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**The Experiences of SCHIP  
Enrollees and Disenrollees in  
10 States: Findings from the  
Congressionally Mandated  
SCHIP Evaluation:  
Appendixes**

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*Mathematica Policy Research, Inc.      The Urban Institute*

*Christopher Trenholm  
Welmoet van Kammen  
Frank Potter  
Myoung Kim  
Lorenzo Moreno  
Barbara Schiff  
William Black*

*Genevieve Kenney  
Lisa Dubay  
Jamie Rubenstein  
Anna Sommers  
Stephen Zuckerman  
Fredric Blavin  
Grace Ko*

Submitted to:

Rob Stewart  
U.S. Department of Health and Human Services  
Office of the Secretary  
Assistant Secretary for Planning and Evaluation  
Room 442E, HHH Building  
200 Independence Avenue, SW  
Washington, DC 20201

Project Officer:  
Rob Stewart

Submitted by:

Mathematica Policy Research, Inc.  
P.O. Box 2393  
Princeton, NJ 08543-2393  
(609) 799-3535  
and  
The Urban Institute  
2100 M Street, NW  
Washington, DC 20037  
(202) 833-7200

Project Director:  
Judith Wooldridge



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**APPENDIX A**  
**SURVEY INSTRUMENT**





**SECTION 1: INTRODUCTION  
(NOT IN PUBLIC ACCESS FILE)**

**FOR CALL BACKS OF AN IDENTIFIED PERSON,  
START WITH 1.9**

Hello, my name is (INTERVIEWER NAME), and I'm calling from Mathematica Policy Research in Princeton, NJ.

We are doing a study for the U.S. Department of Health and Human Services about (SCHIP/MEDICAID), the health insurance program (CHILD) has been enrolled in.

The study is about what works well for children in (SCHIP/MEDICAID), and what does not work so well, and to hear about people's experiences with the program.

PROBE (IF RESPONDENT DOES NOT KNOW PROGRAM):  
(SCHIP/MEDICAID) is the health insurance program that covers medical and dental care expenses for children. You may also know this program as (NAME OF PLAN).

PROBE (IF RESPONDENT SAYS (CHILD) NO LONGER IN PROGRAM)  
That is ok. We are very interested in people's experiences with the program for children no longer in (SCHIP/MEDICAID).

PROBE IF NECESSARY: Mathematica Policy Research in Princeton, NJ is conducting this study for the U.S. Department of Health and Human Services to determine if children are getting the health care they need throughout the United States.

1.1 Is (CHILD) living in your household right now?

|    |     |                                   |
|----|-----|-----------------------------------|
| 01 | YES | GO TO 1.5                         |
| 02 | NO  | GOT TO 1.2                        |
| D  | DK  | Thank you very much.<br>Good-bye. |
| R  | REF | Thank you very much.<br>Good-bye. |

1.2 Can you tell me how to get in touch with someone where the child is living now?

PROBE: Your information is confidential. We will only use this information to contact an adult living with (CHILD) about (SCHIP/MEDICAID).

|    |     |                                   |
|----|-----|-----------------------------------|
| 01 | YES | GO TO 1.4                         |
| 02 | NO  | Thank you very much.<br>Good-bye. |
| D  | DK  |                                   |
| R  | REF |                                   |

1.4 PLEASE ASK AND RECORD NAME OF CONTACT PERSON, ADDRESS AND/OR TELEPHONE NUMBER.

IF PERSON CAN ONLY PROVIDE TELEPHONE NUMBER, ASK IF CHILD IS STILL LIVING IN (STATE SAMPLE WAS SELECTED FROM).

|                           |  |
|---------------------------|--|
| NAME OF PERSON TO CONTACT |  |
| STREET ADDRESS            |  |
| CITY                      |  |
| STATE AND ZIP CODE        |  |
| TELEPHONE NUMBERS         |  |
| BEST DATES TO CALL        |  |
| BEST TIMES TO CONTACT     |  |

Thank you very much for your help. I will contact the person you mentioned. Good-bye.

1.5 Are you the person who is most familiar with (CHILD)'s health and health care?

|    |     |           |
|----|-----|-----------|
| 01 | YES |           |
| 02 | NO  | GO TO 1.6 |
| d  | DK  |           |
| r  | REF |           |

1.5.1 Are you 18 years of age or older?

|    |     |             |
|----|-----|-------------|
| 01 | YES | GO TO 1.10  |
| 02 | NO  | GO TO 1.5.2 |
| d  | DK  |             |
| r  | REF |             |

1.5.2 Are you (CHILD)'s biological parent?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 1.10 |
| 02 | NO  | GO TO 1.6  |
| d  | DK  |            |
| r  | REF |            |

1.6 I need to speak with someone who is 18 or older or who is the biological parent of (CHILD) and who is the person familiar with (CHILD)'s healthcare. May I please speak with that person?

|    |               |                                |
|----|---------------|--------------------------------|
| 01 | YES           | GO TO 1.9                      |
| 02 | NOT AVAILABLE | GO TO 1.7                      |
| d  | DK            |                                |
| r  | REF           | Thank you very much. Good-bye. |

1.7 GET NAME OF PERSON AND TIME TO CALL.

|                    |                                |
|--------------------|--------------------------------|
| NAME OF PERSON     |                                |
| BEST DATES TO CALL |                                |
| BEST TIMES TO CALL |                                |
| REFUSED            | Thank you very much. Good-bye. |

Thank you very much. I will call this person back later.

IF THIS IS A CALLBACK TO PERSON ESTABLISHED BY OTHER PERSON AS  
PERSON MOST FAMILIAR WITH CHILD HEALTH CARE START HERE

1.9.1 Hello, my name is (INTERVIEWER NAME), and I'm calling from Mathematica Policy Research in Princeton, NJ.

We are doing a study for the U.S. Department of Health and Human Services about (SCHIP/MEDICAID), the health insurance program (CHILD) has been enrolled in.

The study is about what works well for children in (SCHIP/MEDICAID), and what does not work so well, and to hear about people's experiences with the program.

PROBE (IF RESPONDENT DOES NOT KNOW PROGRAM):  
(SCHIP/MEDICAID) is the health insurance program that covers medical (and dental care) expenses for children (IF SCHIP/MEDICAID SAMPLE ADD: and families). You may also know this program as (NAME OF PLAN).

PROBE (IF RESPONDENT SAYS (CHILD) NO LONGER IN PROGRAM)  
That is ok. We are very interested in people's experiences with the program for children no longer in (SCHIP/MEDICAID).

ADDITIONAL INFORMATION IF NECESSARY: Mathematica Policy Research in Princeton, NJ is conducting this study for the U.S. Department of Health and Human Services to determine if children are getting the health care they need throughout the United States.

Are you the person who is most familiar with (CHILD)'s health and health care?

|                           |     |             |
|---------------------------|-----|-------------|
| 01                        | YES |             |
| 02                        | NO  | GO TO 1.9.4 |
| d                         | DK  |             |
| r                         | REF |             |
| CHILD NOT IN<br>HOUSEHOLD |     | GO TO 1.9.7 |

1.9.2 Are you 18 years of age or older?

|    |     |             |
|----|-----|-------------|
| 01 | YES | GO TO 1.10  |
| 02 | NO  | GO TO 1.9.3 |
| d  | DK  |             |
| r  | REF |             |

1.9.3 Are you (CHILD)'s biological parent?

|    |     |             |
|----|-----|-------------|
| 01 | YES | GO TO 1.10  |
| 02 | NO  | GO TO 1.9.4 |
| d  | DK  |             |
| r  | REF |             |

1.9.4 I need to speak with someone who is 18 or older or who is the biological parent of (CHILD) and who is the person familiar with (CHILD)'s healthcare. May I please speak with that person?

|    |               |                                |
|----|---------------|--------------------------------|
| 01 | YES           | GO TO 1.9.1                    |
| 02 | NOT AVAILABLE | GO TO 1.9.6                    |
| d  | DK            |                                |
| r  | REF           | Thank you very much. Good-bye. |

1.9.6 GET NAME OF PERSON AND TIME TO CALL.

|                    |                               |
|--------------------|-------------------------------|
| NAME OF PERSON     |                               |
| BEST DATES TO CALL |                               |
| BEST TIMES TO CALL |                               |
| REFUSED            | Thank you very much. Good-bye |

Thank you very much. I will call this person back later.

1.9.7 Can you tell me how to get in touch with someone where the child is living now?

PROBE: Your information is confidential. We will only use this information to contact an adult living with (CHILD) about (SCHIP/MEDICAID).

|    |     |                                |
|----|-----|--------------------------------|
| 01 | YES | GO TO 1.9.9                    |
| 02 | NO  | Thank you very much. Good-bye. |

1.9.9 PLEASE ASK AND RECORD NAME OF CONTACT PERSON, ADDRESS AND/OR TELEPHONE NUMBER.

IF PERSON CAN ONLY PROVIDE TELEPHONE NUMBER, ASK IF CHILD IS STILL LIVING IN (STATE SAMPLE WAS SELECTED FROM).

FOR CHILD STILL IN STATE: Thank you very much for your help. I will contact the person you mentioned. Good-bye.

FOR CHILD MOVED OUT OF STATE: Thank you very much for your help. We will probably not contact this person because (CHILD) is now living in another State. Good-bye.

1.10 Can I please have your first and last name?

NOTE: DO NOT ASK IF ALREADY KNOWN

|   |            |
|---|------------|
|   | FIRST NAME |
|   | LAST NAME  |
| d | DK         |
| r | REF        |

1.10.1 So, why don't we get started with the interview?

It will only take about 30-35 minutes.

|    |     |              |
|----|-----|--------------|
| 01 | YES | GO TO 1.10.3 |
| 02 | NO  | GO TO 1.10.2 |

1.10.2 GET TIME TO CALL.

|                              |                                |
|------------------------------|--------------------------------|
| BEST DATES TO CALL           |                                |
| BEST TIMES AND DATES TO CALL |                                |
| REFUSED                      | Thank you very much. Good-bye. |

Thank you very much. I will call you back later.

IF THIS IS A CALLBACK TO PERSON WHO IDENTIFIED HIM/HERSELF AS THE PERSON TO BE INTERVIEWED, START HERE

- 1.10.3 First, I want to assure you that all information from this interview will be completely confidential and will not in any way affect (CHILD)'s health insurance or medical care.

Information you such as names and addresses will not be stored with information that you give us during the interview and will always be kept in a secure place. Only the researchers directly working on the study will have access to this information.

We will not report on your individual answers but the results of this study will always be presented by combining your answers with the answers of other respondents.

Before we begin, I need to tell you that for purposes of quality control my supervisor may monitor this call.

First, I need to ask you a few basic questions.

- 1.12 (DO NOT ASK IF ALREADY KNOWN) What is your relationship to (CHILD)?

|    |   |
|----|---|
| 01 | MOTHER  |
| 02 | FATHER  |
| 03 | GRANDFATHER   |
| 04 | GRANDMOTHER   |
| 05 | AUNT  |
| 06 | UNCLE   |
| 07 | BROTHER (FULL, HALF, ADOPTED)   |
| 08 | SISTER (FULL, HALF, ADOPTED)  |
| 09 | OTHER RELATIVE (SPECIFY)  |
| 10 | OTHER NON-RELATIVE<br>IF FOSTER PARENT, TERMINATE<br>INTERVIEW FOR<br>(SCHIP/MEDICAID) SAMPLE |
| d  | DK  |
| r  | REF   |

- 1.15 Just to verify my information, my records indicated that (CHILD) is a (BOY/GIRL). Is that correct?

|    |          |
|----|----------|
| 01 | YES      |
| 02 | NO, GIRL |
| 03 | NO, BOY  |

- 1.16 I have (CHILD)'s birthday as (DATE OF BIRTH). Is that correct?

|    |     |                    |
|----|-----|--------------------|
| 01 | YES | GO TO NEXT SECTION |
| 02 | NO  | GO TO 1.17         |
| d  | DK  |                    |
| r  | REF |                    |

- 1.17 What is (CHILD)'s correct birthday?

|  |       |
|--|-------|
|  | MONTH |
|  | DAY   |
|  | YEAR  |



|   |
|---|
| <b>SECTION 2: APPLICATION, ENROLLMENT, REDETERMINATION, AND<br/>DISENROLLMENT</b> |
|---|

My first questions will be about how you learned about (SCHIP/MEDICAID) and what you had to do to enroll and keep (CHILD) enrolled in the program.

First, I will read you a list of ways you may have heard or received information about (SCHIP/MEDICAID).

For each item, please tell me if you ever heard or received information about the program this way.

- 2.1.2.1 Have you ever heard or received information about (SCHIP/MEDICAID) on TV, the radio, or in the newspaper?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

- 2.1.4 Have you ever heard or received information about (SCHIP/MEDICAID) when applying for another program, such as (MEDICAID/SCHIP), TANF/AFDC, WIC, or food stamps?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

- 2.1.5 Have you ever heard or received information about (SCHIP/MEDICAID) at (CHILD)'s school or school related event?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

- 2.1.8 Have you ever heard or received information about (SCHIP/MEDICAID) from a telephone hot line, help line, or referral service?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

- 2.1.9 Have you ever heard or received information about (SCHIP/MEDICAID) in a hospital, emergency room, clinic, doctor's office, or pharmacy?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

- 2.1.12 Have you ever heard or received information about (SCHIP/MEDICAID) at work or at a school you attend or attended?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

- 2.1.13 Have you ever heard or received information about (SCHIP/MEDICAID) at a store, shopping center, or restaurant?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

- 2.1.15 Have you ever heard or received information about (SCHIP/MEDICAID) at any other place or from any other person?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

- 2.2 Was any of this information/Was this information important in making a decision to enroll (CHILD) in (SCHIP/MEDICAID)?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

IF 2.1.2.1-2.1.15 MORE THAN ONE ANSWERED YES and 2.2=YES GO TO 2.2.1  
ELSE GO TO 2.9

- 2.2.1 Which information was the most important in making the decision to enroll (CHILD) in (SCHIP/MEDICAID)?

Was it...

|       |   |  |
|-------|---|--|
| 01-14 | 1=TV<br>2=Radio<br>3=Newspaper<br>4=Outreach<br>5=Welfare<br>6=School<br>7=Church | 8=Telephone<br>9=Hospital<br>10=Pharmacy<br>11=Work<br>12=Store<br>13=Friend<br>14=Other |
| d     | DK  |  |
| r     | REF   |  |

- 2.9 The next questions are about your experiences enrolling (CHILD) in (SCHIP/MEDICAID).

Has (SCHIP/MEDICAID) ever rejected (CHILD)'s application so he/she could not be enrolled in the program?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 2.10 |
| 02 | NO  | GO TO 2.11 |
| d  | DK  | GO TO 2.11 |
| r  | REF | GO TO 2.11 |

2.10.1-2.10.7

What were the reasons (SCHIP/MEDICAID) rejected (CHILD)'s application?

|   |  |
|---|--|
| 1 | DIDN'T PROVIDE ALL PAPER WORK/DOCUMENTS NEEDED |
| 2 | EARNED TOO MUCH MONEY                          |
| 3 | QUALIFIED FOR (MEDICAID/SCHIP)                 |
| 4 | TOO OLD  |
| 5 | WAS INSURED BY OTHER INSURANCE                 |
| 6 | CHILD NEEDED TO BE UNINSURED LONGER TO QUALIFY |
| 7 | OTHER REASON                                   |
| d | DK   |
| r | REF  |

2.11 Now, think about the times (CHILD) (IF 2.9=1 READ: successfully) was enrolled in (SCHIP/MEDICAID). How many times did that happen?

PROBE: Please do not include times you were required to renew or reapply for (CHILD) to stay in the program.

|   |       |
|---|-------|
|   | TIMES |
| d | DK    |
| r | REF   |

2.12 How old was (CHILD) when he/she was (IF 2.11>1 READ: first) enrolled in (SCHIP/MEDICAID)?

|   |             |
|---|-------------|
| 1 | 0 to 4      |
| 2 | 5 to 12     |
| 3 | 13 or older |
| d | DK          |
| r | REF         |

2.13 Was that the first time a child in your household was enrolled in (SCHIP/MEDICAID)?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| D  | DK  |
| R  | REF |

- 2.14 (MULTIPLE TIMES ENROLLED/2.11 > 1) Now think about the most recent time he/she was enrolled in (SCHIP/MEDICAID).

What was the main reason (CHILD) was enrolled in the program?

|    |   |
|----|---|
| 01 | WANTED CHILD TO BE INSURED  |
| 02 | PARENT LOST INSURANCE BECAUSE OF LOSS OF JOB OR CHANGE IN HOURS ON JOB    |
| 03 | (SCHIP/MEDICAID) IS LESS EXPENSIVE THAN INSURANCE CHILD WAS COVERED UNDER |
| 04 | (SCHIP/MEDICAID) COVERAGE BETTER THAN INSURANCE CHILD WAS COVERED UNDER   |
| 05 | NOT ELIGIBLE ANY LONGER FOR MEDICAID/SCHIP                                |
| 06 | OTHER REASON  |
| d  | DK  |
| r  | REF   |

- 2.17 How did you get the application form to enroll in (SCHIP/MEDICAID)?

Did you get the form...

|    |   |              |
|----|---|--------------|
| 01 | In the mail   | GO TO 2.17.1 |
| 02 | Was it given to you or did you pick it up somewhere | GO TO 2.18   |
| 03 | Did you get it from a website on the Internet?      | GO TO 2.19   |
| d  | DK  |              |
| r  | REF   |              |

- 2.17.1 Did you get the form in the mail because...

|    |  |            |
|----|--|------------|
| 01 | You requested the form from someone or someplace | GO TO 2.18 |
| 02 | Did the form just show up in the mail?           | GO TO 2.19 |
| d  | DK   |            |
| r  | REF  |            |

2.18 (IF 2.17=02) Who gave the form to you or where did you pick it up?

(IF 2.17.1=01) Where or from whom did you request the form?

|    |   |
|----|---|
| 01 | HOT/HELP TELEPHONE LINE   |
| 02 | WELFARE OFFICE OR OTHER AGENCY OFFICE (OR SOCIAL WORKER OR OTHER STAFF THERE)       |
| 03 | HOSPITAL, HOSPITAL EMERGENCY ROOM OR CLINIC (OR DOCTOR, NURSE OR OTHER STAFF THERE) |
| 04 | DOCTOR'S OFFICE (OR DOCTOR OR OTHER STAFF THERE)                                    |
| 05 | PHARMACY (OR PHARMACIST OR OTHER STAFF THERE)                                       |
| 06 | SCHOOL OF CHILD (OR STAFF AT THE SCHOOL)  |
| 07 | CHURCH (OR CHURCH STAFF)  |
| 08 | COMMUNITY CENTER (OR STAFF THERE)   |
| 09 | STORE OR SHOPPING CENTER (OR STAFF THERE)   |
| 10 | WORK PLACE/YOUR SCHOOL (OR COWORKERS, TEACHERS, SUPERVISORS, ETC.)                  |
| 11 | FRIEND OR RELATIVE (OR AT THEIR HOUSE)  |
| 12 | OTHER PLACE OR PERSON   |
| d  | DK  |
| r  | REF   |

2.19 Was the application form written in a language other than English?

|    |                                  |            |
|----|----------------------------------|------------|
| 01 | YES, LANGUAGE OTHER THAN ENGLISH | GO TO 2.21 |
| 02 | NO, ENGLISH                      |            |
| d  | DK                               |            |
| r  | REF                              |            |

2.20 Did a translator or some other professional help translate the application form into a language you could understand?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

2.21 (IF 2.20=1) Besides help with translating, did you get other assistance in completing the application?

(ELSE) Did you get assistance in completing the application?

|    |     |               |
|----|-----|---------------|
| 01 | YES |               |
| 02 | NO  | GO TO<br>2.25 |
| d  | DK  |               |
| r  | REF |               |

2.22 Did you get assistance in completing the application from...

|   |                                  |  |
|---|----------------------------------|--|
|   | 01=YES<br>02=NO<br>d=DK<br>r=REF |  |
| A |                                  | An outreach worker, social worker, or someone else coming to your home |
| B |                                  | A person at an agency  |
| C |                                  | A person at a hospital, a clinic, or a doctor's office                 |
| D |                                  | A person at a hot or help line   |
| E |                                  | Any other professional   |

2.22.1 How easy or difficult was it for you to get assistance in completing the application?

Would you say it was...

|    |                    |
|----|--------------------|
| 01 | Very easy          |
| 02 | Somewhat easy      |
| 03 | Somewhat difficult |
| 04 | Very difficult     |
| d  | DK                 |
| r  | REF                |

2.24.1 How courteous and respectful were the people who assisted you in completing the application?

Would you say they were...

|    |                                     |
|----|-------------------------------------|
| 01 | Very courteous and respectful       |
| 02 | Somewhat courteous and respectful   |
| 03 | Not very courteous and respectful   |
| 04 | Not at all courteous and respectful |
| d  | DK                                  |
| r  | REF                                 |

2.25.1 Were you or someone else required to go to an office to complete the application?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 2.26 |
| 02 | NO  | GO TO 2.28 |
| d  | DK  |            |
| r  | REF |            |

2.26 Was the location of the office...

|    |                       |
|----|-----------------------|
| 01 | Very convenient       |
| 02 | Somewhat convenient   |
| 03 | Not very convenient   |
| 04 | Not at all convenient |
| d  | DK                    |
| r  | REF                   |

2.28 For (CHILD)'s (IF 2.11>1 READ: most recent) application for (SCHIP/MEDICAID), how easy or difficult was it to fill out the application form?

Was it...

|    |                    |
|----|--------------------|
| 01 | Very easy          |
| 02 | Somewhat easy      |
| 03 | Somewhat difficult |
| 04 | Very difficult     |
| d  | DK                 |
| r  | REF                |



2.29 And, how easy or difficult was it to get the required documents together? Was it...

|    |                                       |
|----|---------------------------------------|
| 01 | Very easy                             |
| 02 | Somewhat easy                         |
| 03 | Somewhat difficult                    |
| 04 | Very difficult                        |
| 05 | WAS NOT REQUIRED TO GET ANY DOCUMENTS |
| d  | DK                                    |
| r  | REF                                   |

2.29.1 So overall, based on your experiences and what you know about (SCHIP/MEDICAID), how easy or difficult is it to enroll (CHILD) in (SCHIP/MEDICAID)?

Is it...

|    |                    |
|----|--------------------|
| 01 | Very easy          |
| 02 | Somewhat easy      |
| 03 | Somewhat difficult |
| 04 | Very difficult     |
| d  | DK                 |
| r  | REF                |

2.30 Again, think about the most recent time (CHILD) was enrolled in (SCHIP/MEDICAID).

After the entire application was completed and submitted, about how many weeks and or months did it take until you were notified that (CHILD) was enrolled in the program?

|     |                         |              |
|-----|-------------------------|--------------|
| 00  | WAS ENROLLED RIGHT AWAY | GO TO 2.34   |
|     | WEEKS                   |              |
| 999 | NEVER NOTIFIED          | GO TO 2.34   |
| d   | DK                      | GO TO 2.30.1 |
| r   | REF                     | GO TO 2.34   |

2.30.1 Would you say...

|    |                         |
|----|-------------------------|
| 01 | Less than 1 week        |
| 02 | 1 but less than 2 weeks |
| 03 | 2 but less than 3 weeks |
| 04 | 3 but less than 4 weeks |
| 05 | 4 but less than 5 weeks |
| 06 | 6 but less than 8 weeks |
| 07 | More than 2 months      |
| 08 | More than 3 months      |
| d  | DK                      |
| r  | REF                     |

- 2.34 While (CHILD) is on (SCHIP/MEDICAID), you may have to fill out a form or provide information in some other way that will determine if (CHILD) remains eligible for the program. Based on your experiences and what you know about (SCHIP/MEDICAID), how often do you have to reapply to (SCHIP/MEDICAID) for (CHILD) to stay in the program?

Would you have to reapply...

|    |                    |              |
|----|--------------------|--------------|
| 00 | Never              | GO TO 2.45   |
| 01 | Every month        | GO TO 2.34.1 |
| 02 | Every 3 months     |              |
| 03 | Every 6 months     |              |
| 04 | Once a year        |              |
| 05 | Once every 2 years |              |
| 06 | OTHER TIME PERIOD  |              |
| d  | DK                 |              |
| r  | REF                |              |

ALL NEW ENROLLEES, GO TO 2.45

- 2.34.1 While (CHILD) was enrolled in (SCHIP/MEDICAID), were you ever notified that you had to reapply for him/her to stay in the program?

|    |     |            |
|----|-----|------------|
| 01 | YES |            |
| 02 | NO  | GO TO 2.38 |
| d  | DK  |            |
| r  | REF |            |

- 2.38 Has (SCHIP/MEDICAID) ever rejected a reapplication for (CHILD) so he/she could not stay in the program?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 2.42 |
| 02 | NO  |            |
| d  | DK  |            |
| r  | REF |            |

2.39.1-2.39.7

What were the reasons (CHILD)'s reapplication was rejected?

ENTER ALL THAT APPLY

|   |   |
|---|---|
| 1 | DIDN'T PROVIDE ALL PAPER<br>WORK/DOCUMENTS NEEDED |
| 2 | EARNED TOO MUCH MONEY                             |
| 3 | QUALIFIED FOR (MEDICAID/SCHIP)                    |
| 4 | TOO OLD   |
| 5 | WAS INSURED BY OTHER<br>INSURANCE                 |
| 6 | CHILD NEEDED TO BE LONGER<br>UNINSURED TO QUALIFY |
| 7 | OTHER REASON                                      |
| d | DK  |
| r | REF   |

- 2.42 Have you ever received a warning that (CHILD) would be terminated from (SCHIP/MEDICAID) if you did not reapply to the program on time?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

- 2.43 Have you ever successfully completed a reapplication so (CHILD) could stay in the program?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 2.45 |
| 02 | NO  |            |
| d  | DK  |            |
| r  | REF |            |

- 2.44 From your experiences and what you know about (SCHIP/MEDICAID), how easy or difficult is it to complete the reapplication?

Was it...

|    |                    |
|----|--------------------|
| 01 | Very easy          |
| 02 | Somewhat easy      |
| 03 | Somewhat difficult |
| 04 | Very difficult     |
| d  | DK                 |
| r  | REF                |

MEDICAID SAMPLE GO TO NEXT SECTION

- 2.45 Did you ever receive a warning that (CHILD)'s coverage in (SCHIP/MEDICAID) would be terminated if the premium was not paid on time?

|    |                      |                    |
|----|----------------------|--------------------|
| 01 | YES                  |                    |
| 02 | NO                   |                    |
| 03 | DOES NOT PAY PREMIUM | GO TO NEXT SECTION |
| d  | DK                   |                    |
| r  | REF                  |                    |

- 2.47 Has (CHILD)'s coverage in (SCHIP/MEDICAID) ever been terminated because a premium was not paid on time?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

|  |
|--|
| <b>SECTION 3: HEALTH CARE COVERAGE</b> |
|--|

Now, I am going to ask you some questions about (CHILD)'s (SCHIP/MEDICAID) coverage and any other health insurance he/she may have had in the past.

3.2 First, is (CHILD) covered by (SCHIP/MEDICAID) right now?

|    |     |                            |
|----|-----|----------------------------|
| 01 | YES | GO TO 3.7b                 |
| 02 | NO  | GO TO 3.3                  |
| d  | DK  | SWITCH TO SHORTENED SURVEY |
| r  | REF | GO TO 3.2.1                |

3.2.1 Thank you very much. I have no more questions at this point. Good-bye.

**ESTABLISH LAST ENDDATE**

3.3 About how many months has it been since (CHILD)'s (SCHIP/MEDICAID) coverage ended?

|     |                                      |             |
|-----|--------------------------------------|-------------|
|     | MONTHS (IF LESS THAN 1 MONTH, CODE 0 | GO TO 3.5   |
| 999 | UNSURE, BUT MORE THAN 6 MONTHS AGO   | GO TO 3.5.1 |
| d   | DK                                   | GO TO 3.4   |
| r   | REF                                  |             |

3.4 Would you say it has been about...

|    |                                 |             |
|----|---------------------------------|-------------|
| 01 | Less than 1 month               | GO TO 3.5   |
| 02 | 1 month but less than 2 months  |             |
| 03 | 2 months but less than 3 months |             |
| 04 | 3 months but less than 4 months |             |
| 05 | 4 months but less than 5 months |             |
| 06 | 5 months but less than 6 months |             |
| 07 | 6 months                        |             |
| 08 | Longer than 6 months            | GO TO 3.5.1 |
| d  | DK                              |             |
| r  | REF                             |             |

3.5 So, (CHILD) has not been covered by (SCHIP/MEDICAID) since (CURRENT MONTH MINUS MONTHS SINCE COVERAGE ENDED). Is that correct?

|    |     |             |
|----|-----|-------------|
| 01 | YES | GO TO 3.7   |
| 02 | NO  | GO TO 3.5.1 |
| d  | DK  |             |
| r  | REF |             |

3.5.1A AND 3.5.1B

In about what month and year did (CHILD)'s (SCHIP/MEDICAID) coverage end? Your best estimate is fine.

|    |           | YEAR                       |
|----|-----------|----------------------------|
| 01 | JANUARY   |                            |
| 02 | FEBRUARY  |                            |
| 03 | MARCH     |                            |
| 04 | APRIL     |                            |
| 05 | MAY       |                            |
| 06 | JUNE      |                            |
| 07 | JULY      |                            |
| 08 | AUGUST    |                            |
| 09 | SEPTEMBER |                            |
| 10 | OCTOBER   |                            |
| 11 | NOVEMBER  |                            |
| 12 | DECEMBER  |                            |
| d  | DK        | SWITCH TO SHORTENED SURVEY |
| r  | REF       | GO TO 3.2.1                |

BASED ON ANSWERS TO 3.3-3.5.1:

**NEW/ESTABLISHED ENROLLEES:** IF REPORTED DISENROLLED 6 TO 12 MONTHS THEN INTERVIEW AS DISENROLLEE

**DISENROLLEES:** IF REPORTED DISENROLLED 12+ MONTHS THEN SWITCH TO SHORTENED SURVEY

### ESTABLISH LAST/CURRENT STARTDATE

- 3.7 (CHILD) IS NOT CURRENTLY COVERED (3.2=02) Before (CHILD)'s (SCHIP/MEDICAID) coverage ended in (LAST ENDDATE), how many months and/or years was he/she covered by (SCHIP/MEDICAID) without any interruption in coverage?

(CHILD) IS CURRENTLY COVERED (3.2=01) How many months and/or years has (CHILD) been covered by (SCHIP/MEDICAID) without any interruption in coverage?

|     |                                |             |
|-----|--------------------------------|-------------|
|     | MONTHS                         | GO TO 3.9   |
| 999 | UNSURE, BUT MORE THAN 6 MONTHS | GO TO 3.9.1 |
| d   | DK                             | GO TO 3.8   |
| r   | REF                            |             |

- 3.8 Would you say...

|    |                                 |             |
|----|---------------------------------|-------------|
| 01 | Less than 1 month               | GO TO 3.9   |
| 02 | 1 month but less than 2 months  |             |
| 03 | 2 months but less than 3 months |             |
| 04 | 3 months but less than 4 months |             |
| 05 | 4 months but less than 5 months |             |
| 06 | 5 months but less than 6 months |             |
| 07 | 6 months                        |             |
| 08 | Longer than 6 months            |             |
| d  | DK                              | GO TO 3.9.1 |
| r  | REF                             |             |

- 3.9 So, (CHILD)'s (SCHIP/MEDICAID) coverage started in (LAST ENDDATE MINUS MONTHS OF COVERAGE) or (CURRENT MONTH MINUS MONTHS OF COVERAGE). Is that correct?

|    |     |             |
|----|-----|-------------|
| 01 | YES | GO TO 3.11  |
| 02 | NO  | GO TO 3.9.1 |
| d  | DK  |             |
| r  | REF |             |

### 3.9.1A AND 3.9.1B

In about what month and year did (CHILD)'s (SCHIP/MEDICAID) coverage start? Your best estimate is fine.

|    |           | YEAR        |
|----|-----------|-------------|
| 01 | JANUARY   |             |
| 02 | FEBRUARY  |             |
| 03 | MARCH     |             |
| 04 | APRIL     |             |
| 05 | MAY       |             |
| 06 | JUNE      |             |
| 07 | JULY      |             |
| 08 | AUGUST    |             |
| 09 | SEPTEMBER |             |
| 10 | OCTOBER   |             |
| 11 | NOVEMBER  |             |
| 12 | DECEMBER  |             |
| d  | DK        | GO TO 3.2.1 |
| r  | REF       |             |



**BASED ON ANSWERS TO 3.7-3.9.1**

**NEW ENROLLEES:** IF REPORTED ENROLLED 12+ MONTHS THEN INTERVIEW AS ESTABLISHED ENROLLEE

**NEW ENROLLEES:** IF REPORTED BORN IN 6 MONTHS BEFORE ENROLLING IN SCHIP/MEDICAID THEN CHANGE (TIMEFRAME1) TO READ: Before (child) was on SCHIP/Medicaid

**ESTABLISHED ENROLLEES:** IF REPORTED ENROLLED LESS THAN 6 MONTHS THEN CHANGE (TIMEFRAME 1) TO READ: During the time while child has been on SCHIP/Medicaid

**DISENROLLEES:** IF REPORTED ENROLLED 6+ MONTHS THEN INTERVIEW AS ESTABLISHED ENROLLEE

**ESTABLISH PREVIOUS ENDDATE  
FOR  
DISENROLLEES WHO DID RE-ENROLL**

**DISENROLLEES WHO REENROLLED:** GO TO 3.11

**ALL OTHERS:** GO TO 3.24.1

3.11 Now, I am going to ask about the time that (CHILD)'s current (SCHIP/MEDICAID) coverage started in (START DATE) and his/her previous (SCHIP/MEDICAID) coverage ended. How many months were there between these two periods of (SCHIP/MEDICAID) coverage?

|     |  |              |
|-----|--|--------------|
|     | MONTHS (IF LESS THAN A MONTH),<br>CODE 0 | GO TO 3.13   |
| 999 | UNSURE, BUT MORE THAN 6 MONTHS AGO       | GO TO 3.13.1 |
| d   | DK                                       | GO TO 3.12   |
| r   | REF                                      |              |

3.12 Would you say...

|    |                                 |              |
|----|---------------------------------|--------------|
| 01 | Less than 1 month               | GO TO 3.13   |
| 02 | 1 month but less than 2 months  |              |
| 03 | 2 months but less than 3 months |              |
| 04 | 3 months but less than 4 months |              |
| 05 | 4 months but less than 5 months |              |
| 06 | 5 months but less than 6 months |              |
| 07 | 6 months                        |              |
| 08 | Longer than 6 months            | GO TO 3.13.1 |
| d  | DK                              |              |
| r  | REF                             |              |

3.13 So, (CHILD)'s previous (SCHIP/MEDICAID) coverage ended in (STARTDATE MINUS MONTHS BETWEEN COVERAGE). Is that correct?

|    |     |              |
|----|-----|--------------|
| 01 | YES | GO TO 3.14   |
| 02 | NO  | GO TO 3.13.1 |
| d  | DK  |              |
| r  | REF |              |

3.13.1A AND 3.13.1B

In about what month and year did (CHILD)'s previous (SCHIP/MEDICAID) coverage end? Your best estimate is fine.

|    |           | YEAR        |
|----|-----------|-------------|
| 01 | JANUARY   |             |
| 02 | FEBRUARY  |             |
| 03 | MARCH     |             |
| 04 | APRIL     |             |
| 05 | MAY       |             |
| 06 | JUNE      |             |
| 07 | JULY      |             |
| 08 | AUGUST    |             |
| 09 | SEPTEMBER |             |
| 10 | OCTOBER   |             |
| 11 | NOVEMBER  |             |
| 12 | DECEMBER  |             |
| d  | DK        | GO TO 3.2.1 |
| r  | REF       |             |

ANSWERS IN 3.13 AND 3.13.1 WILL PROVIDE **PREVIOUS ENDDATE** IN MONTHS AND YEARS FOR DISENROLLEES WHO HAVE ENROLLED AGAIN IN THE PROGRAM.

**ESTABLISH PREVIOUS STARTDATE  
FOR  
DISENROLLEES WHO DID RE-ENROLL**

- 3.14 Before (CHILD)'s previous (SCHIP/MEDICAID) coverage ended in (PREVIOUS ENDDATE), how many months or years was he/she covered by (SCHIP/MEDICAID) without any interruption in coverage?

|     |                                       |              |
|-----|---------------------------------------|--------------|
|     | MONTHS (IF LESS THAN 1 MONTH, CODE 0) | GO TO 3.16   |
| 999 | UNSURE, BUT MORE THAN 6 MONTHS AGO    | GO TO 3.16.1 |
| d   | DK                                    | GO TO 3.15   |
| r   | REF                                   |              |

- 3.15 Would you say...

|    |                                 |              |
|----|---------------------------------|--------------|
| 01 | Less than 1 month               | GO TO 3.16   |
| 02 | 1 month but less than 2 months  |              |
| 03 | 2 months but less than 3 months |              |
| 04 | 3 months but less than 4 months |              |
| 05 | 4 months but less than 5 months |              |
| 06 | 5 months but less than 6 months |              |
| 07 | 6 months                        |              |
| 08 | Longer than 6 months            | GO TO 3.16.1 |
| d  | DK                              |              |
| r  | REF                             |              |

- 3.16 So, (CHILD)'s previous (SCHIP/MEDICAID) coverage started in (PREVIOUS ENDDATE MINUS MONTHS OF PREVIOUS COVERAGE). Is that correct?

|    |     |              |
|----|-----|--------------|
| 01 | YES | GO TO 3.24.1 |
| 02 | NO  | GO TO 3.16.1 |
| d  | DK  |              |
| r  | REF |              |

### 3.16.1A AND 3.16.1B

In about what month and year did (CHILD)'s previous (SCHIP/MEDICAID) coverage start? Your best estimate is fine.

|    |           | YEAR        |
|----|-----------|-------------|
| 01 | JANUARY   |             |
| 02 | FEBRUARY  |             |
| 03 | MARCH     |             |
| 04 | APRIL     |             |
| 05 | MAY       |             |
| 06 | JUNE      |             |
| 07 | JULY      |             |
| 08 | AUGUST    |             |
| 09 | SEPTEMBER |             |
| 10 | OCTOBER   |             |
| 11 | NOVEMBER  |             |
| 12 | DECEMBER  |             |
| d  | DK        | GO TO 3.2.1 |
| r  | REF       |             |

ANSWERS IN 3.15 AND 3.16.1 WILL PROVIDE **PREVIOUS STARTDATE** IN MONTHS AND YEARS FOR DISENROLLEES WHO HAVE ENROLLED AGAIN IN THE PROGRAM.

## COVERAGE QUESTIONS RELATED TO TIMEFRAME 1

|  |
|--|
| REFERENCE ADJECTIVE FOR QUESTIONS RELATED TO PAST COVERAGE.<br>FOR THE REMAINDER OF THE QUESTIONS IN SECTION 2 |
| PLEASE USE:  |
| <b>Current</b> FOR NEW AND ESTABLISHED ENROLLEES STILL ENROLLED  |
| <b>Last</b> FOR NEW AND ESTABLISHED ENROLLEES DISENROLLED  |
| <b>Last</b> FOR DISENROLLEES NOT ENROLLED  |
| <b>Previous</b> FOR DISENROLLEES RE-ENROLLED   |

FOR MEDICAID SAMPLE GO TO 3.24.1

3.24.1 Does/did the current/last/previous (SCHIP/MEDICAID) coverage include the following services for (CHILD):

|   |                                |   |
|---|--------------------------------|---|
|   | 1=YES<br>2=NO<br>d=DK<br>r=REF |   |
| A |                                | Doctors' visits for illness or injuries                 |
| B |                                | Well-child visits, routine check-ups, and immunizations |
| C |                                | Emergency room visits                                   |
| D |                                | Hospital stays  |
| E |                                | Prescription drugs                                      |
| F |                                | Dental care   |
| G |                                | Vision care or eye exams                                |

FOR MEDICAID SAMPLE GO TO 3.25

3.25

NEW ENROLLEES AND ESTABLISHED ENROLLEES WHO ARE  
CURRENTLY ENROLLED (3.2=1) SKIP TO 3.31

3.26 What was the main reason this (SCHIP) coverage ended?

|    |  |
|----|--|
| 01 | CHILD TOO OLD TO BE ELIGIBLE   |
| 02 | CHILD OBTAINED MEDICAID/SCHIP COVERAGE   |
| 03 | CHILD OBTAINED OTHER INSURANCE   |
| 04 | FINANCIAL SITUATION CHANGED/ NOT QUALIFIED FOR<br>(SCHIP/MEDICAID)                 |
| 05 | ( <i>NOT FOR MEDICAID SAMPLE</i> ) COULD NOT AFFORD PREMIUM/<br>CO-PAYMENT         |
| 06 | ( <i>NOT FOR MEDICAID SAMPLE</i> ) FORGOT TO PAY THE PREMIUM                       |
| 07 | DID NOT LIKE THE DOCTOR(S)/ MEDICAL STAFF/ CLINIC WHERE<br>CHILD RECEIVED SERVICES |
| 08 | DID NOT LIKE THE QUALITY OF THE CARE   |
| 09 | SERVICES PROVIDED NOT CONVENIENTLY LOCATED OR NOT<br>AVAILABLE WHEN NEEDED         |
| 10 | CHILD DOES NOT GET SICK/DO NOT NEED IT   |
| 11 | TOO MUCH PAPER WORK  |
| 12 | DID NOT REAPPLY WHEN COVERAGE ENDED  |
| 13 | OTHER  |
| d  | DK   |
| r  | REF  |

3.27.1

ALL DISENROLLEES SKIP TO 3.60

## COVERAGE QUESTIONS RELATED TO TIMEFRAME 2

- 3.31 Now, I am going to ask you some questions about the time before (CHILD)'s current/last (SCHIP/MEDICAID) coverage started, that is before (CURRENT/LAST STARTDATE).

Just before his/her current/last period of (SCHIP/MEDICAID) coverage started, was (CHILD) without health insurance coverage or did he/she have health insurance, such as Medicaid or private insurance?

|    |                                  |  |
|----|----------------------------------|--|
| 01 | WITHOUT HEALTH INSURANCE         | GO TO 3.32   |
| 02 | HAD HEALTH INSURANCE             | GO TO 3.36.1   |
| 03 | CHILD BORN WHEN COVERAGE STARTED | <b>NEW ENROLLEE: SWITCH TO SHORTENED SURVEY</b><br><b>ESTABLISHED ENROLLEE: GO TO 3.60</b> |
| d  | DK                               | GO TO 3.35.1   |
| r  | REF                              |  |

- 3.32 How many months or years was (CHILD) without health insurance just before his/her current/last (SCHIP/MEDICAID) coverage started?

|   |                              |
|---|------------------------------|
|   | MONTHS                       |
|   | IF LESS THAN 1 MONTH, CODE 1 |
|   | IF ALWAYS, CODE 999          |
| d | DK                           |
| r | REF                          |

3.34 What was the main reason (CHILD) was without any health insurance during this period?

|    |  |
|----|--|
| 01 | PARENT LOST JOB OR CHANGED EMPLOYERS   |
| 02 | PARENT GOT DIVORCED/ SEPARATED/ DEATH OF SPOUSE  |
| 03 | EMPLOYER STOPPED OFFERING INSURANCE  |
| 04 | CHILD TOO OLD TO BE ELIGIBLE   |
| 05 | BENEFITS FROM FORMER EMPLOYER RAN OUT  |
| 06 | NO ONE IN FAMILY EMPLOYED  |
| 07 | EMPLOYER DID NOT OFFER HEALTH INSURANCE/NOT ELIGIBLE FOR COVERAGE THROUGH EMPLOYER               |
| 08 | INSURANCE TOO EXPENSIVE/ CAN NOT AFFORD THE PREMIUM  |
| 09 | DID NOT LIKE THE HEALTH INSURANCE EMPLOYER OFFERS  |
| 10 | INSURANCE COST TOO HIGH  |
| 11 | INSURANCE COMPANY REFUSED COVERAGE DUE TO PREEXISTING CONDITION OR (CHILD'S) HEALTH STATUS       |
| 12 | MEDICAID/SCHIP COVERAGE STOPPED/ NO LONGER ELIGIBLE  |
| 13 | FAILED TO REAPPLY/REDETERMINE  |
| 14 | FORGOT TO PAY THE PREMIUM  |
| 15 | PLACE WHERE SERVICES WERE OFFERED NOT CONVENIENTLY LOCATED OR SERVICES NOT AVAILABLE WHEN NEEDED |
| 16 | DID NOT KNOW HOW TO GET COVERAGE   |
| 17 | NEEDED TO BE UNINSURED TO BE ELIGIBLE FOR (SCHIP/MEDICAID)                                       |
| 18 | OTHER  |
| d  | DK   |
| r  | REF  |



**NEW ENROLLEES: IF WITHOUT INSURANCE FOR 6 MONTHS OR MORE (IF 3.32 GE 6), GO TO 3.60 OTHERWISE CONTINUE WITH 3.35.1**

**ESTABLISHED ENROLLEES: GO TO 3.60**

3.35.1 Was (CHILD) covered by health insurance such as Medicaid or private insurance at any time during the six months before his/her current/last (SCHIP/MEDICAID) coverage started, that is before (STARTDATE)?

|    |     |               |
|----|-----|---------------|
| 01 | YES | GO TO 3.36.1A |
| 02 | NO  | GO TO 3.60    |
| d  | DK  |               |
| r  | REF |               |

3.36.1 IF 3.31=2 AND NEW ENROLLEE: Now think about the six months before (CHILD)'s last (SCHIP) coverage started.  
IF 3.31=2 AND ESTABLISHED ENROLLEE: Go to 3.60.

3.36.1A

Was (CHILD) covered by insurance from a current or past employer or union?

|    |     |                  |
|----|-----|------------------|
| 01 | YES | GO TO<br>3.36.1B |
| 02 | NO  |                  |
| d  | DK  |                  |
| r  | REF |                  |

3.36.1AM

How long was (CHILD) covered by this insurance?

|   |        |
|---|--------|
|   | MONTHS |
| d | DK     |
| r | REF    |

3.36.1B Was (CHILD) covered by insurance from private insurance purchased directly from an insurance company?

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

|    |     |                  |
|----|-----|------------------|
| 01 | YES | GO TO<br>3.36.1C |
| 02 | NO  |                  |
| d  | DK  |                  |
| r  | REF |                  |

3.36.1BM

How long was (CHILD) covered by this insurance?

|   |        |
|---|--------|
|   | MONTHS |
| d | DK     |
| r | REF    |

3.36.1C

Was (CHILD) covered by Medicare, the health insurance plan for people 65 years old and older or persons with certain disabilities?

|    |     |                  |
|----|-----|------------------|
| 01 | YES | GO TO<br>3.36.1D |
| 02 | NO  |                  |
| d  | DK  |                  |
| r  | REF |                  |

3.36.1CM

How long was (CHILD) covered by this insurance?

|   |        |
|---|--------|
|   | MONTHS |
| d | DK     |
| r | REF    |

3.36.1D Was (CHILD) covered by Medicaid or a Medicaid HMO, the government assistance program for people in need?

|    |     |                  |
|----|-----|------------------|
| 01 | YES | GO TO<br>3.36.1E |
| 02 | NO  |                  |
| d  | DK  |                  |
| r  | REF |                  |

3.36.1DM

How long was (CHILD) covered by this insurance?

|   |        |
|---|--------|
|   | MONTHS |
| d | DK     |
| r | REF    |

3.36.1E Was (CHILD) covered by TRICARE, CHAMPUS, CHAMP-VA, VA, or any other military health insurance, service?

|    |     |                  |
|----|-----|------------------|
| 01 | YES | GO TO<br>3.36.1F |
| 02 | NO  |                  |
| d  | DK  |                  |
| r  | REF |                  |

3.36.1EM

How long was (CHILD) covered by this insurance?

|   |        |
|---|--------|
|   | MONTHS |
| d | DK     |
| r | REF    |

3.36.1F Was (CHILD) covered by the Indian Health Service?

|    |     |                  |
|----|-----|------------------|
| 01 | YES | GO TO<br>3.36.1G |
| 02 | NO  |                  |
| d  | DK  |                  |
| r  | REF |                  |

### 3.36.1FM

How long was (CHILD) covered by this insurance?

|   |        |
|---|--------|
|   | MONTHS |
| d | DK     |
| r | REF    |

### 3.36.1G Was (CHILD) covered by (SCHIP)?

|    |     |                  |
|----|-----|------------------|
| 01 | YES | GO TO<br>3.36.1H |
| 02 | NO  |                  |
| d  | DK  |                  |
| r  | REF |                  |

### 3.36.1GM

How long was (CHILD) covered by this insurance?

|   |        |
|---|--------|
|   | MONTHS |
| d | DK     |
| r | REF    |

### 3.36.1H Was (CHILD) covered by some other type of coverage, I have not yet mentioned?

|    |     |                          |
|----|-----|--------------------------|
| 01 | YES | GO TO<br>NEXT<br>SECTION |
| 02 | NO  |                          |
| d  | DK  |                          |
| r  | REF |                          |

### 3.36.1HM

How long was (CHILD) covered by this insurance?

|   |        |
|---|--------|
|   | MONTHS |
| d | DK     |
| r | REF    |

**ESTABLISHED ENROLLEES:**

READ: just before the current/last/previous period of (SCHIP/MEDICAID) coverage started?

**NEW ENROLLEES:**

**IF 3.31=1** (HAD INSURANCE JUST BEFORE SCHIP/MEDICAID) THEN  
READ: just before the current/last/previous period of (SCHIP/MEDICAID) coverage started?)

**IF 3.31=2** (WITHOUT INSURANCE JUST BEFORE SCHIP/MEDICAID)  
THEN READ: just before (CHILD) became uninsured?

IF ONLY ONE PLAN IN 3.36.1, GO TO 3.38

3.37.1-3.37.8

Of the health insurance plan(s) you just mentioned, which plan(s) did (CHILD) have

- A) just before the current/last/previous period of (SCHIP/MEDICAID) coverage started?
- B) just before (CHILD) became uninsured?

|   |   |
|---|---|
| 1 | INSURANCE THROUGH AN EMPLOYER                                     |
| 2 | PRIVATE INSURANCE   |
| 3 | MEDICARE  |
| 4 | MEDICAID  |
| 5 | TRICARE, CHAMPUS, CHAMP-VA, VA OR OTHER MILITARY HEALTH INSURANCE |
| 6 | INDIAN HEALTH SERVICE   |
| 7 | (SCHIP)   |
| 8 | ANY OTHER TYPE OF INSURANCE                                       |

3.38

ALL ESTABLISHED ENROLLEES SKIP TO 3.44

3.38.2 (IF 3.37 A=2 (NO HEALTH INSURANCE FROM EMPLOYER) GO TO 3.39.1)

(IF ONLY HEALTH INSURANCE FROM EMPLOYER/ NONE OF B THRU H IN 3.37 =YES) Did the employer pay all, some, or none of the premium for this health insurance?

