data is to use only a single imputation from the multiple imputation files. Each of the five imputations has been drawn from a valid distribution based on a regression model, but this model and the distribution are slightly different for each imputation. To analyze only one imputation, choose only the subset of cases with IMPUTATION = c, where c is 1, 2, 3, 4, or 5. Single imputation analyses result in estimated standard errors that are too small because the imputed values are treated as if they were observed. This ignores the inherent uncertainty resulting from lack of knowledge about the true (unobserved) value, but is superior to the complete-case analysis. Note that slightly different results will be obtained depending on which subset of cases is chosen, but no subset is superior to another.

The statistically valid way to analyze the data is to analyze all five imputed datasets together. To do this, five separate analyses are conducted; one on each of the five imputed datasets. These analyses are then combined following the standard multiple imputation combining rules (34). This is superior to the previous two methods.

Note that it is invalid to combine the five imputed values into one analysis. For example, taking the average poverty level (which might not be an integer) to derive one "average" poverty status value per case is invalid. Poverty status must be analyzed as a multiply imputed variable with SAS, SUDAAN, IVEware, or another

appropriate statistical software package to make use of the multiply imputed data.

Regardless of the statistical software used to analyze the data, one must merge the survey data from the public-use analysis files with the data from the multiple imputation file by the unique household identifier (IDNUMR). To combine these files, first sort by IDNUMR and then merge using this identifier as the merge variable.

For SAS analyses, it is also very important to have the dataset sorted by IMPUTATION because analyses of the multiply imputed data need to be done separately by IMPUTATION. Separate analyses are specified in SAS by using the procedure option keyword BY ("BY IMPUTATION;" should be one line within the analysis). In SAS, the two basic steps to using the multiply imputed data are to 1) analyze the data separately by IMPUTATION as if each were a separate dataset, and 2) combine the results from the different imputed datasets using PROC MIANALYZE. In the first step, separate analyses are done with options set to keep the covariances that are needed to combine the analyses. Then, PROC MIANALYZE combines these different analyses using the standard multiple imputation combining rules.

For SUDAAN analyses, a separate analytical file is necessary for each of the five imputations. The five datasets should then be sorted by the stratum (STATE) and the primary sampling unit (IDNUMR) variables. To analyze the data using the five imputation files, the MI_COUNT command should be added to the SUDAAN procedure call. The MI_COUNT command tells SUDAAN how many imputation files to expect.

Further instructions and examples for using SAS and SUDAAN are available in the user's guide included as part of an earlier report on the multiple imputation of missing household poverty level values from the 2003 NSCH (37). This report is available from http://www.cdc.gov/nchs/data/slaits/mimp01_03.pdf.

Vital and Health Statistics
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ACTIVE SERIES

Series 1. Programs and Collection Procedures—This type of report describes the data collection programs of the National Center for Health Statistics. Series 1 includes descriptions of the methods used to collect and process the data, definitions, and other material necessary for understanding the data.

Series 2. Data Evaluation and Methods Research—This type of report concerns statistical methods and includes analytical techniques, objective evaluations of reliability of collected data, and contributions to statistical theory. Also included are experimental tests of new survey methods, comparisons of U.S. methodologies with those of other countries, and as of 2009, studies of cognition and survey measurement, and final reports of major committees concerning vital and health statistics measurement and methods.

Series 3. Analytical and Epidemiological Studies—This type of report presents analytical or interpretive studies based on vital and health statistics. As of 2009, Series 3 also includes studies based on surveys that are not part of continuing data systems of the National Center for Health Statistics and international vital and health statistics reports.

Series 10. Data From the National Health Interview Survey—This type of report contains statistics on illness; unintentional injuries; disability; use of hospital, medical, and other health services; and a wide range of special current health topics covering many aspects of health behaviors, health status, and health care utilization. Series 10 is based on data collected in this continuing national household interview survey.

Series 11. Data From the National Health Examination Survey, the National Health and Nutrition Examination Surveys, and the Hispanic Health and Nutrition Examination Survey—In this type of report, data from direct examination, testing, and measurement on representative samples of the civilian noninstitutionalized population provide the basis for (1) medically defined total prevalence of specific diseases or conditions in the United States and the distributions of the population with respect to physical, physiological, and psychological characteristics, and (2) analyses of trends and relationships among various measurements and between survey periods.

Series 13. Data From the National Health Care Survey—This type of report contains statistics on health resources and the public's use of health care resources including ambulatory, hospital, and long-term care services based on data collected directly from health care providers and provider records.

Series 20. Data on Mortality—This type of report contains statistics on mortality that are not included in regular, annual, or monthly reports. Special analyses by cause of death, age, other demographic variables, and geographic and trend analyses are included.

Series 21. Data on Natality, Marriage, and Divorce—This type of report contains statistics on natality, marriage, and divorce that are not included in regular, annual, or monthly reports. Special analyses by health and demographic variables and geographic and trend analyses are included.

Series 23. Data From the National Survey of Family Growth—These reports contain statistics on factors that affect birth rates, including contraception and infertility; factors affecting the formation and dissolution of families, including cohabitation, marriage, divorce, and remarriage; and behavior related to the risk of HIV and other sexually transmitted diseases. These statistics are based on national surveys of women and men of childbearing age.

DISCONTINUED SERIES

Series 4. Documents and Committee Reports—These are final reports of major committees concerned with vital and health statistics and documents. The last Series 4 report was published in 2002. As of 2009, this type of report is included in Series 2 or another appropriate series, depending on the report topic.

Series 5. International Vital and Health Statistics Reports—This type of report compares U.S. vital and health statistics with those of other countries or presents other international data of relevance to the health statistics system of the United States. The last Series 5 report was published in 2003. As of 2009, this type of report is included in Series 3 or another series, depending on the report topic.

Series 6. Cognition and Survey Measurement—This type of report uses methods of cognitive science to design, evaluate, and test survey instruments. The last Series 6 report was published in 1999. As of 2009, this type of report is included in Series 2.

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Series 15. Data From Special Surveys—This type of report contains statistics on health and health-related topics collected in special surveys that are not part of the continuing data systems of the National Center for Health Statistics. The last Series 15 report was published in 2002. As of 2009, reports based on these surveys are included in Series 3.

Series 16. Compilations of Advance Data From Vital and Health Statistics—The last Series 16 report was published in 1996. All reports are available online, and so compilations of Advance Data reports are no longer needed.

Series 22. Data From the National Mortality and Natality Surveys—The last Series 22 report was published in 1973. Reports from these sample surveys, based on vital records, are published in Series 20 or 21.

Series 24. Compilations of Data on Natality, Mortality, Marriage, and Divorce—The last Series 24 report was published in 1996. All reports are available online, and so compilations of reports are no longer needed.

For answers to questions about this report or for a list of reports published in these series, contact:

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