Appendix 1

**Questions on each of the five components of a medical home**

***Personal doctor or nurse***

For the child to be considered as having a personal doctor or nurse, parents must answer “Yes, have at least one personal doctor or nurse”.

1. Do you have one or more persons you think of as this child’s personal doctor or nurse?
2. Yes, have at least one personal doctor or nurse
3. Do not have a personal doctor or nurse

***Usual source of care for sick care***

For the child to be considered as having a usual source of care, the parent must report that the child has a usual place he/she goes for care and that place is someplace other than a hospital emergency room.

1. Is there a place that this child USUALLY goes when he or she is sick or you or another caregiver needs advice about his or her health?
   1. Yes
   2. No
2. Where does this child USUALLY go?
   1. Doctor's Office
   2. Hospital Emergency Room
   3. Hospital Outpatient Department
   4. Clinic or Health Center
   5. Retail Store Clinic or 'Minute Clinic'
   6. School (Nurse's Office, Athletic Trainer's Office)
   7. Some other place

***Family-centered care***

For the child to be considered as receiving family-centered care, parents must answer “always” or “usually” to all 5 questions.

DURING THE PAST 12 MONTHS, how often did (fill with SC\_NAME)'s doctors or other health care providers:

1. Spend enough time with (fill with SC\_Name)?
   1. Always
   2. Usually
   3. Sometimes
   4. Never
2. Listen carefully to you?
   1. Always
   2. Usually
   3. Sometimes
   4. Never
3. Show sensitivity to your family’s values and customs?
   1. Always
   2. Usually
   3. Sometimes
   4. Never
4. Provide the specific information you needed concerning (fill with SC\_Name)?
   1. Always
   2. Usually
   3. Sometimes
   4. Never
5. Help you feel like a partner in (fill with SC\_Name)’s care?
   1. Always
   2. Usually
   3. Sometimes
   4. Never

***Problems getting needed referral***

This component was assessed among children whose parents stated their child needed a referral in the past 12 months. For the child to be considered as having received needed referrals, the parents must answer that getting referrals was ‘not a problem’.

1. During the past 12 months, did this child need a referral to see any doctors or receive any services?
   1. Yes
   2. No
2. How much of a problem was it to get referrals?
   1. Not a problem
   2. Small problem
   3. Big problem

***Effective care coordination when needed***

This component was assessed among children whose parents stated they needed help arranging or coordinating care for the child. For the child to be considered as receiving effective care coordination, parents must answer that they ‘usually’ got as much help as needed and were ‘very satisfied’ with the communication between their doctor and others, when needed.

1. Does anyone help you arrange or coordinate this child’s care among the different doctors or services that this child uses?
   1. Yes
   2. No
   3. Did not see more than one health care provider in the past 12 months
2. DURING THE PAST 12 MONTHS, have you felt that you could have used extra help arranging or coordinating (fill with SC\_NAME)'s care among the different health care providers or services?
   1. Yes
   2. No
3. DURING THE PAST 12 MONTHS, how often did you get as much help as you wanted with arranging or coordinating (fill with SC\_NAME)'s health care?
   1. Usually
   2. Sometimes
   3. Never
4. Overall, how satisfied are you with the communication among (fill with SC\_NAME)'s doctors and other health care providers?
   1. Very satisfied
   2. Somewhat satisfied
   3. Somewhat dissatisfied
   4. Very dissatisfied
5. DURING THE PAST 12 MONTHS, did (fill with SC\_NAME)'s health care provider communicate with this child's school, childcare provider, or special education program?
   1. Yes
   2. No
   3. Did not need health care provider to communicate with these providers
6. Overall, how satisfied are you with the health care provider’s communication with the school, childcare provider, or special education program?
   1. Very satisfied
   2. Somewhat satisfied
   3. Somewhat dissatisfied
   4. Very dissatisfied