(IF OTHER HEALTH INSURANCE BESIDES FROM EMPLOYER/ANY OF B THRU H IN 3.37 =YES) For the health insurance from an employer, did the employer pay all, some, or none of the premium for this health insurance?

|    |      |
|----|------|
| 01 | ALL  |
| 02 | SOME |
| 03 | NONE |
| d  | DK   |
| r  | REF  |

IF MORE THAN ONE INSURANCE IN 3.37 READ “any of the insurance plans” instead of “insurance coverage” in 3.39.1 to 3.43

3.39.1 Did the insurance coverage that (CHILD) had

A) just before his/her current/last/previous period of (SCHIP/MEDICAID) coverage started

B) just before he/she became uninsured

require (CHILD) to be signed up with a certain primary care doctor or clinic (CHILD) would have to go to for all routine care?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

3.43 Did this health insurance coverage that (CHILD) had:

A) just before his/her current/last/previous period of (SCHIP/MEDICAID) coverage started

B) just before he/she became uninsured

include the following services?

|   |                                |  |
|---|--------------------------------|--|
|   | 1=YES<br>2=NO<br>d=DK<br>r=REF |  |
| A |                                | Doctors' visits for illness or injuries                |
| B |                                | Well-child visits, routine check-up, and immunizations |
| C |                                | Emergency room visits                                  |
| D |                                | Hospital stays   |
| E |                                | Prescription drugs                                     |
| F |                                | Dental care  |
| G |                                | Vision care or eye exams                               |

IF MEDICAID COVERAGE ONLY GO TO 3.44

3.43.1 (ASK IF 3.43B=YES) Did you have to pay a co-payment for the well-child visits, routine check-ups, and immunizations?

|    |     |              |
|----|-----|--------------|
| 01 | YES | GO TO 3.43.3 |
| 02 | NO  |              |
| d  | DK  |              |
| r  | REF |              |

3.43.3 (ASK IF 3.43E=YES, ELSE GO TO 3.44) Did you have to pay a co-payment to get a prescription drug filled?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 3.44 |
| 02 | NO  |            |
| d  | DK  |            |
| r  | REF |            |

3.44 What was the main reason (CHILD)'s coverage ended

A) just before the current/last/previous period of (SCHIP/MEDICAID) coverage started? (ASKED OF THOSE UNINSURED)

B) just before (CHILD) became uninsured? (ASKED OF THOSE UNINSURED)

|    |  |
|----|--|
| 01 | PARENT LOST JOB OR CHANGED EMPLOYERS   |
| 02 | PARENT GOT DIVORCED/SEPARATED/DEATH OF SPOUSE  |
| 03 | EMPLOYER STOPPED OFFERING INSURANCE  |
| 04 | CHILD TOO OLD TO BE ELIGIBLE   |
| 05 | BENEFITS FROM FORMER EMPLOYER RAN OUT  |
| 06 | NO ONE IN FAMILY EMPLOYED  |
| 07 | EMPLOYER DID NOT OFFER HEALTH INSURANCE/NOT ELIGIBLE FOR COVERAGE THROUGH EMPLOYER               |
| 08 | INSURANCE TOO EXPENSIVE/CAN NOT AFFORD THE PREMIUM   |
| 09 | DID NOT LIKE THE HEALTH INSURANCE EMPLOYER OFFERS  |
| 10 | INSURANCE COST TOO HIGH  |
| 11 | INSURANCE COMPANY REFUSED COVERAGE DUE TO PREEXISTING CONDITION OR CHILD'S HEALTH STATUS         |
| 12 | MEDICAID/SCHIP COVERAGE STOPPED/NO LONGER ELIGIBLE   |
| 13 | FAILED TO REAPPLY/REDETERMINE  |
| 14 | FORGOT TO PAY THE PREMIUM  |
| 15 | PLACE WHERE SERVICES WERE OFFERED NOT CONVENIENTLY LOCATED OR SERVICES NOT AVAILABLE WHEN NEEDED |
| 16 | DID NOT KNOW HOW TO GET COVERAGE   |
| 17 | NEEDED TO BE UNINSURED TO BE ELIGIBLE FOR (SCHIP/MEDICAID)                                       |
| 18 | OTHER  |
| d  | DK   |
| r  | REF  |



### COVERAGE QUESTIONS RELATED TO TIMEFRAME 3

**ALL NEW ENROLLEES: SKIP TO NEXT SECTION**

**ESTABLISHED ENROLLEE ENROLLED (3.2=1): SKIP TO NEXT SECTION**

- 3.60 **(DISENROLLEES DISENROLLED OR ESTABLISHED ENROLLEES DISENROLLED (3.2=2)** Now, I would like to ask you some questions about the time since (CHILD)'s last (SCHIP/MEDICAID) coverage ended, that is since (LAST ENDDATE). Just after his/her last/previous (SCHIP/MEDICAID) coverage ended, was (CHILD) without health insurance, or did he/she have health insurance coverage, such as Medicaid or private insurance?

**(DISENROLLEES RE-ENROLLED (3.2=1)** Now, I would like to ask you some questions about the time since (CHILD)'s previous (SCHIP/MEDICAID) coverage ended, that is since (PREVIOUS ENDDATE) and before (CHILD) was enrolled again in (CURRENT STARTDATE). Just after his/her last/previous (SCHIP/MEDICAID) coverage ended, was (CHILD) without health insurance coverage or did he/she have health insurance, such as Medicaid or private insurance?

|    |                          |              |
|----|--------------------------|--------------|
| 01 | WITHOUT HEALTH INSURANCE | GO TO 3.63   |
| 02 | HAD HEALTH INSURANCE     | GO TO 3.64.1 |
| d  | DK                       | GO TO 3.64   |
| r  | REF                      |              |

- 3.63 How many months was (CHILD) without any health insurance coverage just after his/her last/previous (SCHIP/MEDICAID) coverage ended?

|     |                                       |              |
|-----|---------------------------------------|--------------|
|     | MONTHS (IF LESS THAN 1 MONTH, CODE 1) | GO TO 3.63.1 |
| 999 | WHOLE PERIOD                          | GO TO 3.63.1 |
| d   | DK                                    | GO TO 3.64   |
| r   | REF                                   |              |

3.63.1 What was the main reason (CHILD) was/has been without any health insurance during this period?

|    |  |
|----|--|
| 01 | PARENT LOST JOB OR CHANGED EMPLOYERS   |
| 02 | PARENT GOT DIVORCED/SEPARATED/ DEATH OF SPOUSE   |
| 03 | EMPLOYER STOPPED OFFERING INSURANCE  |
| 04 | CHILD TOO OLD TO BE ELIGIBLE   |
| 05 | BENEFITS FROM FORMER EMPLOYER RAN OUT  |
| 06 | NO ONE IN FAMILY EMPLOYED  |
| 07 | EMPLOYER DID NOT OFFER HEALTH INSURANCE/NOT ELIGIBLE FOR COVERAGE THROUGH EMPLOYER               |
| 08 | INSURANCE TOO EXPENSIVE/CANNOT AFFORD THE PREMIUM  |
| 09 | DID NOT LIKE THE HEALTH INSURANCE EMPLOYER OFFERS  |
| 10 | INSURANCE COST TOO HIGH  |
| 11 | INSURANCE COMPANY REFUSED COVERAGE DUE TO PREEXISTING CONDITION OR (CHILD'S) HEALTH STATUS       |
| 12 | MEDICAID/SCHIP COVERAGE STOPPED/ NO LONGER ELIGIBLE  |
| 13 | FAILED TO REAPPLY/REDETERMINE  |
| 14 | ( <i>NOT FOR MEDICAID SAMPLE</i> ) FORGOT TO PAY THE PREMIUM                                     |
| 15 | PLACE WHERE SERVICES WERE OFFERED NOT CONVENIENTLY LOCATED OR SERVICES NOT AVAILABLE WHEN NEEDED |
| 16 | DID NOT KNOW HOW TO GET COVERAGE   |
| 17 | NEEDED TO BE UNINSURED TO BE ELIGIBLE FOR (SCHIP/MEDICAID)                                       |
| 18 | OTHER  |
| d  | DK   |
| r  | REF  |

IF UNINSURED WHOLE PERIOD (3.63=WHOLE PERIOD (999) OR MONTH CHILD DISENROLLED PLUS THE NUMBER OF MONTHS ANSWERED IN 3.63 = CURRENT MONTH) OR RE-ENROLLED, GO TO NEXT SECTION, ELSE GO TO 3.64

- 3.64 **(DISENROLLEES DISENROLLED AND ESTABLISHED ENROLLEES DISENROLLED** (3.2=2) Since (CHILD)'s last (SCHIP/MEDICAID) coverage ended, that is since (LAST ENDDATE), has he/she been covered by any health insurance, such as Medicaid or private insurance?

**DISENROLLEES RE-ENROLLED** (3.2=1) Since (CHILD)'s previous (SCHIP/MEDICAID) coverage ended in (PREVIOUS ENDDATE) and before (CHILD) was enrolled again in (CURRENT STARTDATE), was he/she covered by any health insurance, such as Medicaid or private insurance?

|    |     |                    |
|----|-----|--------------------|
| 01 | YES | GO TO 3.64.1       |
| 02 | NO  | GO TO NEXT SECTION |
| d  |     |                    |
| r  |     |                    |

- 3.64.1 How many months was (CHILD) covered by health insurance such as Medicaid or private insurance just after his/her last/previous (SCHIP/MEDICAID) coverage ended?

How many months was (CHILD) covered by health insurance such as Medicaid or private insurance?

|     |                                       |
|-----|---------------------------------------|
|     | MONTHS (IF LESS THAN 1 MONTH, CODE 1) |
| 999 | WHOLE PERIOD                          |
| d   |                                       |
| r   |                                       |

3.65.A During that time, was (CHILD) covered by insurance from a current or past employer or union?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

3.65.B Was (CHILD) covered by insurance from private insurance purchased directly from an insurance company?

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

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

3.65.C Was (CHILD) covered by insurance from Medicare, the health insurance plan for people 65 years old and older or persons with certain disabilities?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

3.65.D (DO NOT ASK IF STATUS=MEDICAID) Was (CHILD) covered by Medicaid or a Medicaid HMO, the government assistance program for people in need?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

3.65.E Was (CHILD) covered by TRICARE, CHAMPUS, CHAMP-VA, VA, or any other military health insurance, service?

|    |     |                |
|----|-----|----------------|
| 01 | YES | GO TO<br>3.65F |
| 02 | NO  |                |
| d  | DK  |                |
| r  | REF |                |

3.65.F Was (CHILD) covered by the Indian Health Service?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

3.65.G (DO NOT ASK THIS QUESTION IF STATUS = SCHIP)

Was (CHILD) covered by (SCHIP)?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

3.65.H Was (CHILD) covered by some other type of coverage I have not yet mentioned?

|    |     |               |
|----|-----|---------------|
| 01 | YES | GO TO<br>3.66 |
| 02 | NO  |               |
| d  | DK  |               |
| r  | REF |               |

3.66.1-3.66.7

IF MORE THAN ONE PLAN IN 3.65: Of the health insurance plan(s) you just mentioned, which plan(s) did (CHILD) have

A) just after the last/previous period of (SCHIP) coverage ended (ASKED OF DISENROLLEES DISENROLLED AND ESTABLISHED ENROLLEES DISENROLLED)

B) just after (CHILD) became uninsured? (ASKED OF DISENROLLEES REENROLLED)

|   |   |
|---|---|
| 1 | INSURANCE THROUGH AN EMPLOYER                               |
| 2 | PRIVATE INSURANCE   |
| 3 | MEDICARE  |
| 4 | MEDICAID  |
| 5 | TRICARE, CHAMPUS, CHAMP-VA, OTHER MILITARY HEALTH INSURANCE |
| 6 | INDIAN HEALTH SERVICE                                       |
| 8 | ANY OTHER TYPE OF INSURANCE                                 |

3.66.2

(IF 3.65=YES b THRU h =NO - ONLY HEALTH INSURANCE FROM EMPLOYER) Did the employer pay all, some, or none of the premium for this health insurance?

(IF 3.65=YES AND ANY b THRU h =YES - OTHER HEALTH INSURANCE BESIDES FROM EMPLOYER) For the health insurance from an employer, did the employer pay all, some, or none of the premium for this health insurance?

|    |      |
|----|------|
| 01 | ALL  |
| 02 | SOME |
| 03 | NONE |
| d  | DK   |
| r  | REF  |

|  |
|--|
| IF MORE THAN ONE INSURANCE IN 3.66 READ “any of the insurance plans” instead of “insurance coverage” in 3.66.3 to 3.71 |
|--|

IF NO HEALTH PLANS FROM 3.65, GO TO NEXT SECTION

SKIP TO 3.66.4 IF COVERED BY (SCHIP/MEDICAID) NOW  
(3.2=1) OR IF NO HEALTH PLANS IN 3.65.A TO 3.65.H

3.66.3 Is (CHILD) covered by this insurance coverage right now?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

3.66.4 Does/Did this health insurance coverage require (CHILD) to be signed up with a certain primary care doctor or clinic (CHILD) would have to go to for all routine care?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

3.71 Does/Did the health insurance include the following services?

|   |                                |   |
|---|--------------------------------|---|
|   | 1=YES<br>2=NO<br>d=DK<br>r=REF |   |
| A |                                | Doctors' visits for illness or injuries                 |
| B |                                | Well-child visits, routine check-ups, and immunizations |
| C |                                | Emergency room visits                                   |
| D |                                | Hospital stays  |
| E |                                | Prescription drugs                                      |
| F |                                | Dental care   |
| G |                                | Vision care or eye exams                                |

IF MEDICAID COVERAGE ONLY, GO TO NEXT SECTION

3.71.1 (ASK IF 3.71B=YES) Do/Did you have to pay a co-payment for the well-child visits, routine check-ups, and immunizations?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

3.71.3 (ASK, IF 3.71E=YES ELSE GO TO NEXT SECTION) Do/Did you have to pay a co-payment to get a prescription drug filled?

|    |     |                       |
|----|-----|-----------------------|
| 01 | YES | GO TO NEXT<br>SECTION |
| 02 | NO  |                       |
| d  | DK  |                       |
| r  | REF |                       |



## SECTION 4: CHILD'S HEALTH

The next questions are about (CHILD)'s health.

4.1 In general, would you say (CHILD)'s health is...

|    |              |
|----|--------------|
| 01 | Excellent    |
| 02 | Very good    |
| 03 | Good         |
| 04 | Fair or poor |
| d  | DK           |
| r  | REF          |

4.2 Compared to 12 months ago, would you say (CHILD)'s health is now... (NOT IN PUBLIC ACCESS FILE)

|    |                   |
|----|-------------------|
| 01 | Better            |
| 02 | Worse             |
| 03 | Or about the same |
| D  | DK                |
| R  | REF               |

4.3 Does (CHILD) have any impairment or health problem that requires him/her to use special equipment such as a brace, a wheelchair, or a hearing aid? Do not include ordinary eye glasses or corrective shoes. (NOT IN PUBLIC ACCESS FILE)

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

4.4 Does (CHILD) have an impairment or health problem that limits his/her ability to crawl, walk, run, or play? (NOT IN PUBLIC ACCESS FILE)

|    |     |           |
|----|-----|-----------|
| 01 | YES | GO TO 4.5 |
| 02 | NO  | GO TO 4.9 |
| d  | DK  |           |
| r  | REF |           |

- 4.5 Is this an impairment or health problem that has lasted or is expected to last 12 months or longer? (NOT IN PUBLIC ACCESS FILE)

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

- 4.6 Because of this impairment or health problem, does (CHILD) need other people to help him/her with personal care needs, such as bathing, dressing, eating, or getting around? (NOT IN PUBLIC ACCESS FILE)

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

- 4.9 Has a doctor or other health care professional ever said that (CHILD) had asthma?

|    |     |               |
|----|-----|---------------|
| 01 | YES | GO TO<br>4.11 |
| 02 | NO  |               |
| d  | DK  |               |
| r  | REF |               |

- 4.10 How old was (CHILD) when he/she had his/her first episode of asthma or first asthma attack? (NOT IN PUBLIC ACCESS FILE)

|   |                                       |
|---|---------------------------------------|
|   | AGE IN YEARS (IF LESS THAN 1, CODE 0) |
| d | DK                                    |
| r | REF                                   |

- 4.10.1 Does (CHILD) take medication or require injections prescribed by a doctor for his/her asthma?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

- 4.11 Does (CHILD) take medication or require injections prescribed by a doctor for any other physical condition?

|    |     |               |
|----|-----|---------------|
| 01 | YES | GO TO<br>4.13 |
| 02 | NO  |               |
| d  | DK  |               |
| r  | REF |               |

- 4.12 Has she/he taken this medication or required these injections for at least 3 months? (NOT IN PUBLIC ACCESS FILE)

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

- 4.13 Has a doctor or other health professional ever said that (CHILD) had a mental health condition or behavioral problem?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 4.14 |
| 02 | NO  | GO TO 4.16 |
| d  | DK  |            |
| r  | REF |            |

- 4.14 How old was (CHILD) when a doctor or other health professional first said that he/she had a mental health condition or behavioral problem? (NOT IN PUBLIC ACCESS FILE)

|   |                                      |
|---|--------------------------------------|
|   | AGE IN YEAR (IF LESS THAN 1, CODE 0) |
| D | DK                                   |
| R | REF                                  |

- 4.15 Does (CHILD) take medication or require injections for a mental health condition or behavioral problem? (NOT IN PUBLIC ACCESS FILE)

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

- 4.16 Has a mental health condition or behavioral problem limited (CHILD) in his/her ability to do regular school work or to participate in the usual kind of activities done by most children his/her age?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

|   |
|---|
| <p><b>SECTION 5: ACCESS AND BARRIERS TO AND SATISFACTION WITH USUAL PLACE OF CARE</b></p> |
|---|

- 5.1 The next questions are about people and places that children usually go to or would go to for medical care.

During (TIMEFRAME 1), was there a particular doctor's office, clinic, health care center, hospital, or other place that (CHILD) usually did go to or would have gone to if he/she were sick or needed advice about his/her health?

|    |                                  |            |
|----|----------------------------------|------------|
| 01 | YES                              | GO TO 5.3  |
| 02 | NO, THERE IS NO PARTICULAR PLACE | GO TO 5.2  |
| d  | DK                               | GO TO 5.80 |
| r  | REF                              |            |

- 5.2 What was the main reason (CHILD) did not have a usual place of health care during that time?

|    |  |
|----|--|
| 01 | CHILD SELDOM OR NEVER GETS SICK                            |
| 02 | RECENTLY MOVED TO THE AREA                                 |
| 03 | DON'T KNOW WHERE TO GO FOR CARE                            |
| 04 | PLACE CLOSED OR MOVED                                      |
| 05 | NO LONGER AVAILABLE IN THIS AREA                           |
| 06 | CAN'T FIND A PROVIDER OR PLACE WHERE MY LANGUAGE IS SPOKEN |
| 07 | LIKES TO GO TO DIFFERENT PLACES FOR HEALTH CARE            |
| 08 | HOURS ARE NOT CONVENIENT                                   |
| 09 | NO WAY TO GET THERE (TRANSPORTATION PROBLEMS)              |
| 10 | JUST CHANGED INSURANCE                                     |
| 11 | PLACE USED TO GO TO NOT IN PLAN                            |
| 12 | HAVE NOT BEEN ABLE TO FIND PLACE I LIKE                    |
| 13 | COST TOO HIGH  |
| 14 | OTHER REASON   |
| d  | DK   |
| r  | REF  |

|             |
|-------------|
| SKIP TO 5.7 |
|-------------|

5.3 What type of place did (CHILD) go to or would have gone to during that time?

Was it a...

|    |   |
|----|---|
| 01 | Private doctor's office or group practice |
| 02 | An HMO-run office or facility             |
| 03 | A clinic or health center                 |
| 04 | A hospital emergency room                 |
| 05 | A hospital outpatient department          |
| 06 | Another type of clinic or health center   |
| d  | DK  |
| r  | REF                                       |

5.6 During that time, did (CHILD) actually go to the (USUAL PLACE OF CARE) because he/she was sick or needed advice about his/her health?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 5.21 |
| 02 | NO  |            |
| d  | DK  |            |
| r  | REF |            |

5.7 During that time did (CHILD) go to a doctor, clinic, health center, hospital, or any other place because he/she was sick or needed advice about his/her health?

|    |     |             |
|----|-----|-------------|
| 01 | YES | GO TO 5.27B |
| 02 | NO  | GO TO 5.51  |
| d  | DK  |             |
| r  | REF |             |

5.21 How long would it usually take to get to the (USUAL PLACE OF CARE)?

|   |         |              |
|---|---------|--------------|
|   | MINUTES | GO TO 5.22.2 |
| d | DK      | GOT TO 5.22  |
| r | REF     | GO TO 5.22.2 |

5.22 Would it take...

|    |                                     |
|----|-------------------------------------|
| 01 | Less than 15 minutes                |
| 02 | 15 minutes but less than 30 minutes |
| 03 | 30 minutes but less than 45 minutes |
| 04 | 45 minutes but less than one hour   |
| 05 | One hour but less than 2 hours      |
| 06 | Two hours or more                   |
| d  | DK                                  |
| r  | REF                                 |

|   |
|---|
| If 5.3 =4 (EMERGENCY ROOM) SKIP TO 5.51 |
|---|

5.22.2 Would there be a particular doctor or other health provider (CHILD) usually would see at the (USUAL PLACE OF CARE)?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

5.23.2 If the (USUAL PLACE OF CARE) were closed and (CHILD) got sick would you be able to reach and talk to a doctor or other health care professional from the (USUAL PLACE OF CARE) about (CHILD)'s condition?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

5.27A Still thinking about the (USUAL PLACE OF CARE) (CHILD) usually would go to for medical care, when he/she arrived on time for an appointment about how long would (CHILD) usually have to wait before getting medical care?

|   |         |              |
|---|---------|--------------|
|   | MINUTES | GO TO 5.32   |
| d | DK      | GO TO 5.27.1 |
| r | REF     | GO TO 5.32   |

- 5.27B Thinking about the places (CHILD) would go to for medical care, when he/she arrived on time for an appointment about how long would (CHILD) usually have to wait before getting medical care?

|   |         |              |
|---|---------|--------------|
|   | MINUTES | GO TO 5.32   |
| d | DK      | GO TO 5.27.1 |
| r | REF     | GO TO 5.32.1 |

- 5.27.1 Would he/she have to wait...

|    |                                     |
|----|-------------------------------------|
| 01 | Less than 15 minutes                |
| 02 | 15 minutes but less than 30 minutes |
| 03 | 30 minutes but less than 45 minutes |
| 04 | 45 minutes but less than one hour   |
| 05 | One hour but less than two hours    |
| 06 | Two hours or more                   |
| d  | DK                                  |
| r  | REF                                 |

- 5.32 How often did the doctors or other health care providers explain things in a way that you could understand?

Would you say...

|    |           |
|----|-----------|
| 01 | Always    |
| 02 | Usually   |
| 03 | Sometimes |
| 04 | Never     |
| d  | DK        |
| r  | REF       |

- 5.35.1 How often did the doctors or other health care providers treat you and (CHILD) with courtesy and respect?

Would you say...

|    |           |
|----|-----------|
| 01 | Always    |
| 02 | Usually   |
| 03 | Sometimes |
| 04 | Never     |
| d  | DK        |
| r  | REF       |



- 5.36 How often did the doctors or other health care providers talk with you about how (CHILD) was feeling, growing, and behaving?

Would you say...

|    |           |
|----|-----------|
| 01 | Always    |
| 02 | Usually   |
| 03 | Sometimes |
| 04 | Never     |
| d  | DK        |
| r  | REF       |

IF NO USUAL PLACE OF CARE (5.1=NO) GO TO 5.41B

ELSE CONTINUE

- 5.39 Would you have recommended the (USUALLY PLACE OF CARE) to family or friends?

|    |     |                |
|----|-----|----------------|
| 01 | YES | GO TO<br>5.41A |
| 02 | NO  |                |
| d  | DK  |                |
| r  | REF |                |

- 5.41A (DO NOT ASK IF 5.6=NO) Now, I would like you to rate the features of the health care (CHILD) got in the (USUAL PLACE OF CARE) during (TIMEFRAME1).

How would you rate the ease of getting medical care when (CHILD) was sick or had an accident? Would you rate it as...

|    |           |            |
|----|-----------|------------|
| 01 | Excellent | GO TO 5.51 |
| 02 | Very Good |            |
| 03 | Good      |            |
| 04 | Fair      |            |
| 05 | Poor      |            |
| d  | DK        |            |
| r  | REF       |            |

5.41B Now, I would like you to rate the features of the health care (CHILD) got ) in the places (CHILD) went to for medical care during (TIMEFRAME1).

How would you rate the ease of getting medical care when (CHILD) was sick or had an accident? Would you rate it as...

|    |           |
|----|-----------|
| 01 | Excellent |
| 02 | Very Good |
| 03 | Good      |
| 04 | Fair      |
| 05 | Poor      |
| d  | DK        |
| r  | REF       |

5.51

|  |
|--|
| IF 5.1 =NO OR ESTABLISHED ENROLLEES WHO ARE ENROLLED<br>(3.2=YES) GO TO 5.80 ELSE CONTINUE |
|--|

Now, I am going to ask you about the places of care (CHILD) did go to or would have gone to since (TIMEFRAME2).

Since that time, was there a particular doctor's office, clinic, health care center, hospital, or other place that (CHILD) usually did go to or would have gone to if he/she were sick or needed advice about his/her health?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 5.52 |
| 02 | NO  | GO TO 5.80 |
| d  | DK  |            |
| r  | REF |            |

5.52 Was this the same (USUAL PLACE OF CARE) as he/she did go to or would have gone to during (TIMEFRAME1)?

|    |     |             |
|----|-----|-------------|
| 01 | YES | GO TO 5.80  |
| 02 | NO  | GO TO 5.52A |
| d  | DK  | GO TO 5.80  |
| r  | REF |             |

5.52A What type of place did (CHILD) go to or would have gone to during (TIMEFRAME2)?

Was it a...

|    |   |
|----|---|
| 01 | Private doctor's office or group practice |
| 02 | An HMO-run office or facility             |
| 03 | A clinic or health center                 |
| 04 | A hospital emergency room                 |
| 05 | A hospital outpatient department          |
| 06 | Another type of clinic or health center   |
| d  | DK  |
| r  | REF                                       |

5.52.1.1

What was/has been the main reason (CHILD) does/did not have the same usual place of health care?

|    |   |
|----|---|
| 01 | OLD PLACE NO LONGER AVAILABLE/NOT IN NEW PLAN |
| 02 | COST OF OLD PLACE TOO HIGH                    |
| 03 | NEW PLACE BETTER/MORE CONVENIENT              |
| 04 | OTHER REASON                                  |
| d  | DK  |
| r  | REF   |

CHILDREN LESS THAN 3 YEARS GO TO NEXT SECTION  
ELSE CONTINUE

5.80 Now, I would like to ask about the places (CHILD) would receive dental care.

During (TIMEFRAME1), was there a particular dentist's office or clinic that (CHILD) usually did go to or would have gone to if he/she needed to see a dentist or a dental hygienist for a check-up, to get his/her teeth cleaned, or for another dental procedure?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 6.2  |
| 02 | NO  | GO TO 5.81 |
| d  | DK  | Go to 6.2  |
| r  | REF |            |

5.81 What is the main reason (CHILD) did not have a usual place of dental care?

|    |   |
|----|---|
| 01 | CHILD DOES NOT NEED TO SEE DENTIST                        |
| 02 | CHILD SELDOM OR NEVER HAS PROBLEM WITH TEETH              |
| 03 | RECENTLY MOVED TO THE AREA                                |
| 04 | DON'T KNOW WHERE TO GO FOR CARE                           |
| 05 | PLACE CLOSED OR MOVED                                     |
| 06 | NO DENTIST ACCEPTS PLAN                                   |
| 07 | CAN'T FIND A DENTIST OR PLACE WHERE MY LANGUAGE IS SPOKEN |
| 08 | LIKES TO GO TO DIFFERENT PLACES FOR HEALTH CARE           |
| 09 | HOURS ARE NOT CONVENIENT                                  |
| 11 | NO WAY TO GET THERE/ TRANSPORTATION PROBLEMS              |
| 12 | JUST CHANGED INSURANCE                                    |
| 13 | COST TOO HIGH   |
| 14 | OTHER   |
| d  | DK  |
| r  | REF   |

## SECTION 6: CHILD'S USE OF HEALTH CARE SERVICES

The next questions are about different kinds of medical care (CHILD) may have received during (TIMEFRAME1).

6.2 During that time, how many different times did (CHILD) stay in the hospital?

READ IF CHILD BORN DURING TIMEFRAME1: Do not include hospital stays if (CHILD) was born during that time period.

|    |       |             |
|----|-------|-------------|
| 00 | NEVER | GO TO 6.6   |
|    | TIMES | GO TO 6.2.1 |
| d  | DK    | GO TO 6.6   |
| r  | REF   |             |

6.2.1 During the time(s) (CHILD) stayed in the hospital, how many nights was she/he in the hospital altogether?

|   |        |
|---|--------|
|   | NIGHTS |
| d | DK     |
| r | REF    |

6.6 During (TIMEFRAME1), how many times did (CHILD) go to a hospital emergency room?

READ IF 6.2>0: Please, do not include the times when the child was admitted to the hospital through the emergency room.

|    |       |           |
|----|-------|-----------|
| 00 | NEVER | GO TO 6.9 |
|    | TIMES |           |
| d  | DK    | GO TO 6.7 |
| r  | REF   | GO TO 6.9 |

6.7 Would you say...

|    |                  |
|----|------------------|
| 01 | 1 time           |
| 02 | 2 or 3 times     |
| 03 | 4 to 9 times     |
| 04 | 10 to 12 times   |
| 05 | 13 or more times |
| d  | DK               |
| r  | REF              |

6.9 Now, I would like to talk about visits to different types of health care professionals.

During (TIMEFRAME1), how many times did (CHILD) see a doctor or any other health care professionals such as a physician assistant, nurse or midwife altogether?

Please do not include doctors or health care professionals he/she saw for a mental health condition or behavioral problem.

Also, do not include doctors or other health professional (CHILD) saw during a hospital stay or in the emergency room.

|    |       |                                       |
|----|-------|---------------------------------------|
| 00 | NEVER | GO TO 6.11                            |
|    | TIMES | IF 1 GO TO 6.10A<br>IF >1 GO TO 6.10C |
| d  | DK    | GO TO 6.9.1                           |
| r  | REF   | GO TO 6.11                            |

6.9.1 Would you say...

|    |                  |                                       |
|----|------------------|---------------------------------------|
| 01 | 1 time           | IF 1 GO TO 6.10A<br>IF >1 GO TO 6.10C |
| 02 | 2 or 3 times     |                                       |
| 03 | 4 to 9 times     |                                       |
| 04 | 10 to 12 times   |                                       |
| 05 | 13 or more times |                                       |
| d  | DK               | GO TO 6.10C                           |
| r  | REF              | GO TO 6.11                            |

6.10A The one time (CHILD) saw a doctor or other health care professional, did he/she see a specialist such as an allergy specialist, ear nose and throat specialist, or other doctor who takes care of special parts of the body?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

6.10B Did he/she see a doctor or health care professional for preventive care, such as a check-up or well-child visit?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 6.14 |
| 02 | NO  |            |
| d  | DK  |            |
| r  | REF |            |

6.10C Of the times (CHILD) saw a doctor or other health care professional, how many times did he/she see a specialist such as an allergy specialist, ear nose and throat specialist, or other doctor who takes care of special parts of the body?

|    |       |
|----|-------|
| 00 | NEVER |
|    | TIMES |
| d  | DK    |
| r  | REF   |

6.10D And, how many times did he/she see a doctor or health care professional for preventive care, such as a check-up or well-child visit?

|    |       |            |
|----|-------|------------|
| 00 | NEVER | GO TO 6.14 |
|    | TIMES |            |
| d  | DK    |            |
| r  | REF   |            |

- 6.14 During (TIMEFRAME1), did (CHILD) see or talk to a mental health professional, such as a psychiatrist, psychologist, psychiatric nurse, or clinical social worker? (NOT IN PUBLIC ACCESS FILE)

|    |     |              |
|----|-----|--------------|
| 01 | YES | GO TO 6.14.1 |
| 02 | NO  | GO TO 6.20   |
| d  | DK  |              |
| r  | REF |              |

- 6.14.1 How many times did (CHILD) see or talk to a mental health professional, such as a psychiatrist, psychologist, psychiatric nurse, or clinical social worker? (NOT IN PUBLIC ACCESS FILE)

|   |       |
|---|-------|
|   | TIMES |
| d | DK    |
| r | REF   |

DO NOT ASK 6.20 OR 6.20.1 FOR CHILDREN LESS THAN 3 YEARS  
OLD

- 6.20 During (TIMEFRAME1), did (CHILD) go to a dentist or dental hygienist for a check-up or to get his/her teeth cleaned?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

- 6.20.1 During (TIMEFRAME1), did (CHILD) go to a dentist for a dental procedure, such as having a cavity filled or a tooth pulled?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |



- 6.23 Now I am going to ask you some questions about experiences (CHILD) may have had in getting care.

During (TIMEFRAME1), was there a time (CHILD) did not get or postponed getting hospital care when you thought he/she needed it?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 6.24 |
| 02 | NO  | GO TO 6.31 |
| d  | DK  |            |
| r  | REF |            |

- 6.24 What was the main reason (CHILD) did not get or postponed getting the hospital care when you thought he/she needed it?

|    |  |
|----|--|
| 01 | COULDN'T SCHEDULE APPOINTMENT SOON ENOUGH/COULD NOT GET THROUGH ON THE PHONE |
| 02 | TAKES TOO LONG TO GET THERE/TRANSPORTATION PROBLEM                           |
| 03 | DID NOT GET APPROVAL FROM PLAN   |
| 04 | PLACE DID NOT ACCEPT THE INSURANCE COVERAGE                                  |
| 05 | DID NOT THINK (CHILD) WAS SICK ENOUGH  |
| 06 | CONDITION CLEARED UP   |
| 07 | COST TOO MUCH  |
| 08 | (CHILD) DID NOT WANT TO GO   |
| 09 | OTHER  |
| d  | DK   |
| r  | REF  |

- 6.31 During (TIMEFRAME1), was there a time (CHILD) did not get or postponed getting care from a specialist when you thought he/she needed it?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 6.32 |
| 02 | NO  | GO TO 6.36 |
| d  | DK  |            |
| r  | REF |            |

6.32 What was the main reason (CHILD) did not get or postponed getting care from a specialist when you thought he/she needed it?

|    |  |
|----|--|
| 01 | COULDN'T SCHEDULE APPOINTMENT SOON ENOUGH/COULD NOT GET THROUGH ON THE PHONE |
| 02 | TAKES TOO LONG TO GET THERE/TRANSPORTATION PROBLEM                           |
| 03 | DID NOT GET APPROVAL FROM PLAN   |
| 04 | PLACE DID NOT ACCEPT THE INSURANCE COVERAGE                                  |
| 05 | DID NOT THINK (CHILD) WAS SICK ENOUGH  |
| 06 | CONDITION CLEARED UP   |
| 07 | COST TOO MUCH  |
| 08 | (CHILD) DID NOT WANT TO GO   |
| 09 | OTHER  |
| d  | DK   |
| r  | REF  |

6.36 During (TIMEFRAME1), was there a time (CHILD) did not get or postponed getting care from a regular doctor or other health care professional for an illness, accident, or injury when you thought she/he needed it?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 6.37 |
| 02 | NO  | GO TO 6.49 |
| d  | DK  |            |
| r  | REF |            |

- 6.37 What was the main reason (CHILD) did not get or postponed getting care from a regular doctor or other health care professional for an illness, accident or injury when you thought he/she needed it?

|    |  |
|----|--|
| 01 | COULDN'T SCHEDULE APPOINTMENT SOON ENOUGH/COULD NOT GET THROUGH ON THE PHONE |
| 02 | TAKES TOO LONG TO GET THERE/ TRANSPORTATION PROBLEM                          |
| 03 | DID NOT GET APPROVAL FROM PLAN   |
| 04 | PLACE DID NOT ACCEPT THE INSURANCE COVERAGE                                  |
| 05 | DID NOT THINK (CHILD) WAS SICK ENOUGH  |
| 06 | CONDITION CLEARED UP   |
| 07 | COST TOO MUCH  |
| 08 | (CHILD) DID NOT WANT TO GO   |
| 09 | OTHER  |
| d  | DK   |
| r  | REF  |

DO NOT ASK 6.49 TO 6.52 FOR CHILDREN LESS THAN 3 YEARS OLD

- 6.49 During (TIMEFRAME1), was there a time (CHILD) did not get or postponed getting dental care when you thought he/she needed it?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 6.50 |
| 02 | NO  | GO TO 6.54 |
| d  | DK  |            |
| r  | REF |            |

- 6.50 What was the main reason (CHILD) did not get or postponed getting dental care when you thought he/she needed it?

|    |  |
|----|--|
| 01 | COULDN'T SCHEDULE APPOINTMENT<br>SOON ENOUGH/COULD NOT GET<br>THROUGH ON THE PHONE |
| 02 | TAKES TOO LONG TO GET THERE/<br>TRANSPORTATION PROBLEM                             |
| 03 | DID NOT GET APPROVAL FROM PLAN   |
| 04 | PLACE DID NOT ACCEPT THE<br>INSURANCE COVERAGE                                     |
| 05 | DID NOT THINK (CHILD) WAS SICK<br>ENOUGH   |
| 06 | CONDITION CLEARED UP   |
| 07 | COST TOO MUCH  |
| 08 | (CHILD) DID NOT WANT TO GO   |
| 09 | OTHER  |
| d  | DK   |
| r  | REF  |

- 6.54 During (TIMEFRAME1), was there a time (CHILD) did not get or postponed getting a prescription drug when you thought she needed it?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 6.55 |
| 02 | NO  | GO TO 6.58 |
| d  | DK  |            |
| r  | REF |            |

6.55 What was the main reason (CHILD) did not get the prescription drug?

|    |  |
|----|--|
| 01 | COULDN'T SCHEDULE APPOINTMENT<br>SOON ENOUGH/COULD NOT GET<br>THROUGH ON THE PHONE |
| 02 | TAKES TOO LONG TO GET THERE/<br>TRANSPORTATION PROBLEM                             |
| 03 | DID NOT GET APPROVAL FROM PLAN   |
| 04 | PLACE DID NOT ACCEPT THE<br>INSURANCE COVERAGE                                     |
| 05 | DID NOT THINK (CHILD) WAS SICK<br>ENOUGH   |
| 06 | CONDITION CLEARED UP   |
| 07 | COST TOO MUCH  |
| 08 | (CHILD) DID NOT WANT TO GO   |
| 09 | OTHER  |
| d  | DK   |
| r  | REF  |

6.58 During (TIMEFRAME1), was there a time (CHILD) took less than the recommended dosage of a prescription drug or took the drug less frequently so that it would last longer?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

6.59 During (TIMEFRAME1), how confident were you that (CHILD) could get health care if he/she needed it?

Would you say...

|    |                      |
|----|----------------------|
| 01 | Very confident       |
| 02 | Somewhat confident   |
| 03 | Not very confident   |
| 04 | Not at all confident |
| d  | DK                   |
| r  | REF                  |

6.60 And during (TIMEFRAME1), how satisfied were you with the quality of the health care (CHILD) received?

Would you say...

|    |                      |
|----|----------------------|
| 01 | Very satisfied       |
| 02 | Somewhat satisfied   |
| 03 | Not very satisfied   |
| 04 | Not at all satisfied |
| d  | DK                   |
| r  | REF                  |

6.61 And, how worried were you about meeting (CHILD)'s health care needs...

|    |                    |
|----|--------------------|
| 01 | Very worried       |
| 02 | Somewhat worried   |
| 03 | Not very worried   |
| 04 | Not at all worried |
| d  | DK                 |
| r  | REF                |

6.62 And during (TIMEFRAME1), how often did you feel stress about meeting (CHILD) health care needs...

|    |                |
|----|----------------|
| 01 | All the time   |
| 02 | Very often     |
| 03 | Not very often |
| 04 | Never          |
| d  | DK             |
| r  | REF            |

6.63 And during (TIMEFRAME1), how much did (CHILD)'s health care needs create financial difficulties...

|    |            |
|----|------------|
| 01 | A lot      |
| 02 | Somewhat   |
| 03 | A little   |
| 04 | Not at all |
| d  | DK         |
| r  | REF        |

|  |
|--|
| <p align="center"><b>SECTION 7: PARENTS' CHARACTERISTICS AND ATTITUDE<br/>TOWARDS HEALTH</b></p> |
|--|

**QUESTIONS ABOUT RESPONDENT**

Next, I have a few questions about your health and health related issues.

**QUESTIONS ABOUT HEALTH AND ATTITUDES TOWARDS HEALTH**

7.3.21 In general, would you say that your health is...

|    |              |
|----|--------------|
| 01 | Excellent    |
| 02 | Very good    |
| 03 | Good         |
| 04 | Fair or poor |
| d  | DK           |
| r  | REF          |

7.3.30 Now, I am going to read you some statements about health and health care. For each statement, please tell me if in your opinion the statement is definitely true, mostly true, mostly false, or definitely false.

First, you worry about your health more than other people your age. Is that...

|    |                  |
|----|------------------|
| 01 | Definitely true  |
| 02 | Mostly true      |
| 03 | Mostly false     |
| 04 | Definitely false |
| d  | DK               |
| r  | REF              |

7.3.32 You can overcome most illnesses without help from a medically trained professional. Is that...

|    |                  |
|----|------------------|
| 01 | Definitely true  |
| 02 | Mostly true      |
| 03 | Mostly false     |
| 04 | Definitely false |
| d  | DK               |
| r  | REF              |

7.3.34 Home remedies are often better than drugs prescribed by a doctor. Is that...

|    |                  |
|----|------------------|
| 01 | Definitely true  |
| 02 | Mostly true      |
| 03 | Mostly false     |
| 04 | Definitely false |
| d  | DK               |
| r  | REF              |

7.3.38 Doctors and nurses look down on people who are in (SCHIP/MEDICAID). Is that...

|    |                  |
|----|------------------|
| 01 | Definitely true  |
| 02 | Mostly true      |
| 03 | Mostly false     |
| 04 | Definitely false |
| d  | DK               |
| r  | REF              |

7.3.40 Getting a child enrolled in (SCHIP/MEDICAID) whenever you want is easy if the child is eligible. Is that...

|    |                  |
|----|------------------|
| 01 | Definitely true  |
| 02 | Mostly true      |
| 03 | Mostly false     |
| 04 | Definitely false |
| d  | DK               |
| r  | REF              |

7.3.41 Children on (SCHIP/MEDICAID) get better health care than children with no insurance. Is that...

|    |                  |
|----|------------------|
| 01 | Definitely true  |
| 02 | Mostly true      |
| 03 | Mostly false     |
| 04 | Definitely false |
| d  | DK               |
| r  | REF              |



7.3.42 You are more likely to take risks than the average person. Is that...

|    |                  |
|----|------------------|
| 01 | Definitely true  |
| 02 | Mostly true      |
| 03 | Mostly false     |
| 04 | Definitely false |
| d  | DK               |
| r  | REF              |

7.3.43 Do you think it's better to plan your life far ahead or would you say that life is too much a matter of luck to plan ahead very far?

|    |                          |
|----|--------------------------|
| 01 | PLAN AHEAD               |
| 02 | TOO MUCH LUCK            |
| 03 | BOTH PLAN AHEAD AND LUCK |
| D  | DK                       |
| R  | REF                      |

### QUESTIONS ABOUT YOU AND OTHERS IN HOUSEHOLD

The next questions are about you and other people living in the household with (CHILD).

7.4.A How many people are living in the household right now? Please include yourself and (CHILD).

|   |                               |
|---|-------------------------------|
|   | NUMBER OF PEOPLE IN HOUSEHOLD |
| d | DK                            |
| r | REF                           |

7.4.1.1 Including yourself, how many people in the household are 18 years or older?

|   |                  |
|---|------------------|
|   | NUMBER OF PEOPLE |
| d | DK               |
| r | REF              |

7.4.1.2 Are you (CHILD)'s biological, step, adoptive parent or legal guardian?

|   |                    |               |
|---|--------------------|---------------|
| 1 | BIOLOGICAL PARENT  | GO TO 7.4.1.5 |
| 2 | OTHER RELATIONSHIP | GO TO 7.4.1.3 |
| D | DK                 | GO TO 7.4.1.3 |
| R | REF                |               |

7.4.1.3 Are you (CHILD)'s legal parent or guardian?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

7.4.1.5 What is your gender?

|    |        |
|----|--------|
| 01 | MALE   |
| 02 | FEMALE |
| r  | REF    |

7.4.1.6 What was your age at your last birthday?

|   |               |
|---|---------------|
| 1 | 30 OR YOUNGER |
| 2 | 31 TO 40      |
| 3 | OLDER THAN 40 |
| d | DK            |
| r | REF           |

7.4.1.7 What is the highest grade or year of schooling you have completed?

|   |                              |
|---|------------------------------|
| 1 | HIGH SCHOOL NO DIPLOMA       |
| 2 | HIGH SCHOOL DIPLOMA OR GED   |
| 3 | ANY POST-SECONDARY EDUCATION |
| d | DK                           |
| r | REF                          |

7.4.1.8 In what country were you born? (NOT IN PUBLIC ACCESS FILE)

|    |                   |                  |
|----|-------------------|------------------|
| 01 | USA               | SKIP TO 7.4.1.12 |
| 02 | ANY OTHER COUNTRY |                  |
| d  | DK                |                  |
| r  | REF               |                  |

7.4.1.9 Are you a citizen of the United States?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

|                         |
|-------------------------|
| IF 7.4.1.1=1 GO TO 7.60 |
|-------------------------|

7.4.5.1 Does (CHILD) have a/another biological, step, adoptive parent or legal guardian living in the household?

|    |     |               |
|----|-----|---------------|
| 01 | YES | GO TO<br>7.60 |
| 02 | NO  |               |
| d  | DK  |               |
| r  | REF |               |

7.4.5.2 What is his/her relationship to (CHILD)?

|   |                    |               |
|---|--------------------|---------------|
| 1 | BIOLOGICAL PARENT  | GO TO 7.4.5.6 |
| 2 | OTHER RELATIONSHIP | GO TO 7.4.5.3 |
| D | DK                 | GO TO 7.4.5.3 |
| R | REF                |               |

7.4.5.3 Is he/she (CHILD)'s legal parent or guardian?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

7.4.5.5 (DO NOT ASK IF ALREADY KNOWN) What is this person's gender?

|    |        |
|----|--------|
| 01 | MALE   |
| 02 | FEMALE |
| r  | REF    |

7.4.5.6 What was his/her age at his/her last birthday?

|   |               |
|---|---------------|
| 1 | 30 OR YOUNGER |
| 2 | 31 TO 40      |
| 3 | OLDER THAN 40 |
| d | DK            |
| r | REF           |

7.4.5.7 What is the highest grade or years of schooling he/she has completed?

|   |                              |
|---|------------------------------|
| 1 | HIGH SCHOOL NO DIPLOMA       |
| 2 | HIGH SCHOOL DIPLOMA OR GED   |
| 3 | ANY POST-SECONDARY EDUCATION |
| d | DK                           |
| r | REF                          |

7.4.5.8 In what country was he/she born? (NOT IN PUBLIC ACCESS FILE)

|    |                   |               |
|----|-------------------|---------------|
| 01 | USA               | GO TO 7.4.6.0 |
| 02 | ANY OTHER COUNTRY |               |
| d  | DK                |               |
| r  | REF               |               |

7.4.5.9 Is he/she a citizen of the United States?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

7.4.6.0

|   |
|---|
| <p>IF TWO LEGAL PARENTS IN HOUSEHOLD (7.4.1.2=1 OR 3<br/>OR 7.4.1.3=1)<br/>AND<br/>(7.4.5.2=1 OR 3 OR 7.4.5.3=1 YES)<br/>OR<br/>ONLY TWO ADULTS IN HOUSEHOLD (7.4.1.1=2)<br/>GO TO 7.60</p> |
|---|

7.4.6.1 Does (CHILD) have another biological, step, adoptive parent or legal guardian living in the household?

|    |     |               |
|----|-----|---------------|
| 01 | YES | GO TO<br>7.60 |
| 02 | NO  |               |
| d  | DK  |               |
| r  | REF |               |

7.4.6.2 What is his/her relationship to (CHILD)? (NOT IN PUBLIC ACCESS FILE)

|    |                   |               |
|----|-------------------|---------------|
| 01 | BIOLOGICAL PARENT | GO TO 7.4.6.5 |
| 02 | STEP PARENT       | GO TO 7.4.6.3 |
| 03 | ADOPTIVE PARENT   | GO TO 7.4.6.5 |
| 04 | OTHER             | GO TO 7.4.6.3 |
| d  | DK                |               |
| r  | REF               |               |

7.4.6.3 Is he/she (CHILD)'s legal parent or guardian? (NOT IN PUBLIC ACCESS FILE)

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

7.4.6.5 (DO NOT ASK IF ALREADY KNOWN) What is this person's gender? (NOT IN PUBLIC ACCESS FILE)

|    |        |
|----|--------|
| 01 | MALE   |
| 02 | FEMALE |
| r  | REF    |

7.4.6.6 What was this person's age at his/her last birthday? (NOT IN PUBLIC ACCESS FILE)

|   |     |
|---|-----|
|   | AGE |
| D | DK  |
| R | REF |

7.4.6.7 What is the highest grade or year of schooling he/she has completed? (NOT IN PUBLIC ACCESS FILE)

|   |   |
|---|---|
| 1 | HIGH SCHOOL NO DIPLOMA<br>How many grades did he/she complete? 7.4.6.7A |
| 2 | HIGH SCHOOL DIPLOMA   |
| 3 | ANY POST SECONDARY EDUCATION  |
| d | DK  |
| r | REF   |

7.5 In what country was he/she born? (NOT IN PUBLIC ACCESS FILE)

|    |                   |           |
|----|-------------------|-----------|
| 01 | USA               | GO TO 7.7 |
| 02 | ANY OTHER COUNTRY |           |
| d  | DK                |           |
| r  | REF               |           |

7.6 Is he/she a citizen of the United States? (NOT IN PUBLIC ACCESS FILE)

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

7.7

| LEGAL PARENT DETERMINATION  |
|---|
| IF (7.4.1.2=1 OR 3 ) OR 7.4.1.3=1) THEN LPER1=TRUE<br>IF LPER1=TRUE AND IF (7.4.5.2=1 OR 3 ) OR 7.4.5.3=1) THEN LPER2=TRUE.<br>IF LPER1=FALSE AND IF (7.4.5.2=1 OR 3 ) OR 7.4.5.3=1) THEN LPER1=TRUE.<br>IF LPER1=TRUE AND IF LPER=TRUE AND (7.4.6.2=1 OR 3) OR 7.4.6.3=1) THEN LPER2=TRUE. |
| IF LPER1=FALSE AND IF (7.4.6.2=1 OR 3) AND 7.4.6.3=1 THEN LPER1=TRUE  |

**HEALTH INSURANCE STATUS OF LEGAL PARENT/GUARDIAN OF  
CHILDREN CURRENTLY ENROLLED SCHIP/MEDICAID**

7.60

|   |
|---|
| <p>IF CHILD NOT CURRENTLY ENROLLED BY (SCHIP/MEDICAID) (2.2=02)<br/>OR <b>NOT</b> AN ESTABLISHED ENROLLEE</p> <p>GO TO 7.90<br/>ELSE CONTINUE</p> |
|---|

|  |
|--|
| <p>REPEAT 7.63-7.79.1 FOR EACH LEGAL GUARDIAN (LPER1-2)<br/>LIVING IN HOUSEHOLD</p> <p>IF RESPONDENT IS LEGAL GUARDIAN OF CHILD CALL THIS<br/>PERSON "YOU" ELSE USE THE RELATIONSHIP FROM 7.4.5.2<br/>(FOR LPER1 OR LPER2), OR 7.4.6.2 FOR (LPER2) TO THE CHILD<br/>TO IDENTIFY THE PERSON</p> |
|--|

7.63 (LPER1) AND 7.65 (LPER2)

The next questions are about insurance coverage of the legal parents of (CHILD).  
Are/Is (LPER1-2) covered by any health insurance, such as Medicaid or SCHIP,  
right now?

| LPER1 | LPER2 |     |   |
|-------|-------|-----|---|
| 01    | 01    | YES |   |
| 02    | 02    | NO  | GO BACK TO 7.63<br>OR TO 7.81 IF NO OTHER<br>LEGAL PARENT |
| d     | d     | DK  |   |
| r     | r     | REF |   |

7.66 Is (CHILD)'s (LPER2) covered by the same health insurance as (LPER1)?

|    |     |  |
|----|-----|--|
| 01 | YES | SKIP REMAINDER OF<br>(LPER2) QUESTIONS |
| 02 | NO  |  |
| d  | DK  |  |
| r  | REF |  |



7.70.1-7.70.5 (LPER1) AND 7.70.6-7.70.10 (LPER2)

Are/Is the (LPER1-2) covered by health insurance from an employer, a private insurance purchased directly from an insurance company, Medicaid, SCHIP, or any other health insurance coverage. If (LPER1-2) have/has more than one coverage, please mention all health insurance coverage (LPER1-2) currently have/has?

|   |  |
|---|--|
| 1 | INSURANCE FROM A CURRENT OR PAST EMPLOYER OR UNION             |
| 2 | PRIVATE INSURANCE PURCHASED DIRECTLY FROM AN INSURANCE COMPANY |
| 3 | MEDICAID   |
| 4 | SCHIP  |
| 5 | SOME OTHER TYPE OF COVERAGE I HAVE NOT YET MENTIONED           |
| D | DK   |
| R | REF  |

IF MORE THAN ONE INSURANCE IN 7.70 READ “any of the insurance plans” instead of “insurance coverage” in 7.71 to 7.76

IF COVERAGE FROM EMPLOYER IN 7.70 (A=YES)  
GO TO 7.71. ELSE GO TO 7.72

7.71 (LPER1) AND 7.73 (LPER2) (IF ONLY HEALTH INSURANCE FROM EMPLOYER) Does the employer pay all, some or none of the premium for this health insurance?

(IF OTHER HEALTH INSURANCE BESIDES FROM EMPLOYER) For the health insurance from an employer, does the employer pay all, some or none of the premium for this health insurance?

| LPER1 | LPER2 |      |
|-------|-------|------|
| 01    | 01    | ALL  |
| 02    | 02    | SOME |
| 03    | 03    | NONE |
| d     | d     | DK   |
| r     | r     | REF  |

7.72 (LPER1) AND 7.74 (LPER2) Does the health insurance coverage require (LPER1-2) to be signed up with a certain primary care doctor or clinic, which (LPER1-2) has to go to for all routine care?

| LPER1 | LPER2 |     |
|-------|-------|-----|
| 01    | 01    | YES |
| 02    | 02    | NO  |
| d     | d     | DK  |
| r     | r     | REF |

7.76 Does this health insurance include coverage for the following services...

|          |                                  |                                  |   |
|----------|----------------------------------|----------------------------------|---|
|          | 01=YES<br>02=NO<br>d=DK<br>r=REF | 01=YES<br>02=NO<br>d=DK<br>r=REF |   |
|          | LPER1                            | LPER2                            |   |
| A AND A2 |                                  |                                  | Doctors' visits for illness or injuries |
| B AND B2 |                                  |                                  | Physical exams or routine check-ups     |
| C AND C2 |                                  |                                  | Emergency room visits                   |
| D AND D2 |                                  |                                  | Hospital stays                          |

IF 7.70 =SCHIP THEN GO TO 7.79.1.1  
ELSE GO TO 7.79

7.79 (LPER1) AND 7.80 (LPER2)

Could (CHILD) be covered by this health insurance?

| LPER1 | LPER2 |     |                |
|-------|-------|-----|----------------|
| 01    | 01    | YES | GO TO 7.79.1.1 |
| 02    | 02    | NO  | GO TO 7.90     |
| d     | d     | DK  |                |
| r     | r     | REF |                |

7.79.1.1 (LPER1) AND 7.79.1.2 (LPER2)

For the health insurance from an employer, would the employer pay all, some or none of the premium to cover (CHILD)?

| LPER1 | LPER2 |      |
|-------|-------|------|
| 01    | 01    | ALL  |
| 02    | 02    | SOME |
| 03    | 03    | NONE |
| d     | d     | DK   |
| r     | r     | REF  |

IF 7.70=CHIP THEN GO TO 7.81  
ELSE GO TO 7.79.1

7.79.1 (LPER1) AND 7.79.2 (LPER2)

What is the main reason (CHILD) is not covered by this health insurance?

| LPER1 | LPER2 |   |  |
|-------|-------|---|--|
| 01    | 01    | ALREADY COVERED BY OTHER INSURANCE                | IF OTHER LEGAL PARENT<br>GO BACK TO<br>7.63<br>ELSE GO TO 7.81 |
| 02    | 02    | TOO EXPENSIVE                                     |  |
| 03    | 03    | NOT NEEDED/ NOT WANTED                            |  |
| 04    | 04    | SERVICES OFFERED NOT LIKED                        |  |
| 05    | 05    | DOCTORS IN PLAN NOT LIKED                         |  |
| 06    | 06    | DO/DOES NOT BELIEVE IN HEALTH INSURANCE FOR CHILD |  |
| 07    | 07    | OTHER   |  |
| d     | d     | DK  |  |
| r     | r     | REF   |  |

| OTHER SPOUSE DETERMINATION  |
|---|
| <p><b>CONDITION 1:</b><br/> (MORE THAN 1 ADULT IN HOUSEHOLD AND LPER1=“YOU” AND LEGAL PARENT (respondent) <b>AND</b> NO OTHER LEGAL PARENT (no LPER2))</p> <p>IF 7.4.1.1&gt;1 AND IF 7.4.1.2=1 OR 3 OR 7.4.1.3=YES) AND LPER2=0</p> <p><b>CONDITION 2:</b><br/> (MORE THAN 2 PEOPLE IN HOUSEHOLD AND LPER1=“HE/SHE” AND LEGAL PARENT (other adult in household) AND NO OTHER LEGAL PARENT - NO LPER2)</p> <p>IF 7.4.1.1&gt;2 AND IF 7.4.1.3=NO OR SKIPPED AND (IF 7.4.5.2=1 OR 3 OR 7.4.5.3=YES) AND LPER2=0</p> <p>IF CONDITION 1=TRUE OR CONDITION 2=TRUE GO TO 7.81<br/> ELSE GO TO 7.90</p> |

7.81 Are/Is (LPER1) married to someone else living in the household who is not a legal parent or guardian of (CHILD)?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 7.90 |
| 02 | NO  |            |
| d  | DK  |            |
| r  | REF |            |

7.82 Is (NONGUARDIAN) covered by any health insurance, such as Medicaid or SCHIP, right now?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 7.90 |
| 02 | NO  |            |
| d  | DK  |            |
| r  | REF |            |

7.83 (ONLY ASK IF 7.63=1) Is (NONGUARDIAN) covered by the same health insurance as (LPER1)?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 7.90 |
| 02 | NO  |            |
| d  | DK  |            |
| r  | REF |            |

7.84.1 - 7.84.5

Is this person covered by health insurance from an employer, a private insurance purchased directly from an insurance company, Medicaid, SCHIP or any other health insurance coverage? If this person has more than one coverage, please mention all health insurance coverage this person currently has.

|   |   |
|---|---|
| 1 | INSURANCE FROM A<br>CURRENT OR PAST<br>EMPLOYER OR UNION                |
| 2 | PRIVATE INSURANCE<br>PURCHASED DIRECTLY<br>FROM AN INSURANCE<br>COMPANY |
| 3 | MEDICAID  |
| 4 | SCHIP   |
| 5 | SOME OTHER TYPE OF<br>COVERAGE I HAVE NOT YET<br>MENTIONED              |
| d | DK  |
| r | REF   |

IF MORE THAN ONE INSURANCE IN 7.84 READ “any of the insurance plans” instead of “insurance coverage” in 7.85 to 7.89.1

IF COVERAGE FROM EMPLOYER IN 7.84 (A=YES)  
GO TO 7.85. ELSE GO TO 7.90

7.85 Does the employer pay all, some or none of the premium for this health insurance?

(IF OTHER HEALTH INSURANCE BESIDES FROM EMPLOYER) For the health insurance from an employer, does the employer pay all, some, or none of the premium for this health insurance?

|    |      |
|----|------|
| 01 | ALL  |
| 02 | SOME |
| 03 | NONE |
| d  | DK   |
| r  | REF  |

- 7.86 Does the health insurance coverage require this person to be signed up with a certain primary care doctor or clinic, which he/she has to go to for all routine care?

|    |     |
|----|-----|
| 01 | YES |
| 02 | NO  |
| d  | DK  |
| r  | REF |

- 7.87 Does this health insurance include coverage to pay or help pay for the following services...

|   |                                  |   |
|---|----------------------------------|---|
|   | 01=YES<br>02=NO<br>d=DK<br>r=REF |   |
| A |                                  | Doctors' visits for illness or injuries |
| B |                                  | Physical exams or routine check-ups     |
| C |                                  | Emergency room visits                   |
| D |                                  | Hospital stays                          |

GO TO 7.89.1

- 7.89.1 Could (CHILD) be covered by this health insurance?

|    |     |            |
|----|-----|------------|
| 01 | YES | GO TO 7.90 |
| 02 | NO  |            |
| d  | DK  |            |
| r  | REF |            |

- 7.89.1.1

For the health insurance from an employer, would the employer pay all, some, or none of the premium to cover (CHILD)?

|    |      |
|----|------|
| 01 | ALL  |
| 02 | SOME |
| 03 | NONE |
| d  | DK   |
| r  | REF  |

7.89.2 What is the main reason (CHILD) is not covered by this health insurance?

|    |   |
|----|---|
| 01 | ALREADY COVERED BY OTHER INSURANCE                |
| 02 | TOO EXPENSIVE                                     |
| 03 | NOT NEEDED/NOT WANTED                             |
| 04 | SERVICES OFFERED NOT LIKED                        |
| 05 | DOCTORS IN PLAN NOT LIKED                         |
| 06 | DO/DOES NOT BELIEVE IN HEALTH INSURANCE FOR CHILD |
| 07 | OTHER   |
| d  | DK  |
| r  | REF   |

### HOUSEHOLD EARNINGS AND HEALTH CARE SPENDING

7.90 The next questions are about money people living in the household with (CHILD) have earned at a job or through self-employment. Remember this information is completely confidential and will not be reported to any agency or program.

REPEAT FOR EACH LEGAL GUARDIAN LIVING IN HOUSEHOLD (7.4.1.5=1 OR 7.4.5.5=1 OR 7.4.6.5=1)

START WITH RESPONDENT IF (LEGAL GUARDIAN OF CHILD), AND CALL THIS PERSON YOU ELSE USE RELATIONSHIP TO THE CHILD TO IDENTIFY THE PERSON

7.91 (LPER1) AND 7.92 (LPER2)

First/Next, in the past 12 months, did (LPER1-2) work at a job or business, either full-time or part-time, for pay or profit?

| <b>LPER1</b> | <b>LPER2</b> |     |
|--------------|--------------|-----|
| 01           | 01           | YES |
| 02           | 02           | NO  |
| d            | d            | DK  |
| r            | r            | REF |

## HOUSEHOLD INCOME & HEALTH CARE SPENDING

- 7.93 In addition to earnings from jobs, household members often have other sources of income from the government, from private institutions or from their own savings. Examples are money received from welfare payments, food stamps, SSI, child support payments, unemployment compensation, cash value of vouchers, any money that is directly deposited to your bank account, or dividend or interest from stocks or bonds.

In the past 12 months, what was the total household income from jobs and all other sources of income?

|   |                                 |               |
|---|---------------------------------|---------------|
| 1 | LESS THAN \$20,000              | GO TO 7.102.1 |
| 2 | \$20,000 BUT LESS THAN \$30,000 | GO TO 7.102.1 |
| 3 | \$30,000 OR MORE                | GO TO 7.102.1 |
| d | DK                              | GO TO 7.99    |
| r | REF                             | GO TO 7.103   |

- 7.99 Would you say your total household income from all sources was less than \$25,000 or more than \$25,000? (NOT IN PUBLIC ACCESS FILE)

|    |                    |             |
|----|--------------------|-------------|
| 01 | Less than \$25,000 | GO TO 7.100 |
| 02 | More than \$25,000 | GO TO 7.101 |
| d  | DK                 | GO TO 7.103 |
| r  | REF                |             |

- 7.100 Would you say it was... (NOT IN PUBLIC ACCESS FILE)

|    |                                 |             |
|----|---------------------------------|-------------|
| 01 | Less than \$5,000               | GO TO 7.102 |
| 02 | \$5,000 but less than \$10,000  |             |
| 03 | \$10,000 but less than \$15,000 |             |
| 04 | \$15,000 but less than \$20,000 |             |
| 05 | \$20,000 but less than \$25,000 |             |
| d  | DK                              |             |
| r  | REF                             |             |



7.101 Would you say it was... (NOT IN PUBLIC ACCESS FILE)

|    |                                  |
|----|----------------------------------|
| 01 | \$25,000 but less than \$30,000  |
| 02 | \$30,000 but less than \$40,000  |
| 03 | \$40,000 but less than \$50,000  |
| 04 | \$50,000 but less than \$60,000  |
| 05 | \$60,000 but less than \$70,000  |
| 06 | \$70,000 but less than \$80,000  |
| 07 | \$80,000 but less than \$90,000  |
| 08 | \$90,000 but less than \$100,000 |
| 09 | More than \$100,000              |
| d  | DK                               |
| r  | REF                              |

7.102.1 In the past two years, has anybody in the household received any benefits from TANF which used to be called AFDC? This includes yourself or any children in your household. (NOT IN PUBLIC ACCESS FILE—SEE “TANFORFS”)

|    |     |  |
|----|-----|--|
| 01 | YES |  |
| 02 | NO  |  |
| d  | DK  |  |
| r  | REF |  |

7.102.2 Including yourself, how many people in the household received food stamps in the past 2 years? (NOT IN PUBLIC ACCESS FILE—SEE “TANFORFS IN ELECTRONIC CODEBOOK”)

|   |                  |
|---|------------------|
|   | NUMBER OF PEOPLE |
| d | DK               |
| r | REF              |

7.103 During the past 12 months, about how much did your household spend on health care, that is money you or someone else in the household paid for doctors’ visits, hospital stays, or prescription drugs? Please include all out-of-pocket expenses that health insurance does not or will not pay for. Do not include any cost for health insurance premiums or dental care.

|   |                             |             |
|---|-----------------------------|-------------|
| 0 | DID NOT PAY ANYTHING        | GO TO 7.109 |
| 1 | LESS THAN \$500             | GO TO 7.109 |
| 2 | \$500 BUT LESS THAN \$1,000 | GO TO 7.109 |
| 3 | \$1,000 OR MORE             | GO TO 7.109 |
| D | DK                          | GO TO 7.104 |
| r | REF                         | GO TO 7.109 |

7.105 Would you say your household spending on health care was... (NOT IN PUBLIC ACCESS FILE)

|    |                               |
|----|-------------------------------|
| 01 | Less than \$500               |
| 02 | \$500 but less than \$1,000   |
| 03 | \$1000 but less than \$2,000  |
| 04 | \$2,000 but less than \$3,000 |
| 05 | \$3,000 but less than \$4,000 |
| 05 | \$4,000 but less than \$5,000 |
| 06 | \$5,000 or more               |
| d  | DK                            |
| r  | REF                           |

## DEMOGRAPHICS OF (CHILD)

I would like to find out a little more about (CHILD)'s background.

- 7.109 Do you consider him/her to be of Hispanic or Latino origin? (NOT IN PUBLIC ACCESS FILE—SEE “ETH\_RACE IN ELECTRONIC CODEBOOK”)

|    |     |             |
|----|-----|-------------|
| 01 | YES | GO TO 7.110 |
| 02 | NO  | GO TO 7.111 |
| D  | DK  |             |
| R  | REF |             |

- 7.110 What Hispanic or Latino group do you consider him/her to belong to? Is it... (NOT IN PUBLIC ACCESS FILE)

|    |                                     |
|----|-------------------------------------|
| 01 | Mexican                             |
| 02 | Puerto Rican                        |
| 03 | Cuban                               |
| 04 | Some other Hispanic or Latino group |
| d  | DK                                  |
| r  | REF                                 |

- 7.111 - 7.116

Which of the following best describes his/her racial background? Is it... (NOT IN PUBLIC ACCESS FILE—SEE “ETH\_RACE IN ELECTRONIC CODEBOOK”)

|   |                           |
|---|---------------------------|
| 1 | White                     |
| 2 | American Indian           |
| 3 | Alaska Native             |
| 4 | Black or African American |
| 5 | Asian/ Pacific Islander   |
| 6 | Other                     |
| d | DK                        |
| r | REF                       |

- 7.120 What is the main language spoken in this household?

|    |                |
|----|----------------|
| 01 | ENGLISH        |
| 02 | OTHER LANGUAGE |
| d  | DK             |
| r  | REF            |



|  |
|--|
| <p align="center"><b>SECTION: 8</b></p> <p align="center"><b>QUESTIONS ABOUT TELEPHONE COVERAGE</b></p> <p align="center"><b>(NOT IN PUBLIC ACCESS FILE)</b></p> |
|--|

The last questions are about the telephones in your households. We need this information so that households are correctly represented in our sample.

- 8.5 During the past 3 months, was there any time when you did not have a working telephone in your household for 2 weeks or more?

|    |     |              |
|----|-----|--------------|
| 01 | YES | GO TO 8.6    |
| 02 | NO  | GO TO 8.15.2 |
| d  | DK  |              |
| r  | REF |              |

- 8.6 For how many of the past 3 months did your household not have a working telephone?

|   |                  |
|---|------------------|
|   | NUMBER OF MONTHS |
| d | DK               |
| r | REF              |

I have your zip code as (CURRENT ZIP CODE). Is that correct?

|    |     |                 |
|----|-----|-----------------|
| 01 | YES | GO 8.ADDRESS    |
| 02 | NO  | GO TO 8.16.1    |
| d  | DK  | GO TO 8.ADDRESS |
| r  | REF |                 |

- 8.15.2 Can I please have your correct zip code?

|  |          |
|--|----------|
|  | ZIP CODE |
|  | REF      |

8.16.1 Can I please verify your address so we can send you a thank you letter?

|                             |              |
|-----------------------------|--------------|
| STREET ADDRESS (q8_address) | GO TO 8.17   |
| CITY (q8city)               |              |
| STATE (q8_state)            |              |
| REF                         | GO TO 8.16.1 |

8.17 These are all the questions we have. Your opinion is very important to us. Thank you very much for all your time.

|   |
|---|
| <p style="text-align: center;"><b>SECTION: 9</b><br/><b>GLOSSARY OF TERMS USED IN SURVEY INSTRUMENT</b></p> |
|---|

**CHILD:** The child in the household who has been sampled for the survey and is the focus of the interview.

**CURRENT MONTH:** The month (and year) of the interview.

**CURRENT STARTDATE:** See STARTDATE.

**DISENROLLEE:** One of three possible classifications of CHILD for purposes of assigning the timelines of interest (see TIMELINE) during the interview. This classification includes CHILD sampled as a recent disenrollee for the survey and not switched to an established enrollee survey because they report being on the SCHIP/MEDICAID for 6 months or more. (Note that a CHILD reported disenrolled 12+ months is assigned to an abbreviated questionnaire; see SWITCH TO SHORTENED SURVEY). See Appendix B for additional information on the survey questions that disenrollees received.

**ENDDATE:** The date (month and year) that CHILD most recently disenrolled from SCHIP/MEDICAID. For a DISENROLLEE who reports being reenrolled, this is the PREVIOUS ENDDATE; for all other children this is the LAST ENDDATE.

**ESTABLISHED ENROLLEE:** One of three possible classifications of CHILD for purposes of assigning the timelines of interest (see TIMELINE) during the interview. This classification includes: CHILD sampled as an established enrollee for the survey; and CHILD sampled as a recent enrollee or disenrollee but switched to this classification because they were reported to have been enrolled, respectively, for 12 or 6 months or more. (Note that if CHILD is reported disenrolled 12+ months, an abbreviated questionnaire is completed; see SWITCH TO SHORTENED SURVEY). See Appendix B for additional information on the survey questions that established enrollees received.

**NEW ENROLLEE:** One of three possible classifications of CHILD for purposes of assigning the timelines of interest (see TIMELINE) during the interview. This classification includes CHILD sampled as a new (recent) enrollee for the survey and not switched to an established enrollee survey because they report being on the SCHIP/MEDICAID for 12 months or more. (Note that if CHILD is reported disenrolled 12+ months, an abbreviated questionnaire is completed; see SWITCH TO SHORTENED SURVEY). See Appendix B for additional information on the survey questions that new enrollees received.

**LAST ENDDATE:** See ENDDATE.

**LPER1:** The first legal parent or guardian of CHILD that is identified during the interview. LPER1 is generally the survey respondent. The only exception is if the survey respondent does not meet the definition of legal parent or guardian. See Question 7.7 of the survey for additional details.

**LPER2:** The second legal parent or guardian of CHILD, if any, that is identified during the interview. See Question 7.7 of the survey for additional details.

**MEDICAID/SCHIP:** The program that the sampled child DID NOT currently participate in (if sampled as an enrollee), or recently disenroll from (if sampled as a disenrollee), at the time of sampling. If this program is Medicaid, the name of the state's Medicaid program (for example, Medi-Cal) is used in the interview; if this program is SCHIP, the name of the state's SCHIP (for example, Healthy Families) is used in the interview.

**MONTHS SINCE COVERAGE ENDED:** Length of time since SCHIP/MEDICAID coverage ended. It is calculated as the number of months between the CURRENT MONTH and ENDDATE. Applies only to CHILD reported to be disenrolled. For DISENROLLEE who re-enrolled, see MONTHS BETWEEN COVERAGE.

**MONTHS OF COVERAGE:** Length of SCHIP/MEDICAID coverage. For NEW ENROLLEE and ESTABLISHED ENROLLEE reported still enrolled, it is calculated as the number of months between CURRENT MONTH and STARTDATE. For CHILD reported to have disenrolled, it is calculated as the number of months between STARTDATE and ENDDATE. For DISENROLLEE who re-enrolled, see MONTHS OF PREVIOUS COVERAGE.

**MONTHS OF PREVIOUS COVERAGE:** Similar to MONTHS OF COVERAGE but applies to DISENROLLEE who re-enrolled. It is calculated as number of months between PREVIOUS STARTDATE and PREVIOUS ENDDATE.

**MONTHS BETWEEN COVERAGE:** Similar to MONTHS SINCE COVERAGE ENDED but applies to DISENROLLEE who re-enrolled. It is calculated as number of months between CURRENT STARTDATE and PREVIOUS ENDDATE.

**PREVIOUS ENDDATE:** See ENDDATE.

**PREVIOUS STARTDATE:** See STARTDATE.

**SCHIP/MEDICAID:** The program, either SCHIP or Medicaid, that the sampled child currently participated in (if sampled as an enrollee) or recently disenrolled from (if sampled as a disenrollee) at the time of sampling. If this program is SCHIP, the name of the state's SCHIP (for example, Healthy Families) is used in the interview this program; if this program is Medicaid, the name of state's Medicaid program (for example, Medi-Cal) is used in the interview.



**STARTDATE:** The month and year that the CHILD enrolled in SCHIP/MEDICAID. For DISENROLLEES who are reported to have reenrolled, there are two start dates of interest—the one pertaining to their current enrollment (called CURRENT STARTDATE) and the one pertaining to their prior enrollment (called PRIOR STARTDATE). For all others, the start date of interest is the most recent. This is either referred to as CURRENT STARTDATE if they are reported to still be enrolled or PRIOR STARTDATE if they are reported to be disenrolled.

**SWITCH TO SHORTENED SURVEY:** Finish the survey with an abbreviated set of questions related to the demographic characteristics of the CHILD and LPER1. This may result, for example, because CHILD is reported to be disenrolled for 12 or months (placing them well outside the three sample domains—new enrollee, established enrollee, and disenrollee—for the survey).

**TERMINATE:** Indicates that the survey interview is ended (before completing the questionnaire in full). This may result, for example, because the respondent refuses to provide information on whether CHILD is covered by SCHIP/MEDICAID at the time of interview.

**TIMEFRAME:** This term refers to the period of interest for a particular question. The timeframe varies by section and by a combination of the classification of the child for purposes of completing the survey (see NEW ENROLLEE, ESTABLISHED ENROLLEE, or DISENROLLEE) and whether or not they are on SCHIP/Medicaid at the time of the interview. There are five timelines specified in the survey questionnaire; they include:

**(1) TIMEFRAME1, Section 3 (Coverage):** Pertains to the period of SCHIP/MEDICAID coverage. (The length of the timeframe is specified in each question). Specifically, the timeframe applies to the different sample classifications as follows:

NEW/ESTABLISHED ENROLLEES WHO ARE STILL ENROLLED: Timeframe is the current period with SCHIP/Medicaid coverage.

NEW/ESTABLISHED ENROLLEES WHO ARE DISENROLLED: Timeframe is the last period with SCHIP/Medicaid coverage.

DISENROLLEES WHO ARE STILL DISENROLLED: Timeframe is the last period with SCHIP/Medicaid coverage.

DISENROLLEES WHO REENROLLED: Timeframe is the prior period with SCHIP/Medicaid coverage.

**(2) TIMEFRAME2, Section 3 (Coverage):** Pertains to the period *before* the start of the SCHIP/MEDICAID coverage. (The length of the timeframe is specified in each question). DISENROLLEES are not asked questions related to this timeframe. Specifically, the timeframe applies to the different sample classifications as follows:

NEW/ESTABLISHED ENROLLEES WHO ARE STILL ENROLLED: Timeframe is the period before current SCHIP/Medicaid coverage.

NEW/ESTABLISHED ENROLLEES WHO ARE DISENROLLED: Timeframe is the period before last Medicaid/SCHIP coverage.

**(3) TIMEFRAME3, Section 3 (Coverage):** Pertains to the period *after* the end of SCHIP/MEDICAID coverage. (The length of the timeframe of is specified in each question). Only DISENROLLEES, and ESTABLISHED ENROLLEES who report being disenrolled, are asked questions related to this timeframe. Specifically, the timeframe applies to the different sample classifications as follows:

ESTABLISHED ENROLLEES WHO DISENROLLED: Timeframe is the period after last SCHIP/Medicaid coverage.

DISENROLLEES WHO ARE STILL DISENROLLED: Timeframe is the period after last SCHIP/Medicaid coverage.

DISENROLLLEES WHO ARE REENROLLED: Timeframe is the period after prior SCHIP/Medicaid coverage.

**(4) TIMEFRAME1, Sections 5 & 6 (Health Care):** Pertains to the focal period of interest for measuring the health care experiences of children in the sample. For NEW ENROLLEES, this is the period *before* the SCHIP/MEDICAID coverage. For ESTABLISHED ENROLLEES and DISENROLLEES, this is the period *after* the start of SCHIP/MEDICAID coverage. The exact timeframe of interest in both these periods is the most recent six months unless it is shorter than six months in length for some reason (in which case it is the full length of the period). For example, for a NEW ENROLLEE born three months before enrolling, Timeframe1 is this three month period before enrolling. Specifically, the timeframe applies to the different sample classifications as follows:

NEW ENROLLEES WHO ARE STILL ENROLLED: Timeframe is before the current period with SCHIP/Medicaid coverage.

NEW ENROLLEES WHO ARE DISENROLLED: Timeframe is before the last period with SCHIP/Medicaid coverage.

ESTABLISHED ENROLLEES WHO ARE STILL ENROLLED: Timeframe is the current period with SCHIP/Medicaid coverage.

ESTABLISHED ENROLLEES WHO ARE DISENROLLED: Timeframe is the last period with SCHIP/Medicaid coverage.

DISENROLLEES WHO ARE STILL DISENROLLED: Timeframe is the last period with SCHIP/Medicaid coverage.

DISENROLLEES WHO REENROLLED: Timeframe is the prior period with SCHIP/Medicaid coverage.

**(5) TIMEFRAME2, Sections 5 & 6 (Health Care):** Pertains to the secondary period of interest for measuring the health care experiences of selected children in the sample. For NEW ENROLLEES, this is the period *after* the start of the start of the SCHIP/Medicaid coverage on which the child was sampled for the survey. For DISENROLLEES, AND ESTABLISHED ENROLLEES who have disenrolled, this is the period *after* the end of their SCHIP/MEDICAID coverage. ESTABLISHED ENROLLEES who are still enrolled are not asked about this timeframe. The exact timeframe of interest in both these periods is the most recent six months or the full length of the period if it is less than 6 months. The timeframe applies to the different sample domains as follows:

NEW ENROLLEES WHO ARE STILL ENROLLED: Timeframe is the current period with SCHIP/Medicaid coverage.

NEW ENROLLEES WHO ARE DISENROLLED: Timeframe is after the last period with SCHIP/Medicaid coverage.

ESTABLISHED ENROLLEES WHO ARE STILL ENROLLED: Not applicable.

ESTABLISHED ENROLLEES WHO ARE DISENROLLED: Timeframe is after the last period with SCHIP/Medicaid coverage.

DISENROLLEES WHO ARE STILL DISENROLLED: Timeframe is the after the last period with SCHIP/Medicaid coverage.

DISENROLLEES WHO REENROLLED: Timeframe is after the prior period with SCHIP/Medicaid coverage.

**USUAL PLACE OF CARE.** The location that CHILD usually would go to seek medical care as defined by Question 5.1.



## **APPENDIX B**

### **METHODS FOR CONDUCTING THE 2002 CONGRESSIONALLY MANDATED SURVEY OF SCHIP ENROLLEES AND DISENROLLEES IN 10 STATES AND MEDICAID ENROLLEES AND DISENROLLEES IN 2 STATES**



The surveys of State Children’s Health Insurance Program (SCHIP) and Medicaid enrollees and disenrollees took place in 2002. They were conducted by telephone but included an in-person follow-up component. Interviews were completed with the parents or guardians of 17,296 SCHIP enrollees and recent disenrollees in 10 states, and with 2,666 Medicaid enrollees and recent disenrollees in 2 of the 10 states. This appendix describes sample design, instrument design, survey management, data collection methods, and the development of sampling weights for these surveys.

## **A. SAMPLE DESIGN AND SELECTION**

For this evaluation, we sampled two distinct groups. The first and most central group consisted of samples of recent and established SCHIP enrollees and recent SCHIP disenrollees in 10 states. As detailed below, this sample was designed to make inferences about SCHIP enrollees and disenrollees in each of the 10 states, and to make comparisons across the states. The second group included samples of recent and established Medicaid enrollees and recent Medicaid disenrollees in 2 of the 10 states in which we drew our SCHIP samples. The sample of recent Medicaid disenrollees was designed similarly to the first sample, to make inferences about Medicaid enrollees and disenrollees in the two states. It was also designed to draw comparisons between Medicaid SCHIP enrollees and disenrollees in those states.

The high costs of face-to-face interviews led to our adoption of a dual-frame sample design. The dual-frame design combined an unclustered sample that was interviewed by telephone only (when a telephone number could be found, using centralized locating efforts) with a clustered sample that was interviewed by telephone but had in-person field followup for locating of nontelephone households. With this approach, we could achieve the greater precision associated with the unclustered design, while retaining the enhanced response and coverage rates of the face-to-face approach. For all sample members, the interview was conducted with the person

most knowledgeable about the health care needs and services received for the sampled child. Typically, that person was either a parent or a legal guardian of the child. For in-person interviewing, the field locator provided the individual with a cell phone for completing the interview, thus ensuring a consistent mode of interview (phone) for all sample members.

Here, we provide additional detail on the sample design, focusing on (1) the state selection process, (2) the target population to be surveyed in the states, (3) the sample frame from which this target population was sampled for interview, and (4) the dual-frame sample design.

## **1. State Selection**

The state selection process flowed from three criteria specified in the legislation for the evaluation—that the 10 states were to (1) include a significant portion of uninsured low-income children, (2) use diverse programmatic approaches to providing child health assistance, and (3) represent various geographic areas. In addition, consistent with guidelines of the Assistant Secretary for Planning and Evaluation (ASPE), we selected the 10 states from a list of 25 states provided by ASPE and gave priority to states that were participating in a separate focus group study funded by ASPE.

Guided by these selection criteria, we chose the following states to participate in the SCHIP evaluation:

- California
- Colorado
- Florida
- Illinois
- Louisiana
- Missouri
- New Jersey
- New York
- North Carolina
- Texas

For the survey of Medicaid enrollees and recent disenrollees, we chose California and North Carolina. We chose those states based on three criteria: (1) the size of the low-income



population covered by Medicaid and SCHIP, (2) the integration of the Medicaid and SCHIP enrollment systems, and (3) the interest of ASPE in conducting the Medicaid survey in states that had adopted a separate SCHIP program.

## 2. Target Population Within States

For each state, the SCHIP and Medicaid samples were drawn from a particular target population. To identify these populations, we used the following operational definitions of SCHIP and Medicaid enrollees and disenrollees:

- ***Recent Enrollees:*** Individuals enrolled in the given program (SCHIP or Medicaid) for at least 1 month but less than 3 months at the time of sample frame construction.<sup>1</sup> The enrollment spell was preceded by at least 2 months of no coverage in the program.
- ***Intermediate Enrollees:*** Individuals enrolled in the program for more than 2 months but less than 5 months at the time of sample frame construction
- ***Established Enrollees:*** Individuals enrolled for 5 or more months in the program at the time of sample frame construction
- ***Recent Disenrollees:*** Individuals disenrolled from the program at the time of sample frame construction but enrolled in the preceding 2 months

As noted, the target population for both the SCHIP and Medicaid samples was limited to the following three of those four domains: (1) recent enrollees, (2) established enrollees, and (3) recent disenrollees. Intermediate enrollees were not included in the evaluation, because they would be too far from their enrollment date to recall their preenrollment experience with a high degree of reliability but would not have been enrolled for sufficient time to acquire experience with the program. In order to focus on children, the target population in both samples was

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<sup>1</sup>The sampling frame for the study was developed from SCHIP and Medicaid enrollment data provided by the states. The frame was used to identify the target population members for sample selection. The “time of sample frame construction” refers to the most recent month for which a state provided its enrollment data.

further limited to individuals age 18 or younger in the two enrollee domains, and to individuals 19 or younger in the recent disenrollee domain. (The age limit of 19 years was set for disenrollees in order to capture any children who had lost eligibility due to age restrictions.) Sampled children who were found to have died or moved out of state were not of interest for the evaluation and were ineligible for data collection. We recorded the event leading to the ineligibility of these children in order to allow for complete reporting of the events leading to disenrollment.

For the Medicaid samples in California and North Carolina, several additional groups of children were excluded from the target population in order to create samples that, aside from differences in income eligibility, were equivalent (and therefore comparable) to the SCHIP samples in the two states. Examples of these exclusions include children who resided in foster care or institutions; received Social Security Income payments; qualified as Medically Needy (California only); or received partial benefits because of dual eligibility for Medicare, immigrant status, or other reasons. In total, these exclusions led to the removal of about 56 percent and 10 percent of children from the eligibility files in California and North Carolina, respectively.

In several states, the domain definitions were refined further, based on two guiding factors: (1) the enrollment process used by the state, and (2) the logistical constraints of the SCHIP enrollee databases used to select the sample (discussed in the sample frame section below). The goal of these refinements was to classify the child's enrollment status based on when the parent believed the child's health care services would be covered—a date that might differ from the date on which the state actually began paying for services. For example, some states retrospectively enroll children as of the first day of the month in which the parent applied for SCHIP, but they might not determine the children to be eligible until 1 or more months after the application was received. As a result, the date that services began to be covered by the state

might be month(s) earlier than the date on which the parent is notified of the child's enrollment. To address this discrepancy, when defining the enrollment status, we used the child's determination/authorization date (the date on which eligibility is granted) as the start date for coverage; we did so because the determination/authorization date was likely to be the date that the parent would perceive as the start of coverage. Other states (such as New York) enroll children at the time of application; thus the database may contain "presumptive eligibles" that may later have been determined to be ineligible. In those states, the target population included only children for whom the determination process was completed and eligibility was confirmed. Furthermore, as in the states with retroactive enrollment, we assumed that enrollment began at the determination date.

### **3. Sampling Frame**

The *sampling frame* for a survey is the list, or mechanism, used to identify population members for sample selection purposes. For this study, we used data from the state SCHIP and Medicaid eligibility and enrollment files to construct the frames for each state and program.

Acquisition and use of these data required frequent and detailed interactions with state program staff. The process began when staff from Mathematica Policy Research, Inc. (MPR) contacted senior state staff to introduce themselves, and to explain the purpose of the study, why and how the state was selected for the study, and the need for a memorandum of understanding (MOU) detailing the data needs and confidentiality requirements and documents. Subsequent discussions with program staff focused on data elements that would support sampling criteria and analytic criteria, the source of program data, the format of the data available for our use, the timeliness of the data, and periodic data extracts and delivery.

Data elements needed to support the survey sampling and analytic effort included:

1. Application date(s) and their associated status codes
2. Eligibility determination dates and their associated reason codes
3. Retroactive or presumptive eligibility status codes
4. Enrollment start and end dates
5. Disenrollment dates and their associated reason codes
6. Individual and household identifiers
7. Parent/guardian names
8. Street addresses
9. City, state, and zip code
10. Telephone numbers
11. Parent/guardian social security numbers
12. Children's demographic characteristics, including age, race, and sex

Timeliness of the data was an important issue to capture the populations of recent enrollees and disenrollees. Time-related issues included the time required by state and local agencies for processing initial applications and redeterminations and the use of retroactive or prospective enrollment (that is, enrollment dates set to the application date or a date prior to the application date). Our concern was that delays in updating the eligibility histories could affect the timely construction of sampling frames and sampling selection. In our discussions with state program staff, we requested delivery of data by the state within 2 weeks of the specified data extract cutoff date. With few exceptions, the states were timely in their delivery of data.

To support survey sampling and analysis, a uniform data structure was designed. The uniform structure reduced the need for unique, state-specific programming of sample selection. It also provided a consistent format for analytic programming. The uniform file contained only one record per client based on the state-level client recipient number. In the single uniform

record, a client's participation in SCHIP (or Medicaid) was indicated for each month up to the file extract date. In the two states with combination programs (Illinois and New Jersey), the uniform record described client participation in both the separate SCHIP component and the Medicaid-expansion SCHIP component; in the two states with Medicaid-expansion programs (Louisiana and Missouri) and in the two states included in the Medicaid study (California and North Carolina), the uniform record included information on the clients' participation in both SCHIP and Medicaid. The same data element naming convention and data definitions were used in all files.

Three notable problems occurred during the development of the sample frame, which were addressed to the greatest extent possible:

1. Client contact information needed to facilitate high survey response rates, such as telephone numbers and addresses, was limited and of poor quality in three states. We requested supplemental data but were successful in acquiring those data in only one of the three states.
2. In three states, data elements used to determine application and/or determination dates were not available. As noted, this limitation, along with variation in the process of enrollment across states, led to refinements in the sample definitions used for the study. In all instances, however, the operational definitions used for purposes of sampling remained quite close to the general or targeted definitions defined previously.
3. In one state, there were no recipient identifiers that could be used to link across different files. In three other states, case identifiers used to relate children with one another were either not present or not reliable. In all cases, best efforts were made to proxy for these identifiers, using additional information on the file.

#### **4. Sample Design**

The sample for the survey was separated into two types of households, based on the availability of telephone information:

- *Telephone households* were defined as households with telephone service for which telephone numbers could be located.
- *Nontelephone households* were defined as (1) households without telephone service, and (2) households for which a telephone number could not be located.<sup>2</sup>

To interview the households as efficiently as possible, we used a variation of the classic subsampling-for-nonresponse-follow-up design. In each state (except New Jersey), two independent samples were selected for the SCHIP survey and for the Medicaid survey—one clustered and one unclustered.<sup>3</sup> (We also drew two independent samples for the Medicaid survey in two states.) Telephone households were interviewed in both samples. Nontelephone households were interviewed only in the clustered sample. Across both samples, telephone households were interviewed by telephone only. This restriction was necessary for the integration of the two samples; it also reduced mode effects across samples, because telephone households were always interviewed by telephone, regardless of the sample design (clustered or nonclustered) from which they were drawn.

Each sample design was replicated with up to three different sample rounds and was fielded in each state. Each sample round was composed of sampled children from each SCHIP enrollment domain and, when applicable, from each Medicaid enrollment domain. The staged fielding of the sample was particularly important in reducing the time between sample frame construction and data collection. In addition, for states with the smallest populations of enrollees, the multiple rounds were needed to ensure that sufficient sample sizes of recent enrollees and recent disenrollees were obtained from each program. The sample for the last

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<sup>2</sup> The latter group included households with unlisted numbers whose current numbers were not recorded in the SCHIP or Medicaid enrollment files.

<sup>3</sup> For New Jersey, we used only an unclustered design because the state is sufficiently geographically small that the use of a clustered sample was deemed unnecessary.

round for each state included a reserve sample from which additional sample cases were released for data collection if response or eligibility rates were unexpectedly low.

Because of the large population of enrollees in California and Texas, the full sample was selected from the March 2002 enrollment files. For six states (Florida, Illinois, Missouri, New Jersey, New York, and North Carolina), two sample rounds, which were based on the January and March 2002 enrollment files, were used. The samples for Colorado and Louisiana, which had the smallest enrollment populations, were selected using three sample rounds (using January, March, and May 2002 enrollment files). We avoided sampling multiple children from the same household or sampling households in more than one sample round. Each sample draw was derived from the universe existing at the time of sampling but took into account whether a household was in the sampling frame or the sample of the prior round(s).

In each sample round, we classified children into the three domains (recent enrollees, established enrollees, and recent disenrollees), using the databases provided by the states. In states with multiple sample rounds, the populations of established enrollees overlapped extensively; however, by definition, recent enrollees and recent disenrollees were unique to a specific sample round. Enrollment status for a given child could vary from one sampling round to another. (For example established enrollees at one time could become recent disenrollees at the next time.)

In each round, the sample consisted of a clustered sample and an unclustered sample of children in the SCHIP domain (except for New Jersey) and the Medicaid domain (in California and North Carolina). We used sampling procedures that prevented the selection of the same child or household at subsequent rounds while preserving the probability structure of the two independent samples in each round. The resulting sample design included 38 separate samples across the 10 states (see Table B.1).

TABLE B.1

## SAMPLE DESIGN CHARACTERISTICS, BY STATE AND STUDY POPULATION

| State                   | Extract<br>File Date(s) | Samples <sup>a</sup> | Field Sample Used for<br>Nontelephone Households       |
|-------------------------|-------------------------|----------------------|--|
| <b>SCHIP Samples</b>    |                         |                      |  |
| California              | March                   | 2                    | Subsample in each domain                               |
| Colorado                | January, March, May     | 6                    | All cases  |
| Florida                 | January, March          | 4                    | All recent disenrollees;<br>Subsample of other domains |
| Illinois                | January, March          | 4                    | All cases  |
| Louisiana               | January, March, May     | 6                    | All cases  |
| Missouri                | January, March          | 4                    | All cases  |
| New Jersey              | January, March          | 2                    | All recent disenrollees;<br>Subsample of other domains |
| New York                | January, March          | 4                    | Subsample in each domain                               |
| North Carolina          | January, March          | 4                    | Subsample in each domain                               |
| Texas                   | March                   | 2                    | Subsample in each domain                               |
| <b>Medicaid Samples</b> |                         |                      |  |
| California              | March                   | 2                    | Subsample in each domain                               |
| North Carolina          | January, March          | 4                    | Subsample in each domain                               |

Note: For New Jersey, only an unclustered sample was used; all other states had both a clustered sample and an unclustered sample.

<sup>a</sup>The samples represent the count of state-level samples selected for the survey. Each sample contained three domains: (1) recent enrollees, (2) established enrollees, and (3) recent disenrollees.



### a. Selecting the Clustered Sample

For the clustered design, which included in-person tracking and locating, the first step in sample selection for each program was to define primary sampling units (PSUs) for each state. These PSUs were geographic areas that met a specified minimum number of total enrollees and recent disenrollees. The areas were defined based on one or more counties and, in some highly populated areas, such as Miami, Florida, and Denver, Colorado, zip code areas. The same set of PSUs was used for all sample rounds for both the Medicaid and SCHIP samples.

A composite size measure strategy was used to select sample PSUs, as well as households and children for interview.<sup>4</sup> As the first step, we defined a composite size measure,  $S(h, i, j)$ , for each household  $j$  from PSU  $i$  in state  $h$  ( $h = 1, 2, \dots, 10$ ) containing one or more eligible children from the three SCHIP domains and (where appropriate) the three Medicaid enrollment domains.

Let  $C_d(h, i, j)$  be the total number of domain  $d$  children in household  $j$  from PSU  $i$  of state  $h$ . Let  $f_d(h)$  be the desired sampling rate for domain  $d$  members in state  $h$ , or:

$$(1) \quad f_d(h) = \frac{m_d(h)}{C_d(h, +, +)} ,$$

where  $m_d(h)$  is the desired sample from domain  $d$  ( $d = 1, 2, \dots, D$ )<sup>5</sup> in state  $h$  and  $C_d(h, +, +)$  is the total number of domain  $d$  members in state  $h$ .<sup>6</sup> The composite size measure  $S(h, i, j)$  for household  $j$  from PSU  $i$  of state  $h$  is then defined as:

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<sup>4</sup> See Folsom et al. (1987) for a discussion of composite size measures.

<sup>5</sup> The domains are composed of the three SCHIP enrollment groups and, for the subset of two states, the three Medicaid enrollee groups. Thus,  $D = 3$  for eight states and  $D = 6$  for two states.

<sup>6</sup> The “+” sign denotes summation over all households and PSUs in state  $h$ .

$$(2) \quad S(h, i, j) = \sum_{d=1}^D f_d(h) C_d(h, i, j).$$

This composite size measure was summed over all households in PSU  $i$  and state  $h$  to produce the size measure  $S(h, i, +)$  for PSU  $i$  in state  $h$ , which was used in selecting the first-stage sample of PSUs.<sup>7</sup>

In most states, 30 PSUs were selected, with probability proportional to this composite size measure and with minimal replacement, using Chromy's (1979) procedure.<sup>8</sup> In selecting the sample PSUs from the frame of  $N_1(h)$  PSUs in state  $h$ , Chromy's procedure partitioned each state's  $N_1(h)$  total PSUs into sampling zones of approximately equal size, based on the composite size measure  $S(h, i, +)$ . Exactly one PSU was selected from each zone. The zones were defined so that all pairs of PSUs had a chance of appearing together in the sample (a requirement for unbiased estimation of sampling variances).<sup>9</sup> Using a controlled ordering of the PSUs, this "zoned sequential selection" made possible an implicit stratification of PSUs that ensured that sample PSUs were representative of selected variables of interest. Two of these variables were the urbanicity and the geographic location of the PSU, which ensured selection of both urban and rural PSUs and the distribution of the sample across the state.

For each domain within a state, we used a composite size measure to ensure that the desired sample sizes were achieved. The composite size measure for PSU  $i$  in state  $h$  was defined as:

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<sup>7</sup> The "+" sign in  $S(h, i, +)$  denotes summation over all households  $j$  within PSU  $i$ .

<sup>8</sup> In California, 60 PSUs were selected; in New Jersey, no PSUs were selected.

<sup>9</sup> This requirement was accomplished by selecting a random starting point and treating the frame as a circular list.

$$(3) \quad S(h, i, +) = \sum_j S(h, i, j) = \sum_{d=1}^D \sum_j f_d(h) C_d(h, i, j),$$

where  $C_d(h, i, j)$  is the number of children in domain  $d$  of household  $j$  of PSU  $i$  in state  $h$ , and  $f_d(h)$  is the desired overall sampling rate for domain  $d$  in state  $h$ . Prior to selection, we again used a controlled ordering procedure, this time for the households within each PSU. Some of the variables for ordering were the sampling domains and, when available, the race of the children in the household.

For each selection of the  $i$ th PSU from the  $h$ th state,  $n_2(h)$  households were selected, with probability proportional to the households' composite size.<sup>10</sup> When multiple enrollee types were present within a household, we randomly determined the enrollee type to interview, using differential probabilities based on the desired state  $h$  sampling rates  $f_d(h)$  for domain  $d$ . If multiple children were present in the sampled household for the enrollee domain selected, we randomly selected one child from the selected enrollee domain to be interviewed. Using the composite size measure for each household enabled us to oversample households with multiple eligible children while ensuring that the selection probabilities were equal within enrollment domains, regardless of household size.

In states for which we included a second (or third) sampling round, we followed procedures designed to avoid selection of households already chosen in a previous sample round, and to account for enrollees who were in the sampling frame for a prior round. By definition, recent enrollees and recent disenrollees were unique populations in each sample round. However,

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<sup>10</sup> For some sample rounds for some states, a household was selected with certainty if the number of enrollees of a specific type (most often, recent disenrollees) was large enough to produce a composite size measure above a threshold.

established enrollees could have had their status across multiple survey rounds (for example, in both January 2002 and March 2002). In order to maintain nearly equal sampling rates across the rounds, the established enrollees in round two and (as needed) in round three were divided into separate sampling strata depending on the number of rounds for which they had that status. The sample for the later rounds was then allocated to each stratum accounting for the sampling rate in the prior round(s) of established enrollees who appeared in both the later round and an earlier round.

The composite size measure was also adjusted to ensure that households were not selected multiple times across sample rounds. We made the adjustment by creating a household-level weight for each sample round after the first round that reflected the probability of *not* being selected in the previous round. The probability was constructed as follows:

- Households that were sampled for a prior round received a score of zero.
- Households that were on the frame(s) in prior round(s) were assigned a probability equal to the likelihood of not being selected in those prior round(s).
- Households not on the frames for the prior round(s) received a probability score of 1.

The modified composite size measure defined for each household was then the product of the probability score and the round-specific composite size measure for the household. Households were then selected according to the procedures outlined above, but with this modified composite size measure. This approach prevented the multiple selection of the same household while ensuring nearly equal selection probabilities across sample rounds.

#### **b. Selecting the Unclustered Sample**

For the unclustered, telephone-only design, we first sampled households; if the household included children in two or more domains, we then selected the domain for which a child would

be selected and, finally, selected the child within the domain. Among households with multiple children eligible for interview, one child was randomly selected for interview. Prior to sample selection, the households were sorted by the various combinations of enrollment domain(s) to which their eligible children belonged (recent enrollee only, recent enrollee and established enrollee, recent enrollee and recent disenrollee, established enrollee only, and so forth). Then, within each combination, the households were further sorted by their race/ethnicity, metropolitan status, and geographic area. Through this process, we created an implicit stratification of the households from which to draw the sample for each domain and state.

A composite size measure was defined for each household that reflected the number of eligible children in the household (including Medicaid enrollees for the two states where they were to be sampled for the Medicaid analysis), as well as their desired, overall selection probabilities for the unclustered design. Households were selected with probability proportional to their composite size measures. For sampled households with multiple children eligible for survey, we used the desired subsampling rates for the enrollee domains in randomly sampling one child for interview. This composite size measure approach ensured that we achieved nearly equal selection probabilities within each state for each enrollee domain, regardless of the household's size. Similar to the approach used for the clustered sample, the selection process for the unclustered sample prevented selection of the same household in multiple rounds.

To account for individuals and households already selected for the clustered sample, we divided the sampling frame for the unclustered sample into two strata: (1) individuals in the geographic areas included in the sampled PSUs for the clustered sample, and (2) individuals in the rest of the state. We allocated the unclustered sample across these two strata. In the stratum of individuals in the PSUs of the clustered sample, we had to account both for households and individuals selected in any prior rounds and for the households and individuals selected in the

clustered sample (for the current round and for any prior rounds). In the stratum of individuals not in the PSUs of the clustered sample, we had to account only for households and individuals selected in any prior rounds. In most states and most rounds of data collection, adequate numbers of households and individuals were available to enable us to select separate unclustered and clustered samples. In North Carolina, the number of recent disenrollees in the March extract was very small. All recent disenrollees in the North Carolina PSUs were selected for the sample. Respondents among those recent disenrollees were included as part of both the clustered sample and the unclustered sample.