Appendix 2

**Demographic and health characteristics of children missing ≥1 variables of interest compared to those without missing data, National Survey of Children’s Health, 2016–2017**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Missing ≥1 variables; excluded from analysis** | | | **No missing data; included in analysis** | | | |  |
|  | Unweighted n | Weighted %, 95% CI | | Unweighted n | | Weighted %, 95% CI | | Chi square p-valuea |
| Total (n=71,811) | 4840 | 8.9% (8.3-9.5) | | 66971 | 91.1% (90.5-91.7) | | | --- |
|  |
| **Heart Condition** |  |  | |  |  | | |  |
| Yes | 107 | 2.3% (1.7-3.0) | | 1563 | 2.2% (1.9-2.4) | | | 0.84 |
|  |
| No | 4503 | 97.8% (97.0-98.3) | | 65408 | 97.8% (97.6-98.1) | | |  |
|  |
| Missing | 230 |  | | 0 |  | | |  |
|  |
| **Preventive care, last 12 months** |  |  | |  |  | | |  |
| Yes | 3378 | 75.5% (71.9 – 78.8) | | 57199 | 82.8% (82.1-83.6) | | | <.001 |
|  |
| No | 868 | 24.5% (21.2-28.1) | | 9772 | | | 17.2% (16.4-17.9) |  |
|  |
| Missing | 594 |  | |  | | |  |  |
|  |
| **Medical Home** |  |  | |  | | |  |  |
| Yes | 2235 | 39.5% (36.3-42.9) | | 37442 | | | 49.5% (48.6-50.4) | <.001 |
|  |
| No | 2554 | 60.5% (57.1-63.7) | | 29529 | | | 50.5% (49.6-51.4) |  |
|  |
| Missing | 51 |  | | 0 | | |  |  |
|  |
| **Sex** |  |  | |  | | |  |  |
| Female | 2335 | 47.3% (43.9-50.8) | | 32676 | | | 49.1% (48.2-50.0) | 0.35 |
|  |
| Male | 2505 | 52.7% (49.2-56.1) | | 34295 | | | 50.9% (50.0-51.8) |  |
|  |
| Missing | 0 |  | | 0 | | |  |  |
|  |
| **Age (years)** |  |  | |  | | |  |  |
| 0-5 | 1249 | 32.4% (29.1-36.0) | | 19406 | | | 32.3% (31.4-33.1) | 0.54 |
|  |
| 6--11 | 1459 | | 32.3% (29.2-35.7) | 20080 | | | 34.0% (33.1-34.9) |  |
|  |
| 12--17 | 2132 | | 35.2% (32.1-38.5) | 27485 | | | 33.7% (32.9-34.5) |  |
|  |
| Missing | 0 | |  | 0 | | |  |  |
|  |
| **Health Insurance Type** |  | |  |  | | |  |  |
| Public, unspecified and no insurance | 1747 | | 57.8% (54.2-61.2) | 17451 | | | 41.6% (40.7-42.6) | <.001 |
|  |
| Only private | 2589 | | 42.2% (38.8-45.8) | 49520 | | | 58.4% (57.5-59.3) |  |
|  |
| Missing | 504 | |  | 0 | | |  |  |
|  |
| **Race/Ethnicity** |  | |  |  | | |  |  |
| Non-Hispanic White | 2926 | | 38.3% (35.3-41.3) | 47293 | | | 52.7% (51.8-53.6) | <.001 |
|  |
| Non-Hispanic Black or African American | 484 | | 16.9% (14.7-19.3) | 3752 | | | 12.7% (12.0-13.4) |  |
|  |
| Hispanic | 737 | | 32.6% (28.7-36.6) | 7256 | | | 24.0 (23.0-25.0) |  |
|  |
| Non-Hispanic other races | 693 | | 12.3% (10.3-14.7) | 8670 | | | 10.6% (10.2-11.1) |  |
|  |
| Missing | 0 | |  | 0 | | |  |  |
|  |
| **Parent marital status** |  | |  |  | | |  |  |
|  |
| Not married | 796 | | 28.8% (25.1-32.8) | 10905 | | | 20.1% (19.4-20.9) | <.001 |
|  |
| Married or living with partner | 2333 | | 71.2% (67.2-74.9) | 56066 | | | 79.9% (79.1-80.6) |  |
|  |
| Missing | 1711 | |  | 0 | | |  |  |
|  |
| **% Federal poverty level** |  | |  |  | | |  |  |
| ≤199% | 2136 | | 61.3% (57.7-64.7) | 16912 | | | 41.2% (40.2-42.2) | <.001 |
|  |
| 200%-399% | 1331 | | 20.2% (17.4-23.4) | 20585 | | | 27.5% (26.7-28.3) |  |
|  |
| ≥400% | 1373 | | 18.5% (16.2-21.2) | 29475 | | | 31.3% (30.5-32.1) |  |
|  |
| Missing | 0 | |  | 0 | | |  |  |
|  |
| **Parent education** |  | |  |  | | |  |  |