## **B. SURVEY QUESTIONNAIRE**

The survey questionnaire addressed a broad range of topics related to the ease of application and enrollment in SCHIP/Medicaid—redetermination in and disenrollment from the program, health care coverage for the child, the child’s health, experiences with and use of care for the child, the respondent’s attitude toward health, and the parents’ demographic characteristics. Whenever possible, we used survey questions that had been validated from existing surveys, including the Evaluation of Five Section 1115 Medicaid Reform Demonstrations Survey, the National Survey of America’s Families, Consumer Assessment of Health Plans Survey, and Kaiser Family Foundation National Medicaid Survey Barriers to Medicaid for Children. Table B.2 summarizes, by section, the topics included in the questionnaire. (For a complete version of the questionnaire, see Appendix A of the main report.) On average, the questionnaire took about 40 minutes to administer.

As shown in Table B.3, survey respondents were asked different questions, depending on the enrollment domain in which they were sampled (recent enrollee, established enrollee, recent

TABLE B.2

## SURVEY QUESTIONNAIRE CONTENT

**Section 1: Introduction**

Confirm child lives in household  
 Confirm child lives in target state  
 Confirm respondent is the person most familiar  
 with the child's health care  
 Read confidentiality statement

**Section 3: Application, Enrollment, Redetermination, and Disenrollment<sup>a</sup>**

How respondent heard about program  
 Was how heard about program an important part  
 of the decision to enroll child in  
 SCHIP/Medicaid?  
 Experiences with enrollment process  
 Experience with rejection of application  
 Number of times successfully enrolled  
 Age of child when first enrolled  
 Reason for enrollment  
 Was assistance with application process  
 necessary?  
 Application and enrollment processes and  
 comparisons between SCHIP and Medicaid  
 Coverage available prior to notification  
 Renewal process and experience with rejection  
 of renewal

**Section 2: Health Care Coverage<sup>a</sup>**

Current enrollment status  
 Establish end date(s) of coverage  
 Establish last or current start date  
 Establish previous end date and start date for  
 disenrollees who enrolled again  
 Features of current, last, or previous  
 SCHIP/Medicaid coverage  
 Premiums  
 Types of service provided  
 Co-payments  
 Prescription drug coverage  
 Period before SCHIP/Medicaid began coverage  
 If insured, features of plan  
 If uninsured, how long and why  
 Period after SCHIP/Medicaid coverage ended  
 If uninsured, how long and why  
 If insured, features of plan

Type of service provided  
 Co-payments  
 Prescription drug coverage

**Section 4: Child's Health**

Child's health status  
 Child's health status versus 12 months ago  
 Any impairment(s) requiring special equipment  
 or limiting mobility  
 Existing health conditions that have been  
 diagnosed  
 Diabetes  
 Asthma  
 Any need for doctor-prescribed medications or  
 injections  
 Mental health or behavioral problems  
 Any need for prescription medications or  
 injections  
 Do mental health or behavioral problems limit  
 child's abilities at school?

**Section 5: Access to, Barriers to, and Satisfaction with Usual Place of Care**

Usual place for care child actually went to or  
 would have gone to if sick or needed advice  
 If no usual place, why not, what type of place  
 child would have gone to, what type of place  
 visited  
 If usual place for care, rate features of place  
 Distance  
 Waiting time  
 Transportation  
 Particular doctor  
 How child was treated  
 Ease of care  
 Where to get advice if usual place closed  
 How long a wait for care  
 If place of care changed, main reason for change  
 Type of new place  
 Reason for visit  
 Features of this place of care  
 How well treated  
 Usual place for dental care child actually went to  
 or would have gone to  
 If no usual place, why not

TABLE B.2 (continued)

**Section 6: Child's Use of Health Care Services**

Health care services child used  
 Number of hospital visits  
 Number of nights in hospital  
 Number of emergency room visits  
 Number of times child saw a doctor, PA, nurse, or midwife  
 Use of specialists  
 Number of visits for preventive care  
 Use of mental health professionals  
 Number of times used mental health professionals  
 Use of dentists  
 Was needed care delayed?  
 Did child take less than prescribed dose of medication?  
 Confidence that child could get needed health care  
 Satisfaction with health care received  
 How worried was respondent about meeting child's health care needs?  
 Stress about meeting child's health care needs  
 Financial problems in meeting health care needs

**Section 7: Parents' Characteristics and Attitudes About Health**

How respondent perceived own health  
 Attitude about health and health care  
 Establish household composition  
 Establish who is legal guardian of child  
 Respondent's age  
 Respondent's education level  
 Respondent's place of birth  
 Other legal guardian of child in household  
 Other legal guardian's education level  
 Other legal guardian's place of birth  
 Health insurance status of legal parents or guardians in household  
 If insured, why is child not insured by same?  
 Features of legal guardian's health insurance  
 Is legal parent/guardian married to another person who is not the legal guardian of child?  
 Can child be covered by this person's insurance?  
 Household earnings for past 12 months  
 TANF recipient for past 2 years

Food stamp recipient for past 2 years  
 Health care spending in past 12 months  
 Child's racial or ethnic background and language spoken in home

**Section 8: Telephones in Household**

Number of other telephone numbers used in household  
 Number working in past 3 months  
 Verify address

<sup>a</sup>Order of these sections was reversed during survey administration.

PA = physician's assistant.



TABLE B.3

## SURVEY QUESTIONS ANSWERED BY RESPONDENT, BY THE SAMPLE MEMBER'S ENROLLMENT DOMAIN

| Definition   | Introduction<br>(Section 1) | Application,<br>Enrollment<br>Predetermination,<br>Disenrollment<br>(Section 2) | Child's<br>Health Care<br>Coverage<br>(Section 3) | Child's Health<br>(Section 4) | Time Frame for<br>Sections 5-6  | Access and<br>Barriers<br>to Care<br>(Section 5) | Child's Use of<br>Health Care<br>Services<br>(Section 6) | Parent<br>Characteristics<br>(Section 7) | Telephone<br>Coverage<br>(Section 8) |
|--|-----------------------------|---|---|-------------------------------|---|--|--|--|--------------------------------------|
| <b>Statuses Within the Recent Enrollee Domain</b>  |                             |   |   |                               |   |  |  |  |                                      |
| Recent Enrollee Who Has<br>Been Enrolled for Fewer<br>than 12 Months                                   | Yes                         | Yes   | 2.1-2.9.1B,<br>2.20-2.44                          | Yes                           | The 6 months<br>before (child)'s<br>current SCHIP<br>coverage started | Yes  | Yes  | Yes                                      | Yes                                  |
| Recent Enrollee Who<br>Was Born in the 6<br>Months Before SCHIP<br>Started                             | Yes                         | Yes   | 2.1-2.9.1B,<br>2.20-2.44                          | Yes                           | Before (child)<br>was on SCHIP  | Yes  | Yes  | Yes                                      | Yes                                  |
| Recent Enrollee Who<br>Obtained Coverage at Birth<br>and Has Been Enrolled for<br>12 Months or More    | Yes                         | Yes   | 2.1-2.9.1B,<br>2.20-2.31                          | Yes                           | Past 6 months   | Yes  | Yes  | Yes                                      | Yes                                  |
| Recent Enrollee Who<br>Obtained Coverage at Birth<br>and Has Been Enrolled for<br>Fewer than 12 Months | Yes                         | Yes   | 2.1-2.9.1B,<br>2.20-2.31                          | Yes                           |   | No   | No   | 7.4.a-7.4.1.9,<br>7.109-7.120            | 8.15 to end                          |
| Recent Enrollee Who Has<br>Been Enrolled for 12<br>Months or Longer                                    | Yes                         | Yes   | 2.1-2.9.1B,<br>2.20-2.44                          | Yes                           | Past 6 months   | Yes  | Yes  | Yes                                      | Yes                                  |
| Recent Enrollee Who Has<br>Been Disenrolled for 6<br>Months but Fewer than 12<br>Months                | Yes                         | Yes   | 2.1-2.9.1B,<br>2.20-2.44                          | Yes                           | The 6 months<br>before (child)'s<br>last SCHIP<br>coverage ended      | Yes  | Yes  | Yes                                      | Yes                                  |
| Recent Enrollee Who Has<br>Been Disenrolled for 12<br>Months or Longer                                 | Yes                         | Yes   | 2.1-2.51  | Yes                           |   | No   | No   | 7.4.a-7.4.1.9,<br>7.109-7.120            | 8.15 to end                          |

TABLE B.3 (continued)

| Definition  | Introduction<br>(Section 1) | Application,<br>Enrollment<br>Predetermination,<br>Disenrollment<br>(Section 2) | Child's<br>Health Care<br>Coverage<br>(Section 3) | Child's Health<br>(Section 4) | Time Frame for<br>Sections 5-6                                   | Access and<br>Barriers<br>to Care<br>(Section 5) | Child's Use of<br>Health Care<br>Services<br>(Section 6) | Parent<br>Characteristics<br>(Section 7)                         | Telephone<br>Coverage<br>(Section 8) |
|---|-----------------------------|---|---|-------------------------------|--|--|--|--|--------------------------------------|
| <b>Statuses Within the Established Enrollee Domain</b>  |                             |   |   |                               |  |  |  |  |                                      |
| Established Enrollee Who<br>Has Been Enrolled 6<br>Months or More                                       | Yes                         | Yes   | 2.1-2.9.1B,<br>2.20-2.44                          | Yes                           | Past 6 months  | Yes  | Yes  | Yes  | Yes                                  |
| Established Enrollee Who<br>Obtained Coverage at Birth  | Yes                         | Yes   | 2.1-2.9.1B,<br>2.20-2.31                          | Yes                           | Past 6 months  | Yes  | Yes  | Yes  | Yes                                  |
| Established Enrollee<br>Enrolled for Fewer than 6<br>Months   | Yes                         | Yes   | 2.1-2.9.1B,<br>2.20-2.44                          | Yes                           | While the (child)<br>was on SCHIP                                | Yes  | Yes  | Yes  | Yes                                  |
| Established Enrollee Who<br>Has Been Disenrolled 6<br>Months but Fewer than 12<br>Months                | Yes                         | Yes   | 2.1-2.9.1B,<br>2.20-2.25,<br>2.60 to end          | Yes                           | The 6 months<br>before (child)'s<br>last SCHIP<br>coverage ended | Yes  | Yes  | Yes  | Yes                                  |
| Established Enrollee Who<br>Has Been Disenrolled for<br>12 Months or More                               | Yes                         | Yes   | 2.1-2.51  | Yes                           |  | No   | No   | 7.4.a-7.4.1.9,<br>7.109-7.120                                    | 8.15 to end                          |
| <b>Statuses Within the Recent Disenrollee Domain</b>  |                             |   |   |                               |  |  |  |  |                                      |
| Disenrollee Who Has Been<br>Disenrolled for Fewer than<br>12 Months                                     | Yes                         | Yes   | 2.1-2.9.1B,<br>2.20-2.25,<br>2.60 to end          | Yes                           | The 6 months<br>before (child)'s<br>last SCHIP<br>coverage ended | Yes  | Yes  | Yes  | Yes                                  |
| Disenrollee Who Has Been<br>Currently Enrolled for 6<br>Months or More                                  | Yes                         | Yes   | 2.1-2.9.1B,<br>2.20-2.25,<br>2.60 to end          | Yes                           | Past 6 months  | Yes  | Yes  | Yes  | Yes                                  |
| Disenrollee Who Has Been<br>Disenrolled for 12 Months<br>or More  | Yes                         | Yes   | 2.1-2.51  | Yes                           |  | No   | No   | 7.4.a-7.4.1.9,<br>7.109-7.120                                    | 8.15 to end                          |
| Disenrollee Who Has Been<br>Disenrolled for 12 Months<br>or More—Recontacted<br>and Completed Interview | Yes                         | Yes   | 2.1-2.5, 2.26,<br>2.60-2.65                       | Yes                           |  | No   | No   | 7.4.a-7.4.1.9,<br>7.109-7.120,<br>7.4.5.1-7.4.5.6,<br>7.90-7.101 | 8.15 to end                          |

TABLE B.3 (continued)

| Definition  | Introduction<br>(Section 1) | Application,<br>Enrollment<br>Predetermination,<br>Disenrollment<br>(Section 2) | Child's<br>Health Care<br>Coverage<br>(Section 3) | Child's Health<br>(Section 4) | Time Frame for<br>Sections 5-6 | Access and<br>Barriers<br>to Care<br>(Section 5) | Child's Use of<br>Health Care<br>Services<br>(Section 6) | Parent<br>Characteristics<br>(Section 7) | Telephone<br>Coverage<br>(Section 8) |
|---|-----------------------------|---|---|-------------------------------|--------------------------------|--|--|--|--------------------------------------|
| <b>Statuses That Apply to All Domains</b>                 |                             |   |   |                               |                                |  |  |  |                                      |
| No Information on Whether<br>Sample Child Is Enrolled     | Yes                         | Yes   | 2.1   | Yes                           |                                | No   | No   | 7.4.a-7.4.1.9,<br>7.109-7.120            | 8.15 to end                          |
| Missing Date(s) to<br>Determine Duration of<br>Enrollment | Yes                         | Yes   | 2.1-2.51  | Yes                           |                                | No   | No   | 7.4.a-7.4.1.9,<br>7.109-7.120            | 8.15 to end                          |

disenrollee) and on the information provided during the interview about the child's start and end dates for coverage. In addition, the wording of questions varied, depending on responses to prior questions, most notably, the dates of coverage. For example, several questions about children's service use and other topics were anchored to a specific time frame that varied both by the children's enrollment domain and the self-reported dates of enrollment. For instance, in the case of a recent enrollee who reported a start date consistent with the sample frame drawn from state administrative data, the specified time frame was the 6 months prior to entry in SCHIP (or Medicaid, in the case of the Medicaid sample); whereas, in the case of an established enrollee who confirmed having been covered for at least 6 months, the specified time frame was the most recent 6 months during which the child had been covered by the program.

## **C. SURVEY MANAGEMENT**

### **1. Training**

MPR conducted all the telephone interviewing from its Columbia, Maryland, telephone center. One hundred and seventy-nine interviewers worked on and completed interviews on the project. Thirty-one percent of the interviewers conducted interviews in both Spanish and English.

Newly hired interviewers first received a 12-hour general training to acquire the knowledge and skills necessary to collect accurate and complete data using computer-assisted telephone interviewing (CATI). MPR telephone center staff conducted general training that covered the concept of samples, the importance of reaching the correct respondent, confidentiality, listening, understanding bias and neutral probing, persuasion, recording responses carefully and completely, and learning standardized recording of calls or call attempts.

After general training, all interviewers participated in a 16-hour, two-part, project-specific training session. The session was conducted by MPR project staff and telephone center staff. To

ensure that all interviewers received the same training, a series of overheads and a training protocol were developed and used for all training sessions. The objective of the first part of the project-specific training was to ensure that the interviewers had a general understanding of the project. In this part of the training, interviewers were first introduced to the purpose of the study, the study's funding source, various data collection components, data collection methods, and planned use of the data. Interviewers then learned about the characteristics of SCHIP and Medicaid, the people who were covered by the programs, and the different strategies that states used to implement the programs. In addition, interviewers were informed about the state selection process for the survey, criteria for selecting enrollees and disenrollees, and how the sample would be released to the study.

The objective of the second part of the project-specific training was to ensure that interviewers became familiar with the survey instrument, and that they became confident about their ability to contact respondents and to administer the questionnaire. First, the trainers discussed the various sections of the survey and the topics covered in each section. Next, the discussion covered respondent characteristics and the contact information that would be available. Because the sample included three types of respondents (recent enrollees, established enrollees, and recent disenrollees) who would be responding to different sets of questions, depending on how long their children had been covered or not covered by SCHIP or Medicaid, the training covered three question-by-question reviews of the survey instrument. The first review involved a practice session of the questions asked of a respondent with a child who had been in the program for more than 6 months at the time of the interview (an established enrollee). This review was followed by two additional reviews: (1) a practice session interviewing a respondent with a recently enrolled child, and (2) a practice session interviewing a respondent with a recently disenrolled child. Role-playing was used to enable interviewers to practice

contact procedures (including locating the correct respondent), as well as methods of persuasion and refusal avoidance. Interviewers practiced using the CATI instrument until the system and its navigation between screens became so familiar that they could spend all their time and attention listening, recording, and responding to respondents' concerns, without "technical" distractions.

In training, particular attention was paid to techniques designed to help respondents focus on their experiences with the program (SCHIP or Medicaid), and to help all sample members recall as accurately as possible the time period or periods during which their child had been covered by health insurance. Although the state-specific name of SCHIP (and Medicaid) was programmed into the instrument for each sample member, not all respondents were expected to recognize the program by that name. In the event that respondents did not recognize the state-specific program name, interviewers were trained to use the generic name of the program or any other possible name for the program used in the state. If the name of the health plan in which the child was enrolled was available, that name was used to help the respondent recognize the program. Since accurate recollection of the time period(s) during which the child was or was not covered by SCHIP, Medicaid, or other health insurance programs was so important for the survey, an additional set of confirmatory questions was administered. These questions, based on previous responses, were designed to ensure that the respondents remembered and reported time frames correctly. If the respondents could not confirm their responses, the program allowed the interviewer to record changes in the time frames reported by the respondents. The training emphasized how to deal with respondents who were hesitant about time frames and how the questions in the instrument could help respondents resolve those ambiguities.

After data collection started, each interviewer received an additional 5 hours of training that included debriefings on survey questions and responses that interviewers identified as being particularly challenging, as well as reviews of answer categories. There were also sessions

devoted to refusal-conversion training and to morale boosting. Interviewers who conducted interviews in Spanish received an additional 4-hour training and practice to become familiar with the Spanish version of the interview.

Field locators participated in a 2-hour telephone training session. This training was an abbreviated version of the telephone interviewer training that did not include training on the survey instrument. In addition, field locators received special training in methods of locating sample members in the field, how to introduce the study after they had contacted sample members in person, and how to connect sample members with a telephone interviewer in MPR's call center to complete the interview. Since every case selected for in-person locating had to have an equal chance of being completed, field locators were trained to attempt contacting a household at least two times on two different days (one of which had to be a weekend) at two different times of the day.

## **2. Monitoring**

To ensure the highest possible quality of data collection, approximately five percent of the interviews were monitored by telephone supervisory staff. Special monitoring sessions were scheduled for interviewers who were new to the project and for interviewers with high refusal or low productivity rates. The monitoring system enabled supervisors to listen to interviews without either the interviewers or the respondents being aware that monitoring was occurring. (Both interviewers and respondents were informed that interviews might be monitored.) The monitoring system also enabled supervisors to view the interviewers' input screens to monitor the accuracy of recording of responses.

Monitoring concentrated on identifying such problems as inaccurate presentation of information about the study, errors in reading questions, biased probes, inappropriate use of feedback in responding to questions, inappropriately interrupting the respondent, and offering

opinions about specific questions or about the survey as a whole. After each monitored interview, a supervisor reviewed the observations with the interviewer. Results of the monitoring were maintained electronically to evaluate interviewers' progress over time. If necessary, additional training was provided; if performance problems persisted, interviewers were removed from the project. Supervisors with Spanish-language capabilities monitored interviews conducted in Spanish.

### **3. Performance**

Interviewers completed an average of 108 interviews. The number of completed interviews by interviewer varied considerably, with 19 percent of the interviewers completing more than 200 interviews, 20 percent of the interviewers completing between 100 and 200 interviews, and over 40 percent completing fewer than 50 interviews. Interviewers worked an average of 6.5 months on the project, with about 11 percent working fewer than 2 months and about 9 percent of the interviewers working on the survey for the duration of the study. Interviewers who conducted interviews in both Spanish and English completed about the same number of interviews in English as did interviewers who conducted interviews in English only. However, in addition to the English interviews, Spanish interviewers completed an average of 67 interviews in Spanish. The higher number of completed interviews among the dual-language interviewers can be partially attributed to the fact that those interviewers generally remained longer on the project (an average of 7.7 months, compared with an average of 6.5 months for interviewers who interviewed in English only).

### **D. DATA COLLECTION METHODS**

All interviews were completed using CATI. Because of the complexity of the survey instrument, we did not consider any other method of interviewing respondents. However, a



variety of methods were used to optimize our ability to contact sample members as quickly as possible, including prelocating of the sample, optimal scheduling of call attempts, using a sophisticated locating database, and field locating with cell phone interviewing.

## **1. Initial Locating and Advance Mailings**

Information to be used to contact the families came from the state SCHIP and Medicaid management information systems (MISs). For most states, we were able to obtain the first and last name of the child in the program, the first and last name of a parent, and an address. In most instances, we also obtained telephone numbers and, for some states, the social security number of at least one parent. (Table B.4 provides an overview, by state, of the contact information obtained from the MISs.)

To ensure that the contact information was as current as possible, we sent contact information to a commercial search firm to match the contact information obtained from the states with address, telephone, and name information in the firm's databases. This initial locating procedure resulted in additional telephone numbers and revised telephone numbers, as well as confirmation that the telephone numbers we had obtained from the states matched the telephone numbers in the commercial databases. The initial locating also yielded updated addresses of sample members. In states such as Texas, we initially obtained at least one telephone number for each sample member from the state's MIS, and the percentage of confirmed, new, or changed telephone numbers as a result of prelocating was also quite high (54 percent). In New Jersey, where no telephone numbers were available from the state, the initial locating resulted in obtaining telephone numbers for 37 percent of the sample. However, in the California Medicaid sample, where no telephone numbers were provided by the state, only 21 percent of the sample's telephone numbers were obtained as a result of initial locating.

TABLE B.4  
CHARACTERISTICS OF CONTACT INFORMATION AND INITIAL LOCATING RESULTS  
(Percentages)

|                 | Cases with Recent<br>Social Security<br>Numbers Available | Cases with Any<br>Telephone Number<br>in State Files | Cases with Telephone<br>Numbers Verified Through<br>Initial Locating Efforts |
|-----------------|---|--|--|
| <b>SCHIP</b>    |   |  |  |
| California      | 60  | 98   | 29   |
| Colorado        | 50  | 97   | 38   |
| Florida         | 100   | 56   | 25   |
| Illinois        | 70  | 85   | 39   |
| Louisiana       | 100   | 77   | 50   |
| Missouri        | 0   | 38   | 35   |
| New York        | 0   | 85   | 29   |
| New Jersey      | 0   | 0  | 37   |
| North Carolina  | 0   | 30   | 36   |
| Texas           | 0   | 100  | 54   |
| <b>Medicaid</b> |   |  |  |
| California      | 0   | 0  | 21   |
| North Carolina  | 0   | 28   | 29   |

In addition to initial locating, we sent all sample members an advance letter about 1 week before interviewing started. The letter introduced the study, encouraged participation, and included a toll-free number that people could use to call the telephone interviewing center. The letters were mailed with “Address Service Requested” so that undelivered letters would be returned with forwarding addresses, when available. A sample letter is attached as Exhibit 1.

## **2. Sample Release Strategies**

As described in Section A.4, we released sample in one round in two states, in two rounds in six states, and in three rounds in two states. Table B.5 summarizes, for each state, the releases, by the month of the sample round, as well as the month that the release was made available for interviewing.

## **3. The CATI System**

Blaise software, developed by Statistics Netherlands, was used to collect the interview data. Blaise is a powerful survey processing tool that has been used in a variety of household surveys with cross-sectional as well as longitudinal designs. Blaise is designed for the Windows operating system, has a powerful but simple questionnaire definition language, and uses clear screen layouts that can be customized if necessary. The system allows interviewers to move backward to previously answered questions with little effort, add a note to a response, and switch between the English and Spanish versions of the questionnaire.

## **4. Call Scheduler**

The scheduling of telephone calls was controlled by the Blaise CATI scheduler. The scheduling program randomly assigned telephone numbers to interviewers who were signed in to the system, based on a calling algorithm. The algorithm tracked the number and types of calls in time slots that covered different parts of the day and different days of the week. After a time slot

TABLE B.5

## SAMPLE RELEASE DATES, BY FILE EXTRACT DATA AND STATE

|                 | January 2002<br>Extract | March 2002<br>Extract | May 2002<br>Extract |
|-----------------|-------------------------|-----------------------|---------------------|
| <b>SCHIP</b>    |                         |                       |                     |
| California      |                         | September             |                     |
| Colorado        | March                   | July                  | September           |
| Florida         | May                     | June                  |                     |
| Illinois        | April                   | July                  |                     |
| Louisiana       | March                   | August                | September           |
| Missouri        | April                   | September             |                     |
| New York        | June                    | July                  |                     |
| New Jersey      | May                     | July                  |                     |
| North Carolina  | April                   | October               |                     |
| Texas           | May                     |                       |                     |
| <b>Medicaid</b> |                         |                       |                     |
| California      |                         | September             |                     |
| North Carolina  | April                   | October               |                     |

for a particular case had reached the maximum number of calls, that time slot was no longer available for the case. If the maximum number of calls was reached for all time slots, and if the sample member had not been reached by phone, the case was flagged for additional actions. Calls contacting an answering machine were coded separately; case interviewers would leave a scripted message after a maximum number of these calls was reached. Firm appointments were scheduled within a 20-minute window of the appointment, while other, more tentative appointments were scheduled within a 60-minute time window. The system was also capable of overruling the scheduling program to prioritize cases based on other criteria, such as cases belonging to a specific state or specific sampling group. In addition, cases could be flagged so that they could be accessed only by interviewers specially trained to handle the circumstances of the case. For example, some cases were assigned to Spanish-speaking interviewers or to interviewers specially trained to handle reluctant participants. Interviewers used a standard set of disposition codes to code all call attempts. Information from the call attempts was included in daily reports that tracked the status of cases, completion rates, and interviewer productivity.

## **5. Telephone Locating**

If a case did not have a telephone number or, as a result of call attempts, was determined to have a wrong or nonworking telephone number, it was coded as eligible for additional centralized locating effort and was automatically removed from the call scheduler. In total, about 46 percent of all cases became eligible for centralized locating, with a substantially larger share in the Medicaid sample (63 percent) than in the SCHIP sample (42 percent). The centralized locating was assisted by a computerized tracking system that, for each case, stored and tracked the dates and types of locating attempts and all newly acquired contact information. Information about mailings to sample members and whether the mailing had been returned with or without forwarding addresses was stored and tracked in the same system. The system was

able to prioritize the locating of cases by state, date of entry into the system, and type of locating effort completed on the case. A series of daily reports was produced from this system that recorded the number of outstanding and completed cases in locating.

## **6. Closeout**

The design of the study required that a case that could not be reached by centralized locating efforts be classified as a “closeout” case and made potentially eligible for in-person locating. Closeout cases included those for which we were unable to obtain working telephone numbers and those for which we were unable to get a person in the household to respond to our call attempts. We developed a computer algorithm to identify those cases based on the disposition codes of the call attempts, whether a case had been in locating, and the elapsed time since the case had been released. Before finalizing closeout, we reviewed the interviewers’ comments on all call and locating attempts of the cases identified by the algorithm to ensure that records had been coded correctly, and that the appropriate locating efforts had been completed. Overall, 22 percent of the released SCHIP cases and 42 percent of the Medicaid cases were classified as closeout cases. Rates of closeout were similar across the 10 states in the SCHIP sample; in the Medicaid sample, they were somewhat higher for California than for North Carolina.

In the unclustered sample, all cases identified for closeout were terminated from the study. In the clustered sample, however, some or all of these cases were classified for in-person locating, depending on the state (Table B.6).<sup>11</sup>

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<sup>11</sup> In states in which only some of the closeout cases had to be released, we chose a random sample. In New Jersey, where we adopted only an unclustered sample design, we randomly selected from the closeout cases 50 percent of the recent and established enrollees for in-person contacting, as well as all of the disenrollees.

TABLE B.6

CLOSEOUT CASES SELECTED FOR IN-PERSON CONTACTING IN THE CLUSTERED SAMPLE  
(Approximate Percentages)

|                 | Recent Enrollees | Established Enrollees | Recent Disenrollees |
|-----------------|------------------|-----------------------|---------------------|
| <b>SCHIP</b>    |                  |                       |                     |
| California      | 50               | 50                    | 50                  |
| Colorado        | 100              | 100                   | 100                 |
| Florida         | 50               | 50                    | 100                 |
| Illinois        | 100              | 100                   | 100                 |
| Louisiana       | 100              | 100                   | 100                 |
| Missouri        | 100              | 100                   | 100                 |
| New York        | 50               | 50                    | 50                  |
| North Carolina  | 50               | 50                    | 75 <sup>a</sup>     |
| Texas           | 50               | 50                    | 50                  |
| <b>Medicaid</b> |                  |                       |                     |
| California      | 50               | 50                    | 50                  |
| North Carolina  | 50               | 50                    | 75                  |

Note: In New Jersey, 50 percent of the closed out enrollee samples and 100 percent of the disenrollee sample were selected for in-person contacting.

<sup>a</sup>50 percent January file and 100 percent March file.

## **7. In-Person Locating**

We hired and trained 43 field locators to locate and contact sample members who had been classified for in-person locating. The number of locators used in a given state depended on the state's size and on the distribution and number of sample members released for in-person locating. Once contacted, sample members had the option of completing the interview with a telephone interviewer at MPR's call center by dialing a toll-free number using their own telephone (if they had one) or by using the field locator's cell phone. In total, about 30 percent of the cases released for locating were successfully interviewed, which constituted about 5 percent of all completed cases in the study. For the vast majority of the cases not interviewed, the field locators were not able to locate the sample members.

## **8. Refusal Conversions**

Roughly 10 percent of the sample refused to participate in the survey when initially contacted for interview. (Over 80 percent of these households were English-speaking.) Specially trained interviewers were assigned to attempt to "convert" these cases, and to complete the interview. The interviewers were successful about half the time. Interestingly, they experienced somewhat greater success with households that spoke Spanish (61 percent) than spoke English (46 percent).

## **9. Follow-Up Interview for Children Disenrolled for More than 12 Months**

At the start of the survey, we chose to conduct an abbreviated version of the questionnaire with respondents who reported that their children were disenrolled from SCHIP or Medicaid for more than 12 months. However, because this group proved to be far larger than expected (roughly one-third of the total disenrollee sample), we decided to re-contact these respondents, and to ask them a series of new, additional questions. (The additional questions asked about the



reasons that the respondent's child was disenrolled from SCHIP, the child's insurance coverage just after leaving the program, household composition, and income.) During a 2-week period in March 2003, we were able to contact and interview 615 of the 1,334 cases in this group.

## **E. SAMPLING WEIGHTS**

As described previously, the samples were selected using complex multistage and multiphase procedures. For unbiased survey estimates, the sampling weights have to reflect the various stages of sampling. Our basic approach to calculating the sampling weights was to first compute design-specific sampling weights for each design (clustered and unclustered) for each sample round and state. These within-sample round, within-design sampling weights were calculated using the product of the sampling weight of the household multiplied by the conditional sampling weight of the child, given that his or her household was selected.<sup>12</sup> We then combined the design-specific sample weights across rounds to create a single base sampling weight for each sampled child for each design for each state.<sup>13</sup> The two sets of weights (one for the unclustered sample and one for the clustered sample) were poststratified to the same average monthly enrollment population (computed from enrollment counts for data collection round enrollment files) for each domain in each state.

We then conducted a nonresponse analysis to assess the response patterns for the samples. We used data available from the sampling frame, such as the age and race of the sampled child, and county-level information from the Area Resource File (ARF), such as the percentage of children living in households with family incomes under the poverty level, the percentage of

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<sup>12</sup> The sampling weight of the household is the inverse of the probability of selection of the household. The conditional sampling weight of the child is the inverse of the probability of selection of the child, given that his or her household was selected.

<sup>13</sup> Recall that, for California and for Texas, only one round was used, and that, for New Jersey, only the unclustered design was used.

households with female head of the household, and a 10-level scale denoting urbanicity (Bureau of Health Professions 2003). Using the results of the nonresponse analysis, we developed logistic regression models to compute response propensity scores to compensate for nonresponse. The nonresponse-adjusted weight was the product of the combined-round base weight and the inverse of the response propensity score. We developed response propensity models separately for each sample (clustered and unclustered), for each domain (recent enrollees, established enrollees, and recent disenrollees), for each state, and for each study population (SCHIP and Medicaid). Finally, we used the estimated population counts in each state and each domain to poststratify within each state based on enrollment status at the time of sampling of the child. The poststratification adjustment ensured that the nonresponse-adjusted base weights summed to the estimated enrollment population for that domain in each state.

The following sections describe more fully the computations of the sampling weights. The initial weights were computed in two stages: (1) the round-specific, design-specific weights; and (2) the combined-round, design-specific weights (the base weights). We then used the base weights to compute nonresponse adjustments for each design and each domain for each state. Finally, the nonresponse-adjusted base weights for each design were combined and poststratified to form the final analysis weights.

## **1. Initial (Round-Specific, Design-Specific) Weights**

For California and Texas (which were sampled in a single round) and for the first sample round for the other states, initial weights for the clustered samples were computed from the inverse of the product of the selection probability for the:

- Cluster
- Household within the cluster

- Domain type
- Child

If the household included two or more children, the children could have been either in the same domain (for example, two children in a household both might have been recent enrollees) or in two or more domains (for example, one child might have been a recent enrollee and a second child might have been an established enrollee).<sup>14</sup> For the unclustered samples, the initial weights were computed from the inverse of the product of the selection probability for the:

- Household
- Domain type
- Child

For the second and third sample rounds, the initial weights also included a factor representing the probability that a household had not been selected in the prior round(s).

Because we expected variation in the eligibility and response rates in each state, we selected a reserve sample for use in ensuring an adequate number of complete interviews. The initial weights also included a subsampling rate to reflect the proportion of the full sample (the primary and reserve samples) that was used in the survey. In some states, subsamples of nontelephone households in clustered samples were assigned to field staff for in-person locating. The initial weights accounted for this subsampling. Basically, the initial weight for each round was the inverse of the product of three to six sampling probabilities and subsampling rates. These initial

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<sup>14</sup> In California and North Carolina, some children were eligible for the samples as new enrollees in SCHIP and recent disenrollees in Medicaid. Children with this type of concurrent valid classification were accounted for in the sampling design.

weights were then poststratified by sample domain (recent enrollee, established enrollee, and recent disenrollee) to the enrollment population size in the file extract.

## **2. Base (Combined-Round, Design-Specific) Weights**

For the eight states with two or three sample rounds, the initial weights summed to the enrollment population at the time of the extract. For the recent enrollees and recent disenrollees, the enrollment populations for extracts were mutually exclusive (that is, the children could not be classified as recent enrollees in both the January and March file extracts); similarly, the same children could not be recent disenrollees in both the January and March file extracts. To compute design-specific weights for these domains that spanned all sample rounds, we combined the sample weights from the two (or three) sample rounds by multiplying the initial weight by a compositing factor based on the proportion of the sample from all sampling rounds that was used in a specific sample round. That is, if the January sample round included 180 recent enrollees and the March sample round contained 120 recent enrollees, then the weights for recent enrollees from the January sample round were multiplied by 0.60 ( $180/300$ ), and the weights for recent enrollees from the March sample round were multiplied by 0.40 ( $120/300$ ). After the combined-round weight was computed, we poststratified the weight to the average enrollment in that domain across the sample rounds to form the base weight.

For the established enrollees, a child in the January extract file might or might not still be an established enrollee in the March extract file. Therefore, for the six states with two sample rounds, we had to account for the enrollment populations, which depended on the extract file in which the child was classified as an established enrollee. In particular, a child could be classified as an established enrollee:

- In January but not in March

- In both January and March
- In March but not in January

The round-specific weights based on the January extract provided unbiased estimates of the established enrollees who were in the January extract file but not in the March one, and of established enrollees who were in both months' extract files. The round-specific weights based on the March extract provided unbiased estimates of the established enrollees who were in both the January and March extract files, and of those who were in the March extract file but not in the January extract file.

To combine these round-specific weights, we tabulated the counts in each extract to determine the exact enrollment counts for each of the three populations (established enrollees in January only, in both January and in March, and in March only). We then poststratified the weighted counts for each sample component to the exact enrollment counts. We scaled the initial weights for the cases in both the January extract and the March extract, using the proportion of the sample in the respective January or March samples. (The initial weights for cases in only the January extract and for those in only the March extract were not changed.) These combined-round initial weights summed to the number of children who were established enrollees in either or both the January and March extract files. In order to compute the base weights for the established enrollees, these weights were then rescaled to the average of the enrollment in the two extracts to achieve comparability with the other states.

The base weights were computed for each design (the clustered and unclustered sample designs) for the eight states with two or three sample rounds. For Colorado and Louisiana, three sample rounds (and, therefore, three extract files) were used. A child could be an established enrollee (1) in January, March, and May; (2) in January only; (3) in January and March but not in

May; (4) in March only; (5) in March and May but not in January; and (6) in May only.<sup>15</sup> We used procedures analogous to those used for the states with only two sample rounds.

### **3. Nonresponse Adjustments**

Nonresponse occurs in all surveys. The standard procedure to account for nonresponse is to adjust the sampling weights, thereby minimizing the potential for nonresponse bias. Weights for respondents who are similar to sample members who do not respond are adjusted to reduce the potential for nonresponse bias. We initially conducted an analysis to identify the factors that might have been related to nonresponse. Because the extract files from the states contained limited data (age and, sometimes, race) for identifying similarities between respondents and nonrespondents, we accessed county-level data from the ARF to supplement the state-provided data. The ARF contains county-level counts and other data compiled from the Census Bureau, the Bureau of Economic Analysis, the U.S. Department of Agriculture, the National Center for Health Statistics, and other sources. The data obtained from the ARF included:

- Rural/urban continuum code (10 level code)
- Population percentage for white, black/African American, Asian, American Indian/Alaskan Native, and other
- Percentage Hispanic or Latino population
- Percentage of people 25 or older with less than 9 years of school
- Percentage of people 25 or older with a high school diploma or more
- Percentage of people 25 or older with 4 or more years of college
- Median family income
- Median household income

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<sup>15</sup> Children had to be enrolled for 5 consecutive months. Thus, by definition, a child could not be an established enrollee in January and in May but not in March.

- Percentage of families below the poverty level
- Percentage of people below the poverty level
- Percentage of families with a female head
- Percentage of people in poverty
- Percentage of people ages 0 to 17 in poverty
- Percentage of related children ages 5 to 17 in poverty

These variables were selected as measures of racial and ethnic composition and as measures related to the extent of poverty in the counties in which the sample members resided. We viewed these variables as proxy measures for unobservable factors associated with response, although the variables themselves did not imply any direct relationship with response patterns.

For the response models, we formed categories based on the characteristics of each sample to ensure that there were adequate sample counts in each category, and that the categories were somewhat logical breaks in the distribution of continuous variables. We used stepwise logistic modeling to identify the variables (including both the categorized variables and the state-provided data on the child's age and race) that best explained the response pattern for each sample. Since the states and the enrollment population differed substantially, no single set of variables was consistently the best one to explain a response pattern. In general, however, response was associated with the degree of urbanicity, with lower response in some urban areas and higher response in rural areas. Other community factors that helped explain the response pattern were ethnicity and race and the percentage of children in poverty.

These response propensity models were developed separately for each domain, for each sample type (clustered and unclustered), and for each state. Separate models were also developed for the Medicaid samples, again for each domain, sample type (clustered and

unclustered), and state. More than 80 response propensity models were developed, with 69 developed for the SCHIP samples and 12 developed for the Medicaid samples.

#### 4. Final Analysis Weights

The clustered and unclustered samples were designed so that children from telephone households would have nearly equal probabilities of selection for either design. Because of the possible similarity of responses among sample members in the same cluster (that is, the possibility of a positive intracluster correlation), the sampling variance of estimates computed using the clustered sample was expected to be somewhat larger than the sampling variance of the same estimates computed using the unclustered sample. To develop the combined-design, nonresponse-adjusted sample weight, we used the ratio of the sampling variances computed for selected outcome-related variables as a factor for computing a composite weight factor for the children in telephone households.

Specifically, to compute a survey estimate,  $Est(Y)$ , combined across the two samples, separate estimates can be computed for each sample and combined using the equation:

$$(4) \ Est(Y) = \lambda \ Y(Clustered) + (1 - \lambda) \ Y(Unclustered),$$

where  $Y(Clustered)$  is the survey estimate from the clustered sample,  $Y(Unclustered)$  is the survey estimate from the unclustered sample, and  $\lambda$  (lambda) is an arbitrary constant between 0 and 1. For the sampling variance,  $V(Y)$ , the estimate is computed using the equation:

$$(5) \ V(Y) = \lambda^2 \ V(Y(Clustered)) + (1 - \lambda)^2 \ V(Y(Unclustered)),$$

where  $V(Y(Clustered))$  is the sampling variance for the estimate from the clustered sample and  $V(Y(Unclustered))$  is the sampling variance for the estimate from the unclustered sample. Any value of lambda between 0 and 1 will result in an unbiased estimate of the survey estimate, but



not necessarily in an estimate with the minimum sampling variance. A lambda value producing a sampling variance at its minimum value results in the shortest confidence interval and, by implication, the most accurate point estimate.

A value of lambda can be computed in an optimal (minimum variance) sense as:

$$(6) \lambda = V(Y(Unclustered)) / [V(Y(Clustered)) + V(Y(Unclustered))].$$

In this case, the minimum variance is:

$$(7) V(Y) = [V(Y(Clustered)) * V(Y(Unclustered))] / [V(Y(Clustered)) + V(Y(Unclustered))].$$

To compute a combined-sample estimate with minimum variance, survey estimates are derived by first computing the estimates for each sample component, computing a value of lambda for each pair of estimates, and then combining the point and variance estimates. Although producing the minimum variance estimates, the process is computer-intensive and results in some inconsistencies among estimates for percentages and proportions because of differing values among levels of a categorical variable.

For this study, we identified a pool of variables of interest for each domain and computed variance estimates for the clustered and unclustered samples. We used these sampling variances to compute values of lambda and used the median values of the lambdas to develop a single value for computing the combined-sample weights. The lambda values differed for each domain and state but were generally around 0.45, which indicated slightly larger sampling variances in the clustered sample (as expected). The combined weight for each sample member in the clustered sample was computed as:

$$(8) WT(Combined) = \lambda WT(Clustered \text{ Nonresponse-Adjusted Weight}),$$

and for sample members in the unclustered sample, by:

$$(9) \quad WT(Combined) = (1 - \lambda) \quad WT(Unclustered \text{ Nonresponse-Adjusted Weight}).$$

Children from nontelephone households were eligible for interview only when sampled for the clustered design, so their nonresponse-adjusted weight was used as their combined sample weight. This combined weight was then poststratified again to the domain-specific monthly enrollment count for each state.

## **5. Sampling Variances**

The sampling variance of an estimate derived from survey data for a statistic (such as a total, a mean or proportion, or a regression coefficient) is a measure of the random variation among estimates of the same statistic computed over repeated implementation of the same sample design with the same sample size on the same population. The sampling variance is a function of the constituent variables, the form of the statistic, and the nature of the sampling design. The two general forms of statistics are linear combinations of the survey data (for example, a total) and nonlinear combinations of the survey data. Nonlinear combinations include the ratio of two estimates (for example, a mean or a proportion in which both the numerator and the denominator are estimated) and more complex combinations, such as regression coefficients. For linear estimates with simple sample designs (such as stratified or unstratified simple random samples) or with complex designs (such as stratified multistage designs), explicit equations are available to compute the sampling variance. For the more common nonlinear estimates with simple or complex sample designs, explicit equations are not generally available, and various approximations or computational algorithms are used to provide an essentially unbiased estimate of the sampling variance. A Web site that reviews software for variance estimation from complex surveys, created with the encouragement of the Section on Survey Research Methods of

the American Statistical Association, is now available at <http://www.fas.harvard.edu/~stats/survey-soft/survey-soft.html>.

For this study, we used procedures based on the Taylor series linearization of the nonlinear estimator, using explicit sampling variance equations. This procedure is based on classic statistical methods in which a nonlinear statistic can be approximated by a linear combination of the components within the statistic. The accuracy of the approximation is dependent on the sample size and the complexity of the statistic. For most commonly used nonlinear statistics (such as ratios, means, proportions, and regression coefficients), the linearized form has been developed and has good statistical properties under large sample approximations. Once a linearized form of an estimate is developed, the explicit equations for linear estimates can be used to estimate the sampling variance. Because the explicit equations can be used, the sampling variance can be estimated using many of the features of the sampling design (for example, finite population corrections, stratification, multiple stages of selection, and unequal selection rates within strata). This is the basic variance estimation procedure used in SUDAAN, SAS, and Stata to accommodate many simple and complex sampling designs. (For more details on variance estimation using the Taylor series linearization procedure, see Wolter 1985, and, more recently, LaVange et al. 1996.)

To estimate the sampling variance, we defined a stratification variable and a variable to denote the first-stage sampling unit. The stratification variable basically identified for the survey data analysis software the sampled state and whether the sample was from the clustered or unclustered sample. The first-stage sampling unit variable identified the sample cluster in the clustered sample and the individual sampled child in the unclustered sample.

## F. RESPONSE RATES

The response rate is a measure of potential for bias in the survey results due to nonresponse. For designs like ours, weighted response rates are preferred. Weighted response rates integrated the differential sampling rates and subsampling that we used in the survey.<sup>16</sup> Our data collection approach was designed to achieve good response rates for each state by each of the three domains. The sample design incorporated a clustered sample with in-person field locating for children in nontelephone households and an unclustered sample with children in nontelephone households classified as ineligible. The response rates had to take these design features into account in order to validly represent the response.

We developed two response rates for assessing response in our study. The first response rate incorporated an average of the response rates for the clustered and unclustered surveys. This response rate is:

$$(10) \quad RR = 0.50 \, RR(Clustered \, Sample) + 0.50 \, RR(Unclustered \, Sample),$$

where  $RR(Clustered \, Sample)$  is the weighted response rate for the clustered sample and  $RR(Unclustered \, Sample)$  is the weighted response rate for the unclustered sample. The response rate for each sample design is computed using weighted totals as follows:

$$(11) \quad RR = (Completes + Ineligible) / (Completes + Ineligible + Nonrespondents).$$

These response rates are shown in Table B.7.

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<sup>16</sup> Unweighted response rates are designed for simple list frame surveys or telephone surveys. They are discussed in reports by the Council of American Survey Research Organizations (1982) and the American Association for Public Opinion Research (2000). The reports provide useful guidelines for computing response rates.

TABLE B.7

## DESIGN-SPECIFIC SAMPLE COUNTS AND RESPONSE RATES: SCHIP SAMPLE

| State | Sample/Domain        | Full Sample (Count) | Eligible Sample (Count) | Response (Count) | Complete (Count) | Nontelephone Households <sup>a</sup> (Count) | Design-Specific, Weighted Rate (Percent) | State Rate, Average Weighted Rate (Percent) |
|-------|----------------------|---------------------|-------------------------|------------------|------------------|--|--|---|
| CA    | Unclustered          |                     |                         |                  |                  |  |  |   |
|       | Recent Enrollee      | 402                 | 343                     | 305              | 303              | 59   | 88.9                                     |   |
|       | Established Enrollee | 400                 | 342                     | 283              | 279              | 58   | 82.7                                     |   |
|       | Recent Disenrollee   | 586                 | 491                     | 362              | 346              | 95   | 73.4                                     |   |
|       | Clustered            |                     |                         |                  |                  |  |  |   |
|       | Recent Enrollee      | 407                 | 379                     | 303              | 296              | 28   | 75.9                                     | 82.4  |
|       | Established Enrollee | 393                 | 364                     | 286              | 282              | 29   | 75.6                                     | 79.2  |
|       | Recent Disenrollee   | 425                 | 384                     | 267              | 260              | 41   | 64.8                                     | 69.1  |
| CO    | Unclustered          |                     |                         |                  |                  |  |  |   |
|       | Recent Enrollee      | 455                 | 394                     | 334              | 328              | 61   | 84.7                                     |   |
|       | Established Enrollee | 461                 | 384                     | 324              | 318              | 77   | 84.1                                     |   |
|       | Recent Disenrollee   | 445                 | 344                     | 285              | 265              | 101  | 82.9                                     |   |
|       | Clustered            |                     |                         |                  |                  |  |  |   |
|       | Recent Enrollee      | 452                 | 452                     | 324              | 316              | 0  | 71.3                                     | 78.0  |
|       | Established Enrollee | 466                 | 466                     | 309              | 300              | 0  | 66.9                                     | 75.5  |
|       | Recent Disenrollee   | 466                 | 466                     | 353              | 319              | 0  | 76.6                                     | 79.7  |
| FL    | Unclustered          |                     |                         |                  |                  |  |  |   |
|       | Recent Enrollee      | 457                 | 374                     | 321              | 317              | 83   | 86.0                                     |   |
|       | Established Enrollee | 440                 | 357                     | 305              | 303              | 83   | 85.2                                     |   |
|       | Recent Disenrollee   | 551                 | 442                     | 320              | 301              | 109  | 72.3                                     |   |
|       | Clustered            |                     |                         |                  |                  |  |  |   |
|       | Recent Enrollee      | 405                 | 363                     | 291              | 284              | 42   | 77.0                                     | 81.5  |
|       | Established Enrollee | 418                 | 374                     | 296              | 292              | 44   | 74.7                                     | 80.0  |
|       | Recent Disenrollee   | 458                 | 458                     | 306              | 269              | 0  | 63.9                                     | 68.1  |
| IL    | Unclustered          |                     |                         |                  |                  |  |  |   |
|       | Recent Enrollee      | 524                 | 413                     | 295              | 291              | 111  | 72.6                                     |   |
|       | Established Enrollee | 527                 | 432                     | 319              | 305              | 95   | 75.1                                     |   |
|       | Recent Disenrollee   | 505                 | 389                     | 272              | 251              | 116  | 70.4                                     |   |
|       | Clustered            |                     |                         |                  |                  |  |  |   |
|       | Recent Enrollee      | 447                 | 447                     | 292              | 283              | 0  | 65.3                                     | 69.0  |
|       | Established Enrollee | 418                 | 418                     | 282              | 267              | 0  | 67.5                                     | 71.3  |
|       | Recent Disenrollee   | 504                 | 504                     | 301              | 280              | 0  | 60.1                                     | 65.3  |

TABLE B.7 (continued)

| State | Sample/Domain        | Full Sample (Count) | Eligible Sample (Count) | Response (Count) | Complete (Count) | Nontelephone Households <sup>a</sup> (Count) | Design-Specific, Weighted Rate (Percent) | State Rate, Average Weighted Rate (Percent) |
|-------|----------------------|---------------------|-------------------------|------------------|------------------|--|--|---|
| LA    | Unclustered          |                     |                         |                  |                  |  |  |   |
|       | Recent Enrollee      | 432                 | 345                     | 289              | 282              | 87   | 83.7                                     |   |
|       | Established Enrollee | 429                 | 343                     | 291              | 278              | 86   | 83.9                                     |   |
|       | Recent Disenrollee   | 501                 | 400                     | 308              | 279              | 101  | 76.8                                     |   |
|       | Clustered            |                     |                         |                  |                  |  |  |   |
|       | Recent Enrollee      | 403                 | 403                     | 317              | 309              | 0  | 78.7                                     | 81.2  |
|       | Established Enrollee | 399                 | 399                     | 311              | 298              | 0  | 77.7                                     | 80.8  |
|       | Recent Disenrollee   | 453                 | 453                     | 330              | 286              | 0  | 72.3                                     | 74.6  |
| MO    | Unclustered          |                     |                         |                  |                  |  |  |   |
|       | Recent Enrollee      | 507                 | 390                     | 273              | 267              | 117  | 69.9                                     |   |
|       | Established Enrollee | 508                 | 373                     | 271              | 267              | 135  | 73.8                                     |   |
|       | Recent Disenrollee   | 551                 | 415                     | 265              | 251              | 136  | 64.2                                     |   |
|       | Clustered            |                     |                         |                  |                  |  |  |   |
|       | Recent Enrollee      | 433                 | 433                     | 292              | 283              | 0  | 67.6                                     | 68.8  |
|       | Established Enrollee | 407                 | 407                     | 301              | 295              | 0  | 74.4                                     | 74.1  |
|       | Recent Disenrollee   | 483                 | 483                     | 307              | 282              | 0  | 63.7                                     | 64.0  |
| NJ    | Unclustered          |                     |                         |                  |                  |  |  |   |
|       | Recent Enrollee      | 911                 | 795                     | 597              | 583              | 116  | 71.3                                     | 71.3  |
|       | Established Enrollee | 881                 | 782                     | 581              | 569              | 99   | 70.7                                     | 70.7  |
|       | Recent Disenrollee   | 998                 | 998                     | 592              | 536              | 0  | 58.3                                     | 58.3  |
| NY    | Unclustered          |                     |                         |                  |                  |  |  |   |
|       | Recent Enrollee      | 542                 | 458                     | 327              | 321              | 84   | 72.1                                     |   |
|       | Established Enrollee | 532                 | 446                     | 322              | 317              | 86   | 71.7                                     |   |
|       | Recent Disenrollee   | 533                 | 417                     | 318              | 295              | 116  | 76.3                                     |   |
|       | Clustered            |                     |                         |                  |                  |  |  |   |
|       | Recent Enrollee      | 409                 | 373                     | 266              | 260              | 36   | 68.9                                     | 70.5  |
|       | Established Enrollee | 416                 | 372                     | 271              | 259              | 44   | 69.5                                     | 70.6  |
|       | Recent Disenrollee   | 432                 | 388                     | 264              | 253              | 44   | 64.9                                     | 70.6  |
| NC    | Unclustered          |                     |                         |                  |                  |  |  |   |
|       | Recent Enrollee      | 518                 | 377                     | 284              | 280              | 141  | 75.4                                     |   |
|       | Established Enrollee | 522                 | 403                     | 322              | 317              | 119  | 82.5                                     |   |
|       | Recent Disenrollee   | 631                 | 430                     | 349              | 332              | 201  | 80.6                                     |   |

TABLE B.7 (continued)

| State | Sample/Domain        | Full<br>Sample<br>(Count) | Eligible<br>Sample<br>(Count) | Response<br>(Count) | Complete<br>(Count) | Nontelephone<br>Households <sup>a</sup><br>(Count) | Design-<br>Specific,<br>Weighted Rate<br>(Percent) | State Rate,<br>Average<br>Weighted Rate<br>(Percent) |
|-------|----------------------|---------------------------|-------------------------------|---------------------|---------------------|--|--|--|
| TX    | Clustered            |                           |                               |                     |                     |  |  |  |
|       | Recent Enrollee      | 398                       | 348                           | 265                 | 262                 | 50   | 68.9   | 72.2   |
|       | Established Enrollee | 400                       | 349                           | 288                 | 286                 | 51   | 76.3   | 79.4   |
|       | Recent Disenrollee   | 416                       | 372                           | 241                 | 230                 | 44   | 58.3   | 69.5   |
|       | Unclustered          |                           |                               |                     |                     |  |  |  |
|       | Recent Enrollee      | 410                       | 317                           | 259                 | 256                 | 93   | 81.7   |  |
|       | Established Enrollee | 386                       | 300                           | 266                 | 263                 | 86   | 88.5   |  |
|       | Recent Disenrollee   | 565                       | 448                           | 306                 | 293                 | 117  | 68.5   |  |
|       | Clustered            |                           |                               |                     |                     |  |  |  |
|       | Recent Enrollee      | 454                       | 402                           | 339                 | 336                 | 52   | 79.9   | 80.8   |
|       | Established Enrollee | 447                       | 401                           | 333                 | 332                 | 46   | 79.0   | 83.8   |
|       | Recent Disenrollee   | 451                       | 385                           | 296                 | 284                 | 66   | 72.3   | 70.4   |

<sup>a</sup>The count of nontelephone households includes the nontelephone households in the clustered samples that were not released for in-person field locating.

The second response rate is derived by combining the response rates achieved for children in telephone and nontelephone households weighted by the estimated incidence of telephone and nontelephone households in the population. Under this approach, the weighted response rate, *WRR*, is:

$$(12) \quad WRR = P(\text{Telephone Households}) * RR(\text{Telephone Households}) + [1 - P(\text{Telephone Households})] * RR(\text{Nontelephone Households}),$$

where  $P(\text{Telephone Households})$  is the survey-based weighted estimate of the proportion of telephone households among all households in the sample,  $RR(\text{Telephone Households})$  is the response rate for telephone households, and  $RR(\text{Nontelephone Households})$  is the response rate for nontelephone households. Again, the response rate for telephone and nontelephone households is computed using weighted totals as follows:

$$(13) \quad RR = (\text{Completes} + \text{Ineligible}) / (\text{Completes} + \text{Ineligible} + \text{Nonrespondents}).$$

These response rates are shown in Table B.8.

The average weighted response rates ranged in size from 83.8 percent for established enrollees in Texas to 58.3 percent for recent disenrollees in New Jersey. The majority of the response rates were in the range of 75 to 80 percent. For the algorithm for the weighted response rate, *WRR*, rates were generally slightly lower and ranged from 78.6 percent for established enrollees in Texas to 58.3 percent for recent disenrollees in New Jersey. These response rates were generally in the range of 65 to 75 percent. The response rates were higher for the recent and established enrollees and were lower for recent disenrollees.

For comparative analysis between the Medicaid and SCHIP samples in California and North Carolina, the sample counts and response rates are summarized in Tables B.9 and B.10. We



TABLE B.8

## STATE-LEVEL SCHIP COUNTS AND RESPONSE RATES

| State | Domain                  | Full Sample<br>(Count) | Eligible<br>Sample<br>(Count) | Complete<br>Interviews<br>(Count) | Average<br>Weighted Rate<br>(Percent) | Response in<br>Telephone<br>Households<br>(Percent) | Proportion of<br>Nontelephone<br>Households<br>(Percent) | Response in<br>Nontelephone<br>Households<br>(Percent) | Weighted<br>Rate<br>(Percent) |
|-------|-------------------------|------------------------|-------------------------------|-----------------------------------|---------------------------------------|---|--|--|-------------------------------|
| B.53  | CA Recent Enrollee      | 809                    | 722                           | 599                               | 82.4                                  | 86.5  | 14.0   | 22.3   | 77.5                          |
|       | CA Established Enrollee | 793                    | 706                           | 561                               | 79.2                                  | 82.3  | 13.9   | 34.6   | 75.7                          |
|       | CA Recent Disenrollee   | 1,011                  | 875                           | 606                               | 69.1                                  | 74.4  | 20.0   | 31.3   | 65.7                          |
|       | CO Recent Enrollee      | 907                    | 846                           | 644                               | 78.0                                  | 83.4  | 15.3   | 19.7   | 73.6                          |
|       | CO Established Enrollee | 927                    | 850                           | 618                               | 75.5                                  | 83.9  | 20.8   | 13.5   | 69.2                          |
|       | CO Recent Disenrollee   | 911                    | 810                           | 584                               | 79.7                                  | 86.0  | 22.3   | 33.3   | 74.3                          |
|       | FL Recent Enrollee      | 862                    | 737                           | 601                               | 81.5                                  | 85.9  | 19.8   | 45.5   | 77.9                          |
|       | FL Established Enrollee | 858                    | 731                           | 595                               | 80.0                                  | 85.1  | 19.1   | 33.0   | 75.2                          |
|       | FL Recent Disenrollee   | 1,009                  | 900                           | 570                               | 68.1                                  | 75.3  | 24.2   | 27.5   | 63.7                          |
|       | IL Recent Enrollee      | 971                    | 860                           | 574                               | 69.0                                  | 73.4  | 22.0   | 35.0   | 64.9                          |
|       | IL Established Enrollee | 945                    | 850                           | 572                               | 71.3                                  | 76.7  | 19.4   | 22.8   | 66.2                          |
|       | IL Recent Disenrollee   | 1,009                  | 893                           | 531                               | 65.3                                  | 68.7  | 22.7   | 35.3   | 61.1                          |
|       | LA Recent Enrollee      | 835                    | 748                           | 591                               | 81.2                                  | 86.9  | 20.8   | 36.7   | 76.5                          |
|       | LA Established Enrollee | 828                    | 742                           | 576                               | 80.8                                  | 84.9  | 21.4   | 50.0   | 77.5                          |
|       | LA Recent Disenrollee   | 954                    | 853                           | 565                               | 74.6                                  | 79.8  | 22.9   | 40.8   | 70.8                          |
|       | MO Recent Enrollee      | 940                    | 823                           | 550                               | 68.8                                  | 73.7  | 44.0   | 59.7   | 67.6                          |
|       | MO Established Enrollee | 915                    | 780                           | 562                               | 74.1                                  | 78.8  | 27.7   | 49.8   | 70.8                          |
|       | MO Recent Disenrollee   | 1,034                  | 898                           | 533                               | 64.0                                  | 71.5  | 30.0   | 33.4   | 60.1                          |
|       | NJ Recent Enrollee      | 911                    | 795                           | 583                               | 71.3                                  | 80.4  | 22.9   | 40.5   | 71.3                          |
|       | NJ Established Enrollee | 881                    | 782                           | 569                               | 70.7                                  | 80.6  | 24.2   | 39.8   | 70.7                          |
|       | NJ Recent Disenrollee   | 998                    | 998                           | 536                               | 58.3                                  | 69.8  | 24.8   | 23.1   | 58.3                          |
|       | NY Recent Enrollee      | 951                    | 831                           | 581                               | 70.5                                  | 75.6  | 19.5   | 34.5   | 67.6                          |
|       | NY Established Enrollee | 948                    | 818                           | 576                               | 70.6                                  | 75.4  | 17.5   | 23.1   | 66.2                          |

TABLE B.8 (continued)

| State | Domain               | Full Sample<br>(Count) | Eligible<br>Sample<br>(Count) | Complete<br>Interviews<br>(Count) | Average<br>Weighted Rate<br>(Percent) | Response in<br>Telephone<br>Households<br>(Percent) | Proportion of<br>Nontelephone<br>Households<br>(Percent) | Response in<br>Nontelephone<br>Households<br>(Percent) | Weighted<br>Rate<br>(Percent) |
|-------|----------------------|------------------------|-------------------------------|-----------------------------------|---------------------------------------|---|--|--|-------------------------------|
|       | Recent Disenrollee   | 965                    | 805                           | 548                               | 70.6                                  | 76.0  | 22.6   | 29.3   | 65.4                          |
| NC    | Recent Enrollee      | 916                    | 725                           | 542                               | 72.2                                  | 81.1  | 29.0   | 28.7   | 65.9                          |
|       | Established Enrollee | 922                    | 752                           | 603                               | 79.4                                  | 87.2  | 26.1   | 36.8   | 74.0                          |
|       | Recent Disenrollee   | 1,047                  | 802                           | 562                               | 69.5                                  | 80.8  | 34.7   | 22.4   | 60.6                          |
| TX    | Recent Enrollee      | 864                    | 719                           | 592                               | 80.8                                  | 85.9  | 24.6   | 50.8   | 77.3                          |
|       | Established Enrollee | 833                    | 701                           | 595                               | 83.8                                  | 88.6  | 21.7   | 42.6   | 78.6                          |
|       | Recent Disenrollee   | 1,016                  | 833                           | 577                               | 70.4                                  | 75.9  | 24.7   | 43.2   | 67.8                          |

TABLE B.9

DESIGN-SPECIFIC SAMPLE COUNTER AND REFERENCE RATE FOR  
THE SCHIP—MEDICAID CONFIRMATION ANALYSIS

| State/<br>Program | Sample Design/<br>Domain | Full<br>Sample<br>(Count) | Eligible<br>Sample<br>(Count) | Response<br>(Count) | Complete<br>(Count) | Nontelephone<br>Households <sup>a</sup><br>(Count) | Design-<br>Specific,<br>Weighted<br>Rate<br>(Percent) | State Rate,<br>Average<br>Weighted Rate<br>(Percent) |
|-------------------|--------------------------|---------------------------|-------------------------------|---------------------|---------------------|--|---|--|
| CA<br>SCHIP       | Unclustered              |                           |                               |                     |                     |  |   |  |
|                   | Recent Enrollee          | 402                       | 358                           | 313                 | 311                 | 44   | 87.4  |  |
|                   | Established Enrollee     | 400                       | 359                           | 292                 | 288                 | 41   | 81.3  |  |
|                   | Recent Disenrollee       | 586                       | 515                           | 369                 | 353                 | 71   | 71.6  |  |
|                   | Clustered                |                           |                               |                     |                     |  |   |  |
|                   | Recent Enrollee          | 407                       | 407                           | 304                 | 297                 | 0  | 74.7  | 81.0   |
|                   | Established Enrollee     | 393                       | 393                           | 293                 | 287                 | 0  | 74.6  | 77.9   |
|                   | Recent Disenrollee       | 425                       | 425                           | 271                 | 264                 | 0  | 63.4  | 67.5   |
|                   |                          |                           |                               |                     |                     |  |   |  |
| CA<br>Medicaid    | Unclustered              |                           |                               |                     |                     |  |   |  |
|                   | Recent Enrollee          | 599                       | 401                           | 191                 | 183                 | 198  | 47.4  |  |
|                   | Established Enrollee     | 600                       | 418                           | 209                 | 202                 | 182  | 50.0  |  |
|                   | Recent Disenrollee       | 600                       | 385                           | 198                 | 196                 | 215  | 51.2  |  |
|                   | Clustered                |                           |                               |                     |                     |  |   |  |
|                   | Recent Enrollee          | 602                       | 602                           | 237                 | 231                 | 0  | 39.4  | 43.4   |
|                   | Established Enrollee     | 599                       | 599                           | 197                 | 191                 | 0  | 32.9  | 41.4   |
|                   | Recent Disenrollee       | 600                       | 600                           | 213                 | 208                 | 0  | 35.5  | 43.4   |
|                   |                          |                           |                               |                     |                     |  |   |  |
| NC<br>SCHIP       | Unclustered              |                           |                               |                     |                     |  |   |  |
|                   | Recent Enrollee          | 518                       | 408                           | 294                 | 289                 | 110  | 72.1  |  |
|                   | Established Enrollee     | 522                       | 424                           | 330                 | 324                 | 98   | 79.9  |  |
|                   | Recent Disenrollee       | 631                       | 509                           | 376                 | 356                 | 122  | 77.3  |  |
|                   | Clustered                |                           |                               |                     |                     |  |   |  |
|                   | Recent Enrollee          | 398                       | 398                           | 268                 | 265                 | 0  | 67.4  | 69.8   |
|                   | Established Enrollee     | 400                       | 400                           | 293                 | 291                 | 0  | 73.3  | 76.6   |
|                   | Recent Disenrollee       | 416                       | 416                           | 246                 | 235                 | 0  | 59.2  | 68.2   |
|                   |                          |                           |                               |                     |                     |  |   |  |

TABLE B.9 (continued)

| State/<br>Program | Sample Design/<br>Domain | Full<br>Sample<br>(Count) | Eligible<br>Sample<br>(Count) | Response<br>(Count) | Complete<br>(Count) | Nontelephone<br>Households <sup>a</sup><br>(Count) | Design-<br>Specific,<br>Weighted<br>Rate<br>(Percent) | State Rate,<br>Average<br>Weighted Rate<br>(Percent) |
|-------------------|--------------------------|---------------------------|-------------------------------|---------------------|---------------------|--|---|--|
| NC                | Unclustered              |                           |                               |                     |                     |  |   |  |
| Medicaid          | Recent Enrollee          | 522                       | 382                           | 256                 | 243                 | 140  | 67.6  |  |
|                   | Established Enrollee     | 530                       | 394                           | 271                 | 261                 | 136  | 70.9  |  |
|                   | Recent Disenrollee       | 531                       | 389                           | 230                 | 199                 | 142  | 59.5  |  |
|                   | Clustered                |                           |                               |                     |                     |  |   |  |
|                   | Recent Enrollee          | 553                       | 553                           | 281                 | 274                 | 0  | 50.7  |  |
|                   | Established Enrollee     | 548                       | 548                           | 274                 | 267                 | 0  | 49.1  |  |
|                   | Recent Disenrollee       | 553                       | 553                           | 235                 | 211                 | 0  | 42.7  |  |

<sup>a</sup>The count of nontelephone households includes the nontelephone households in the clustered samples that were not released for in-person field locating.

TABLE B.10  
STATE-LEVEL SAMPLE COUNTS AND REFERENCE RATES

| State/Program  | Domain               | Full<br>Sample<br>(Count) | Eligible<br>Sample<br>(Count) | Complete<br>Interviews<br>(Count) | Average<br>Weighted<br>Rate<br>(Percent) | Response in<br>Telephone<br>Households<br>(Percent) | Proportion of<br>Nontelephone<br>Households<br>(Percent) | Response in<br>Nontelephone<br>Households<br>(Percent) | Weighted<br>Rate<br>(Percent) |
|----------------|----------------------|---------------------------|-------------------------------|-----------------------------------|--|---|--|--|-------------------------------|
| CA<br>SCHIP    | New Enrollee         | 809                       | 765                           | 608                               | 81.0                                     | 82.9  | 9.0  | 21.4   | 77.4                          |
|                | Established Enrollee | 793                       | 752                           | 575                               | 77.9                                     | 79.3  | 8.4  | 34.6   | 75.5                          |
|                | Recent Disenrollee   | 1,011                     | 940                           | 617                               | 67.5                                     | 69.8  | 12.1   | 31.3   | 65.1                          |
| CA<br>Medicaid | New Enrollee         | 1,201                     | 1,003                         | 414                               | 43.4                                     | 44.1  | 29.6   | 34.4   | 41.2                          |
|                | Established Enrollee | 1,199                     | 1,017                         | 393                               | 41.4                                     | 41.7  | 27.2   | 29.2   | 38.3                          |
|                | Recent Disenrollee   | 1,200                     | 985                           | 404                               | 43.4                                     | 44.6  | 31.0   | 27.3   | 39.2                          |
| NC<br>SCHIP    | New Enrollee         | 916                       | 806                           | 554                               | 69.8                                     | 73.5  | 18.5   | 28.7   | 65.2                          |
|                | Established Enrollee | 922                       | 824                           | 615                               | 76.6                                     | 79.7  | 16.9   | 36.8   | 72.5                          |
|                | Recent Disenrollee   | 1,047                     | 925                           | 591                               | 68.2                                     | 73.1  | 20.7   | 22.3   | 62.6                          |
| NC<br>Medicaid | New Enrollee         | 1,075                     | 935                           | 517                               | 59.2                                     | 62.8  | 24.5   | 23.6   | 53.2                          |
|                | Established Enrollee | 1,078                     | 942                           | 528                               | 60.0                                     | 63.4  | 23.7   | 20.6   | 53.3                          |
|                | Recent Disenrollee   | 1,084                     | 942                           | 410                               | 51.1                                     | 57.1  | 28.7   | 15.4   | 45.1                          |

made a special effort to increase response for these SCHIP and Medicaid samples (particularly for the latter). The response rates for the SCHIP samples in California and in North Carolina were similar to those for the main sample, shown in Tables B.7 and B.8. However, the response rates for the Medicaid samples for those states were considerably lower than were the response rates for the main sample. The Medicaid response rates were similar to those found for other major surveys of the Medicaid population and largely reflect poor or inadequate contact information in administrative records (Ghosh et al. 2001; Ciemnecki et al. 2000).

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## **APPENDIX C**

### **METHODS USED TO CONDUCT THE ANALYSIS OF SCHIP ENROLLEES AND DISENROLLEES IN 10 STATES**



This appendix describes the methods used in the report by Kenney, Trenholm, et al. (2005), “The Experiences of SCHIP Enrollees and Disenrollees in 10 States: Findings from the Congressionally Mandated SCHIP Evaluation.” The report is based on data from the 2002 Congressionally Mandated Survey of State Children’s Insurance Program (SCHIP) Enrollees and Disenrollees in 10 States and on several related sources.<sup>1</sup> The first section of this six-section appendix summarizes methodological issues that are relevant to most or all of the different analyses presented in the report. The remaining sections describe the analytic methods used in specific chapters of the report (see Table C.1).

## **A. CROSS-CUTTING METHODS**

This section discusses two cross-cutting methodological issues. The first is the sample design on which the overall analysis is based, as well as the rationale for the design. The second is the set of descriptive variables that were used in the report to characterize the SCHIP (or Medicaid) population, define key subgroups, and investigate sources of variation in key outcomes.

### **1. Sample Design**

The 2002 survey of SCHIP enrollees and disenrollees focused on three domains of interest, as defined from the state enrollment files: (1) recent SCHIP enrollees, who, according to the state files, had been enrolled in SCHIP within a month or two prior to sampling; (2) established SCHIP enrollees, who were enrolled in SCHIP for 6 months or more prior to sampling; and (3) recent disenrollees, who had exited SCHIP a month or two prior to sampling. In addition, in

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<sup>1</sup>The report also draws on data from a companion survey of Medicaid enrollees and disenrollees in two states, as well as on data from various state administrative and enrollment files. See Appendix A for a layout of the full survey instrument. For details on the sample design and administration of the survey, see Appendix B.

TABLE C.1

## SECTION(S) OF APPENDIX ADDRESSING METHODS FOR EACH REPORT CHAPTER

| Appendix Section                                     | Chapter I:<br>Key Survey<br>Findings | Chapter II:<br>Enrollment<br>Experiences | Chapter III:<br>Program<br>Experiences<br>(Access/Use) | Chapter IV:<br>Length of<br>Enrollment | Chapter V:<br>Disenrollee<br>Experiences | Chapter VI:<br>Substitution | Chapter VII:<br>Impacts | Chapter VIII:<br>Medicaid |
|--|--------------------------------------|--|--|--|--|-----------------------------|-------------------------|---------------------------|
| A. Cross-Cutting Methods                             | X                                    | X  | X  |  | X  |                             | X                       | X                         |
| B. Analysis of Recent<br>Enrollees                   | X                                    | X  |  |  |  |                             |                         | X                         |
| C. Analysis of Established<br>Enrollees              | X                                    |  | X  |  |  |                             | X                       | X                         |
| D. Analysis of Disenrollees                          | X                                    |  |  |  | X  |                             |                         |                           |
| E. Analysis of Substitution<br>and Prior Coverage    | X                                    |  |  |  |  | X                           |                         |                           |
| F. Analysis of Determinants<br>of Enrollment Lengths | X                                    |  |  | X                                      |  |                             |                         |                           |

two states, we conducted a parallel survey of Medicaid enrollees and disenrollees across the three domains.

A central goal in conducting the survey was to reflect the experiences of *all* children and families in the domains so that we could present research findings that were as accurate and as generalizable to the overall SCHIP population as possible. In order to achieve this goal, we developed a highly flexible survey instrument that tailored the interview to the perceptions of the families regardless of the consistency between these perceptions and the state enrollment files. As discussed below, this approach enabled us to retain families in the sample who might otherwise have been dropped because they provided dates of enrollment or disenrollment that were inconsistent with their sample domains. Research demonstrates that many survey respondents have difficulty reporting their insurance histories accurately (Nelson and Miller 2001; Rajan et al. 2000). In light of this research, our approach was essential to retaining as much sample as possible, and to yielding the most credible set of estimates possible about families' experiences with SCHIP.

**a. Addressing Sample Domain Inconsistencies**

To illustrate the importance of addressing potential inconsistencies between the respondents' perceptions and the assigned sample domains, consider the children whom we selected for our recent enrollee sample. The state program files showed that almost 35 percent of the children across our 10-state sample either had spells of SCHIP coverage prior to enrolling (their short gaps in coverage perhaps resulting from late premium payments or renewals) or had recent spells of Medicaid coverage prior to enrolling (often with no gaps between the two programs). In some instances, the families would not be expected to recognize their recent enrollment in SCHIP, believing instead that they had never left the program (in the case of a short gap in SCHIP

coverage) or had never switched programs (in the case of a transition from Medicaid). Many of these families would therefore have reported having been covered by SCHIP for longer than indicated by the state files, often significantly so. As a result, when these families reported on key outcomes, such as prior insurance coverage or pre-SCHIP utilization of health care, they were not reporting those data for the period immediately before their current (state-determined) period of enrollment.

To address this problem and others like it, we had two options. The first was to simply drop from the survey sample any cases whose self-reported dates of entry (or exit) were inconsistent with the domains in which they had been sampled. (So, for example, a recent enrollee who reported having been enrolled for, say, a year or more at the time of interview might be classified as ineligible for the survey and dropped from the recent enrollee sample.) This approach was attractive because it was simple and would have yielded an analytic file containing reliable data for all outcomes across all sample members. However, because the approach would remove a large fraction of the children and families originally sampled for survey, it could have led to substantial biases in our estimates of several key outcomes.

For example, suppose we had dropped from the study sample any recent enrollee who had reported being enrolled in SCHIP for an extended period, say, a year or more. This step would have eliminated the problem of interviewing recent enrollees who believed themselves enrolled for a long period of time. However, it probably also would have resulted in the removal of a disproportionate share of recent enrollees who had either transitioned from Medicaid seamlessly, or who had experienced only short gaps in SCHIP coverage. In turn, any estimates of prior coverage among recent enrollees would have been biased, leading to underestimates of the share of recent enrollees with public coverage, and to overestimates of the share with private coverage or no insurance.

The second option, which we adopted, was to retain sample that displayed inconsistency between the state enrollment data and the self-reported data and interview families based on the self-reported information, rather than on the information from the state enrollment files. (So, for example, if a recent enrollee had informed us that he or she had been enrolled for more than a year, we interviewed that person as if he or she were an established enrollee, and not a recent enrollee.) As described below, this option required us to use imputation and/or nonresponse adjustment for some outcomes to account for survey data on selected sample members that were either incomplete or incorrect. Nevertheless, because we retained a sample that was fully representative of each study domain, this option was much more likely than the first option to yield unbiased estimates of the experiences of SCHIP enrollees and disenrollees.

As shown in Table C.2, the adoption of this approach led to a complex sample design. In total, the sample included 18 types of sample members across the three domains. For some sample members, survey questions were either skipped because they could not be addressed properly or were replaced by a different series of questions. For example, within the recent-enrollee domain, children reported to have been enrolled at birth were not asked any questions about their pre-SCHIP access, service use, or other experiences for obvious reasons; however, if the newborns were reported to have been enrolled for 12 months or longer at interview, we collected information about their experiences while in the program. Furthermore, we used Medicaid and SCHIP enrollment files to validate reports that children were enrolled in SCHIP at birth. We were thus able to identify children who had actually been enrolled in Medicaid at birth, and had then transferred seamlessly to SCHIP. By adopting these strategies, we were able to collect as much usable information as possible on each member of the sample. In subsequent chapters of the appendix, we describe the methods used to combine interview and

TABLE C.2

## SUMMARY OF THE TYPES OF SAMPLE MEMBERS AND THE SURVEY QUESTIONS THEY ANSWERED

| Definition (Self-Reported)   | Introduction<br>(Section 1) | Application and<br>Enrollment<br>(Section 2) | Child's<br>Insurance<br>Coverage<br>(Section 3) | Child's<br>Health<br>(Section 4) | Time Frame for<br>Sections 5-6                                 | Access to<br>Care<br>(Section 5) | Service<br>Utilization/<br>Unmet Need<br>(Section 6) | Parent<br>Characteristics<br>(Section 7) | Telephone<br>Coverage<br>(Section 8) |
|--|-----------------------------|--|---|----------------------------------|--|----------------------------------|--|--|--------------------------------------|
| <b>Statuses Within the Recent Enrollee Domain</b>  |                             |  |   |                                  |  |                                  |  |  |                                      |
| Recent Enrollee Who Has<br>Been Enrolled for Fewer<br>than 12 Months                                   | Yes                         | Yes  | 2.1-2.9.1B,<br>2.20-2.44                        | Yes                              | The 6 months<br>before child's<br>coverage began               | Yes                              | Yes  | Yes                                      | Yes                                  |
| Recent Enrollee Who Was<br>Born in the 6 Months<br>Before SCHIP Started                                | Yes                         | Yes  | 2.1-2.9.1B,<br>2.20-2.44                        | Yes                              | Before child's<br>coverage began                               | Yes                              | Yes  | Yes                                      | Yes                                  |
| Recent Enrollee Who<br>Obtained Coverage at Birth<br>and Has Been Enrolled for<br>12 Months or More    | Yes                         | Yes  | 2.1-2.9.1B,<br>2.20-2.31                        | Yes                              | Past 6 months  | Yes                              | Yes  | Yes                                      | Yes                                  |
| Recent Enrollee Who<br>Obtained Coverage at Birth<br>and Has Been Enrolled for<br>Fewer than 12 Months | Yes                         | Yes  | 2.1-2.9.1B,<br>2.20-2.31                        | Yes                              |  | No                               | No   | 7.4.a-7.4.1.9,<br>7.109-7.120            | 8.15 to end                          |
| Recent Enrollee Who Has<br>Been Enrolled for 12<br>Months or Longer                                    | Yes                         | Yes  | 2.1-2.9.1B,<br>2.20-2.44                        | Yes                              | Past 6 months  | Yes                              | Yes  | Yes                                      | Yes                                  |
| Recent Enrollee Who Has<br>Been Disenrolled for 6<br>Months but Fewer than 12<br>Months                | Yes                         | Yes  | 2.1-2.9.1B,<br>2.20-2.44                        | Yes                              | The 6 months<br>before child's<br>last SCHIP<br>coverage ended | Yes                              | Yes  | Yes                                      | Yes                                  |
| Recent Enrollee Who Has<br>Been Disenrolled for 12<br>Months or Longer                                 | Yes                         | Yes  | 2.1-2.51  | Yes                              |  | No                               | No   | 7.4.a-7.4.1.9,<br>7.109-7.120            | 8.15 to end                          |
| <b>Statuses Within the Established Enrollee Domain</b>   |                             |  |   |                                  |  |                                  |  |  |                                      |
| Established Enrollee Who<br>Has Been Enrolled 6<br>Months or More                                      | Yes                         | Yes  | 2.1-2.9.1B,<br>2.20-2.44                        | Yes                              | Past 6 months  | Yes                              | Yes  | Yes                                      | Yes                                  |
| Established Enrollee Who<br>Obtained Coverage at Birth   | Yes                         | Yes  | 2.1-2.9.1B,<br>2.20-2.31                        | Yes                              | Past 6 months  | Yes                              | Yes  | Yes                                      | Yes                                  |



TABLE C.2 (continued)

| Definition (Self-Reported)  | Introduction<br>(Section 1) | Application and<br>Enrollment<br>(Section 2) | Child's<br>Insurance<br>Coverage<br>(Section 3) | Child's<br>Health<br>(Section 4) | Time Frame for<br>Sections 5-6                                 | Access to<br>Care<br>(Section 5) | Service<br>Utilization/<br>Unmet Need<br>(Section 6) | Parent<br>Characteristics<br>(Section 7)                              | Telephone<br>Coverage<br>(Section 8) |
|---|-----------------------------|--|---|----------------------------------|--|----------------------------------|--|---|--------------------------------------|
| Established Enrollee<br>Enrolled for Fewer than 6<br>Months   | Yes                         | Yes  | 2.1-2.9.1B,<br>2.20-2.44                        | Yes                              | While the child<br>was on SCHIP                                | Yes                              | Yes  | Yes   | Yes                                  |
| Established Enrollee Who<br>Has Been Disenrolled 6<br>Months but Fewer than 12<br>Months                | Yes                         | Yes  | 2.1-2.9.1B,<br>2.20-2.25,<br>2.60 to end        | Yes                              | The 6 months<br>before child's<br>last SCHIP<br>coverage ended | Yes                              | Yes  | Yes   | Yes                                  |
| Established Enrollee Who<br>Has Been Disenrolled for 12<br>Months or More                               | Yes                         | Yes  | 2.1-2.51  | Yes                              |  | No                               | No   | 7.4.a-7.4.1.9,<br>7.109-7.120   | 8.15 to end                          |
| <b>Statuses Within the Recent Disenrollee Domain</b>  |                             |  |   |                                  |  |                                  |  |   |                                      |
| Disenrollee Who Has Been<br>Disenrolled for Fewer than<br>12 Months                                     | Yes                         | Yes  | 2.1-2.9.1B,<br>2.20-2.25,<br>2.60 to end        | Yes                              | The 6 months<br>before child's<br>last SCHIP<br>coverage ended | Yes                              | Yes  | Yes   | Yes                                  |
| Disenrollee Who Has Been<br>Currently Enrolled for 6<br>Months or More                                  | Yes                         | Yes  | 2.1-2.9.1B,<br>2.20-2.25,<br>2.60 to end        | Yes                              | Past 6 months  | Yes                              | Yes  | Yes   | Yes                                  |
| Disenrollee Who Has Been<br>Disenrolled for 12 Months<br>or More  | Yes                         | Yes  | 2.1-2.51  | Yes                              | —  | No                               | No   | 7.4.a-7.4.1.9,<br>7.109-7.120   | 8.15 to end                          |
| Disenrollee Who Has Been<br>Disenrolled for 12 Months<br>or More—Recontacted and<br>Completed Interview | Yes                         | Yes  | 2.1-2.5,<br>2.26, 2.60-<br>2.65                 | Yes                              | —  | No                               | No   | 7.4.a-7.4.1.9,<br>7.109-7.120,<br>7.4.5.1-<br>7.4.5.6, 7.90-<br>7.101 | 8.15 to end                          |
| <b>Statuses That Apply to Yes Domains</b>   |                             |  |   |                                  |  |                                  |  |   |                                      |
| No Info on Whether Sample<br>Child Is Enrolled  | Yes                         | Yes  | 2.1   | Yes                              | —  | No                               | No   | 7.4.a-7.4.1.9,<br>7.109-7.120   | 8.15 to end                          |
| Missing Date(s) to<br>Determine Duration of<br>Enrollment   | Yes                         | Yes  | 2.1-2.51  | Yes                              | —  | No                               | No   | 7.4.a-7.4.1.9,<br>7.109-7.120   | 8.15 to end                          |

administrative data to construct key outcome variables, and any steps taken to impute or otherwise account for data that were missing or potentially misreported.

## **b. Sample Sizes**

As described in Appendix B, the sample design for the study allowed children to be selected for the study in either a clustered or unclustered sample. In rare instances, SCHIP children were selected for both samples, leading these children to have two records in the analysis sample rather than one. (Throughout the analysis, we used appropriate sample weights to avoid over-representing such cases, and all standard errors are calculated with SUDAAN to reflect the actual sample size, design effects, and weighting.)

The resulting analysis sample for the SCHIP study, summarized in Table C.3, included a total of 16,680 records drawn from a total of 16,580 interviews with the parents of SCHIP enrollees and disenrollees.<sup>2</sup> The Medicaid analysis sample, summarized in Table C.4, had no instances of this dual sample selection, so that the total sample size reported (2,613) reflects both the number of sample records and the number of completed interviews (conducted with the parents of Medicaid enrollees and disenrollees). For both the SCHIP and Medicaid samples, the size of the unweighted sample was roughly equal across the three sample domains. However, the weighted sample was much larger for the established enrollees, reflecting their larger population in relation to recent enrollees or disenrollees.

Within each domain, the largest subsample was the one that a respondent would generally be expected to self-report. For example, within the domain of recent SCHIP enrollees, the largest subsample consisted of children reported to have been enrolled for fewer than 12 months (3,330

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<sup>2</sup> Throughout this appendix, as well as the main report, we base our sample size numbers on the slightly larger record count in order to make the numbers easier to replicate by users of the forthcoming public use file.

TABLE C.3

## SCHIP SURVEY: SAMPLE SIZE AND DISTRIBUTION

| Definition  | Unweighted  |            |                          |                      | Weighted       |                          |                         |
|---|-------------|------------|--------------------------|----------------------|----------------|--------------------------|-------------------------|
|   | Sample Size |            | % of<br>Sample<br>Domain | % of Total<br>Sample | Sample<br>Size | % of<br>Sample<br>Domain | %<br>of Total<br>Sample |
|   | Records     | Interviews |                          |                      |                |                          |                         |
| Recent Enrollees  |             |            |                          |                      |                |                          |                         |
| Recent Enrollee Who Has Been Enrolled for Fewer than 12 Months                          | 3,330       | 3,326      | 59                       | 20                   | 111,658        | 61                       | 6                       |
| Recent Enrollee Who Was Born in the 6 Months Before SCHIP Started                       | 67          | 67         | 1                        | <1                   | 2,176          | 1                        | <1                      |
| Recent Enrollee Who Obtained Coverage at Birth and Is Enrolled for 12 Months or More    | 164         | 164        | 3                        | 1                    | 2,806          | 2                        | <1                      |
| Recent Enrollee Who Obtained Coverage at Birth and Is Enrolled for Fewer than 12 Months | 37          | 37         | 1                        | <1                   | 1,462          | 1                        | <1                      |
| Recent Enrollee Who Has Been Enrolled for 12 Months or Longer                           | 1,761       | 1,756      | 31                       | 10                   | 55,317         | 30                       | 3                       |
| Recent Enrollee Who Has Been Disenrolled for 6 Months but Fewer than 12 Months          | 84          | 82         | 1                        | 1                    | 3,160          | 2                        | 0                       |
| Recent Enrollee Who Has Been Disenrolled for 12 Months or Longer                        | 76          | 75         | 1                        | <1                   | 2,294          | 1                        | 0                       |
| No Information on Whether Sample Child is Enrolled                                      | 62          | 62         | 1                        | <1                   | 1,870          | 1                        | 0                       |
| Missing Date(s) to Determine Duration of Enrollment                                     | 82          | 82         | 1                        | <1                   | 2,361          | 1                        | 0                       |
| Subtotal (Recent Enrollees)   | 5,663       | 5,651      | 100                      | 34                   | 183,105        | 100                      | 10                      |
| Established Enrollees   |             |            |                          |                      |                |                          |                         |
| Established Enrollee Who Has Been Enrolled 6 Months or More                             | 5,010       | 5,007      | 86                       | 30                   | 1,373,010      | 89                       | 77                      |
| Established Enrollee Who Obtained Coverage at Birth                                     | 179         | 178        | 3                        | 1                    | 30,542         | 2                        | 2                       |
| Established Enrollee Enrolled for Fewer than 6 Months                                   | 109         | 109        | 2                        | 1                    | 27,681         | 2                        | 2                       |
| Established Enrollee Who Has Been Disenrolled 6 Months but Less than 12 Months          | 167         | 167        | 3                        | 1                    | 44,873         | 3                        | 3                       |
| Established Enrollee Who Has Been Disenrolled for 12 Months or More                     | 112         | 112        | 2                        | 1                    | 25,735         | 2                        | 1                       |
| No Information on Whether Sample Child Is Enrolled                                      | 83          | 83         | 1                        | <1                   | 18,398         | 1                        | 1                       |
| Missing Date(s) to Determine Duration of Enrollment                                     | 177         | 137        | 2                        | 1                    | 26,863         | 2                        | 2                       |
| Subtotal (Established Enrollees)  | 5,797       | 5,793      | 100                      | 35                   | 1,547,102      | 100                      | 86                      |

TABLE C.3 (continued)

| Definition  | Unweighted  |            |                          |                      | Weighted       |                          |                         |
|---|-------------|------------|--------------------------|----------------------|----------------|--------------------------|-------------------------|
|   | Sample Size |            | % of<br>Sample<br>Domain | % of Total<br>Sample | Sample<br>Size | % of<br>Sample<br>Domain | %<br>of Total<br>Sample |
|   | Records     | Interviews |                          |                      |                |                          |                         |
| Disenrollees  |             |            |                          |                      |                |                          |                         |
| Disenrollee Who Has Been Disenrolled for Less than 12 Months                                    | 2,051       | 2,011      | 39                       | 12                   | 23,265         | 40                       | 1                       |
| Disenrollee Who Has Been Currently Enrolled for 6 Months or More                                | 1,762       | 1,747      | 33                       | 11                   | 16,980         | 29                       | 1                       |
| Disenrollee Who Has Been Disenrolled for 12 Months or More                                      | 563         | 550        | 11                       | 3                    | 6,507          | 11                       | <1                      |
| Disenrollee Who Has Been Disenrolled for 12 Months or More—Recontacted and Successfully Reached | 630         | 618        | 12                       | 4                    | 8,352          | 14                       | <1                      |
| No Information on Whether Sample Child Is Enrolled  | 113         | 112        | 2                        | 1                    | 1,122          | 2                        | <1                      |
| Missing Date(s) to Determine Duration of Enrollment   | 201         | 198        | 4                        | 1                    | 2,177          | 4                        | <1                      |
| Subtotal (Disenrollees)   | 5,320       | 5,236      | 100                      | 32                   | 58,403         | 100                      | 3                       |
| Total (Full Sample)   | 16,780      | 16,680     | —                        | 100                  | 1,788,610      | —                        | 100                     |

TABLE C.4

## THE MEDICAID SURVEY: SAMPLE SIZE AND DISTRIBUTION

| Definition  | Unweighted  |                    |                   | Weighted         |                    |                   |
|---|-------------|--------------------|-------------------|------------------|--------------------|-------------------|
|   | Sample Size | % of Sample Domain | % of Total Sample | Sample Size      | % of Sample Domain | % of Total Sample |
| <b>Recent Enrollees</b>   |             |                    |                   |                  |                    |                   |
| Recent Enrollee Who Has Been Enrolled for Fewer than 12 Months                          | 311         | 34                 | 12                | 21,972           | 33                 | 1                 |
| Recent Enrollee Who Was Born in the 6 Months Before SCHIP Started                       | 56          | 6                  | 2                 | 3,873            | 6                  | <1                |
| Recent Enrollee Who Obtained Coverage at Birth and Is Enrolled for 12 Months or More    | 87          | 10                 | 3                 | 7,543            | 11                 | <1                |
| Recent Enrollee Who Obtained Coverage at Birth and Is Enrolled for Fewer than 12 Months | 225         | 25                 | 9                 | 15,581           | 23                 | 1                 |
| Recent Enrollee Who Has Been Enrolled for 12 Months or Longer                           | 186         | 20                 | 7                 | 13,997           | 21                 | 1                 |
| Recent Enrollee Who Has Been Disenrolled for 6 Months but Fewer than 12 Months          | 17          | 2                  | 1                 | 1,581            | 2                  | <1                |
| Recent Enrollee Who Has Been Disenrolled for 12 Months or Longer                        | 14          | 2                  | 1                 | 1,225            | 2                  | <1                |
| No Information on Whether Sample Child is Enrolled                                      | 9           | 1                  | 0                 | 1,109            | 2                  | <1                |
| Missing Date(s) to Determine Duration of Enrollment                                     | 6           | 1                  | 0                 | 497              | 1                  | <1                |
| <b>Subtotal (Recent Enrollees)</b>  | <b>911</b>  | <b>100</b>         | <b>35</b>         | <b>67,378</b>    | <b>100</b>         | <b>3</b>          |
| <b>Established Enrollees</b>  |             |                    |                   |                  |                    |                   |
| Established Enrollee Who Has Been Enrolled 6 Months or More                             | 461         | 50                 | 18                | 863,121          | 46                 | 44                |
| Established Enrollee Who Obtained Coverage at Birth                                     | 345         | 37                 | 13                | 755,159          | 40                 | 38                |
| Established Enrollee Enrolled for Fewer than 6 Months                                   | 31          | 3                  | 1                 | 65,570           | 3                  | 3                 |
| Established Enrollee Who Has Been Disenrolled 6 Months but Less than 12 Months          | 25          | 3                  | 1                 | 55,641           | 3                  | 3                 |
| Established Enrollee Who Has Been Disenrolled for 12 Months or More                     | 28          | 3                  | 1                 | 69,444           | 4                  | 4                 |
| No Information on Whether Sample Child Is Enrolled                                      | 16          | 2                  | 1                 | 38,338           | 2                  | 2                 |
| Missing Date(s) to Determine Duration of Enrollment                                     | 16          | 2                  | 1                 | 37,777           | 2                  | 2                 |
| <b>Subtotal (Established Enrollees)</b>   | <b>922</b>  | <b>100</b>         | <b>35</b>         | <b>1,885,048</b> | <b>100</b>         | <b>95</b>         |

TABLE C.4 (continued)

| Definition  | Unweighted   |                    |                   | Weighted         |                    |                   |
|---|--------------|--------------------|-------------------|------------------|--------------------|-------------------|
|   | Sample Size  | % of Sample Domain | % of Total Sample | Sample Size      | % of Sample Domain | % of Total Sample |
| <b>Disenrollees</b>   |              |                    |                   |                  |                    |                   |
| Disenrollee Who Has Been Disenrolled for Less than 12 Months                                    | 190          | 24                 | 7                 | 5,970            | 26                 | <1                |
| Disenrollee Who Has Been Currently Enrolled for 6 Months or More                                | 456          | 58                 | 17                | 13,223           | 57                 | 1                 |
| Disenrollee Who Has Been Disenrolled for 12 Months or More                                      | 45           | 6                  | 2                 | 1,286            | 6                  | <1                |
| Disenrollee Who Has Been Disenrolled for 12 Months or More—Recontacted and Successfully Reached | 73           | 9                  | 3                 | 2,386            | 10                 | <1                |
| No Information on Whether Sample Child Is Enrolled  | 5            | 1                  | 0%                | 96               | 0                  | <1                |
| Missing Date(s) to Determine Duration of Enrollment   | 11           | 1                  | 0                 | 351              | 2                  | <1                |
| <b>Subtotal (Disenrollees)</b>  | <b>780</b>   | <b>100</b>         | <b>30</b>         | <b>23,313</b>    | <b>100</b>         | <b>1</b>          |
| <b>Total (Full Sample)</b>  | <b>2,613</b> | <b>—</b>           | <b>100</b>        | <b>1,975,738</b> | <b>100</b>         | <b>1</b>          |

of the 5,663 records in that domain). Likewise, within the domain of established SCHIP enrollees, the largest subsample consisted of children reported to have been enrolled for 6 months or more (5,010 of the 5,797 records in that domain). The same pattern also was true for the SCHIP-disenrollee domain, although to a lesser extent. Although the largest subsample reported being disenrolled for fewer than 12 months (2,051 of the 5,320 records in that domain), a nearly equal number reported being enrolled for 6 or more months (1,762).

## **2. Demographic and Other Cross-Cutting Variables**

We constructed a base set of demographic and other variables that were used across all the analyses. These variables were used for three main purposes: (1) to describe the characteristics of the SCHIP population across states and enrollment domains, (2) to form key subgroups for analysis, and (3) to serve as covariates in several types of regression analysis.

Table C.5 displays the source data used to construct the variables and notes important issues with their development or use. All of the variables were constructed as simple indicators that took on a value of 1 if the characteristic was true, or a value of 0 if the characteristic was false. For example, the variable “age 0 to 5” takes on a value of 1 if a given sample member was in that age range, and 0 otherwise. In many instances, these indicator variables reflected one of several related categories. For example, we had four indicator variables for children’s ages, reflecting categories of 0 to 5, 6 to 12, 13 to 17, and 18 years and older. (In some analyses, the two older age groups were collapsed into one category that included all children age 13 and older.) In regression analysis, one of the indicator variables is always omitted to serve as the reference category.

TABLE C.5

## SUMMARY OF DEMOGRAPHIC VARIABLES USED THROUGHOUT ANALYSIS

| Indicator Variables          |                                   | Source Data <sup>a</sup>     | Notes  |
|------------------------------|-----------------------------------|------------------------------|--|
| <b>Child-Level Variables</b> |                                   |                              |  |
| Age                          | Age 0-5                           | Q1.16-1.17                   |  |
|                              | Age 6-12                          |                              |  |
|                              | Age 13-17                         |                              |  |
|                              | Age 18-20                         |                              |  |
| Gender                       | Female                            | Q1.15                        |  |
| Race/Ethnicity <sup>b</sup>  | Hispanic                          | Q7.109-7.111                 | If respondent considered child to be of Hispanic or Latino origin, child was categorized as "Hispanic/Spanish origin." For each other child, respondent was also asked to describe the child's racial background. Categories were white, American Indian, Alaskan Native, black or African American, and Asian/Pacific Islander, or respondent could write in an answer. Children with written answers categorized into one of the previous categories if possible. American Indian, Alaskan Native, and children with more than one race listed were added to the "Other" category. Any child who could not be classified was not included in the variable.   |
|                              | White, non-Hispanic               |                              |  |
|                              | Black, non-Hispanic               |                              |  |
|                              | Asian, non-Hispanic               |                              |  |
| Health Status                | Other, non-Hispanic               |                              |  |
|                              | Health is fair or poor            | Q4.1                         |  |
|                              | Child has asthma                  | Q4.9                         |  |
|                              | Child has mental health condition | Q4.13                        |  |
|                              | Has special health care need      | Q4.3-4.10, Q4.11-4.16        | Respondent reported that child met at least one of the following four criteria: (1) child had an impairment or health problem limiting ability to (crawl), walk, run, or play and lasting at least 12 months; (2) a doctor or other health care professional said that child had asthma or child has taken medication or required injections prescribed by a doctor for his/her asthma; (3) child has taken medication or required injections for at least 3 months (excluding asthma); (4) a doctor or other health professional said that child had mental health condition or behavioral problem or child had mental health condition or behavioral problem limiting ability to do regular schoolwork or participate in usual kind of activities done by most children his/her age. |
|                              | Has elevated health care need     | Q4.1;Q4.3-Q4.10; Q4.11-Q4.16 | Child's health fair or poor or child has special health care need (see above)  |



TABLE C.5 (continued)

| Indicator Variables                  |   | Source Data <sup>a</sup>   | Notes   |
|--------------------------------------|---|--|---|
| Household-Level Variables            |   |  |   |
| Main Household Language <sup>b</sup> | English<br>Spanish<br>Other   | Q7.120   |   |
| Household Structure                  | Two-parent household<br>Two parents/one working<br>Two parents/none working<br>One parent/working<br>One parent/not working | Q7.4.1.2-7.4.1.3,<br>Q7.4.5.2- 7.4.5.3,<br>Q7.4.6.2-7.4.6.3,<br>Q7.9.1-7.9.2 | Two constructed variables are combined to determine household structure:<br>1. Respondent reported relation to child and those of other adults living in the same household to determine number of parents/legal guardians in the household<br>2. Respondent reported employment status of one/both parent/legal guardians during past 12 months. If worked at any time during past 12 months, full-time or part-time, for pay or profit, then defined as working |
| Highest Education Level              | No GED or HS diploma<br>GED or HS diploma<br>Some college or college degree   | Q7.4.1.7,<br>Q7.4.6.7  | The highest education level reported by any parent/legal guardian   |
| Household Income                     | <150% FPL<br>150 to 199%FPL<br>>200%FPL   | Q7.90-7.101  | Household income from jobs and all other sources of income reported by respondent and size of household used to compute income as percentage of FPL   |
| Parent(s) Foreign Born               |   | Q7.4.1.8,<br>Q7.4.5.8  |   |
| Urbanicity                           | MSA   | Based on the variable "r_ucc" from 2001 ARF                                  | Metro counties include "central counties of metro areas of 1 million population or more," "fringe counties of metro areas of 1 million population or more," "counties in metro areas of 250,000-1,000,000 population," and "counties in metro areas of 250,000-1,000,000 population."   |
|                                      | Adjacent to MSA   | Based on the variable "r_ucc" from 2001 ARF                                  | Adjacent counties include "urban population of 20,000 or more, adjacent to a metro area," "urban population of 2,500-19,999, adjacent to a metro area," and "completely rural (no population of 2,500 or more) adjacent to a metro area."   |

TABLE C.5 (continued)

| Indicator Variables                         | Source Data <sup>a</sup>                    | Notes   |
|---|---|---|
| Non-MSA/non-adjacent                        | Based on the variable “r_ucc” from 2001 ARF | Non-metro/non-adjacent counties include “urban population of 20,000 or more, not adjacent to a metro area,” “urban population of 2,500-19,999, not adjacent to a metro area,” and “completely rural (no population of 2,500 or more) not adjacent to a metro area.” |
| Home remedies better than drugs             | Q7.3.34                                     | Includes response of either “definitely true” or “mostly true”  |
| Can overcome most problems without a doctor | Q7.3.32                                     | Includes response of either “definitely true” or “mostly true”  |

<sup>a</sup>Except as noted, source data reflect the question number on the survey instrument (see Appendix A).