| ≤High schoolb | 999 | | 47.7% (43.5-51.8) | 9234 | | | 27.0% (26.0-28.0) | <.001 |
|  |
| Some college or associate degree | 895 | | 20.7% (17.6-24.2) | 15154 | | | 22.5% (21.8-23.2) |  |
|  |
| ≥College degree | 1749 | | 31.6% (28.2-35.3) | 42583 | | | 50.5% (49.6-51.4) |  |
|  |
| Missing | 1197 | |  | 0 | | |  |  |
|  |
| **Number of other health conditionsc** |  | |  |  | | |  |  |
| 0 | 2982 | | 63.7% (60.3-66.9) | 39807 | | | 63.4% (62.5-64.2) | 0.26 |
|  |
| 1 | 898 | | 17.2% (14.8-19.9) | 13721 | | | 19.1% (18.4-19.8) |  |
|  |
| ≥2 | 960 | | 19.1% (16.7-21.8) | 13443 | | | 17.6% (16.9-18.2) |  |
|  |
| Missing | 0 | |  | 0 | | |  |  |
|  |
| **Medical Home components** |  | |  |  | | |  |  |
| **Personal doctor** |  | |  |  | | |  |  |
| Have at least one personal doctor or nurse | 3145 | | 64.8% (61.2-68.2) | 52416 | | | 73.4 (72.6-74.3) | <.001 |
|  |
| Does not have a personal doctor or nurse | 1326 | | 35.2% (31.8-38.9) | 14555 | | | 26.6% (25.7-27.4) |  |
|  |
| Missing | 369 | |  |  | | |  |  |
|  |
| **Family-centered cared** |  | |  |  | | |  |  |
| Received family-centered care | 2935 | | 51.2% (47.7- 54.7) | 53724 | | | 74.9% (74.0-75.7) | <.001 |
|  |
| Did not receive family-centered care | 460 | | 14.4% (11.9-17.4) | 5842 | | | 11.2% (10.5-11.8) |  |
|  |
| Missing | 791 | |  |  | | |  |  |
|  |
| **Usual source for sick caree** |  | |  |  | | |  |  |
| Has a usual source for sick care | 2828 | | 64.2% (60.1-68.2) | 56744 | | | 80.0% (79.1-80.7) | <.001 |
|  |
| Does not have a usual source for sick care | 1129 | | 35.8% (31.9-39.9) | 10227 | | | 20.1% (19.3-20.9) |  |
|  |
| Missing | 883 | |  |  | | |  |  |
|  |
| **Referral problemsf** |  | |  |  | | |  |  |
| No problems getting referrals, when needed | 591 | | 12.1% (10.1-14.6) | 10349 | | | 14.1% (13.5-14.7) | 0.94 |
|  |
| Had problems getting referrals, when needed | 156 | | 10.0% (2.5-4.8) | 2202 | | | 4.0% (3.6-4.4) |  |
|  |
| Missing | 339 | |  |  | | |  |  |
|  |
| **Care Coordinationg** |  | |  |  | | |  |  |
| Received all elements of care coordination | 1728 | | 40.1% (36.5-43.9) | 27870 | | | 39.3 (38.5-40.2) | 0.68 |
|  |
| Did not receive one or more elements of coordination | 681 | | 13.0% (11.1-15.2) | 9731 | | | 14.7% (14.1-15.4) |  |
|  |
| Missing | 518 | |  |  | | |  |  |
|  |

a Not including individuals missing data for that variable

b Including vocational, trade or business school

c Excludes heart conditions but includes allergies, arthritis, asthma, blood disorder, brain injury, cerebral palsy, cystic fibrosis, diabetes, Down syndrome, epilepsy or seizure disorder, genetic condition, severe headache, Tourette syndrome, anxiety, depression, behavior problems, developmental delay, intellectual disability, speech disorder, learning disability, other mental health conditions, autism, Attention-deficit/hyperactivity disorder, substance abuse, deafness or hearing problems, and blindness

dAmong 59, 572 children who have a usual place to receive care

eAmong 59,566 children who had a health care visit in the past 12 months

f Among 12,552 children who needed referrals during the past 12 months

gAmong 37,601 children who needed coordinated care and have ≥2 services during past 12 months