<sup>b</sup>Race/ethnicity and language variables were often combined in the report to form six indicator variables: (1) Hispanic, Spanish-speaking; (2) Hispanic, English-speaking; (3) non-Hispanic, English-speaking white; (4) non-Hispanic, English-speaking black; (5) non-Hispanic, English-speaking other; and (6) non-Hispanic, non-English-speaking (all).

ARF = Area Resource File; FPL = Federal Poverty Level; GED = General Educational Development; HS = High School; MSA = Metropolitan Statistical Area.

## **B. ANALYSIS OF ENROLLMENT EXPERIENCES**

This section discusses the samples and study methods used to analyze enrollment experiences of recent SCHIP and Medicaid enrollees (reported in Chapters I, II, and VIII of the main report). We begin by describing the samples used for the analyses, first for SCHIP enrollment experience and then for Medicaid enrollment experience. We then describe the construction of the key measures that we investigated.

### **1. SCHIP Sample**

The analysis of the experiences of recent SCHIP enrollees focused on two different samples:

1. *To examine enrollees' sources of information* about the program and the importance of that information, we analyzed the entire sample of 5,663 recent SCHIP enrollees across the 10 states.
2. *To examine experience with the application and enrollment process*, we focused on a subsample of recent enrollees. The subsample included all recent enrollees whose self-reported enrollment months coincided closely with the months shown on the state files for sampling.

Our reason for limiting the latter sample was to ensure that we measured the application and enrollment experiences of recent enrollees at the time they were sampled for the survey—not the application experience at some other time. However, we also recognized that excluding a large number of cases from the analysis might bias our measurement. Most notably, many families whose children transitioned from Medicaid appeared not to have been aware of their entry into SCHIP, resulting in self-reported enrollment dates in SCHIP that more closely corresponded to the children's dates of Medicaid entry months or years earlier. Since the information provided by these families on the surveys did not pertain to the target time frame (or even to the target program), it would not have been appropriate to include it in the analysis. However, we did not want to simply exclude those observations from the analysis, as that step would have led us to

understate the extent of such “seamless transitions” into the SCHIP program. As described below, we conducted an imputation for a fraction of the recent enrollees sample in order to retain them in the analysis.

We separated the recent-enrollee sample into four categories based on the survey respondents’ perceptions of when their children had enrolled in SCHIP. These categories include:<sup>3</sup>

1. ***Families whose children’s reported enrollment dates were similar to the enrollment dates found in the program data (N = 3,952).*** This group included a majority of recent enrollees (70 percent) whose families provided enrollment dates that were within 6 months of the enrollment dates indicated in the program enrollment files. Reported experiences among these families were likely to reflect the families’ most recent SCHIP enrollment.
2. ***Families whose children were “seamlessly” transferred from Medicaid (N = 942).*** This group, which included 17 percent of the recent-enrollee sample, included families who reported that their children had enrolled 6 or more months earlier than indicated by the program data, and who transferred to SCHIP directly from Medicaid with no intervening uninsured spells. In all likelihood, most of these families did not report their most recent enrollment in SCHIP because that enrollment required little or no effort and was thus unobserved.
3. ***Families who reported enrollment dates that were far removed from the actual enrollment (N = 625).*** This group included the families who reported enrollment dates 6 or more months beyond the ones indicated on the enrollment files, but for whom there was no evidence from the state files of seamless Medicaid enrollment.
4. ***Families who were unable to provide enrollment dates because they either could not recall them or refused to answer (N = 144).*** This group included families who were unable to provide the dates of the sampled children’s most recent enrollment.

Our analysis of the application and enrollment experience included the first group, who reported dates of enrollment similar to the ones contained in the state files. In addition, it

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<sup>3</sup>The four categories corresponded loosely to the subsamples shown in Table C.3 for the recent-enrollee domain. Thus, most of the families who fell into the first category had self-reported program tenures of less than a year, most sample members in the second and third categories had self-reported tenures of more than a year (leading them to be interviewed as established enrollees), and sample members in the final category included those who could not answer the survey questions because they did not provide enrollment dates.

included the second group, which transitioned from Medicaid. (Below, we describe our data imputation for this latter sample.) Together, these two groups accounted for about 85 percent of the full sample of recent SCHIP enrollees. The third group, which included children who did not transfer from Medicaid but still had reported program tenures that were far longer than those contained in the state files, were excluded from the sample for the application and enrollment analysis (along with the small, fourth group). However, in order to reflect the enrollment experiences of the excluded groups in our estimates, we used a nonresponse adjustment whereby the weights in the analysis sample were adjusted based on the excluded groups' observed characteristics.<sup>4</sup> Estimates of recent enrollee experiences differed little with or without this adjustment, suggesting that our reported outcomes were robust to the loss of this sample.

## **2. Medicaid Sample**

We defined our sample of recent Medicaid enrollees for the analysis of enrollment experiences using an approach parallel to the one we used for recent SCHIP enrollees. Thus, to investigate where families learned about SCHIP, we used the full sample of recent Medicaid enrollees, along with the original sample weights. However, to study the application and enrollment experiences of these families, we limited the analytic sample to recent enrollees with self-reported enrollment dates within 6 months of the state files' dates (the first category in the list above), and to those entering Medicaid "seamlessly" from SCHIP (the second category in the list). Together, these two categories accounted for roughly 80 percent of all children in the Medicaid recent enrollee sample.

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<sup>4</sup>The adjustment was based on each enrollee's self-reported health care coverage in the 6 months before enrolling, which may have had a strong influence on reported enrollment experiences. Specifically, within each prior coverage type (uninsured, private, Medicaid, SCHIP), we created a ratio equal to the sum of sampling weights for the dropped sample and the retained sample relative to the sum of the sampling weights for the retained sample only. This ratio was then multiplied by the weight for each retained sample member, by prior coverage type, in order to create a revised weight that accounted for the dropped sample members.

### 3. Outcome Measures

The analysis of information sources focused on two measures: (1) respondents' source(s) of information on SCHIP/Medicaid, and (2) the importance of this information in the decision of the respondents to enroll their children. These measures were based on responses to 10 survey questions in Section B of the survey instrument (Table C.6, top panel). Open-ended responses were coded to appropriate response categories.

The analysis of enrollment experience focused on five measures (Table C.6, lower panel). For families who experienced seamless transfers of their children from Medicaid (the second group in the list), the reported application experiences most likely pertained to their original Medicaid enrollment, rather than to their more recent enrollment in SCHIP (through transfer from Medicaid). To retain this sample, we assumed that the sample members' program applications and entry involved little or no effort (since they were not even observed by the survey respondents). Based on this assumption, we imputed the following values for this group of recent enrollees:

- ***Ease of Enrollment.*** Assigned a value of “very easy”
- ***Received Application Assistance.*** Assigned a value that the enrollee “did not receive assistance” applying for SCHIP
- ***Waited 4 Weeks or Less to Enroll.*** Assigned a value of “yes,” indicating that the wait time was less than 4 weeks after submitting an application

These imputations should lead to a more accurate description of the experiences of recent enrollees than would either simply dropping the sample or using the information provided (which appeared to pertain to the wrong period). Nevertheless, the substantive policy findings are robust to whether we perform the imputation or simply drop the sample from the analysis. For example, even in the absence of an imputation, most enrollees found their application

TABLE C.6

## SUMMARY OF MEASURES USED IN THE ANALYSIS OF ENROLLMENT EXPERIENCE

| Analysis of Information Sources  |           |  |
|--|-----------|--|
| “Have You Ever Heard or Received Information About SCHIP from/at ...?” | Q3.1.2.1: | Television or radio  |
|  | Q3.1.4:   | Public agencies  |
|  | Q3.1.5:   | Child’s school   |
|  | Q3.1.8:   | Telephone hotline, helpline  |
|  | Q3.1.9:   | Healthcare providers   |
|  | Q3.1.12:  | Employer   |
|  | Q3.1.13:  | Stores, restaurants, malls, etc.   |
|  | Q3.1.15:  | Other places   |
| Most Importance Source   | Q3.2:     | “Was any of this information important in making a decision to enroll your child in SCHIP?”<br>(If YES to Q3.2) Q3.2.1: “Which information was most important in making the decision to enroll your child in SCHIP?”   |
| Analysis of Application and Enrollment Process                         |           |  |
| Easy Enrollment  | Q3.29.1:  | “So overall, based on your experience and what you know about SCHIP, how easy or difficult is it to enroll your child in SCHIP?”— Affirmative if one of the first two response categories, “Very easy” and “Somewhat easy,” was provided.  |
| Received Application Assistance  | Q3.20:    | “Did a translator or some other professional help translate the application form in a language you could understand?” and Q3.21: “Did you get any (other) assistance in completing the application?”— Affirmative if the response to either question is affirmative.               |
| Waited 4 Weeks or Less to Enroll                                       | Q3.30:    | “After the entire application was completed and submitted, about how many weeks or months did it take until you were notified that your child was enrolled in the program?”— Affirmative if the response is 4 weeks or less.   |
| Knowledge of Renewal Frequency   | Q3.34:    | “Based on your experiences and what you know about SCHIP, how often do you have to reapply to SCHIP for your child to stay in the program?” — Respondent has correct knowledge if the response is consistent with state’s SCHIP eligibility redetermination frequency at the time. |

process to be at least somewhat easy, and most received notification of their eligibility within 4 weeks.

### **C. ANALYSIS OF SCHIP PROGRAM EXPERIENCES (ACCESS AND USE)**

This section discusses the study methodology used for the analysis of SCHIP and Medicaid program experiences related to access and use, unmet needs, and satisfaction with care (presented in Chapters I, III, VII, and VIII of the report). Although the analysis focused mainly on the outcomes of established enrollees, it also examined the preenrollment outcomes of recent enrollees (for comparison) and the outcomes of disenrollees while in the program (for sensitivity testing). Thus, the overall analysis drew on all three domains for the study—established enrollees, recent enrollees, and disenrollees—in both SCHIP and Medicaid.

We begin by describing the analytic samples used, focusing on cases that were excluded and on the reasons for the exclusions. We then provide additional information on the characteristics of the recent- and established-enrollee samples, focusing on any differences between the full sample and the access and use analytic samples. Finally, we describe the construction of measures of access and use used to analyze the experiences SCHIP and Medicaid recent and established enrollees.

#### **1. Established-Enrollee Samples**

The sample of established SCHIP (or Medicaid) enrollees formed the basis for assessing children's access, use, and other experiences while in the program. As described here, the analysis samples for SCHIP and Medicaid excluded only a very small fraction of children in the established-enrollee sample. Moreover, the characteristics of excluded sample members differed little from the characteristics of the ones who were retained.



### a. SCHIP Sample

The sample eligible for the analysis of access and use experiences of established SCHIP enrollees included 5,797 observations. As summarized in Table C.3, the sample fell into four categories defined by the survey respondents' perception of when their children had enrolled in SCHIP, and on whether the children had subsequently disenrolled. Here, we summarize the four categories and the action taken with respect to each of them in order to construct our measures:

1. ***Enrolled for 6 Months or More (N = 5,189).*** These sample members provided enrollment dates similar to the ones indicated on the enrollment file, suggesting that their reported enrollment information was reliable. We therefore asked them a full series of questions about their access and use experience “in the past 6 months.”
2. ***Enrolled for Fewer than 6 Months (N = 109).*** Because asking about these children's experiences “in the past 6 months” would have covered days in which the children were not enrolled in SCHIP, we asked these respondents about the time “that the child was on SCHIP.” We collected a full range of information about these respondents' demographic characteristics and their program experience for the time that their children were in SCHIP. However, we did not include the children in our access and use analysis because the period over which experiences were measured was not comparable to the period for which information was provided by enrollees in the first category. For example, unmet need for doctor care in the past 4 months is not comparable to unmet need for doctor care in the previous 6 months.
3. ***Disenrolled for 6 Months or More (N = 279).*** Either these children had disenrolled between sampling and the fielding of the survey or their parents erroneously believed that they children had disenrolled. In the case of children whose parents reported that they had been disenrolled for more than 6 but fewer than 12 months (167 observations), we interviewed respondents as parents of “disenrollees” and collected a full range of information about their demographic characteristics and their access and use experience “in the 6 months prior to disenrolling.” We included these observations in our analyses of the access and use experiences of SCHIP enrollees prior to disenrolling from the program. For established enrollees whose parents reported that the children had been disenrolled more than 12 months (112 cases), we collected only health and demographic information for these recent enrollees and excluded them from the analytic sample. Because the period being referenced was so distant, it is likely that many of the responses would have been inaccurate.
4. ***Unable to Provide Enrollment Information (N = 220).*** These sample members included established enrollees whose parents were unable to report when or whether their children had enrolled in SCHIP. As a result, they could not respond to further questions about insurance coverage, and interview questions were limited to basic

information on the children's health and demographic characteristics, and on the characteristics of the household.

The resulting analysis sample included 5,356 records, or about 92 percent of the overall sample of established enrollees, suggesting that any bias introduced by the sample exclusions would be modest. Moreover, the demographic features of the analytic sample and full sample proved to be very similar (see Table C.7).

#### **b. Medicaid Sample**

The full sample of established Medicaid enrollees included 922 records—394 in California and 528 in North Carolina. (Like the sample of SCHIP enrollees, this sample fell into four distinct categories, which were defined by the survey respondents' perception of their children's enrollment and disenrollment in Medicaid.) The analysis sample included 830 records, or about 90 percent of the full sample. As with the SCHIP sample, the characteristics of the full sample and analytic sample were very similar.

### **2. Recent-Enrollee Samples**

We used the sample of SCHIP (and Medicaid) recent enrollees to obtain estimates of the access and use experiences of children prior to enrolling in SCHIP (or Medicaid). We expected that, for some cases within this sample, the enrollment and disenrollment dates reported in the survey would differ from those shown in the state files. As we described previously, we refined the survey instrument so that children sampled as recent enrollees whose parents reported different sample statuses than those indicated in the state files could be interviewed in the status perceived by the parent.

TABLE C.7

CHARACTERISTICS OF ALL ESTABLISHED ENROLLEES AND ESTABLISHED  
ENROLLEES USED IN ACCESS AND USE ANALYSIS

| Variable                                    | All Established Enrollees | Established Enrollees Used in Access and Use Analysis |
|---|---------------------------|---|
| Age of Child                                |                           |   |
| Age 0-5                                     | 19.3                      | 19.3  |
| Age 6-12                                    | 47.9                      | 48.3  |
| Age 13 and older                            | 32.8                      | 32.4  |
| Child's Race                                |                           |   |
| Hispanic/Latino                             | 49.2                      | 49.3  |
| White                                       | 32.0                      | 32.1  |
| Black                                       | 11.6                      | 11.2  |
| Asian                                       | 5.6                       | 5.7   |
| All other                                   | 1.7                       | 1.7   |
| Child Has Elevated Health Care Needs        | 23.9                      | 23.9  |
| Child's Overall Health Is Fair or Poor      | 8.5                       | 8.2   |
| Child Has Asthma                            | 15.4                      | 15.2  |
| Child Has Mental Health Condition           | 7.4                       | 7.3   |
| Household Structure                         |                           |   |
| Two parents/both working                    | 28.4                      | 28.7  |
| Two parents/one working                     | 33.4                      | 33.4  |
| Two parents/not working                     | 2.8                       | 2.8   |
| One parent/working                          | 30.8                      | 30.7  |
| One parent/not working                      | 4.5                       | 4.3   |
| Highest Education Level of Parent(s)        |                           |   |
| No GED or HS diploma                        | 24.7                      | 24.4  |
| GED or HS diploma                           | 35.0                      | 35.0  |
| Some college or college degree <sup>a</sup> | 40.3                      | 40.7  |
| Household Income by FPL Range <sup>b</sup>  |                           |   |
| <150% FPL                                   | 67.9                      | 68.1  |
| 150-199% FPL                                | 23.1                      | 22.9  |
| >200% FPL                                   | 9.1                       | 9.1   |
| At Least One Parent Foreign Born            | 9.1                       | 9.1   |
| Main Language Spoken in Household           |                           |   |
| Spanish                                     | 28.1                      | 28.6  |
| Other                                       | 4.6                       | 4.7   |
| Metropolitan Status                         |                           |   |
| (MSA)                                       | 86.3                      | 86.3  |
| Adjacent to MSA                             | 9.4                       | 9.4   |
| Non-MSA/Non-adjacent                        | 4.3                       | 4.4   |
| <b>Sample Size (Weighted)</b>               | <b>1,547,147</b>          | <b>1,461,558</b>                                      |
| <b>Sample Size (Unweighted)</b>             | <b>5,797</b>              | <b>5,394</b>  |

Source: 2002 congressionally mandated survey of SCHIP enrollees and disenrollees in 10 states.

<sup>a</sup>Includes 2-year associate's degree and trade school.

<sup>b</sup>Household income has a missing rate of 11 percent, which is considerably higher than missing rate for other variables cited.

FPL = Federal Poverty Level; GED = General Educational Development; MSA = Metropolitan Statistical Area.

### **a. SCHIP Sample**

The full sample of recent SCHIP enrollees included 5,663 records, regardless of the reported enrollment and disenrollment dates. As shown in Table C.3, the sample fell into nine distinct categories, which were defined by the survey respondents' perception of when, and whether, their children had enrolled in SCHIP, and whether they had since disenrolled. Only the first category, consisting of those who had been enrolled in SCHIP for fewer than 12 months and had not since disenrolled, was included in the access and use analysis. Respondents in the remaining categories could not be included in the analysis because they did not report on the time frame of interest (the 6 months prior to enrolling).<sup>5</sup>

The resulting analytic sample included 3,095 records, or about 55 percent of the overall sample of recent SCHIP enrollees. Not surprisingly, differences between the full sample and the analytic sample of recent enrollees were a bit larger than were those for the sample of established enrollees. However, none of the *differences* was substantial, despite the relatively significant sample loss (see Table C.8). The most notable difference was the age of the recent enrollees, who were more likely to be under age 5 and less likely to be over age 13 in the analytic sample than in the full sample. A child in the analytic sample was also somewhat more likely to be Hispanic or Latino, and less likely to be black.

### **b. Medicaid Sample**

The full sample for the Medicaid analysis of recent enrollees includes 911 records—408 in California and 503 in North Carolina. However, the analytic sample was considerably smaller,

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<sup>5</sup> For example, in the case of children enrolled in SCHIP since birth, parents could not report on the children's experiences prior to SCHIP because the children did not have any. Similarly, children reported to be covered for more than a year (despite being sampled as recent enrollees) were interviewed as established enrollees, and thus information was obtained on those children's most recent 6 months in the program.

TABLE C.8  
CHARACTERISTICS OF ALL RECENT ENROLLEES AND RECENT  
ENROLLEES USED IN THE ACCESS AND USE ANALYSIS

| Variable                                    | All Recent Enrollees | Recent Enrollees Used in Access and Use Analysis |
|---|----------------------|--|
| Age of Child                                |                      |  |
| Age 0-5                                     | 27.5                 | 31.2   |
| Age 6-12                                    | 46.1                 | 44.3   |
| Age 13 and older                            | 26.4                 | 24.5   |
| Child's Race                                |                      |  |
| Hispanic/Latino                             | 48.6                 | 51.5   |
| White                                       | 29.9                 | 29.5   |
| Black                                       | 13.7                 | 11.2   |
| Asian                                       | 5.8                  | 5.9  |
| All other                                   | 2.0                  | 1.9  |
| Child Has Elevated Health Care Need         | 23.7                 | 22.5   |
| Child's Overall Health Is Fair or Poor      | 8.3                  | 8.1  |
| Child Has Asthma                            | 14.8                 | 13.0   |
| Child Has Mental Health Condition           | 8.0                  | 6.7  |
| Household Structure                         |                      |  |
| Two parents/both working                    | 28.7                 | 29.4   |
| Two parents/one working                     | 31.0                 | 33.1   |
| Two parents/not working                     | 2.2                  | 2.1  |
| One parent/working                          | 32.7                 | 30.0   |
| One parent/not working                      | 5.4                  | 5.4  |
| Highest Education Level of Parent(s)        |                      |  |
| No GED or HS diploma                        | 21.2                 | 21.2   |
| GED or HS diploma                           | 34.6                 | 32.7   |
| Some college or college degree <sup>a</sup> | 44.2                 | 46.1   |
| Household Income by FPL Range <sup>b</sup>  |                      |  |
| <150% FPL                                   | 71.4                 | 69.1   |
| 150-199%FPL                                 | 18.1                 | 20.9   |
| >200%FPL                                    | 10.4                 | 10.0   |
| At Least One Parent Foreign Born            | 44.3                 | 46.3   |
| Main Language Spoken in Household           |                      |  |
| Spanish                                     | 28.8                 | 30.3   |
| Other                                       | 4.3                  | 4.5  |
| Metropolitan Status                         |                      |  |
| (MSA)                                       | 86.1                 | 86.0   |
| Adjacent to MSA                             | 9.2                  | 9.7  |
| Non-MSA/Non-Adjacent                        | 4.7                  | 4.4  |
| <b>Sample Size (Weighted)</b>               | <b>183,156</b>       | <b>103,060</b>                                   |
| <b>Sample Size (Unweighted)</b>             | <b>5,663</b>         | <b>3,095</b>                                     |

Source: 2002 congressionally mandated survey of SCHIP enrollees and disenrollees in 10 states.

<sup>a</sup>Includes 2-year associate's degree and trade school.

<sup>b</sup>Household income has a missing rate of 11 percent, which is considerably higher than other variables cited.

FPL = Federal Poverty Level; GED = General Educational Development; MSA = Metropolitan Statistical Area.

with 144 records in California and 188 in North Carolina. These large differences were driven mainly by the sizable share of recent Medicaid enrollees who obtained coverage at birth (roughly one-third of the total sample).<sup>6</sup> These children could not be used in the analysis because they did not have access experiences prior to enrolling in the program. Differences between the analytic sample and the full sample were larger than the differences seen for the SCHIP samples, which was not surprising, given the small fraction of cases that could be used (Table C.9).

### **3. Disenrollee Sample**

The disenrollee sample was used in a limited way in the access and use analyses to conduct sensitivity analyses. The analytic sample included 3,813 records, or about 72 percent of the full sample of recent disenrollees. The largest excluded group had parents who reported in the survey that their children were disenrolled for more than 12 months. (These respondents were not asked about their children's access and utilization experiences.) Differences between the analytic sample and the full sample were generally modest.

### **4. Outcome Measures**

To analyze the access and use experiences of SCHIP established enrollees, we constructed a set of outcome measures from the survey items. These variables included measures of service use, unmet needs, parental stress and attitudes, the presence of and type of usual source of care, and characteristics of health care provider communication and accessibility. Table C.10 provides a summary of these variables, including any sample restrictions, sample sizes, and notes on the variables' creation. Each of these variables is based on related questions from the sections of the survey on access, use, satisfaction, and unmet need (see Table C.2).

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<sup>6</sup> As described in Appendix B, the Medicaid sample was limited to children in the poverty-expansion and TANF-related eligibility groups in order to make it as comparable as possible to the SCHIP sample.

TABLE C.9

## CHARACTERISTICS OF RECENT ENROLLEES IN THE MEDICAID SAMPLE AND RECENT ENROLLEES USED IN THE ACCESS AND USE ANALYSIS OF MEDICAID SAMPLE

| Variable                                    | California                    |   | North Carolina                |   |
|---|-------------------------------|---|-------------------------------|---|
|   | All Recent Medicaid Enrollees | Recent Medicaid Enrollees Used in Access and Use Analysis | All Recent Medicaid Enrollees | Recent Medicaid Enrollees Used in Access and Use Analysis |
| Age of Child                                |                               |   |                               |   |
| Age 0-5                                     | 56.5                          | 45.8  | 58.6                          | 40.3  |
| Age 6-12                                    | 27.9                          | 35.5  | 23.8                          | 35.3  |
| Age 13 and older                            | 15.6                          | 18.6  | 17.6                          | 24.3  |
| Child's Race                                |                               |   |                               |   |
| Hispanic/Latino                             | 75.7                          | 70.4  | 14.9                          | 10.0  |
| White                                       | 10.2                          | 14.0  | 45.7                          | 51.0  |
| Black                                       | 5.0                           | 6.1   | 30.8                          | 31.9  |
| Asian                                       | 5.5                           | 6.3   | 1.7                           | 1.2   |
| All other                                   | 3.7                           | 3.3   | 6.9                           | 5.9   |
| Child Has Elevated Health Care Needs        | 20.2                          | 17.1  | 20.0                          | 20.6  |
| Child's Overall Health Is Fair or Poor      | 12.0                          | 7.5   | 7.4                           | 6.6   |
| Child Has Asthma                            | 8.8                           | 12.0  | 10.4                          | 14.3  |
| Child Has Mental Health Condition           | 4.5                           | 5.5   | 7.4                           | 8.4   |
| Household Structure                         |                               |   |                               |   |
| Two parents/both working                    | 19.0                          | 18.0  | 17.2                          | 16.3  |
| Two parents/one working                     | 34.6                          | 31.8  | 25.2                          | 21.8  |
| Two parents/not working                     | 19.0                          | 18.0  | 2.6                           | 3.9   |
| One parent/working                          | 25.3                          | 28.8  | 39.9                          | 44.6  |
| One parent/not working                      | 15.6                          | 17.1  | 15.1                          | 13.5  |
| Highest Education Level of Parent(s)        |                               |   |                               |   |
| No GED or HS diploma                        | 43.5                          | 32.3  | 24.6                          | 20.3  |
| GED or HS diploma                           | 30.6                          | 35.7  | 37.8                          | 39.8  |
| Some college or college degree <sup>a</sup> | 25.9                          | 32.0  | 37.6                          | 39.9  |
| Household Income by FPL Range <sup>b</sup>  |                               |   |                               |   |
| <150% FPL                                   | 92.6                          | 92.4  | 77.9                          | 73.7  |
| 150-199% FPL                                | 5.0                           | 4.5   | 11.6                          | 15.0  |
| >200% FPL                                   | 2.4                           | 3.1   | 10.6                          | 11.3  |
| At Least One Parent Foreign Born            | 66.6                          | 60.3  | 17.9                          | 15.7  |
| Main Language Spoken in Household           |                               |   |                               |   |
| Spanish                                     | 55.0                          | 37.2  | 11.6                          | 8.1   |
| Other                                       | 5.2                           | 8.2   | 1.0                           | 0.6   |
| Metropolitan Status                         |                               |   |                               |   |
| (MSA)                                       | 96.1                          | 96.1  | 69.7                          | 69.7  |
| Adjacent to MSA                             | 3.8                           | 3.5   | 21.8                          | 23.6  |
| Non-MSA/Non-Adjacent                        | 0.1                           | 0.4   | 8.5                           | 6.7   |
| <b>Sample Size (Weighted)</b>               | <b>40,516</b>                 | <b>13,677</b>   | <b>28,862</b>                 | <b>9,814</b>  |
| <b>Sample Size (Unweighted)</b>             | <b>408</b>                    | <b>144</b>  | <b>503</b>                    | <b>188</b>  |

Source: 2002 congressionally mandated survey of SCHIP enrollees and disenrollees in 10 states.

<sup>a</sup>Includes 2-year associate's degree and trade school.

<sup>b</sup>Household income has a missing rate of 11 percent, which is considerably higher than other variables cited.

FPL = Federal Poverty Level; GED = General Educational Development; MSA = Metropolitan Statistical Area.

TABLE C.10

## SAMPLE DEFINITIONS AND SIZES FOR THE ACCESS AND SERVICE USE MEASURES

| Outcome     | Variable                                  | Sample Restriction         | Notes on Variable Creation  | Sample Size <sup>a</sup> |
|-------------|---|----------------------------|---|--------------------------|
| Service Use | Any physician visit                       | All children               | Any visit to a doctor or other health care professional such as a PA, nurse, or midwife. Excludes visits to doctors or health care professionals seen for mental health condition or behavioral problems <sup>b</sup> | 5,336                    |
|             | Any well-child visit                      | All children               | Saw a doctor or health care professional for preventive care, such as a checkup or well-child visit   | 5,312                    |
|             | Dental care                               | Children 3 years and older | Went to a dentist or dental hygienist for a checkup or cleaning   | 5,059                    |
|             | Any mental health visit                   | All children               | Saw or talked to a mental health professional, such as a psychiatrist, psychologist, psychiatric nurse, or clinical social worker   | 5,337                    |
|             | Any specialist visit                      | All children               | Saw a specialist such as an allergy specialist, ear/nose/throat specialist, or other doctor who takes care of special parts of the body   | 5,319                    |
|             | Any specialist or mental health visit     | All children               | Received a specialist visit, a mental health visit, or both   | 5,317                    |
|             | Any hospital visit                        | All children               | Stayed in hospital. Excludes hospital stays related to birth  | 5,351                    |
|             | Any ER visit                              | All children               | Visited a hospital ER. Excludes times for hospital admission through ER   | 5,348                    |
| Unmet Need  | Doctor/other health professional services | All children               | At least one time child did not get, or postponed getting, care from a regular doctor or other health care professional for illness, accident, or injury when respondent thought child needed it                      | 5,324                    |
|             | Dental care                               | Children 3 years and older | At least one time child did not get, or postponed getting, dental care when respondent thought child needed it  | 5,053                    |
|             | Specialist care                           | All children               | At least one time child did not get, or postponed getting, specialist care when respondent thought child needed it  | 5,321                    |
|             | Hospital care                             | All children               | At least one time child did not get, or postponed getting, hospital care when respondent thought child needed it.   | 5,318                    |



TABLE C.10 (continued)

| Outcome              | Variable   | Sample Restriction | Notes on Variable Creation  | Sample Size <sup>a</sup> |
|----------------------|--|--------------------|---|--------------------------|
| Attitudes and Stress | Prescription drugs   | All children       | At least one time child did not get, or postponed getting, a prescription drug when respondent thought child needed it or at least one time that child took less than recommended dosage of prescription drug or took the drug less frequently so that it would last longer | 5,315                    |
|                      | Any of the above services (excluding dental)                         | All children       | Had unmet need for doctor services, specialist care, hospital care, or prescription drugs   | 5,310                    |
|                      | Any of the above services (including dental)                         | All children       | Had unmet need for doctor services, specialist care, hospital care, prescription drugs, or dental care  | 5,289                    |
|                      | More than one unmet need   | All children       | Had unmet need for at least two of the following categories: doctor services, specialist care, hospital care, prescription drugs, or dental care  | 5,307                    |
|                      | Very confident about ability to meet child's health care needs       | All children       | Respondent "very confident" child could get health care if child needed it <sup>c</sup>   | 5,307                    |
|                      | Not stressed about ability to meet child's health care needs         | All children       | Respondent "a lot" or "somewhat" stressed about meeting child's health care needs <sup>d</sup>  | 5,289                    |
|                      | Not worried about ability to meet child's health care needs          | All children       | Respondent "a lot" or "somewhat" worried about meeting child's health care needs <sup>d</sup>   | 5,299                    |
|                      | Child's health care needs do not cause financial hardship            | All children       | Respondent reports "a lot" or "somewhat" of the time child's health care needs created financial difficulties <sup>d</sup>  | 5,303                    |
|                      | Children on SCHIP/Medicaid get better health care than the uninsured | All children       | Respondent said statement "Children on SCHIP/Medicaid get better health care than children with no insurance" is either "definitely true or "mostly true." <sup>e</sup>   | 5,052                    |
|                      | Doctors and nurses look down on SCHIP enrollees                      | All children       | Respondent said statement "Doctors and nurses look down on people who are in (SCHIP/MEDICAID)" is either "definitely true or "mostly true." <sup>e</sup>  | 5,124                    |

TABLE C.10 (continued)

| Outcome                                   | Variable  | Sample Restriction                           | Notes on Variable Creation  | Sample Size <sup>a</sup> |
|---|---|--|---|--------------------------|
| Presence and Type of Usual Source of Care | Has a usual source for health care that is not an ER        | All children                                 | Usually went to, or would have gone to, a particular doctor's office, clinic, health care center, hospital, or other place if child were sick or needed advice about child's health. Respondents who cited ER as a usual source of care coded as not having a USC | 5,370                    |
|   | Usual source is a private doctor's office or group practice | Child has USC <sup>f</sup>                   | USC a private doctor's office or group practice   | 4,926                    |
|   | Usual source is a clinic or health center                   | Child has USC <sup>f</sup>                   | USC a clinic or health center   | 4,926                    |
|   | Usually sees same provider at usual source of care          | Child has USC <sup>f</sup>                   | Child usually saw a particular doctor or other health provider at USC   | 4,899                    |
|   | Has a usual source for dental care                          | Children 3 years and older                   | Usually went to, or would have gone to, a particular dentist's office or clinic if child needed to see a dentist or dental hygienist for checkup, cleaning, or other dental procedure   | 5,046                    |
| Provider Communication and Accessibility  | Would recommend usual source to others                      | Child has USC <sup>f</sup>                   | Respondent reported "yes."  |                          |
|   | Could reach provider after hours                            | Child has USC <sup>f</sup>                   | If USC (above) closed and child got sick, respondent could reach and talk to a doctor or other health care professional from USC about the child's condition  | 4,619                    |
|   | Provider explained things in understandable ways            | Child has USC and received care <sup>g</sup> | Respondent reported that doctors or other health care providers "always" or "usually" explained things in understandable way <sup>h</sup>   | 3,827                    |
|   | Provider treated with courtesy and respect                  | Child has USC and received care <sup>g</sup> | Respondent reported that doctors or other health care providers "always" or "usually" treated respondent and child with courtesy and respect. <sup>h</sup>  | 3,826                    |
|   | Provider asked about how child was feeling and growing      | Child has USC and received care <sup>g</sup> | Respondent reported doctors or other health care providers "always" or "usually" talked about how child was feeling, growing, and behaving. <sup>h</sup>  | 3,825                    |

TABLE C.10 (continued)

| Outcome | Variable   | Sample Restriction                           | Notes on Variable Creation  | Sample Size <sup>a</sup> |
|---------|--|--|---|--------------------------|
|         | Rated ease of getting care as very good or excellent   | Child has USC and received care <sup>g</sup> | Respondent rated ease of getting medical care when child was sick or had an accident as “excellent or “very good.” <sup>i</sup> | 3,795                    |
|         | Waiting time was less than 30 minutes for appointments | Child has USC and received care <sup>g</sup> | If arrived on time for appointment, usually had to wait less than 30 minutes for medical care                                   | 4,995                    |
|         | Travel time was less than 30 minutes                   | Child has USC <sup>j</sup>                   | Usually took less than 30 minutes to travel to usual source of care   | 5,011                    |

Source: 2002 congressionally mandated survey of SCHIP enrollees and disenrollees in 10 states.

Notes: The reference period is the 6 months prior to the interview. Sample sizes vary due to sample restrictions and missing data.

<sup>a</sup>Sample sizes reflect the records for established enrollees only. They varied both because of listed restrictions on the sample and valid responses to individual survey questions.

<sup>b</sup>All variables refer to the prior 6 months.

<sup>c</sup>Other choices were “somewhat confident,” “not very confident,” and “not at all confident.”

<sup>d</sup>Other choices were “a little” and “not at all.”

<sup>e</sup>Other choices were “definitely false” and “mostly false.”

<sup>f</sup>Includes those who reported ER as their USC.

<sup>g</sup>Excludes those who reported ER on their use, regardless of whether they received care.

<sup>h</sup>Other choices were “sometimes” and “never.”

<sup>i</sup>Other choices were “good,” “fair,” and “poor.”

<sup>j</sup>Excludes those who reported ER as their USC.

ER = emergency room; PA = physician’s assistant; USC = usual source of care.

## **D. ANALYSIS OF DISENROLLEE EXPERIENCES**

This section discusses the study methodology used for the analysis of SCHIP disenrollees, which is presented in Chapters I and V of the report. We begin by describing the samples used to conduct the analysis. We then discuss the methods used to analyze the experiences of SCHIP disenrollees, focusing in particular on how we measured disenrollees' insurance coverage after leaving the program.

### **1. Disenrollee Sample**

Similar to the other sample domains for the study, the disenrollee sample was designed so that it could be generalized to all children identified on the 10 state files as having recently disenrolled from SCHIP at the time of sampling (spring 2002).<sup>7</sup> For some disenrollees in this sample, we expected the disenrollment experiences reported in the survey to differ markedly from what was shown on the state files, and that, as a result, we would have to be flexible in conducting the interview. For example, we anticipated that some disenrollees might report still remaining in SCHIP (for a long period) because they had transitioned “seamlessly” to Medicaid and had not observed the transfer, or because they had experienced only a short gap in SCHIP coverage that went unnoticed (during which we had sampled them as recent disenrollees). In order to collect useful information for these cases, the sampled children (if reporting enrollments of 6 months or more) were interviewed as established enrollees, rather than as disenrollees. As discussed below, this approach added complexity to the construction of key outcomes; however,

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<sup>7</sup> A sample of Medicaid disenrollees in two states, California and North Carolina, was also surveyed for this study. However, due to a combination of low response rates for the sampled disenrollees and the sampled disenrollees' very low rates of recognition that they had actually been disenrolled (particularly in California), we did not present analyses of the Medicaid disenrollee sample in the survey report.

it also yielded the most credible estimates possible, given the confusion of some families about whether they had left the program.

The overall sample for the disenrollee analysis included 5,320 records. These observations fell into five groups that were defined by the survey respondents' perception of when, and whether, their children had disenrolled from SCHIP. These groups are important because they determined the type of survey information that we collected on a given disenrollee. The following list summarizes the five groups and the specific outcomes that were analyzed for each one:

1. ***Disenrolled for Fewer than 12 Months (N = 2,051).*** These sample members provided disenrollment dates that were similar to the ones indicated on the state enrollment files, thus increasing the reliability of their reported disenrollment information. We therefore asked these sample members a full series of questions about their disenrollment experiences, including their reasons for exit, the type of coverage that they obtained after leaving SCHIP, and their reasons for being uninsured after exit (if applicable).
2. ***Enrolled for 6 or More Months (N = 1,762).*** Since the respondents in this group did not perceive their children as having recently disenrolled (in fact, many reported never having disenrolled), we interviewed them as if the children were established enrollees. We therefore collected a full range of information on their demographic characteristics and their program experiences, but we did not collect information about their recent disenrollment experiences.
3. ***Disenrolled for More than 12 Months, Recontacted (N = 563).*** We initially considered data from these respondents to be unreliable because the states' reported disenrollment dates significantly preceded the ones on the enrollment files. As a result, we limited the data collection to basic information on the children's health and demographic characteristics, and on the characteristics of the household. Given the sheer number of disenrollees of this type, we decided to recontact them, and to ask a series of additional questions. Key additional questions asked about reasons for leaving SCHIP, the type of coverage that the respondents obtained after exit, and their household income.
4. ***Disenrolled for 12 Months or More, not Recontacted (N = 630).*** This group included disenrollees similar to ones in the third group, except that we were unable to reach them for a follow-up interview. The available data for this group were therefore limited to basic information on the children's health and demographic characteristics, and on the characteristics of the household.

5. ***Unable to Provide Disenrollment Information (N = 314).*** This group included disenrollees who failed to indicate when, or whether, they exited SCHIP. As a result, interview questions were limited to basic information on the children's health and demographic characteristics, and on the characteristics of the household.

Our analysis sample included the first three groups, resulting in a sample size of 4,321 records, or about 80 percent of the overall disenrollee sample.<sup>8</sup> The last two groups were excluded from the analysis of disenrollee experiences because we lacked sufficient information to construct measures of their experiences either from the survey data or through imputation. Observed differences between the full sample and the analytic sample were generally modest (see Table C.11). Nevertheless, a nonresponse adjustment was applied to the analytic sample in order to reflect the experiences of *all* sample members reported to be disenrolled for more than 12 months (including those in the fourth category), rather than the experiences of only those who could be recontacted.<sup>9</sup>

## 2. Outcome Measures

The most important measure in the analysis of disenrollees' experiences was the type of insurance coverage after leaving SCHIP. The two other key measures we examined were the reported reason for leaving SCHIP and the reason for being uninsured after leaving (if

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<sup>8</sup>A total of 55 sample members who were successfully recontacted were also dropped from the analysis because their self-reported exit dates were very different from the dates in the state files (by 24 months or more). As a result, the analytic samples were slightly smaller than the combined samples in the first three categories shown.

<sup>9</sup> Based on data from the families who could be recontacted, many children reported to be disenrolled more than 12 months had switched to other coverage, and it appears that the families reported the exit dates of these children from SCHIP as the date of this switch, rather than the date that the state terminated the children's SCHIP coverage. Simply dropping from the analysis families who could not be recontacted would have therefore biased downward estimates of coverage after families left SCHIP (particularly private coverage) and would have biased upward estimates of uninsurance among SCHIP disenrollees. To address this potential source of bias, we applied a nonresponse adjustment that scaled up the sample weight for the disenrollees who could be recontacted to reflect the full population of disenrollees who reported exits more than 12 months prior to the dates recorded by the states. The adjustment was further refined to account for differences in demographic characteristics between families who could and who could not be recontacted.

TABLE C.11

CHARACTERISTICS OF THE FULL SAMPLE OF SCHIP DISENROLLEES AND THE SAMPLE USED  
IN THE ANALYSIS OF SCHIP DISENROLLEE EXPERIENCES

| Variable                                    | Full Sample   | Sample Used in Analysis of<br>SCHIP Disenrollee<br>Experiences |
|---|---------------|--|
| Age of Child                                |               |  |
| 0-5   | 20.4          | 18.1   |
| 6-12  | 44.1          | 41.6   |
| 13 and older                                | 35.6          | 40.3   |
| Child's Race                                |               |  |
| Hispanic/Latino                             | 44.1          | 47.9   |
| White                                       | 15.4          | 13.6   |
| Black                                       | 33.7          | 30.9   |
| Asian                                       | 2.0           | 2.1  |
| All other                                   | 4.8           | 5.5  |
| Child's Overall Health Is Fair or Poor      | 10.2          | 10.3   |
| Child Has Asthma                            | 15.4          | 15.0   |
| Child Has Mental Health Condition           | 6.8           | 5.7  |
| Household Structure                         |               |  |
| Two parents/both working                    | 27.0          | 27.0   |
| Two parents/one working                     | 28.3          | 28.2   |
| Two parents/not working                     | 3.1           | 3.1  |
| One parent/working                          | 33.8          | 33.8   |
| One parent/not working                      | 7.9           | 8.0  |
| Highest Education Level of Parent(s)        |               |  |
| No GED or HS diploma                        | 22.6          | 25.3   |
| GED or HS diploma                           | 35.7          | 37.3   |
| Some college or college degree <sup>a</sup> | 41.7          | 37.4   |
| Household income by FPL range <sup>b</sup>  |               |  |
| <150% FPL                                   | 63.3          | 64.2   |
| 150-199%FPL                                 | 15.3          | 15.6   |
| >200%FPL                                    | 12.7          | 11.7   |
| At Least One Parent Foreign Born            | 35.9          | 37.4   |
| Main Language Spoken in Household           |               |  |
| Spanish                                     | 24.0          | 24.0   |
| Other                                       | 3.1           | 3.9  |
| Metropolitan Status                         |               |  |
| (MSA)                                       | 83.2          | 84.2   |
| Adjacent to MSA                             | 10.4          | 9.2  |
| Non-MSA/Non-Adjacent                        | 6.5           | 6.6  |
| <b>Sample (weighted)</b>                    | <b>58,403</b> | <b>51,543</b>  |
| <b>Sample (unweighted)</b>                  | <b>5,320</b>  | <b>4,321</b>   |

Source: 2002 congressionally mandated survey of SCHIP enrollees and disenrollees in 10 states.

<sup>a</sup>Includes 2-year associate's degree and trade school.

<sup>b</sup>Household income has a missing rate of 11 percent, which is considerably higher than other variables cited.

MSA = Metropolitan Service Area; NA = not available.

applicable). Development of these measures, particularly the measure of insurance coverage, was complex and required several steps.

### **3. Insurance Coverage**

Our measure of insurance coverage for two groups of disenrollees—those who had exited within the past 12 months ( $N = 2,051$ ) and those who had exited more than 12 months ago and were recontacted ( $N = 563$ )—was obtained directly from questions on the survey. The specific steps we took were as follows:

Based on responses to Questions 2.60 and 2.63, we determined how many months the disenrollee had been uninsured after leaving SCHIP. Each of these months was coded as uninsured. If the disenrollee reported being uninsured for the “whole period” since leaving SCHIP, all months between disenrollment and the interview date (up to month 6) were coded as uninsured.<sup>10</sup>

1. Based on responses to Questions 2.64 and 2.64.1, we then determined how many months the disenrollee had been insured after exit (or after the spell of uninsurance, if reported above). Each of these months was then coded as insured. If the disenrollee reported being insured for the whole period, all months between disenrollment (or the end of uninsurance spell) and the interview were coded as insured.<sup>11</sup>

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<sup>10</sup>For disenrollees interviewed within 6 months after leaving SCHIP, all months after the interview month (through month 6) were coded as missing. To understand how the loss of these cases might have biased our coverage estimates in later months, we compared the coverage of these disenrollees in the first month after leaving SCHIP with the coverage of those who reported on the full 6-month period (because they were interviewed 6 or more months after leaving the program). The distributions were very similar, suggesting that our estimates of insurance coverage among disenrollees 6 months after leaving SCHIP were biased little by the loss of sample.

<sup>11</sup>As noted above, all remaining months for disenrollees interviewed less than 6 months after they had left SCHIP were coded as missing, as the disenrollees’ insurance statuses for the remaining months were unknown. For the rare case interviewed after 6 months but providing less than 6 months of coverage information (the combination of the uninsured period and insured period), we coded the remaining months as other/unknown coverage. For the similarly rare case that reported SCHIP coverage without reporting any uninsurance spell in between, we coded the first month after exit as other/unknown coverage.



2. For the months coded as insured, the type of insurance was coded based on responses to Questions 2.65a through 2.65hw. For disenrollees reported to have more than one type of coverage, we chose the first reported type of coverage as given by Question 2.66.

After completing these three steps, the types of coverages were then collapsed into four categories: (1) SCHIP coverage;<sup>12</sup> (2) Medicaid coverage, including Medicaid health maintenance organizations (HMOs); (3) private coverage, which included coverage from a current or past employer/union and coverage from direct purchase of insurance; and (4) other/unknown coverage, which included Medicare, military coverage of any kind, coverage through the Indian Health Service, and any other type of coverage that could not be coded. Fewer than five percent of disenrollees in each state fell into the latter category.<sup>13</sup>

Because those who reported being covered by SCHIP for 6 or more months (N = 1,762) did not appear to recognize that they had been disenrolled from the program, the survey did not collect information about their coverage after exit. For most of these cases, the state files indicated either new spells of SCHIP coverage or Medicaid coverage in the first few months after disenrollment.<sup>14</sup> This information suggests that most of the respondents did not recognize their exit either (1) because they experienced a short gap in SCHIP coverage that apparently

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<sup>12</sup>SCHIP coverage was indicated most often by a response that the child was currently enrolled in SCHIP (Question 2.2). For these cases, the insurance questions—and the steps taken above to determine coverage—applied only to the intervening period between the reported SCHIP exit and the reported reentry. All months after the reentry were coded as SCHIP coverage. For disenrollees who were not reported to be in SCHIP, SCHIP coverage could also have been indicated by a “yes” response to Question 2.65.g (“Was [child] covered by SCHIP [during the time s/he had coverage]?”).

<sup>13</sup>Only about three percent of disenrollees were reported to have more than one of the four types of coverage. The decision to assign coverage based on the first type reported thus had little effect on overall coverage estimates.

<sup>14</sup>Specifically, in the seven states in which both Medicaid and SCHIP enrollment data were available, 59 percent of these disenrollees transitioned to Medicaid with no break in coverage, and an additional 29 percent reentered SCHIP or transitioned to Medicaid within 6 months of leaving SCHIP. Both percentages were several times the rate found for other categories of disenrollees. This finding suggests that simply dropping these cases from the analysis would have led to very substantial underestimates of the extent of public coverage among SCHIP disenrollees, and to very substantial overestimates of the extent of uninsurance.

went unnoticed, or (2) because they experienced a “seamless” transition to the Medicaid program that likewise appears to have been unrecognized. To retain these cases in the analysis, we drew on the state SCHIP and Medicaid files and followed a four-step coverage imputation procedure:

1. Using the state SCHIP files, we looked at the 6 months after a child’s exit and identified each month that the child was shown to be covered. These months were then coded as SCHIP coverage as if the respondent had self-reported them.
2. For the seven states for which we had Medicaid enrollment data (California, Florida, Illinois, Louisiana, Missouri, New Jersey, and North Carolina), we looked at the 6 months after the child’s exit and identified each month that the child was shown to be covered by Medicaid. If these months had not been previously imputed as SCHIP in Step 1, they were coded as Medicaid as if the respondent had self-reported them.<sup>15</sup>
3. For the three states for which we did not have Medicaid enrollment data (Colorado, New York, and Texas), we imputed Medicaid coverage after disenrollment, using the sample of disenrollees from three “donor states” that also had separate SCHIP programs (California, Florida, and North Carolina). The imputation was carried out as follows:
  - We separated the disenrollees in the three donor states into groups based on their observed SCHIP coverage during the 6 months after exit.
  - Within each of these groups, we identified all of the possible scenarios of Medicaid coverage and calculated the frequency of each in the donor states.<sup>16</sup> Each scenario was given a probability,  $p_s$ , equal to this frequency.
  - For each case subject to imputation, we determined the group to which it belonged based on the observed SCHIP coverage during the 6 months after exit. We then imputed the string of Medicaid coverage by selecting one of the possible scenarios identified in the previous step. The particular scenario chosen was based on the probability,  $p_s$ , assigned to it in relation to a random number between 0 and 1.

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<sup>15</sup> Overlap between SCHIP and Medicaid coverage during these months was trivial, and the decision to give SCHIP priority over Medicaid (rather than the reverse) had only a miniscule effect on the overall distribution of coverage.

<sup>16</sup> For example, consider the group of disenrollees who showed no SCHIP coverage in the first 2 months after exit and then continual coverage from months 3 through 6. Within this group, four possible scenarios of Medicaid coverage were possible: (1) Medicaid coverage in both of the first 2 months, (2) Medicaid coverage in the first month but not the second, (3) Medicaid coverage in the second month but not the first, and (4) Medicaid coverage in neither month. Not surprisingly, the latter scenario was by far the most common for this group.

4. Any months that were not assigned SCHIP or Medicaid coverage based on the state files were imputed a value of either uninsured or private coverage. The imputation was performed as follows:<sup>17</sup>
  - If the disenrollee showed any SCHIP or Medicaid coverage during the 6-month period, the undetermined months between exit and coverage (if any) were coded as uninsured. This coding was based on the assumption that very few disenrollees who cycled off and back on public coverage in a short period would have obtained coverage in the intervening months.
  - All other undetermined months were imputed through regression. Using the subsample with valid self-reported data (category 1), we first constructed a dummy variable that equaled 1 if the disenrollee was privately insured in a given month  $t$ , and 0 if uninsured in month  $t$ . This dummy variable was then regressed on a series of covariates measuring key child and family demographics. Based on the coefficients from this model, we then generated the predicted probability of having private insurance in each undetermined month. This predicted value was then compared with a random digit generated between zero and one. If the predicted value was above the random digit, we coded the month as privately insured; it was below the random digit, we coded the month as uninsured.

For some cases, this imputation procedure was likely to assign a coverage type that was different from what would have been reported by the respondent in the survey (had it been possible to collect this information). However, in the aggregate, we expected this procedure to yield a distribution that would be consistent with self-reported data from the survey. To investigate the degree of consistency, we studied the sample of disenrollees in the first group (those who left SCHIP within the last 12 months), whom we expected to report reliably on coverage type after exit. We compared the coverage reported in the survey for this group with the coverage derived from imputation.

Results, shown in Table C.12, indicate similar distributions of coverage for this group of disenrollees whether based on the reported coverage or on the imputation procedure. For example, the percentage of disenrollees who were uninsured 6 months after exit was 56 percent

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<sup>17</sup> Fewer than four percent of the disenrollee sample was subject to this imputation, so that it had only a small effect on the reported distribution of coverage after program exit.

TABLE C.12

SENSITIVITY TO DATA SOURCE OF COVERAGE ESTIMATES  
AMONG RECENT DISENROLLEES

| Type of Estimate     |           | Total  |       | Uninsured |      | Medicaid |      | SCHIP |     | Private |      |
|----------------------|-----------|--------|-------|-----------|------|----------|------|-------|-----|---------|------|
| Survey Self-Report   |           | 12,894 | (100) | 6,715     | (52) | 3,584    | (28) | 451   | (3) | 2,144   | (17) |
| Imputation Procedure | Uninsured | 6,982  | (54)  | 4,175     |      | 1,478    |      | 200   |     | 1,129   |      |
|                      | Medicaid  | 3,080  | (24)  | 1271      |      | 1,478    |      | 83    |     | 248     |      |
|                      | SCHIP     | 6,77   | (5)   | 296       |      | 94       |      | 168   |     | 119     |      |
|                      | Private   | 2,155  | (17)  | 973       |      | 534      |      | 0     |     | 648     |      |

Source: 2002 congressionally mandated survey of SCHIP enrollees and disenrollees in 10 states linked with state SCHIP and Medicaid enrollment files.

Note: Numbers in parentheses are percentages. Estimates are based on the weighted sample of disenrollees who reported being disenrolled for 12 months or less from SCHIP. (The unweighted sample size is 2,011 disenrollees.) See text for details on how these estimates were calculated with the survey data and with the imputation.

based on the survey self-reports, and 58 percent based on the imputation. This consistency provided confidence that the imputation produced accurate overall estimates for the second group of disenrollees (who did not report their coverage because they believed they remained enrolled), leading to far more credible estimates than if we had simply dropped these cases.<sup>18</sup>

#### **4. Reasons for Exit and Uninsurance**

Our measures of reasons for disenrolling and for being uninsured after disenrolling are based on Questions 2.26 and 2.63, respectively. Responses to these questions were open-ended; they were coded into a long list of categories by the interviewers. If response did not fit any of the categories, the interviewers placed them in an “other specify” category and recorded them verbatim. Responses in this category were reviewed by the study team; most were then “backcoded” into existing categories. Subsequently, the response categories were reduced to a smaller number.

“Reasons for leaving SCHIP” were grouped into six categories.<sup>19</sup> Disenrollees were considered more likely to remain eligible for SCHIP if their reasons fell into one of the following three categories:

1. ***Failure to pay premium***, which included the original categories of “could not afford premium” and “forgot to pay premium”
2. ***Failure to reapply***, which included the original categories “did not reapply” and “too much paperwork”

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<sup>18</sup>As noted above, in the seven states for which we had both Medicaid and SCHIP data, 59 percent of these disenrollees transitioned to Medicaid with no break in coverage, and an additional 29 percent had reentered SCHIP or had transitioned to Medicaid within 6 months. Both percentages were several times the rate found for other categories of disenrollees. This finding suggests that simply dropping these cases from the analysis would have severely underestimated the extent of public health insurance among SCHIP disenrollees, and would have overestimated the share without insurance.

<sup>19</sup>Families who reported being enrolled for more than 6 months were assigned an additional classification of “family did not know they had exited.”

3. ***Other reasons***, which included such responses as “did not like doctors/clinic/staff where care provided,” “did not like the quality of care,” and “child does not get sick.” Also included a small number of miscellaneous reasons

Disenrollees whose reasons fell into one of the following three groups were not likely to be eligible for SCHIP:

1. ***Child is too old***, which reflected a single category
2. ***Eligible for other coverage***, which included the original categories of “child obtained Medicaid coverage” and “child obtained other insurance”
3. ***Change in income or employment***, which reflected a single category (“financial situation changed/not qualified”)

The categories for “reasons for being uninsured” were also collapsed into six groups. Those who reasons fell into any of the following three groups were again considered possibly eligible for SCHIP:

1. ***Failure to pay premium***, which included the original categories of “forgot to pay premium” and “cannot afford premium”
2. ***Lack of access to affordable private coverage***, which included the original categories of “parent(s) lost/changed job,” “employer did not offer insurance,” “employer stopped offering insurance,” “parents got divorced/death of spouse,” “benefits from former employer ran out,” “no one in family employed,” and “insurance costs too high”
3. ***Failure to reapply***, which reflected a single category

The following three groups were considered not likely to be eligible for SCHIP:

1. ***Child is too old***, which reflected a single category
2. ***Eligible for other coverage***, which reflected a single category
3. ***Other reasons***, which included “did not like health insurance employer offers” and “needed to be uninsured to be eligible.” Also included a few miscellaneous responses

## **E. ANALYSIS OF COVERAGE PRIOR TO ENROLLMENT, PARENTAL INSURANCE STATUS, AND SUBSTITUTION**

This section discusses the methodology used for the analyses of the relationships among SCHIP, private coverage, and uninsured periods among recent and established enrollees, which are presented in Chapters I and VI of the main report. Methods were identical for estimates of substitution among established Medicaid enrollees presented in Chapter VIII, except where noted. Sample sizes given in the text were based on the analyses of SCHIP enrollees. We begin this section by describing the analytic samples and the cases excluded from the analysis of prior insurance coverage among recent enrollees. We then describe the methodology used to assign prior coverage to the recent-enrollee analytic sample. In the third section, we describe the methodology used to classify reasons reported by parents for ending private coverage, and for enrolling their children in SCHIP. Finally, we describe the sample used for the analysis of substitution among established enrollees, and the methods used to classify children based on their parents' coverage.

### **1. Analytic Sample of Recent SCHIP Enrollees**

Our analysis focused on the entire sample of recent enrollees so that we could generalize estimates to all children in the 10 states who had recently enrolled in SCHIP at the time of sampling (spring 2002). As with the other analyses, we expected that this focus would present some challenges for the analysis because the enrollment dates for some children reported in the survey would differ from the dates in the state files. For example, some parents of enrollees might not have accurately reported their dates of SCHIP enrollment because they had failed to recognize that their children had transitioned “seamlessly” into SCHIP from Medicaid. Asking these parents about their children’s experiences “prior to enrollment” would have yielded questionable information. As discussed below, to retain these and other cases in our analysis of

substitution, we used a series of logical edits and imputations that enabled us to arrive at credible estimates of prior coverage for our sample of recent enrollees.

The overall sample for the recent-enrollee analysis included 5,663 records. Based on the nine categories in Table C.3, we grouped the sample into five distinct categories that were defined by the survey respondents' perceptions of when, and whether, their children had enrolled in SCHIP. The following list summarizes these categories and the information obtained related to prior coverage:

1. ***Enrolled for Fewer than 12 Months (N = 3,397).*** These sample members provided enrollment dates similar to the ones indicated on the enrollment files, thus increasing the reliability of their reported enrollment information. We therefore asked them a full series of questions about their enrollment experiences, including the type of coverage held "in the 6 months prior to enrolling," the length of time coverage was held, the main reason for ending this coverage (if insured), and the main reason for being uninsured (if uninsured), as well as questions about their access to care and use of services during the same 6-month time frame.
2. ***Enrolled for More than 12 Months (N = 1,761).*** Since the respondents in this group did not perceive their children as having recently enrolled, we interviewed them as if each one's child were an established enrollee in the program. We therefore collected a full range of information on their demographic characteristics and their program experiences "in the past 6 months" (prior to interview). We asked about their coverage experience prior to enrolling only if the children were uninsured just prior to enrollment. If they were uninsured, we also asked about the duration of their uninsurance and the main reason for the uninsured. As described in more detail below, we used data from state files to determine public coverage patterns experienced by these children and then used imputation to fill in any gaps.
3. ***Disenrolled for 6 or More Months (N = 157).*** Either these sample members had disenrolled between sampling and fielding of the survey or their parents believed that they had disenrolled. We did not ask any questions about their coverage prior to enrolling, because the period referenced would have been too distant, and the reports would not be sufficiently salient from the respondents' perspective to be reliable.
4. ***Born on SCHIP (N = 201).*** When asked about coverage prior to enrollment, parents were provided the option to report that SCHIP had covered their children since birth. In this case, respondents were skipped out of further questions about prior coverage. The validity of these self-reports was checked against state files, and children deemed to have been born on Medicaid were edited to reflect that determination (see Section 2.d below). After our validity check, only 38 of the 201 cases were deemed born on SCHIP.



5. ***Unable to Provide Enrollment Information (N = 144).*** These sample members included recent enrollees whose parents were unable to report when, or whether, the children had been enrolled in SCHIP. As a result, the parents could not respond to further questions about insurance coverage, and interview questions were limited to basic information on the children's health and demographic characteristics, and on the characteristics of the household.

The main analytic sample consisted of all sample members in the first two categories ( $N = 3,397 + 1,761 = 5,158$ ), as well as those who had been born on SCHIP ( $N = 201$ ). It includes 5,359 records, or about 95 percent of the full recent-enrollee sample.

## **2. Prior Coverage Among Recent Enrollees**

### **a. Recent Enrollees Reported in SCHIP Fewer than 12 Months**

For sample members who reported being enrolled in SCHIP for fewer than 12 months (the first category in the list), estimates of prior coverage were taken directly from the survey data. We constructed variables characterizing children's coverage in the month just prior to enrolling, and another set characterizing their coverage during the 6 months prior to enrolling.

Only 6.1 percent of the unweighted sample reported two or three types of coverage "just before enrolling." We imposed a hierarchy on types of coverage to assign cases to a single type, for reporting purposes. Because our primary concern was children's access to employer coverage, we assigned a child to employer coverage if any employer coverage was reported; otherwise, we assigned the child to non-group private, Medicaid, SCHIP, and other public coverage, in that order. We collapsed types of coverage into four categories: (1) SCHIP coverage; (2) Medicaid coverage, including Medicaid HMOs; (3) private coverage, which included coverage from a current or past employer/union and coverage from direct purchase of insurance; and (4) other public, which included Medicare, military coverage, and coverage through the Indian Health Service. Combining information, we characterized children's

coverage in the month just prior to enrolling as (1) uninsured, (2) private, (3) Medicaid, (4) other public, and (5) born on SCHIP.

We also characterized children's coverage during the 6 months prior to enrolling as (1) uninsured all 6 months, (2) private with no gap just before enrolling in SCHIP, (3) public with no gap, (4) private with gap, (5) public with gap, and (6) born on SCHIP. We did not seek to characterize the length of uninsured "gaps" but reported them as such only if the gap was less than 6 months and had occurred just prior to enrolling. In characterizing prior coverage, we incorporated only gaps in coverage that occurred immediately before joining SCHIP, even if coverage for all 6 months was not reported. In other words, if a parent reported his or her child as having Medicaid just prior to enrolling in SCHIP, with no intervening gap, but reported being covered by Medicaid for only 3 months, we categorized the coverage as "Medicaid with no gap." We used information on short gaps in coverage in Chapter I to characterize prior coverage, as well as in the impacts analysis to construct control variables.

**b. Recent Enrollees Reported on SCHIP for 12 or More Months**

For the sizable fraction of recent enrollees who reported coverage of more than 12 months (the second category), we did not ask any questions about the type of coverage prior to enrollment, as those data were expected to be unreliable. In order to retain this sample in the analysis, we determined the sample members' insurance status based on data in the state enrollment files for SCHIP and Medicaid.

To assign coverage during the 6 months prior to SCHIP enrollment, we first compared the SCHIP enrollment month reported by the respondent with the enrollment month from the SCHIP enrollment file. Some respondents with long stays who were interviewed late in the survey fielding period reported lengths of coverage on SCHIP that were consistent. However, we

expected some inconsistency between sources due to recall error. In the analytic phase, we therefore divided this group into two categories based on how much earlier the reported enrollment month was from the enrollment month in the state file:

1. ***Reported Enrollment Month Less than 6 Months Earlier than the Enrollment Month in State Files.*** Almost one-third (32 percent) of recent enrollees reporting enrollment in SCHIP for 12 or more months fell into this category. We assumed that a discrepancy in dates of enrollment up to and including 6 months was due to recall error. We did not consider these discrepancies to be problematic because respondents still were referring to a time period prior to enrollment that overlapped with the time period about which we were asking in the survey.
2. ***Reported Enrollment Month More than 6 Months Earlier than the Enrollment Month in State Files.*** Slightly more than two-thirds (68 percent) of recent enrollees reporting enrollment in SCHIP for 12 or more months fell into this category. This group presented an analytic challenge, because respondents were referring to a time period predating the 6-month period prior to their current SCHIP enrollment spells, and they may have been reporting a coverage experience from a prior coverage spell, possibly in Medicaid.

To estimate prior coverage for these two groups, we adopted two separate imputation procedures. For the first group, which had self-reported data with few discrepancies, we relied on survey data to estimate prior coverage. For the second group, whose self-reported data were less likely to be credible, we relied on information from the administrative data files.

For the first group, we used the following procedure:

1. We used the 6-month period prior to the self-reported enrollment date as the reference period to search the state administrative files.
2. From the state administrative file, we determined the number of months the child was enrolled in Medicaid during the self-reported reference period. However, we used survey data to determine whether the transition from Medicaid to SCHIP was accompanied by a gap with no coverage at all.<sup>20</sup>

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<sup>20</sup>Because our sampling frame required a recent enrollee to show no enrollment in SCHIP for 1 month followed by up to 2 months of enrollment, evidence of enrollment in SCHIP prior to the current episode included at least a short period of noncoverage.

3. If the respondent reported being insured immediately before enrollment, we coded the child as being covered by Medicaid if we found administrative evidence of enrollment in Medicaid in the state files during the self-reported period. Otherwise, we coded children who were covered immediately before enrollment as having been covered by private insurance for all 6 months.
4. If the respondent reported an uninsured period of less than 6 months immediately before enrollment, we coded the child as moving from Medicaid to that uninsured period and then to SCHIP if we found evidence of enrollment in Medicaid. Otherwise, we coded the child as moving from private coverage to uninsured before enrolling in SCHIP.
5. If the respondent reported an uninsured period of 6 months or more immediately before enrollment, we coded the child as uninsured for all 6 months prior to enrollment unless we found evidence of Medicaid enrollment. In that case, we coded the child as moving uninsured to Medicaid and then directly to SCHIP. Our reasoning was that the parent may not have recognized a short spell on Medicaid prior to having been moved to SCHIP, but was otherwise uninsured prior to public coverage.

For the second group, which reported enrollment dates occurring more than 6 months earlier than the dates in the state files, we used the following procedure:

1. We used the 6-month period prior to the administrative enrollment date as the period of reference to search the state file.
2. Self-reported information on insurance status was overridden entirely if Medicaid or SCHIP data were found in this period, under the assumption that respondents were referring to reference periods outside our 6-month period, so that their self-reports were less credible.
3. We examined the number of months the child was enrolled in Medicaid during the 6-month period prior to the month of enrollment, and whether there was a gap in enrollment in the month prior to SCHIP enrollment. This information was used to code the child as either being covered by Medicaid all 6 months or having a period of being uninsured between Medicaid and SCHIP. If we found enrollment data in either both the Medicaid and SCHIP files or the Medicaid file alone, we coded the child as transitioning from Medicaid to SCHIP. If only SCHIP data were found, we coded the child as having a prior SCHIP episode.
4. If we found no evidence of Medicaid enrollment in the 6-month period prior to the administrative month of enrollment, we relied on reports of uninsured periods to assign enrollees to private coverage or uninsured status. If the respondent reported some coverage, but no evidence of public coverage was found in the state files, we coded the child as having private coverage for the 6 months before enrollment. If the respondent reported an uninsured spell of 6 months or more prior to enrollment, and

there was no evidence of Medicaid enrollment, we coded the child as being uninsured for all 6 months.

**c. Recent Enrollees Reported on SCHIP at Birth**

We examined the enrollment records for the 201 recent enrollees who were born on SCHIP and found evidence of Medicaid coverage prior to their SCHIP enrollment dates for 148 of the 201. We therefore assigned insurance coverage for these children as a seamless transition from Medicaid. Children over the age of 5 and therefore born prior to implementation of SCHIP in January 1998, with no evidence of Medicaid or SCHIP enrollment at birth, were coded as missing prior coverage data ( $N = 15$ ). The remaining 38 cases were coded as “born on SCHIP.”

**d. States Not Providing Medicaid Data**

Colorado, New York, and Texas provided no Medicaid enrollment data from their administrative files. We could therefore use only state SCHIP files to determine the types of coverage for children in those states. In the case of children reported as being insured prior to enrolling in SCHIP but who, according to the state files, did not have SCHIP, we could not turn to Medicaid files to determine whether the coverage was public or private. Instead, we imputed coverage status, using a regression model based on the coverage experience of two other types of recent enrollees: (1) those with complete information covered by SCHIP for more than 12 months in states with Medicaid data, and (2) recent enrollees with complete insurance information in the three states with no Medicaid data. We refer to those cases as “donor cases.”

We used regression imputation to predict private or public coverage among those with coverage prior to SCHIP enrollment. The dependent variable was set to 1 if the donor case held any form of private coverage during the 6 months prior to SCHIP enrollment, and to 0 if the donor held only public coverage (Medicaid, SCHIP, or other public). We estimated a logistic regression because of the binary nature of the dependent variable. The model explained

insurance status based on parents' work status, family structure, family income, the respondent's age and health status, the child's race/ethnicity, state of residence, and reported length of time on SCHIP. The specification for the regression achieved a high percentage of correctly predicted donor cases. We used this model for children whose prior insurance status was "insured" to assign the children a predicted probability of private coverage. Cases with a high predicted probability of private coverage were assigned private coverage.

Based on the protocol to determine prior insurance coverage within the universe of 5,359 recent enrollees, we could not assign prior coverage to 350 cases and therefore had to drop the cases from the analytic sample. This group included 38 cases coded as born on SCHIP, 258 covered by SCHIP during the 6 months before the current enrollment, and 54 missing sufficient insurance status information to classify. The analytic sample used to estimate substitution at the time of enrollment included 5,009 observations. The sample used to describe prior coverage status in Chapter I excluded those born on SCHIP ( $N = 38$ ) and those with missing insurance data ( $N = 54$ ) but included those with prior SCHIP spells ( $N = 258$ ), for an analytic sample of 5,267.

### **3. Reasons for Ending Private Coverage and Enrolling in SCHIP**

We analyzed reasons for ending prior coverage and enrolling in SCHIP for those with private coverage during the 6 months prior to enrollment ( $N = 1,349$ ). The reasons were used to determine whether private coverage ended voluntarily or involuntarily, and to produce estimates of substitution at the time of enrollment. The estimates are presented in Chapter VI of the report. This section describes how we assigned reasons for transitions from private insurance in the 6 months prior to enrollment in SCHIP among recent enrollees.

Parents of recent enrollees provided information through one of three survey questions on why private coverage ended. Parents who reported their children as being privately insured just

before enrolling were asked a question about why that private coverage had ended. Alternatively, parents who reported their children were uninsured at some point in the 6 months prior to enrolling were asked why their children were uninsured during that time. Many of the responses to that question related to private coverage that had ended. Finally, all respondents were asked why they had enrolled their children in SCHIP. All three questions used similar response categories, and we applied the same coding protocols to any open-ended verbatim responses that parents provided. This technique enabled us to combine responses from all three questions about why private coverage had ended.

For parents who were asked more than one of the questions, we used the responses about why private coverage had ended to assess the parents' ability to have retained private coverage for their children. For those who were asked the question but did not provide a reason, we substituted the reason why the children were uninsured ( $N = 28$ ). About 18 percent of cases with prior private coverage were not asked why the coverage ended or did not respond to the question about why their children were uninsured ( $N = 246$ ). This set of cases included primarily recent enrollees who were interviewed as established enrollees. We determined that the children had prior private coverage through our examination of administrative data, logical editing, and imputation. For these cases, we used the response to the survey question on why the parent had enrolled his or her child in SCHIP to assess why private coverage had ended. Only one case was missing responses to all the questions about reasons. Table VI.2, in Chapter VI, displays the full set of response categories, and how they were subsequently classified to determine substitution at the time of enrollment.

#### **4. Measures of Parental Coverage Among Established SCHIP Enrollees**

Information on parents' coverage and potential substitution estimates presented in Chapter VI are based on the established SCHIP enrollee sample. Of the 5,797 records, we excluded from

our analytic sample any enrollees who did not provide this information. Among the excluded sample were enrollees who were reported as disenrolled by the time of interview (N = 838), enrollees who could not report enrollment dates for SCHIP (N = 174), and those missing parents' insurance data (N = 80). The analytic sample included 4,705 records, or about 81 percent of the established enrollee sample. Observed characteristics of the analytic sample (for example, income, race, and health status) and those of the full sample were similar.<sup>21</sup>

Parents' coverage information (presented in Table VI.3 of the report) was constructed to reflect the proportion of children living with parents who had certain types of coverage (for example, any parent with employer insurance, any parent who was uninsured). All adults in the household identified by the respondent as parents, legal guardians, or spouses of parents of the enrolled child were asked about the type of coverage they held at the time of interview. Each adult reporting more than one type of coverage was assigned only one form of coverage, using a hierarchical protocol that first classified all adults with any employer-sponsored insurance in this category. Thus, adults reporting both employer insurance and an individually purchased plan and those reporting employer insurance and some form of public coverage were classified as having employer insurance.

In two-parent families, each parent was classified into a category based on the preceding protocol. If the two parents held different forms of coverage, the children were, for example, coded as having both "any parent with employer insurance" and "any parent with public insurance." This coding should not be interpreted to mean that one parent might have had both

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<sup>21</sup> For the Medicaid analysis in two states, the full sample consisted of 922 records. We excluded 162 of the 922 from the analysis sample for reasons similar to the reasons for the exclusions from the SCHIP sample. Of the resulting 760 records in the analytic sample, 317 were from California and 443 were from North Carolina. The analytic sample for the SCHIP comparison included 963 records, 489 of which were from California and 474 of which were from North Carolina. All variables were derived using the same methods explained in the previous section.



employer insurance and public insurance. It means only that one parent had employer insurance, and the other had public insurance. Fifty-five of the children in this analytic sample lived with two parents, each of whom held two different types of insurance, and 595 lived in households with one insured and one uninsured parent (16 percent of weighted sample).

## **F. ANALYSIS OF THE DETERMINANTS OF LENGTH OF SCHIP ENROLLMENT AND REENROLLMENT**

This section discusses the methodology used to analyze the determinants of the length of SCHIP enrollment and reenrollment, presented in Chapter V of the report. In contrast to the other analyses, this analysis drew mainly on data from state SCHIP enrollment files, rather than from the survey. We begin by describing the enrollment history data we obtained from the 10 states in the evaluation. We also summarize the process we followed to construct enrollment and exit spells and other measures using enrollment history data. We then describe the crosswalk between the SCHIP and Medicaid eligibility codes provided by the states and the grouping we used. We end this section by discussing the life table methods we used for the descriptive and multivariate analyses.

### **1. SCHIP and Medicaid Enrollment History Data**

The analysis of the determinants of the length of SCHIP enrollment and time to reenrollment after leaving SCHIP used person-level data provided by the 10 study states. In summer 2002, we requested SCHIP enrollment histories for all children included in our survey samples of recent and established SCHIP enrollees and recent disenrollees from SCHIP. We also requested Medicaid enrollment history data for the 10 SCHIP samples and for the samples in the two states in which we conducted a survey of Medicaid enrollees and recent disenrollees (California and North Carolina). As we describe below, Medicaid data were used to supplement the analysis of SCHIP enrollment and reenrollment.

Between summer 2001 and summer 2002, we requested four types of data from the states' management information systems: (1) contact data, (2) application data, (3) enrollment data, and (4) redetermination (or renewal) and disenrollment data. A separate report identifies the availability and reliability of the required data elements for all 10 study states (Zambrowski et al. 2003).

**a. Data Availability**

The period for which we obtained enrollment records varied across states. For all 10 states, we obtained SCHIP enrollment history data from the month in which the program began in each state through December 2002. (We selected this cutoff date to coincide with the expected end of the survey field period for all states.) SCHIP enrollment histories were available for a period of 50 to 60 months for nine states, and for 32 months for Texas (see Table C.13).<sup>22</sup>

In contrast, Medicaid enrollment history data were available for only seven states (Table C.13).<sup>23</sup> For the SCHIP samples, Medicaid data were available from the beginning of the SCHIP program in five states. The exceptions were California and Florida, for which enrollment history data began in November 2000 and in January 2001, respectively. In addition, Medicaid enrollment histories for the samples of enrollees in Medicaid and of recent disenrollees from Medicaid were available beginning in November 2000 in California, and beginning in October 1998 in North Carolina.<sup>24</sup> For all states that provided Medicaid data, these histories were

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<sup>22</sup>In Texas, the separate SCHIP program began on April 30, 2000, and enrollment began the following month.

<sup>23</sup>We did not obtain Medicaid enrollment history data for the SCHIP samples in Colorado, New York, or Texas.

<sup>24</sup>We obtained SCHIP enrollment history data for the Medicaid sample in North Carolina, but not for the Medicaid sample in California.

TABLE C.13  
 AVAILABILITY OF DATA ELEMENTS FROM THE SCHIP ENROLLMENT HISTORY DATA FILES

| Survey                  | SCHIP<br>Start Date              | Enrollment<br>History<br>Start Date | Medicaid<br>Enrollment<br>History <sup>a</sup> | Data Elements  |                                  |   |                        |                     |                                      |                                    |                          |                    |                           |
|-------------------------|----------------------------------|-------------------------------------|--|--|----------------------------------|---|------------------------|---------------------|--------------------------------------|------------------------------------|--------------------------|--------------------|---------------------------|
|                         |                                  |                                     |  | Child's<br>Demographic<br>Characteristics <sup>b</sup> | Whether Child<br>Is U.S. Citizen | Zip Code<br>and County<br>Code <sup>c</sup> | Health Plan<br>History | Eligibility<br>Code | Redetermination<br>Date <sup>d</sup> | Disenrollment<br>Date <sup>e</sup> | Disenrollment<br>Reasons | Premium<br>History | Enrollment<br>Fee History |
| CA—SCHIP (SEP)          | 3/1/98 - Exp<br>7/1/98 - Sep     | Jul-98                              | Yes <sup>f</sup>                               | Yes  | Yes                              | Yes   | Yes                    | Yes <sup>g</sup>    | No                                   | Yes                                | Yes                      | No                 | n.a.                      |
| CA—Medicaid             | n.a.                             | Nov-00                              | Yes  | Yes  | No                               | Yes   | No                     | Yes                 | No                                   | Yes                                | Yes                      | n.a.               | n.a.                      |
| CO (SEP)                | 4/22/98                          | Apr-98                              | No   | Yes  | No                               | Yes   | n.a. <sup>h</sup>      | Yes <sup>g</sup>    | Yes                                  | Yes                                | No                       | n.a.               | Yes                       |
| FL (SEP)                | 4/1/98                           | Apr-98                              | Yes  | Yes <sup>i</sup>                                       | No                               | Yes   | Yes                    | Yes                 | No                                   | No                                 | No                       | No                 | n.a.                      |
| IL (COMB)               | 1/1/98 - Exp<br>8/12/98 -<br>Sep | Jan-98                              | Yes  | Yes  | Yes                              | Yes   | n.a. <sup>h</sup>      | Yes                 | Yes <sup>j</sup>                     | Yes                                | Yes                      | Yes                | n.a.                      |
| LA (EXP)                | 11/1/98                          | Nov-98                              | Yes  | Yes  | Yes                              | Yes   | n.a.                   | Yes                 | Yes                                  | Yes                                | Yes                      | n.a.               | n.a.                      |
| MO (EXP)                | 7/1/98                           | Feb-98                              | Yes  | Yes  | Yes                              | Yes   | Yes <sup>h</sup>       | Yes                 | Yes                                  | Yes                                | Yes                      | Yes                | n.a.                      |
| NJ (COMB)               | 2/1/98 - Exp<br>3/1/98 - Sep     | Mar-98                              | Yes  | Yes  | No                               | Yes   | n.a.                   | Yes                 | No                                   | Yes                                | Yes                      | Yes                | n.a.                      |
| NY (SEP)                | 4/15/98                          | Apr-98                              | No   | Yes <sup>i</sup>                                       | No                               | Yes   | Yes                    | Yes <sup>g</sup>    | No                                   | No                                 | No                       | Yes                | n.a.                      |
| NC—SCHIP (SEP)          | 10/1/98                          | Oct-98                              | Yes  | Yes  | No <sup>k</sup>                  | Yes   | n.a.                   | Yes                 | No                                   | Yes                                | Yes                      | n.a.               | No                        |
| NC—Medicaid             | n.a.                             | Oct-98                              | Yes  | Yes  | No <sup>h</sup>                  | Yes   | n.a.                   | Yes                 | No                                   | Yes                                | Yes                      | n.a.               | n.a.                      |
| TX (SEP)                | 4/30/00                          | May-00                              | No   | Yes  | No                               | Yes   | Yes <sup>h</sup>       | Yes <sup>g</sup>    | Yes                                  | Yes                                | Yes <sup>l</sup>         | No                 | No                        |
| <b>Number with Data</b> | <b>n.a.</b>                      | <b>n.a.</b>                         | <b>7 of 10</b>                                 | <b>12 of 12</b>  | <b>4 of 12</b>                   | <b>12 of 12</b>                             | <b>5 of 6</b>          | <b>12 of 12</b>     | <b>5 of 12</b>                       | <b>10 of 12</b>                    | <b>9 of 12</b>           | <b>3 of 7</b>      | <b>1 of 3</b>             |

Source: State enrollment history data files for the period January 1998 through December 2002.

<sup>a</sup>Refers to the availability of a Medicaid enrollment history for children in the SCHIP sample.

<sup>b</sup>The child's demographic characteristics are date of birth, sex, race, and whether of Hispanic origin.

<sup>c</sup>FIPS county codes are available.

TABLE C.13 (continued)

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<sup>d</sup>In Missouri and Texas, the redetermination date of an ongoing segment is the anticipated date when the child will be redetermined; in Florida, redetermination is passive, but no date is available.

<sup>e</sup>Only a binary indicator of whether a child disenrolled in a given month is included in the analysis file.

<sup>f</sup>Medicaid enrollment history data are available only for 67 children in the survey sample.

<sup>g</sup>Reported as groups defined in terms of the percentage of the Federal Poverty Level.

<sup>h</sup>In Colorado, all children are enrolled in either an HMO or the state's Children's Basic Health Plan network. In Illinois, health plan information is reported voluntarily, but we received a history of managed care enrollment in Cook and St. Clair counties. In Missouri, we identified the managed care counties from the county codes in the monthly records. In New Jersey, all children are enrolled in managed care.

<sup>i</sup>In Florida, the demographic variables were extracted from the survey data, and race codes are missing. In New York, the race of the child is not available.

<sup>j</sup>In Illinois, the redetermination date provided by the state is not reliable.

<sup>k</sup>In North Carolina, only refugee status is available.

<sup>l</sup>In Texas, the disenrollment reason may be available only for the last enrollment segment in the history.

COMB = SCHIP combination program; EXP = SCHIP Medicaid expansion program; FIPS = Federal Information Processing Standards; HMO = health maintenance organization; n.a. = not applicable; SEP = SCHIP separate program.

available through December 2002. Medicaid enrollment histories were therefore available for a period of 26 to 60 months for seven states.

**b. Construction of the Analysis File**

Because enrollment files vary in their structure and content across states, we developed uniform files for the analysis of the determinants of length of SCHIP enrollment and reenrollment, as well as for other analyses. The process of creating these files included data quality and consistency checks. In several instances, we contacted the states to clarify anomalies observed in specific data elements.

We used the state enrollment files to create one record for each child included in the SCHIP and Medicaid survey samples and periods noted above for the 10 states. The file contained information on the month-by-month eligibility status of each child, including whether the child was enrolled in Medicaid SCHIP or separate SCHIP programs, or in the Medicaid program (for the seven states that provided these data for the SCHIP and Medicaid samples), and the eligibility group. The file also included one or more of several dates: application, eligibility determination, and eligibility renewal. In addition, the file contained demographic information (age, sex, race/ethnicity, whether the child was a U.S. citizen, and the zip code and county of residence). Finally, in selected states, the file included the reasons for exiting the program, a health plan history, and a premium-payment history.

### c. Defining Enrollment and Exit Spells

Figure C.1 illustrates the steps we followed to construct the enrollment and exit spells for the analysis.<sup>25</sup> This process applies to all 10 SCHIP samples and to the 2 Medicaid samples in California and North Carolina, unless otherwise noted.

An enrollment spell begins on either the first day of the month when enrollment is first recorded or the first day of the month immediately following a period of disenrollment (for example,  $B_{1(Enr)}$  and  $B_{2(Enr)}$ ).<sup>26</sup> An enrollment spell ends on the last day of the month immediately before the next disenrollment period (for example,  $E_{1(Enr)}$ ). We took the eligibility category for an enrollment spell from the first month of a spell (for example,  $Elig_{1(Enr)}$  and  $Elig_{2(Enr)}$ ).<sup>27,28</sup> Finally, if an enrollment spell had not ended by December 31, 2002, and an exit reason was not available for that month, we defined the spell as censored (for example,  $C_{2(Enr)}$ ).

An exit spell begins on the first day of the month immediately following a period of enrollment (for example,  $B_{1(Ex)}$  and  $B_{2(Ex)}$ ) and ends on the last day of the month immediately before the next enrollment period (for example,  $E_{1(Ex)}$ ).<sup>29</sup> We took the eligibility category for an

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<sup>25</sup>Throughout this discussion, we use the term *exit* to denote an exit from the program, regardless of whether a child transferred to Medicaid on private insurance or had been uninsured.

<sup>26</sup>For the Medicaid enrollment spells in California and North Carolina, because we use a change in the binary indicator of enrollment from 0 to 1, rather than the exact date of enrollment, we cannot identify enrollment spells that began on the first month of the study period.

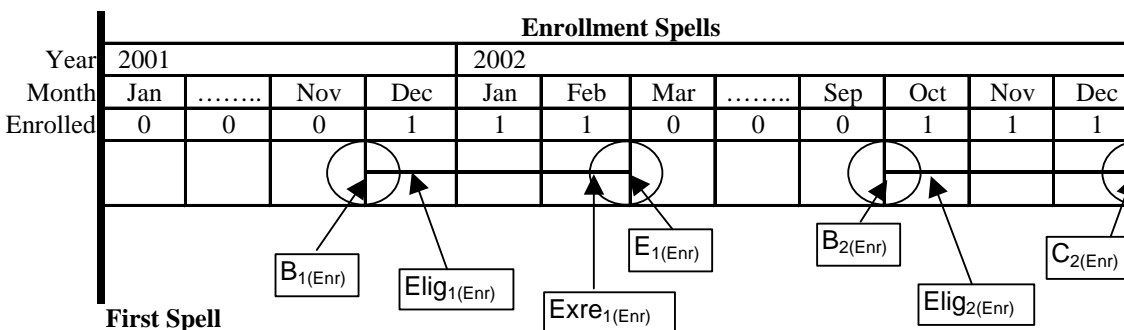
<sup>27</sup>The eligibility category sometimes changed within an enrollment spell. The percentage of enrollment spells in which the category changed at least once averaged 15 percent across the nine states that use SCHIP eligibility categories. (California does not use eligibility categories for Healthy Families.) Attributing the eligibility category of the first month in which a category appeared to the entire spell greatly simplified the analysis of enrollment by eligibility group because it made the determination of the eligibility group in which a child was enrolled *independent* of the length of the enrollment spell.

<sup>28</sup>In New York, we extracted the eligibility code from the month after which the period of presumptive eligibility ended. That period ranged from 1 to 4 months, although the statutory period of presumptive eligibility is 60 days. Finally, we found spells of eight children who exited SCHIP while being presumptively eligible. We used the presumptive eligibility code to classify the spell for those children.

<sup>29</sup>The same issue regarding the identification of Medicaid enrollment spells that began on the first month of the study period applies in the case of Medicaid exit spells.

FIGURE C.1

DEFINITION OF ENROLLMENT AND EXIT SPELLS



**First Spell**

$B_1(Enr)$  = Begin date

$E_1(Enr)$  = End date

$Elig_1(Enr)$  = Eligibility category (from first month of enrollment spell)

$Exre_1(Enr)$  = Exit Reason (from last month of enrollment spell)

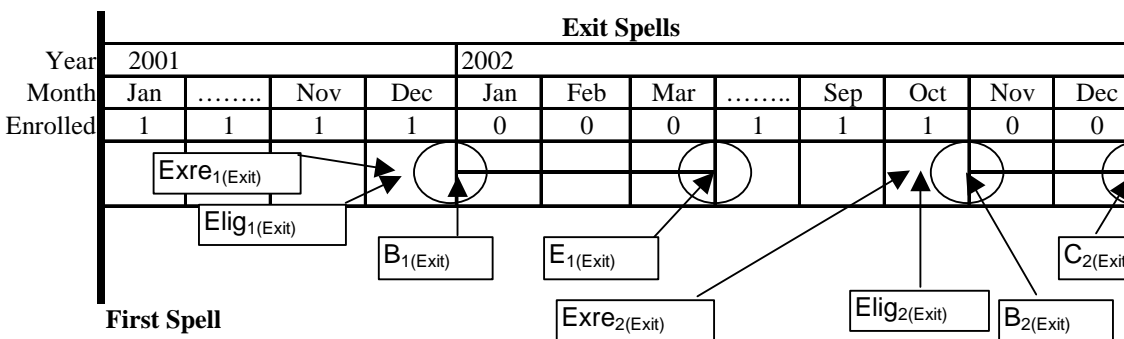
**Second Spell**

$B_2(Enr)$  = Begin date

$E_2(Enr)$  = End date

$Elig_2(Enr)$  = Eligibility category (from first month of enrollment spell)

$C_2(Enr)$  = Censor indicator



**First Spell**

$B_1(Exit)$  = Begin date

$E_1(Exit)$  = End date

$Elig_1(Exit)$  = Eligibility category (from last month of previous enrollment spell)

$Exre_1(Exit)$  = Disenrollment Reason (from last month of previous enrollment spell)

**Second Spell**

$B_2(Exit)$  = Begin date

$E_2(Exit)$  = End date

$Elig_2(Exit)$  = Eligibility category (from last month of previous enrollment spell)

$Exre_2(Exit)$  = Exit reason (from last month of previous enrollment spell)

$C_2(Exit)$  = Censor indicator

exit spell from the last month of the previous enrollment spell (for example,  $Elig_{1(Ex)}$  and  $Elig_{2(Ex)}$ ). If an exit spell had not ended by December 31, 2002, we defined the spell as censored (for example,  $C_{2(Ex)}$ ).

Table C.14 summarizes the number of spells included in the analysis; the number of transitions from a specific status (for example, reenrollment into SCHIP, in the case of the reenrollment analysis); the number of spells censored as of December 31, 2002; the exit rate (for the enrollment analysis); and the reentry rate (for the reenrollment analysis), for each state.<sup>30</sup> Although some children had multiple spells, we analyzed the spell from which a child was sampled only for recent enrollees (in the enrollment analysis) and for recent disenrollees (in the reenrollment analysis); including all spells would have oversampled children with long spells, resulting in biased estimates.

#### **d. Defining Subgroup Variables**

We constructed a number of person-level variables to explore variation in durations of exit and reentry, by subgroup. The distribution of these variables is shown, by state, in Table C.15 for recent enrollees and in Table C.16 for recent disenrollees. The categorical variable for the age of the child was defined at the beginning of each spell. The categories of this variable correspond to those used in the analysis of survey data reported in Chapter I. Because states differ in their approaches to collecting data on race and ethnicity in the enrollment records, we used the data on this variable that we had collected in the survey. This convention should enable us to make comparisons of our measures of the length of SCHIP enrollment and reenrollment, by

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<sup>30</sup>Because the analysis uses only the spells from which the recent enrollees and recent disenrollees were sampled, the number of children is the same as the number of spells.



TABLE C.14  
ANALYSIS FILE SUMMARY STATISTICS:  
SCHIP SAMPLES

|   | CA              | CO              | FL              | IL              | LA               | MO              | NJ              | NY              | NC               | TX              | Total |
|---|-----------------|-----------------|-----------------|-----------------|------------------|-----------------|-----------------|-----------------|------------------|-----------------|-------|
| Data Period                                   | 7/98 –<br>12/02 | 4/98 –<br>12/02 | 4/98 –<br>12/02 | 1/98 –<br>12/02 | 11/98 –<br>12/02 | 2/98 –<br>12/02 | 3/98 –<br>12/02 | 4/98 –<br>12/02 | 10/98 –<br>12/02 | 5/00 –<br>12/02 | —     |
| <b>Enrollment Analysis</b>                    |                 |                 |                 |                 |                  |                 |                 |                 |                  |                 |       |
| Number of Spells                              | 598             | 631             | 601             | 496             | 591              | 541             | 534             | 525             | 542              | 591             | 5,650 |
| Number of Exits                               | 54              | 93              | 216             | 233             | 174              | 180             | 191             | 227             | 287              | 149             | 1,804 |
| Number of Censored Spells                     | 544             | 538             | 385             | 263             | 417              | 361             | 343             | 298             | 255              | 442             | 3,846 |
| Total Time at Risk (in Person-Years)          | 510             | 588             | 479             | 402             | 535              | 419             | 458             | 494             | 520              | 456             | 4,861 |
| Exit Rate (Weighted, per 100 Person-Years)    | 10.5            | 14.6            | 44.6            | 59.9            | 32.1             | 40.5            | 43.3            | 49.1            | 56.4             | 32.6            | 33.5  |
| <b>Reenrollment Analysis</b>                  |                 |                 |                 |                 |                  |                 |                 |                 |                  |                 |       |
| Number of Spells                              | 458             | 480             | 525             | 447             | 401              | 495             | 381             | 418             | 497              | 519             | 4,621 |
| Number of Reentries                           | 91              | 85              | 231             | 86              | 55               | 153             | 57              | 102             | 89               | 111             | 1,060 |
| Number of Censored Spells                     | 367             | 395             | 294             | 361             | 346              | 342             | 324             | 316             | 408              | 408             | 3,561 |
| Total Time at Risk (in Person-Years)          | 378             | 394             | 375             | 400             | 340              | 392             | 343             | 344             | 464              | 420             | 3,851 |
| Reentry Rate (Weighted, per 100 Person-Years) | 21.8            | 21.8            | 61.5            | 23.1            | 13.5             | 39.5            | 18.5            | 29.0            | 22.7             | 25.1            | 29.4  |

Source: State enrollment history data files for samples of recent enrollees and recent disenrollees from the 2002 congressionally mandated survey of SCHIP enrollees and disenrollees in 10 states linked to data from this survey.

Note: All estimates, with the exception of the exit and reentry rates, are unweighted.

TABLE C.15

DISTRIBUTION OF CHARACTERISTICS OF SPELLS FOR THE ANALYSIS  
OF THE LENGTH OF SCHIP ENROLLMENT

| Characteristic <sup>a</sup>                       | CA     | CO    | FL     | IL     | LA    | MO    | NJ    | NY     | NC    | TX     | Total   |
|---|--------|-------|--------|--------|-------|-------|-------|--------|-------|--------|---------|
| Total Number of Enrollment Spells                 | 44,677 | 4,472 | 26,682 | 13,381 | 7,055 | 6,515 | 8,956 | 11,752 | 8,671 | 50,562 | 182,723 |
| Total Number of Enrollment Spells<br>(Unweighted) | 598    | 631   | 601    | 496    | 591   | 541   | 534   | 525    | 542   | 591    | 5,650   |
| Total Number of Exits<br>(Unweighted)             | 54     | 93    | 216    | 233    | 174   | 180   | 191   | 227    | 287   | 149    | 1,804   |
| Child's Race and Main Language                    |        |       |        |        |       |       |       |        |       |        |         |
| Hispanic, speaks Spanish                          | 47.9   | 22.2  | 20.1   | 22.4   | 2.3   | 0.6   | 19.4  | 12.0   | 7.4   | 31.5   | 27.7    |
| Hispanic, speaks English                          | 19.2   | 20.9  | 14.8   | 8.3    | 3.0   | 3.6   | 14.5  | 10.8   | 5.3   | 32.4   | 18.8    |
| Non-Hispanic white, speaks<br>English             | 11.7   | 43.4  | 38.1   | 36.5   | 43.4  | 70.4  | 29.3  | 39.1   | 50.1  | 20.1   | 28.2    |
| Non-Hispanic black, speaks<br>English             | 3.5    | 3.2   | 14.7   | 20.8   | 41.6  | 14.9  | 21.4  | 18.3   | 28.7  | 9.1    | 12.8    |
| Non-Hispanic other, speaks<br>English             | 6.6    | 5.5   | 4.1    | 2.9    | 3.9   | 3.8   | 4.9   | 6.0    | 5.4   | 2.4    | 4.4     |
| Non-Hispanic, non-English<br>speaking             | 7.9    | 1.1   | 2.1    | 3.9    | 0.7   | 1.0   | 7.6   | 7.2    | 0.6   | 2.2    | 4.1     |
| Missing race, ethnicity, or<br>language           | 3.2    | 3.7   | 6.1    | 5.2    | 5.2   | 5.6   | 2.9   | 6.5    | 2.4   | 2.4    | 3.9     |
| Sex   |        |       |        |        |       |       |       |        |       |        |         |
| Female  | 49.2   | 48.8  | 49.2   | 53.2   | 50.8  | 47.4  | 48.1  | 47.1   | 47.4  | 48.2   | 48.9    |
| Male  | 50.8   | 51.2  | 50.8   | 46.8   | 49.2  | 52.6  | 51.9  | 52.9   | 52.6  | 51.8   | 51.1    |
| Age (in Years)                                    |        |       |        |        |       |       |       |        |       |        |         |
| <1  | 3.7    | 6.5   | 0.0    | 1.0    | 2.8   | 2.1   | 1.9   | 4.4    | 0.4   | 4.6    | 3.0     |
| 1 to 5  | 35.8   | 33.6  | 22.8   | 11.1   | 23.2  | 25.7  | 20.7  | 25.6   | 24.9  | 30.0   | 27.7    |
| 6 to 12   | 38.1   | 34.3  | 43.2   | 54.9   | 41.7  | 41.7  | 39.5  | 40.6   | 44.3  | 37.1   | 40.5    |
| ≥13   | 22.5   | 25.7  | 33.9   | 32.9   | 32.3  | 30.6  | 37.9  | 29.4   | 30.5  | 28.3   | 28.8    |
| Child Has a Special Health Care<br>Need           |        |       |        |        |       |       |       |        |       |        |         |
| Yes   | 17.9   | 20.6  | 29.9   | 31.4   | 37.2  | 34.3  | 27.6  | 31.5   | 36.9  | 29.2   | 27.4    |
| No  | 82.1   | 79.4  | 70.1   | 68.6   | 62.8  | 65.7  | 72.4  | 68.5   | 63.1  | 70.8   | 72.6    |

TABLE C.15 (continued)

| Characteristic <sup>a</sup>                 | CA    | CO   | FL   | IL   | LA   | MO   | NJ    | NY   | NC   | TX   | Total |
|---|-------|------|------|------|------|------|-------|------|------|------|-------|
| Child's Overall Health Status               |       |      |      |      |      |      |       |      |      |      |       |
| Excellent/very good                         | 66.1  | 77.0 | 75.6 | 65.3 | 69.0 | 72.1 | 67.6  | 76.1 | 70.0 | 64.1 | 68.3  |
| Good  | 27.1  | 17.3 | 19.4 | 24.4 | 23.1 | 19.1 | 25.0  | 18.2 | 20.3 | 24.5 | 23.4  |
| Fair/poor                                   | 6.9   | 5.7  | 5.0  | 10.3 | 7.9  | 8.8  | 7.4   | 5.8  | 9.7  | 11.3 | 8.3   |
| Household Income, by FPL Range              |       |      |      |      |      |      |       |      |      |      |       |
| < 150% FPL                                  | 67.5  | 73.7 | 69.0 | 82.1 | 77.5 | 72.5 | 69.0  | 62.0 | 72.2 | 74.7 | 71.4  |
| 150 to 200% FPL                             | 19.3  | 19.1 | 19.4 | 13.8 | 16.8 | 16.9 | 17.0  | 22.8 | 18.7 | 17.0 | 18.2  |
| ≥ 200% FPL                                  | 13.2  | 7.2  | 11.6 | 4.1  | 5.7  | 10.7 | 14.0  | 15.3 | 9.1  | 8.3  | 10.4  |
| Highest Education Level of Parent(s)        |       |      |      |      |      |      |       |      |      |      |       |
| No GED or HS diploma                        | 31.4  | 19.9 | 11.9 | 21.9 | 12.7 | 7.8  | 14.7  | 11.3 | 12.5 | 24.5 | 21.2  |
| GED or HS diploma                           | 31.4  | 32.3 | 35.0 | 39.6 | 52.8 | 46.5 | 41.9  | 33.8 | 43.2 | 40.9 | 37.8  |
| Some college or college degree <sup>b</sup> | 37.2  | 47.7 | 53.1 | 38.5 | 34.4 | 45.7 | 43.4  | 54.9 | 44.3 | 34.6 | 41.1  |
| Residential Location                        |       |      |      |      |      |      |       |      |      |      |       |
| Metropolitan                                | 96.1  | 76.1 | 94.4 | 77.9 | 67.7 | 55.9 | 100.0 | 89.7 | 67.2 | 82.2 | 86.1  |
| Nonmetropolitan, adjacent                   | 3.6   | 5.7  | 5.3  | 11.9 | 26.5 | 14.4 | 0.0   | 6.9  | 21.6 | 12.8 | 9.2   |
| Nonmetropolitan, nonadjacent                | 0.3   | 18.2 | 0.3  | 10.1 | 5.8  | 29.7 | 0.0   | 3.4  | 11.2 | 5.1  | 4.7   |
| Program Type                                |       |      |      |      |      |      |       |      |      |      |       |
| Separate                                    | 100   | 100  | 100  | 23.0 | 0    | 0    | 60.9  | 100  | 100  | 100  | 85.0  |
| Medicaid-expansion                          | 0     | 0    | 0    | 77.0 | 100  | 100  | 39.1  | 0    | 0    | 0    | 15.0  |
| Eligibility Group (at Enrollment)           |       |      |      |      |      |      |       |      |      |      |       |
| California                                  |       |      |      |      |      |      |       |      |      |      |       |
| < 250% FPL                                  | 100.0 |      |      |      |      |      |       |      |      |      |       |
| Colorado                                    |       |      |      |      |      |      |       |      |      |      |       |
| ≤ 100% FPL                                  |       | 34.6 |      |      |      |      |       |      |      |      |       |
| 101 to 150% FPL                             |       | 42.7 |      |      |      |      |       |      |      |      |       |
| 151 to 185% FPL                             |       | 22.7 |      |      |      |      |       |      |      |      |       |
| Florida                                     |       |      |      |      |      |      |       |      |      |      |       |
| MediKids                                    |       |      | 17.9 |      |      |      |       |      |      |      |       |
| HealthyKids                                 |       |      | 80.7 |      |      |      |       |      |      |      |       |
| CMS   |       |      | 1.4  |      |      |      |       |      |      |      |       |

TABLE C.15 (continued)

| Characteristic <sup>a</sup>                               | CA | CO | FL | IL   | LA   | MO   | NJ   | NY   | NC   | TX | Total |
|---|----|----|----|------|------|------|------|------|------|----|-------|
| Illinois  |    |    |    |      |      |      |      |      |      |    |       |
| KidCare Assist Medicaid expansion SCHIP (< 133% FPL)      |    |    |    | 77.0 |      |      |      |      |      |    |       |
| KidCare Assist Medicaid expansion SCHIP (134 to 150% FPL) |    |    |    | 12.8 |      |      |      |      |      |    |       |
| KidCare Premium SCHIP (151 to 185% FPL)                   |    |    |    | 10.1 |      |      |      |      |      |    |       |
| Louisiana   |    |    |    |      |      |      |      |      |      |    |       |
| LACHIP I (< 133% FPL)                                     |    |    |    |      | 43.6 |      |      |      |      |    |       |
| LACHIP II (133 to 150% FPL)                               |    |    |    |      | 17.6 |      |      |      |      |    |       |
| LACHIP III (151 to 200% FPL)                              |    |    |    |      | 38.8 |      |      |      |      |    |       |
| Missouri  |    |    |    |      |      |      |      |      |      |    |       |
| ≤ 185% FPL  |    |    |    |      |      | 73.0 |      |      |      |    |       |
| 186 to 225% FPL   |    |    |    |      |      | 21.6 |      |      |      |    |       |
| 226 to 300% FPL   |    |    |    |      |      | 5.4  |      |      |      |    |       |
| New Jersey  |    |    |    |      |      |      |      |      |      |    |       |
| Plan A (> 133% FPL)                                       |    |    |    |      |      |      | 39.1 |      |      |    |       |
| Plan B (133 to 150% FPL)                                  |    |    |    |      |      |      | 10.7 |      |      |    |       |
| Plan C (151 to 200% FPL)                                  |    |    |    |      |      |      | 30.3 |      |      |    |       |
| Plan D (201 to 350% FPL)                                  |    |    |    |      |      |      | 19.9 |      |      |    |       |
| New York  |    |    |    |      |      |      |      |      |      |    |       |
| < 151% FPL  |    |    |    |      |      |      |      | 49.5 |      |    |       |
| 151 to 222% FPL   |    |    |    |      |      |      |      | 41.3 |      |    |       |
| > 222% FPL  |    |    |    |      |      |      |      | 8.2  |      |    |       |
| Full premium  |    |    |    |      |      |      |      | 0.9  |      |    |       |
| North Carolina  |    |    |    |      |      |      |      |      |      |    |       |
| ≤ 150% FPL  |    |    |    |      |      |      |      |      | 67.0 |    |       |
| 151 to 200% FPL   |    |    |    |      |      |      |      |      | 33.0 |    |       |

TABLE C.15 (continued)

| Characteristic <sup>a</sup> | CA | CO | FL | IL | LA | MO | NJ | NY | NC | TX   | Total |
|-----------------------------|----|----|----|----|----|----|----|----|----|------|-------|
| Texas                       |    |    |    |    |    |    |    |    |    |      |       |
| < 100% FPL                  |    |    |    |    |    |    |    |    |    | 16.8 |       |
| 100 to 150% FPL             |    |    |    |    |    |    |    |    |    | 48.6 |       |
| 151 to 185% FPL             |    |    |    |    |    |    |    |    |    | 29.1 |       |
| 186 to 200% FPL             |    |    |    |    |    |    |    |    |    | 5.6  |       |

Source: State enrollment history data files for the sample of recent enrollees from the 2002 congressionally mandated survey of SCHIP enrollees and disenrollees in 10 states linked to data from this survey.

Note: All estimates are weighted unless otherwise noted.

<sup>a</sup>Except age, eligibility group, and program type, all characteristics are based on survey data.

<sup>b</sup>Includes 2-year associate's degree and trade school.

FPL = federal poverty level; GED = General Educational Development; HS = high school.

TABLE C.16

## DISTRIBUTION OF CHARACTERISTICS OF SPELLS FOR THE ANALYSIS OF TIME TO REENROLLMENT

| Characteristic <sup>a</sup>              | CA     | CO    | FL    | IL    | LA    | MO    | NJ    | NY    | NC    | TX     | Total  |
|--|--------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| Total Number of Exit Spells              | 10,289 | 1,339 | 7,999 | 4,598 | 1,724 | 2,857 | 1,939 | 5,757 | 2,185 | 13,581 | 52,268 |
| Total Number of Exit Spells (Unweighted) | 458    | 480   | 525   | 447   | 401   | 495   | 381   | 418   | 497   | 519    | 4,621  |
| Total Number of Exits (Unweighted)       | 91     | 85    | 231   | 86    | 55    | 153   | 57    | 102   | 89    | 111    | 1,060  |
| Child's Race and Main Language           |        |       |       |       |       |       |       |       |       |        |        |
| Hispanic, speaks Spanish                 | 47.1   | 24.7  | 15.3  | 17.4  | 1.8   | 0.7   | 21.5  | 8.9   | 5.8   | 26.7   | 22.8   |
| Hispanic, speaks English                 | 18.4   | 26.9  | 14.1  | 11.6  | 3.4   | 2.9   | 12.0  | 8.3   | 2.9   | 37.3   | 18.9   |
| Non-Hispanic white, speaks English       | 16.3   | 33.5  | 39.1  | 36.7  | 43.3  | 74.1  | 31.1  | 54.0  | 44.0  | 17.5   | 32.2   |
| Non-Hispanic black, speaks English       | 4.8    | 4.7   | 17.3  | 24.5  | 40.4  | 9.8   | 20.3  | 13.1  | 29.4  | 10.5   | 13.9   |
| Non-Hispanic other, speaks English       | 4.0    | 5.5   | 5.9   | 4.0   | 5.1   | 5.1   | 4.5   | 4.5   | 7.8   | 2.1    | 4.2    |
| Non-Hispanic, non-English-speaking       | 6.2    | 1.4   | 2.4   | 2.2   | 0.0   | 1.1   | 4.4   | 6.0   | 3.7   | 0.0    | 2.9    |
| Missing race, ethnicity, or language     | 3.2    | 3.2   | 5.9   | 3.6   | 6.0   | 6.2   | 6.1   | 5.2   | 6.4   | 6.0    | 5.1    |
| Sex                                      |        |       |       |       |       |       |       |       |       |        |        |
| Female                                   | 51.5   | 46.0  | 47.4  | 50.8  | 47.2  | 51.1  | 46.7  | 43.2  | 50.8  | 46.1   | 48.0   |
| Male                                     | 48.5   | 54.0  | 52.6  | 49.2  | 52.8  | 48.9  | 53.3  | 56.8  | 49.2  | 53.9   | 52.0   |
| Age (in Years)                           |        |       |       |       |       |       |       |       |       |        |        |
| <1                                       | 0.4    | 1.0   | 0.0   | 0.0   | 0.8   | 0.2   | 0.3   | 1.4   | 0.0   | 1.6    | 0.7    |
| 1 to 5                                   | 32.4   | 33.3  | 16.7  | 9.0   | 24.4  | 27.3  | 21.5  | 24.8  | 23.2  | 29.1   | 24.9   |
| 6 to 12                                  | 41.6   | 37.4  | 50.5  | 51.5  | 41.1  | 42.6  | 46.7  | 43.3  | 46.4  | 38.3   | 43.5   |
| ≥13                                      | 25.5   | 28.3  | 32.8  | 39.5  | 33.7  | 29.8  | 31.5  | 30.5  | 30.4  | 31.0   | 30.8   |
| Child Has a Special Health Care Need     |        |       |       |       |       |       |       |       |       |        |        |
| Yes                                      | 20.6   | 24.6  | 31.0  | 31.3  | 38.4  | 35.6  | 29.3  | 30.0  | 39.8  | 29.9   | 29.2   |
| No                                       | 79.4   | 75.4  | 69.0  | 68.7  | 61.6  | 64.4  | 70.7  | 70.0  | 60.2  | 70.1   | 70.8   |
| Child's Overall Health Status            |        |       |       |       |       |       |       |       |       |        |        |
| Excellent/very good                      | 63.1   | 70.3  | 71.8  | 66.6  | 67.2  | 75.2  | 65.4  | 73.7  | 66.3  | 59.7   | 66.2   |
| Good                                     | 26.2   | 22.4  | 19.2  | 23.0  | 20.4  | 19.5  | 25.9  | 21.4  | 26.0  | 28.3   | 24.2   |
| Fair/poor                                | 10.7   | 7.3   | 9.0   | 10.4  | 12.5  | 5.3   | 8.7   | 4.9   | 7.7   | 11.9   | 9.6    |
| Household Income, by FPL Range           |        |       |       |       |       |       |       |       |       |        |        |
| < 150% FPL                               | 62.9   | 62.5  | 71.3  | 79.4  | 83.3  | 70.4  | 59.1  | 63.9  | 72.9  | 74.7   | 70.4   |
| 150 to 200% FPL                          | 20.1   | 24.8  | 16.4  | 13.7  | 11.6  | 19.7  | 18.3  | 15.2  | 15.6  | 16.4   | 17.0   |
| ≥ 200% FPL                               | 16.9   | 12.7  | 12.3  | 6.9   | 5.1   | 9.9   | 22.7  | 20.8  | 11.5  | 8.9    | 12.6   |

TABLE C.16 (continued)

| Characteristic <sup>a</sup>                               | CA    | CO   | FL   | IL   | LA   | MO   | NJ    | NY   | NC   | TX   | Total |
|---|-------|------|------|------|------|------|-------|------|------|------|-------|
| Highest Education Level of Parent(s)                      |       |      |      |      |      |      |       |      |      |      |       |
| No GED or HS diploma                                      | 27.4  | 25.5 | 12.3 | 18.1 | 17.2 | 10.7 | 17.4  | 12.3 | 16.6 | 33.0 | 21.9  |
| GED or HS diploma   | 36.9  | 40.1 | 39.0 | 40.8 | 47.3 | 45.9 | 41.7  | 37.9 | 42.4 | 38.9 | 39.5  |
| Some college or college degree <sup>b</sup>               | 35.6  | 34.5 | 48.7 | 41.2 | 35.4 | 43.4 | 40.9  | 49.8 | 41.0 | 28.1 | 38.6  |
| Residential Location                                      |       |      |      |      |      |      |       |      |      |      |       |
| Metropolitan  | 96.7  | 75.6 | 94.7 | 78.1 | 67.0 | 52.3 | 100.0 | 83.7 | 65.6 | 78.0 | 83.3  |
| Nonmetropolitan, adjacent                                 | 3.1   | 5.5  | 4.5  | 10.2 | 25.1 | 10.6 | 0.0   | 9.3  | 25.0 | 15.8 | 9.9   |
| Nonmetropolitan, nonadjacent                              | 0.2   | 18.9 | 0.8  | 11.7 | 8.0  | 37.1 | 0.0   | 7.0  | 9.4  | 6.3  | 6.7   |
| Program Type  |       |      |      |      |      |      |       |      |      |      |       |
| Separate  | 100   | 100  | 100  | 23.2 | 0    | 0    | 66.8  | 100  | 100  | 100  | 83.2  |
| Medicaid-expansion  | 0     | 0    | 0    | 76.8 | 100  | 100  | 33.2  | 0    | 0    | 0    | 16.8  |
| States with Separate Programs                             | 100   | 100  | 100  | 0    | 0    | 0    | 0     | 100  | 100  | 100  | 78.7  |
| With Medicaid-expansion programs                          | 0     | 0    | 0    | 0    | 100  | 100  | 0     | 0    | 0    | 0    | 8.8   |
| With combination programs                                 | 0     | 0    | 0    | 100  | 0    | 0    | 100   | 0    | 0    | 0    | 12.5  |
| Eligibility Group (at Enrollment)                         |       |      |      |      |      |      |       |      |      |      |       |
| California  |       |      |      |      |      |      |       |      |      |      |       |
| < 250% FPL  | 100.0 |      |      |      |      |      |       |      |      |      |       |
| Colorado  |       |      |      |      |      |      |       |      |      |      |       |
| ≤ 100% FPL  |       | 30.5 |      |      |      |      |       |      |      |      |       |
| 101 to 150% FPL   |       | 38.6 |      |      |      |      |       |      |      |      |       |
| 151 to 185% FPL   |       | 30.9 |      |      |      |      |       |      |      |      |       |
| Florida   |       |      |      |      |      |      |       |      |      |      |       |
| MediKids  |       |      | 12.8 |      |      |      |       |      |      |      |       |
| HealthyKids   |       |      | 83.9 |      |      |      |       |      |      |      |       |
| CMS   |       |      | 3.3  |      |      |      |       |      |      |      |       |
| Illinois  |       |      |      |      |      |      |       |      |      |      |       |
| KidCare Assist Medicaid expansion SCHIP (< 133% FPL)      |       |      |      | 76.8 |      |      |       |      |      |      |       |
| KidCare Assist Medicaid expansion SCHIP (134 to 150% FPL) |       |      |      | 8.9  |      |      |       |      |      |      |       |
| KidCare Premium SCHIP (151 to 185% FPL)                   |       |      |      | 14.3 |      |      |       |      |      |      |       |
| Louisiana   |       |      |      |      |      |      |       |      |      |      |       |
| LACHIP I (< 133% FPL)                                     |       |      |      |      | 44.4 |      |       |      |      |      |       |
| LACHIP II (133 to 150% FPL)                               |       |      |      |      | 23.2 |      |       |      |      |      |       |
| LACHIP III (151 to 200% FPL)                              |       |      |      |      | 32.3 |      |       |      |      |      |       |

TABLE C.16 (continued)

| Characteristic <sup>a</sup> | CA | CO | FL | IL | LA | MO   | NJ   | NY   | NC   | TX   | Total |
|-----------------------------|----|----|----|----|----|------|------|------|------|------|-------|
| Missouri                    |    |    |    |    |    |      |      |      |      |      |       |
| ≤ 185% FPL                  |    |    |    |    |    | 74.5 |      |      |      |      |       |
| 186 to 225% FPL             |    |    |    |    |    | 16.1 |      |      |      |      |       |
| 226 to 300% FPL             |    |    |    |    |    | 9.4  |      |      |      |      |       |
| New Jersey                  |    |    |    |    |    |      |      |      |      |      |       |
| Plan A (< 133% FPL)         |    |    |    |    |    |      | 33.2 |      |      |      |       |
| Plan B (133 to 150% FPL)    |    |    |    |    |    |      | 8.4  |      |      |      |       |
| Plan C (151 to 200% FPL)    |    |    |    |    |    |      | 34.2 |      |      |      |       |
| Plan D (201 to 350% FPL)    |    |    |    |    |    |      | 24.2 |      |      |      |       |
| New York                    |    |    |    |    |    |      |      |      |      |      |       |
| < 151% FPL                  |    |    |    |    |    |      |      | 53.4 |      |      |       |
| 151 to 222% FPL             |    |    |    |    |    |      |      | 37.5 |      |      |       |
| > 222% FPL                  |    |    |    |    |    |      |      | 8.1  |      |      |       |
| Full premium                |    |    |    |    |    |      |      | 1.0  |      |      |       |
| North Carolina              |    |    |    |    |    |      |      |      |      |      |       |
| ≤ 150% FPL                  |    |    |    |    |    |      |      |      | 62.6 |      |       |
| 151 to 200% FPL             |    |    |    |    |    |      |      |      | 37.4 |      |       |
| Texas                       |    |    |    |    |    |      |      |      |      |      |       |
| < 100% FPL                  |    |    |    |    |    |      |      |      |      | 20.4 |       |
| 100 to 150% FPL             |    |    |    |    |    |      |      |      |      | 44.1 |       |
| 151 to 185% FPL             |    |    |    |    |    |      |      |      |      | 28.3 |       |
| 186 to 200% FPL             |    |    |    |    |    |      |      |      |      | 7.2  |       |

Source: State enrollment history data files for the sample of recent disenrollees from the 2002 congressionally mandated survey of SCHIP enrollees and disenrollees in 10 states linked to data from this survey.

Note: All estimates are weighted unless otherwise noted.

<sup>a</sup>Except age, eligibility group, and program type, all characteristics are based on survey data.

<sup>b</sup>Includes 2-year associate’s degree and trade school.

FPL = federal poverty level; GED = General Educational Development; HS = high school.



race/ethnicity, across states and with other analyses in this report.<sup>31</sup> The other groups we defined from the survey data included (1) whether the child has special health care needs, (2) the child's health status, (3) the main language spoken in the household, (4) the parents' highest education level, (5) household income, and (6) the residential location of the child's household.<sup>32</sup>

#### **e. Classification of SCHIP and Medicaid Eligibility Codes**

We classified SCHIP state eligibility codes into broad categories defined by family income and, in one instance, by the age of the child (Florida).

For the Medicaid codes, we classified the state eligibility codes into the four broad eligibility groups of (1) cash assistance, (2) medically needy, (3) poverty related, and (4) other. These codes correspond to the Maintenance Assistance Status (MAS) codes used by the Centers for Medicare & Medicaid Services to report eligibility in the Medicaid Statistical Information Systems. To keep the classification manageable, we did not create subgroups defined by the Basis of Eligibility (BOE) codes. To crosswalk the Medicaid state eligibility codes into the groups used in our analysis, we used the specifications provided by the two states.<sup>33,34</sup>

The definitions of the SCHIP and Medicaid eligibility codes we used in the analysis are summarized in Table C.17 and Table C.18, respectively.

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<sup>31</sup>Florida did not provide data on race/ethnicity in the enrollment history file.

<sup>32</sup>We combined the race/ethnicity of the child with the language spoken in the household.

<sup>33</sup>For California, the crosswalks are described in "California's MSIS Recipient Crosswalk Beginning FFY 1999 (Revised June 2000)." For North Carolina, the crosswalk is described in "Crosswalk North Carolina 5-Character Schematic to MAS Grouping (Version of August 8, 2001)" and "Descriptions of North Carolina 5 Character Eligibility Code Schematic."

<sup>34</sup>In North Carolina, children with state aid code of MICLN were coded into a separate category (MAS equal to 0), as they are not eligible for Medicaid. (Children with aid code of MICLN are eligible for the SCHIP program [NC Health Choice for Children] and live in households with incomes of more than 200 percent of the federal poverty level).

TABLE C.17

## CROSSWALK OF STATE ELIGIBILITY CODES INTO UNIFORM CODES, BY STATE AND PROGRAM (SCHIP)

| State Eligibility Code Description |                              |                  |                            |                       |                            |                                   |                                     |
|------------------------------------|------------------------------|------------------|----------------------------|-----------------------|----------------------------|-----------------------------------|-------------------------------------|
|                                    | State<br>Eligibility<br>Code | Program<br>Name  | Age<br>Requirement         | Income<br>Requirement | MPR<br>Eligibility<br>Code | Unique MPR<br>Eligibility<br>Code | MPR Eligibility<br>Code Description |
| CA <sup>a</sup>                    |                              | Healthy Families | 0 to 18 years              | < 150% FPL            | 1                          | 101                               | < 250% FPL                          |
|                                    |                              | Healthy Families | 0 to 18 years              | 151 to 250% FPL       | 1                          | 101                               | < 250% FPL                          |
| CO <sup>b</sup> 01/01 to present   | N                            | CHP+             | 0 to 18 years <sup>c</sup> | ≤ 40% FPL             | 1                          | 201                               | ≤ 100% FPL                          |
|                                    | A                            | CHP+             | 0 to 18 years <sup>c</sup> | 40 to 62% FPL         | 1                          | 201                               | ≤ 100% FPL                          |
|                                    | B                            | CHP+             | 0 to 18 years <sup>c</sup> | 63 to 81% FPL         | 1                          | 201                               | ≤ 100% FPL                          |
|                                    | C                            | CHP+             | 0 to 18 years <sup>c</sup> | 82 to 100% FPL        | 1                          | 201                               | ≤ 100% FPL                          |
|                                    | D                            | CHP+             | 6 to 18 years              | 101 to 117% FPL       | 2                          | 202                               | 101 to 150% FPL                     |
|                                    | E                            | CHP+             | 6 to 18 years              | 118 to 133% FPL       | 2                          | 202                               | 101 to 150% FPL                     |
|                                    | F-                           | CHP+             | 0 to 18 years              | 134 to 150% FPL       | 2                          | 202                               | 101 to 150% FPL                     |
|                                    | F+                           | CHP+             | 0 to 18 years              | 151 to 159% FPL       | 3                          | 203                               | 151 to 185% FPL                     |
|                                    | G-                           | CHP+             | 0 to 18 years              | 160 to 170% FPL       | 3                          | 203                               | 151 to 185% FPL                     |
|                                    | G+                           | CHP+             | 0 to 18 years              | 171 to 185% FPL       | 3                          | 203                               | 151 to 185% FPL                     |
| 04/98 – 12/00                      | N                            | CHP+             | 15 to 18 years             | 40 to 62% FPL         | 1                          | 201                               | ≤ 100% FPL                          |
|                                    | A                            | CHP+             | 15 to 18 years             | 63 to 81% FPL         | 1                          | 201                               | ≤ 100% FPL                          |
|                                    | B                            | CHP+             | 15 to 18 years             | 82 to 100% FPL        | 1                          | 201                               | ≤ 100% FPL                          |
|                                    | C                            | CHP+             | 15 to 18 years             | 101 to 117% FPL       | 1                          | 201                               | ≤ 100% FPL                          |
|                                    | D                            | CHP+             | 6 to 18 years              | 118 to 133% FPL       | 2                          | 202                               | 101 to 150% FPL                     |
|                                    | E                            | CHP+             | 6 to 18 years              | 134 to 150% FPL       | 2                          | 202                               | 101 to 150% FPL                     |
|                                    | F-                           | CHP+             | 0 to 18 years              | 151 to 159% FPL       | 2                          | 202                               | 101 to 150% FPL                     |
|                                    | F+                           | CHP+             | 0 to 18 years              | 160 to 170% FPL       | 3                          | 203                               | 151 to 185% FPL                     |
|                                    | G-                           | CHP+             | 0 to 18 years              | 171 to 185% FPL       | 3                          | 203                               | 151 to 185% FPL                     |
| FL                                 | MK                           | MediKids         | 0 to 5 years               | ≤ 200% FPL            | 1                          | 301                               | MediKids                            |
|                                    | HK                           | Healthy Kids     | 5 to 18 years              | ≤ 200% FPL            | 2                          | 302                               | HealthyKids                         |
|                                    | CMS                          | CMS              | 0 to 18 years              | ≤ 200% FPL            | 3                          | 303                               | CMS                                 |

TABLE C.17 (continued)

|                         | State Eligibility Code Description |                         |                            |                    | MPR Eligibility Code | Unique MPR Eligibility Code | MPR Eligibility Code Description           |
|-------------------------|------------------------------------|-------------------------|----------------------------|--------------------|----------------------|-----------------------------|--|
|                         | State Eligibility Code             | Program Name            | Age Requirement            | Income Requirement |                      |                             |  |
| IL                      | K                                  | Kidcare Assist (MSCHIP) | 0 to 18 years <sup>d</sup> | 47 to 100% FPL     | 1                    | 401                         | KidCare Assist MSCHIP (< 133% FPL)         |
|                         | L                                  | Kidcare Assist (MSCHIP) | 0 to 18 years <sup>d</sup> | 47 to 100% FPL     | 1                    | 401                         | KidCare Assist MSCHIP (< 133% FPL)         |
|                         | H                                  | Kidcare Assist (MSCHIP) | 5 to 18 years <sup>e</sup> | 101 to 133% FPL    | 1                    | 401                         | KidCare Assist MSCHIP (< 133% FPL)         |
|                         | I                                  | Kidcare Assist (MSCHIP) | 5 to 18 years <sup>e</sup> | 101 to 133% FPL    | 1                    | 401                         | KidCare Assist MSCHIP (< 133% FPL)         |
|                         | N                                  | Kidcare Assist (MSCHIP) | 0 to 18 years <sup>d</sup> | 101 to 133% FPL    | 1                    | 401                         | KidCare Assist MSCHIP (< 133% FPL)         |
|                         | O                                  | Kidcare Assist (MSCHIP) | 0 to 18 years <sup>d</sup> | 101 to 133% FPL    | 1                    | 401                         | KidCare Assist MSCHIP (< 133% FPL)         |
|                         | 4                                  | Kidcare Share (SCHIP)   | 1 to 18 years old          | 134 to 150% FPL    | 2                    | 402                         | KidCare Share MSCHIP (< 134 to 150% FPL)   |
|                         | S                                  | Kidcare Share (SCHIP)   | 1 to 18 years old          | 134 to 150% FPL    | 2                    | 402                         | KidCare Share MSCHIP (< 134 to 150% FPL)   |
|                         | Z                                  | KidCare Premium (SCHIP) | 1 to 18 years old          | 151 to 185% FPL    | 3                    | 403                         | KidCare Premium MSCHIP (< 151 to 185% FPL) |
| LA                      | 007                                | LACHIP                  | 6 to 18 years              | ≤ 133% FPL         | 1                    | 501                         | LACHIP I (< 133% FPL)                      |
|                         | 015                                | LACHIP Phase II         | Birth to 18 years          | 133 to 150% FPL    | 2                    | 502                         | LACHIP II (133 to 150% FPL)                |
|                         | 055                                | LACHIP Phase III        | Birth to 18 years          | 151 to 200% FPL    | 3                    | 503                         | LACHIP III (151 to 200% FPL)               |
| MO                      | C071                               | MC+ for Kids            | 1 to 18 years old          | ≤ 185% FPL         | 1                    | 601                         | ≤ 185% FPL                                 |
|                         | C072                               | MC+ for Kids            | 0 to 18 years old          | 186 to 225% FPL    | 2                    | 602                         | 186 to 225% FPL                            |
|                         | C073                               | MC+ for Kids            | 0 to 18 years old          | 126 to 300% FPL    | 3                    | 603                         | 226 to 300% FPL                            |
| NJ                      | 484                                | NJC                     | 0 to 18 years <sup>d</sup> | ≤ 100% FPL         | 1                    | 701                         | Plan A (< 133% FPL)                        |
|                         | 485                                | NJC                     | 6 to 18 years              | 101 to 133% FPL    | 1                    | 701                         | Plan A (< 133% FPL)                        |
|                         | 486                                | KidCare                 | 1 to 18 years              | 134 to 150% FPL    | 2                    | 702                         | Plan B (133 to 150% FPL)                   |
|                         | 487                                | KidCare                 | 1 to 18 years              | 151 to 185% FPL    | 3                    | 703                         | Plan C (151 to 200% FPL)                   |
|                         | 488                                | KidCare                 | Birth to 18 years          | 186 to 200% FPL    | 3                    | 703                         | Plan C (151 to 200% FPL)                   |
|                         | 489                                | KidCare Fee For Service | Birth to 3 months          | 186 to 200% FPL    | 3                    | 703                         | Plan C (151 to 200% FPL)                   |
|                         | 493                                | KidCare                 | 0 to 18 years              | 201 to 250% FPL    | 4                    | 704                         | Plan D (201 to 350% FPL)                   |
|                         | 494                                | KidCare                 | 0 to 18 years              | 251 to 300% FPL    | 4                    | 704                         | Plan D (201 to 350% FPL)                   |
|                         | 495                                | KidCare                 | 0 to 18 years              | 301 to 350% FPL    | 4                    | 704                         | Plan D (201 to 350% FPL)                   |
|                         | 496                                | KidCare                 | Birth to 3 months          | 201 to 350% FPL    | 4                    | 704                         | Plan D (201 to 350% FPL)                   |
| NY <sup>f</sup> Current | A                                  | Child Health Plus       | 6 to 18 years old          | < 120% FPL         | 1                    | 801                         | < 151% FPL                                 |
|                         | B                                  | Child Health Plus       | 1 to 18 years old          | 120 to 150% FPL    | 1                    | 801                         | <151% FPL                                  |
|                         | C                                  | Child Health Plus       | 1 to 18 years old          | 151 to 159% FPL    | 2                    | 802                         | 151 to 222% FPL                            |
|                         | H                                  | Child Health Plus       | 0 to 18 years old          | 160 to 222% FPL    | 2                    | 802                         | 151 to 222% FPL                            |
|                         | I                                  | Child Health Plus       | 0 to 18 years old          | 160 to 222% FPL    | 2                    | 802                         | 151 to 222% FPL                            |
|                         | L                                  | Child Health Plus       | 0 to 18 years old          | 223 to 250% FPL    | 3                    | 803                         | > 222%                                     |
|                         | M                                  | Child Health Plus       | 0 to 18 years old          | 223 to 250% FPL    | 3                    | 803                         | > 222%                                     |
|                         | S                                  | Child Health Plus       | 0 to 18 years old          | > 250% FPL         | 4                    | 804                         | Full premium                               |
|                         | <sup>g</sup>                       | Child Health Plus       |                            |                    | 5                    | 805                         | Non-missing, unclassified                  |
|                         | P                                  | Child Health Plus       |                            |                    | 6                    | 806                         | Presumptive eligibility                    |

TABLE C.17 (continued)

|        | State Eligibility Code Description |                               |                               |                    |                      |                             |                                  |
|--------|------------------------------------|-------------------------------|-------------------------------|--------------------|----------------------|-----------------------------|----------------------------------|
|        | State Eligibility Code             | Program Name                  | Age Requirement               | Income Requirement | MPR Eligibility Code | Unique MPR Eligibility Code | MPR Eligibility Code Description |
| Oct-98 | A                                  | Child Health Plus             | 6 to 18 years old             | < 120% FPL         | 1                    | 801                         | < 151% FPL                       |
|        | B                                  | Child Health Plus             | 1 to 18 years old             | 120 to 150% FPL    | 1                    | 801                         | <151% FPL                        |
|        | C                                  | Child Health Plus             | 1 to 18 years old             | 151 to 159% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | H                                  | Child Health Plus             | 0 to 18 years old             | 160 to 222% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | I                                  | Child Health Plus             | 0 to 18 years old             | 160 to 222% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | L                                  | Child Health Plus             | 0 to 18 years old             | 223 to 230% FPL    | 3                    | 803                         | > 222% FPL                       |
|        | M                                  | Child Health Plus             | 0 to 18 years old             | 223 to 230% FPL    | 3                    | 803                         | > 222% FPL                       |
|        | S                                  | Child Health Plus             | 0 to 18 years old             | > 230% FPL         | 4                    | 804                         | Full premium                     |
|        | §                                  | Child Health Plus             |                               |                    | 5                    | 805                         | Non-missing, unclassified        |
| P      | Child Health Plus                  |                               |                               | 6                  | 806                  | Presumptive eligibility     |                                  |
| May-98 | F                                  | Child Health Plus             | 1 to 18 years old             | < 151% FPL         | 1                    | 801                         | < 151% FPL                       |
|        | C                                  | Child Health Plus             | 1 to 18 years old             | 151 to 159% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | E                                  | Child Health Plus             | 1 to 18 years old             | 151 to 159% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | K                                  | Child Health Plus             | 1 to 18 years old             | 151 to 159% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | G                                  | Child Health Plus             | 0 to 18 years old             | 160 to 200% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | I                                  | Child Health Plus             | 0 to 18 years old             | 160 to 200% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | L                                  | Child Health Plus             | 0 to 18 years old             | 160 to 200% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | H                                  | Child Health Plus             | 0 to 18 years old             | 201 to 222% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | J                                  | Child Health Plus             | 0 to 18 years old             | 201 to 222% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | M                                  | Child Health Plus             | 0 to 18 years old             | 201 to 222% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | S                                  | Child Health Plus             | 0 to 18 years old             | > 222% FPL         | 4                    | 804                         | Full premium                     |
|        | §                                  | Child Health Plus             |                               |                    | 5                    | 805                         | Non-missing, unclassified        |
|        | P                                  | Child Health Plus             |                               |                    | 6                    | 806                         | Presumptive Eligibility          |
| Oct-97 | F                                  | Child Health Plus             | 6 to 18 years old             | < 120% FPL         | 1                    | 801                         | < 151% FPL                       |
|        | B                                  | Child Health Plus             | 1 to 18 years old             | 120 to 150% FPL    | 1                    | 801                         | < 151% FPL                       |
|        | D                                  | Child Health Plus             | 1 to 18 years old             | 120 to 150% FPL    | 1                    | 801                         | < 151% FPL                       |
|        | C                                  | Child Health Plus             | 1 to 18 years old             | 151 to 159% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | E                                  | Child Health Plus             | 1 to 18 years old             | 151 to 159% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | G                                  | Child Health Plus             | 0 to 18 years old             | 160 to 200% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | I                                  | Child Health Plus             | 0 to 18 years old             | 160 to 200% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | H                                  | Child Health Plus             | 0 to 18 years old             | 201 to 222% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | J                                  | Child Health Plus             | 0 to 18 years old             | 201 to 222% FPL    | 2                    | 802                         | 151 to 222% FPL                  |
|        | S                                  | Child Health Plus             | 0 to 18 years old             | > 222% FPL         | 4                    | 804                         | Full premium                     |
|        | §                                  | Child Health Plus             |                               |                    | 5                    | 805                         | Non-missing, unclassified        |
|        | P                                  | Child Health Plus             |                               |                    | 6                    | 806                         | Presumptive eligibility          |
|        | NC                                 | MICJN                         | NC Health Choice for Children | 1 to 18 years old  | ≤ 150% FPL           | 1                           | 901                              |
| MICKN  |                                    | NC Health Choice for Children | 0 to 18 years old             | 151 to 200% FPL    | 2                    | 902                         | 151 to 200% FPL                  |
| MICSN  |                                    | NC Health Choice for Children | 0 to 18 years old             | 151 to 200% FPL    | 2                    | 902                         | 151 to 200% FPL                  |

TABLE C.17 (continued)

|                 | State Eligibility Code Description |              |                   |                    | MPR Eligibility Code | Unique MPR Eligibility Code | MPR Eligibility Code Description |
|-----------------|------------------------------------|--------------|-------------------|--------------------|----------------------|-----------------------------|----------------------------------|
|                 | State Eligibility Code             | Program Name | Age Requirement   | Income Requirement |                      |                             |                                  |
| TX <sup>h</sup> | 0                                  | TexCare      | < 19 years old    | < 100% FPL         | 1                    | 991                         | < 100% FPL/no co-pay             |
|                 | 1                                  | TexCare      | 1 to 18 years old | 100 to 150% FPL    | 2                    | 992                         | 100 to 150% FPL                  |
|                 | 2                                  | TexCare      | 1 to 18 years old | 151 to 185% FPL    | 3                    | 993                         | 151 to 185% FPL                  |
|                 | 3                                  | TexCare      | 0 to 18 years old | 186 to 200% FPL    | 4                    | 994                         | 186 to 200% FPL                  |

Source: Documentation provided by the states for the enrollment history files for the samples of recent enrollees and disenrollees from the 2002 congressionally mandated survey of SCHIP enrollees and disenrollees in 10 states, supplemented with site visit report data summarized in Hill et al. (2003).

<sup>a</sup>California does not have SCHIP eligibility groups.

<sup>b</sup>Colorado does not have SCHIP eligibility groups. We used the variable “program rate,” which is based on income and family size, to determine SCHIP eligibility group.

<sup>c</sup>Colorado does not count assets when calculating income, whereas Medicaid does. Consequently, certain children under age 18 may not qualify for Medicaid and will be covered by SCHIP. Therefore, children of any age can be found in categories N, A, B, and C (telephone conversation with Joanne Lindsay, of Colorado, on 9/19/2003).

<sup>d</sup>Child must be born before 10/01/1983.

<sup>e</sup>Child must be born after 9/30/1983.

<sup>f</sup>New York does not have SCHIP eligibility codes. We used the variable “payment category” to determine eligibility group.

<sup>g</sup>All nonmissing eligibility codes in New York that were not classified in the documentation were grouped into a separate eligibility category.

<sup>h</sup>Texas does not have SCHIP eligibility groups. We used the co-payment category to determine SCHIP eligibility group.

FPL= federal poverty level; MSCHIP = Medicaid-expansion SCHIP; NA = not applicable; TPL = third-party liability.

TABLE C.18

CROSSWALK OF STATE ELIGIBILITY CODES INTO UNIFORM CODES,  
BY STATE AND PROGRAM (MEDICAID)

|    | State<br>Eligibility<br>Code | Federal Eligibility Code |                                       |             |                   | MPR<br>Eligibility<br>Code | Unique MPR<br>Eligibility<br>Code | MPR Eligibility<br>Code Description   |
|----|------------------------------|--------------------------|---------------------------------------|-------------|-------------------|----------------------------|-----------------------------------|---------------------------------------|
|    |                              | MAS<br>Code              | MAS Description                       | BOE<br>Code | BOE Description   |                            |                                   |                                       |
| CA | 30                           | 1                        | Individuals receiving cash assistance | 4/5         | Child/adult       | 1                          | 111                               | Individuals receiving cash assistance |
|    | 32                           | 1                        | Individuals receiving cash assistance | 4/5         | Child/adult       | 1                          | 111                               | Individuals receiving cash assistance |
|    | 33                           | 1                        | Individuals receiving cash assistance | 4/5         | Child/adult       | 1                          | 111                               | Individuals receiving cash assistance |
|    | 35                           | 1                        | Individuals receiving cash assistance | 4/5         | Child/adult       | 1                          | 111                               | Individuals receiving cash assistance |
|    | 60                           | 1                        | Individuals receiving cash assistance | 2           | Blind/disabled    | 1                          | 111                               | Individuals receiving cash assistance |
|    | 3E                           | 1                        | Individuals receiving cash assistance | 4/5         | Child/adult       | 1                          | 111                               | Individuals receiving cash assistance |
|    | 3L                           | 1                        | Individuals receiving cash assistance | 4/5         | Child/adult       | 1                          | 111                               | Individuals receiving cash assistance |
|    | 3M                           | 1                        | Individuals receiving cash assistance | 4/5         | Child/adult       | 1                          | 111                               | Individuals receiving cash assistance |
|    | 3N                           | 1                        | Individuals receiving cash assistance | 4/5         | Child/adult       | 1                          | 111                               | Individuals receiving cash assistance |
|    | 3P                           | 1                        | Individuals receiving cash assistance | 4/5         | Child/adult       | 1                          | 111                               | Individuals receiving cash assistance |
|    | 3R                           | 1                        | Individuals receiving cash assistance | 4/5         | Child/adult       | 1                          | 111                               | Individuals receiving cash assistance |
|    | 3U                           | 1                        | Individuals receiving cash assistance | 4/5         | Child/adult       | 1                          | 111                               | Individuals receiving cash assistance |
|    | 34                           | 2                        | Medically needy                       | 4/5         | Child/adult       | 2                          | 112                               | Medically needy                       |
|    | 37                           | 2                        | Medically needy                       | 4/5         | Child/adult       | 2                          | 112                               | Medically needy                       |
|    | 64                           | 2                        | Medically needy                       | 2           | Blind/disabled    | 2                          | 112                               | Medically needy                       |
|    | 67                           | 2                        | Medically needy                       | 2           | Blind/disabled    | 2                          | 112                               | Medically needy                       |
|    | 82                           | 2                        | Medically needy                       | 4           | Child             | 2                          | 112                               | Medically needy                       |
|    | 83                           | 2                        | Medically needy                       | 4           | Child             | 2                          | 112                               | Medically needy                       |
|    | 47                           | 3                        | Poverty related                       | 4           | Child             | 3                          | 113                               | Poverty related                       |
|    | 72                           | 3                        | Poverty related                       | 4           | Child             | 3                          | 113                               | Poverty related                       |
|    | 7A                           | 3                        | Poverty related                       | 4           | Child             | 3                          | 113                               | Poverty related                       |
|    | 8P                           | 3                        | Poverty related                       | 4           | Child             | 3                          | 113                               | Poverty related                       |
|    | 8R                           | 3                        | Poverty related                       | 4           | Child             | 3                          | 113                               | Poverty related                       |
|    | 38                           | 4                        | Other                                 | 4/5         | Child/adult       | 4                          | 114                               | Other                                 |
|    | 39                           | 4                        | Other                                 | 4/5         | Child/adult       | 4                          | 114                               | Other                                 |
|    | 40                           | 4                        | Other                                 | 8           | Foster care child | 4                          | 114                               | Other                                 |
|    | 42                           | 4                        | Other                                 | 8           | Foster care child | 4                          | 114                               | Other                                 |
|    | 45                           | 4                        | Other                                 | 8           | Foster care child | 4                          | 114                               | Other                                 |
|    | 58                           | 4                        | Other                                 | 2, 1, 4/5   | Blind/disabled    | 4                          | 114                               | Other                                 |
|    | 59                           | 4                        | Other                                 | 4/5         | Child/adult       | 4                          | 114                               | Other                                 |
|    | 74                           | 4                        | Other                                 | 4           | Child             | 4                          | 114                               | Other                                 |
|    | 3T                           | 4                        | Other                                 | 4/5         | Child/adult       | 4                          | 114                               | Other                                 |
|    | 3V                           | 4                        | Other                                 | 4/5         | Child/adult       | 4                          | 114                               | Other                                 |
|    | 5F                           | 4                        | Other                                 | 5           | Adult             | 4                          | 114                               | Other                                 |
|    | 5K                           | 4                        | Other                                 | 8           | Foster care child | 4                          | 114                               | Other                                 |
|    | 6N                           | 4                        | Other                                 | 2           | Blind/disabled    | 4                          | 114                               | Other                                 |
|    | 7C                           | 4                        | Other                                 | 4           | Child             | 4                          | 114                               | Other                                 |

TABLE C.18 (continued)

|    | State Eligibility Code | Federal Eligibility Code |                                       |            |                 | MPR Eligibility Code | Unique MPR Eligibility Code | MPR Eligibility Code Description      |
|----|------------------------|--------------------------|---------------------------------------|------------|-----------------|----------------------|-----------------------------|---------------------------------------|
|    |                        | MAS Code                 | MAS Description                       | BOE Code   | BOE Description |                      |                             |                                       |
|    | 7J                     | 4                        | Other                                 | 4          | Child           | 4                    | 114                         | Other                                 |
|    | 7K                     | 4                        | Other                                 | 4          | Child           | 4                    | 114                         | Other                                 |
| NC | MICLN <sup>a</sup>     | 0                        | Separate SCHIP                        | 0          |                 | 0                    | 910                         | Separate SCHIP                        |
|    | AAFCN <sup>b</sup>     | 1, 4                     | Individuals receiving cash assistance | 4, 5, 6, 7 |                 | 1                    | 911                         | Individuals receiving cash assistance |
|    | MABCY                  | 1                        | Individuals receiving cash assistance | 2          |                 | 1                    | 911                         | Individuals receiving cash assistance |
|    | MADCY                  | 1                        | Individuals receiving cash assistance | 2          |                 | 1                    | 911                         | Individuals receiving cash assistance |
|    | MAFCN                  | 1                        | Individuals receiving cash assistance | 4, 5, 6, 7 |                 | 1                    | 911                         | Individuals receiving cash assistance |
|    | MAFMN                  | 2                        | Medically needy                       | 4, 5       |                 | 2                    | 912                         | Medically needy                       |
|    | MADNN <sup>c</sup>     | 3, 4                     | Poverty related                       | 2          |                 | 3                    | 913                         | Poverty related                       |
|    | MICNN                  | 3                        | Poverty related                       | 4          |                 | 3                    | 913                         | Poverty related                       |
|    | MPWFN                  | 3                        | Poverty related                       | 5          |                 | 3                    | 913                         | Poverty related                       |
|    | MPWNN                  | 3                        | Poverty related                       | 3          |                 | 3                    | 913                         | Poverty related                       |
|    | HSFNN                  | 4                        | Other                                 | 8          |                 | 4                    | 914                         | Other                                 |
|    | IASCN                  | 4                        | Other                                 | 8          |                 | 4                    | 914                         | Other                                 |
|    | MAFNN                  | 4                        | Other                                 | 4, 5       |                 | 4                    | 914                         | Other                                 |

Source: Documentation provided by the states for the enrollment files for the samples of recent enrollees and disenrollees for the 2002 congressionally mandated survey of SCHIP enrollees and disenrollees in 10 states.

<sup>a</sup>Based on an email from Marilyn Ellwood on July 3, 2003, these children are part of the separate SCHIP program. As a result, they are given a MAS/BOE code of 00, as they are not Medicaid enrollees.

<sup>b</sup>Based on an email from Lorenzo Moreno, of MPR, on 6/24/2003, the MPR eligibility code for AAFCN = 1.

<sup>c</sup>Based on an email from Lorenzo Moreno, of MPR, on 6/24/2003, the MPR eligibility code for MADNN = 3.

BOE = basis of eligibility; MAS = maintenance assistance status.

## 2. Life-Table Methods: Descriptive Analysis

We used the life-table method, a statistical approach for analyzing data on duration of participation in a given status, for the descriptive analyses of enrollment and exit spells (Namboodiri and Suchindran 1987). Specifically, we used the life-table method for estimating the cumulative distribution of children who remained enrolled in SCHIP (and in Medicaid, in California and North Carolina) at specific durations since enrollment (that is, the “survival function” in the parlance of life-table methods). Similarly, we used a life table for estimating the cumulative distribution of children who reenrolled in SCHIP at specific durations since leaving the program.<sup>35</sup>

The life table is the appropriate approach for overcoming one of the problems of event-history data (enrollment histories), that of censoring of the experience of individuals in a specific status. Censoring occurs when enrollment or exit spells are ongoing at the time the investigation ends (that is, the data set is truncated at December 31, 2002; see Figure C.1). Unless censoring present in the sample is adequately factored in, any estimates of the mean duration of enrollment in a specific status will be biased downward.

To estimate the enrollment and reenrollment life-table distributions for each subgroup of interest, for each state, for groups of states, and for all states pooled, we used STATA (StataCorp 2003). To estimate these distributions, we used the sample weights developed for the surveys of SCHIP and Medicaid enrollees and recent disenrollees to account for the fact that the enrollment and exit spells correspond to a representative sample of children in each state.<sup>36, 37</sup>

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<sup>35</sup>The percentage of children who have reenrolled in SCHIP at selected durations since leaving SCHIP is calculated as  $(1 - S_{[x]})$ , where  $S_{[x]}$  is the cumulative distribution of children who remain disenrolled from SCHIP at selected durations since leaving the program.

<sup>36</sup>Neither STATA nor SUDAAN—another statistical package for analyzing complex survey data—allow for the specification of the survey design (a two-stage clustered design) for estimating the variances of the life table estimates. However, STATA allows for the use of sampling weights with life-table methods. (SUDAAN allows for



We used the estimates of the quartiles of the enrollment and reenrollment distributions to define the *tri-mean*, a robust measure of central tendency (Tukey 1977). This measure is defined as:

$$T = \frac{P_{25} + 2P_{50} + P_{75}}{4},$$

where  $P_{25}$ ,  $P_{50}$ , and  $P_{75}$  denote, respectively, the 25th, 50th, and 75th percentiles of the cumulative survival distribution.<sup>38</sup> In some instances, at least one of the quartiles of the cumulative distribution could not be determined because of data censoring, so the tri-mean could not be estimated. In those instances, we reported the longest interval between enrollment and the end of the follow-up period, which can be interpreted as a lower bound of the median and tri-mean. To test whether the distributions of enrollment (or reenrollment) varied across subgroups, we used a variant of the log-rank test for weighted data, using Cox regression.<sup>39,40</sup> We also estimated the percentage of children who exited at selected durations from the corresponding

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(continued)

sampling weights and for the specification of the survey design only for proportional hazards models [see next section]). In our judgment, for a descriptive analysis such as the one presented in this report, it is more critical to use the appropriate weights in our estimates than to account for the survey design. Moreover, the estimator for the variance of life-table estimates is very different from that of simpler estimates, such as means and proportions, so there have been no attempts to calculate the life-table variances under complex sampling designs. Although weighted life-table estimates are unbiased, their variances could potentially be underestimated as the result of not accounting for the survey design.

<sup>37</sup>We did not present the distribution for a given subgroup's category if it had less than 10 unweighted observations.

<sup>38</sup>These percentiles correspond to the three quartiles of the distribution. The second quartile, or  $P_{50}$ , corresponds to the median of the distribution.

<sup>39</sup>We used the so-called "Cox" test (StataCorp 2003), which is equivalent to fitting a proportional hazards model (see next section), with binary indicators for each of the subgroups under consideration. The test is whether the coefficients are zero and hinges on the assumption of proportionality between hazards across subgroups. None of the alternative tests to assess the equality of survivor functions across subgroups (such as the Peto-Peto test or the Wilcoxon test) have been developed for weighted data.

<sup>40</sup>We did not present the p-value for this test if any subgroup category had fewer than five unweighted exits (or reentries).

survival distribution. For instance, in states in which eligibility is renewed every 12 months, we estimated the percentage of children who exited at first renewal as  $S_{[13]} - S_{[11]}$ .<sup>41</sup>

The sample size involved in the calculations varies by the duration of the interval between enrollment (or exit) and the end of the study period (December 2002). In the month of enrollment, the sample size is equal to all children in the study sample. However, as children leave the program or as the end of the study period arrives while the children are still in the program, the size of the sample decreases. Consequently, for long intervals since enrollment, the sample size might be too small to obtain robust estimates of the rate at which children exit SCHIP (or reenter it). As a result, the estimate of the percentage who remain in SCHIP at long durations since enrollment might be unstable and must be interpreted cautiously.

### **3. Life-Table Methods: Analysis of the Determinants of SCHIP Enrollment and Reenrollment**

We used multivariate, life-table regression methods to examine the association between program experience and the length of enrollment and length of reenrollment for the samples of recent enrollees and disenrollees, respectively. The determinants and individual- or family-level control variables were constructed from both survey and program data.<sup>42</sup> This methodology is called the *Cox proportional hazard model*, as this type of model assesses the effects of individual characteristics on the hazard (or conditional event rate) function, one of the life-table distributions (Namboodiri and Suchindran 1987). We used a SUDAAN program to fit this type of regression model to account for the sample weights and survey design. We also used a

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<sup>41</sup>We allowed for an extra month in our estimate because the eligibility renewal process usually takes several weeks to complete. In Florida, which renews eligibility every 6 months, we estimated this percentage as  $S_{[7]} - S_{[5]}$ .

<sup>42</sup>Age and whether the spell is the first ever are from the program data.

STATA program to test a key assumption of these models—whether the hazard function for a subgroup was proportional to the hazard function of another subgroup.<sup>43</sup>

We report the exponentiated coefficients of the determinants of continuation of coverage or reenrollment. When the assumption that the hazard functions are proportional is violated, the exponentiated coefficient has the interpretation of an *average relative risk (or hazard ratio)*—that is, the average ratio over time of the probability of exiting (reenrolling) SCHIP at any duration since enrollment (exit) for children in a subgroup relative to the probability of exiting (reentering) for children in another subgroup, controlling for individual characteristics.<sup>44</sup> Therefore, this ratio can be interpreted as an average change in the probability of being in one subgroup relative to being in another, controlling for other characteristics.

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<sup>43</sup>This assumption means that, at any duration since enrollment, both the hazard function and the cumulative distribution of children who exit from (or reenter) SCHIP are parallel for any two subgroups. The difference between the functions for the two subgroups is proportional to the value of the coefficient of the subgroup indicator in the regression model.

<sup>44</sup>We interpret all results in this manner, as doing so applies to cases in which the proportionality assumption is violated and to cases in which it is not violated.



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