

# Review of Access and Quality of Care in SCHIP Using Standardized National Performance Measures

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**OVERVIEW** — *The State Children's Health Insurance Program (SCHIP) has proven to be a critical addition to public coverage programs for low-income children since its inception ten years ago. Tracking the number of children enrolled, however, is only part of the story. This technical paper reviews access and quality for children enrolled in SCHIP by examining information on four primary and preventive care health measures submitted to the Centers for Medicare & Medicaid Services by states in their 2005 annual reports. The paper concludes that the data examined for this paper indicate that children enrolled in SCHIP are receiving not only coverage but care; the paper also suggests issues that require additional attention and discussion.*

# Review of Access and Quality of Care in SCHIP Using Standardized National Performance Measures

The State Child Health Insurance Program (SCHIP), and its big sister, Medicaid, have been critical in providing millions of America's children with health care coverage. Since SCHIP was adopted as part of the Balanced Budget Act of 1997, the percentage of uninsured children in lower income families has dropped from 22.3 to 14.9 percent.<sup>1</sup> But tracking the number of children enrolled tells only part of the story. Providing an insurance card does not necessarily provide the child with ready access to quality care. To answer the access and quality questions that are frequently raised, additional data are needed.

Section 2108 of the SCHIP statute requires each state to file an annual report with the Department of Health and Human Services detailing a considerable amount of information about the policies and operation of the state's program. The information requested includes the state's objectives for SCHIP, the performance measures used, and its progress that year toward reaching those goals. The evaluation should include information about the quality of the health care provided.

Beginning with the annual reports filed at the end of 2002, Centers for Medicare & Medicaid Services (CMS) asked the states to include in their annual SCHIP reports specific access and quality of care data based on four widely used primary and preventive child health care measures drawn from the National Committee for Quality Assurance (NCQA) Health Plan Employer Data and Information Set (HEDIS®). The three categories and their related measures, reported as percentages, are:

## Access

- Child and adolescent access to primary care practitioners (PCPs) (reported for four age groups)

## Comprehensive checkups

- The number of well child visits in the first 15 months of life (reported in seven parts, from percentage having zero visits up to percentage having six or more visits)
- Annual well child visits for ages 3 through 6

## Treatment of children with persistent asthma

- Use of appropriate medications for children with persistent asthma (reported in three age groups)

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All four measures can be calculated from administrative data, that is, eligibility files and claims paid or encounter history. No state needs to go to the expense of drawing data from medical records. It was hoped that, over time, enough states would be reporting on a given measure—and using the HEDIS specifications—to produce a robust national database of comparable data. That data could then be used to generate national average scores and identify targets for improvement.

The review in this technical paper aims to address two questions: (i) By 2005, were enough states using the four HEDIS measures to furnish a reasonable national database for comparative purposes? (ii) If so, what kind of national picture of quality do they paint? The analysis is drawn from the material included in each state's 2005 annual SCHIP report to CMS and posted on the CMS Web site.<sup>2</sup> Reports from 47 states and the District of Columbia were reviewed. No reports from Hawaii or Illinois are posted on the CMS web site. Tennessee did not have a SCHIP program in 2005.

As anticipated, not all states followed the HEDIS specifications precisely, nor did all of the states report on all of the measures. The number of states reporting on a given measure also fluctuated greatly, from a high of 34 for well child visits for children ages 3 through 6 to a low of 10 states reporting the number of infants having five or more well child visits during the first 15 months of life.

Despite these gaps, the analysis shows that there is sufficient comparable data to build a national SCHIP database and generate credible national averages for two of the four measures: the access to care measure and one of the two comprehensive checkup measures. The national means for those measures are:

**Percentage of children and adolescents seeing a PCP**

12–24 months .....	95.2%
25 months–age 6 .....	86.9%
Ages 7–11 .....	84.2%
Ages 12–18 .....	82.2%

**Percentage of children ages 3 through 6 having an annual comprehensive well child visit**

Ages 3–6 .....	53%
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For the two other measures, asthma care and comprehensive well care visits for children during the first 15 months of life, the number of states reporting on the measure was too low to generate a reliable national number. Because the Medicaid income eligibility ceiling in many states for infants is just a bit below that for SCHIP, many infants are enrolled in Medicaid rather than SCHIP during their first year, resulting in SCHIP sample sizes below the NCQA-recommended level of 30 individuals and therefore either not reported by the state or not usable for comparative purposes. A total of 22 states reported on one or more of the components of the asthma measure, but no one component was used by more than

15 states. The utility of the asthma measure should grow in future years, as more and more states are targeting pediatric asthma for quality improvement initiatives in their Medicaid and SCHIP programs.

The high national averages for the primary care practitioner visits measure, especially for very young children, reflect positively on access to care through SCHIP. However, the national mean (53 percent) for the annual comprehensive well child visit measure for 3 through 6 year olds is well below that for visits to PCPs. As can be seen from the following state-by-state tables, the variation among the states on this measure is extensive, from 22 to 93.4 percent (see Table 3). Some of the variation may be due to coding problems, that is, the provider may not bill using a code or codes that constitute a comprehensive visit. Overall, this variation suggests that annual comprehensive visits are a target for improvement initiatives at the state level. States with higher scores could be a resource for states with lower scores in their efforts to improve the quality of well child care in their states.

One of the stated goals of CMS in the President's fiscal year (FY) 2008 budget is "to improve health care quality across the SCHIP program."<sup>3</sup> States will continue to be asked to report on well child care, asthma treatment, and access. The Bush administration also plans to submit legislation to require states to report on Medicaid performance measures as well and ultimately link financial incentives to performance improvement.<sup>4</sup> The compilation of the data from the 2005 SCHIP annual reports in this technical paper also sheds light on technical and policy issues state and federal officials may encounter as these planned initiatives are implemented.

## METHODOLOGY FOR THIS STUDY

Early in the history of SCHIP, the National Academy for State Health Policy in cooperation with state and federal staff developed a model template for the SCHIP annual reports. That form is still in use and is regularly modified to accommodate additional information requests or adjust the format. Copies of state reports, beginning with those filed for state fiscal years ending in 2002, are posted on the CMS Web site.

Section IIA of the SCHIP annual report addresses the use of the four HEDIS measures. States are asked to report on whether they use the measure and, if not, why not: Is data not available? Is the sample size too small (less than 30)? Are there other reasons the state cannot report on the measure? The state is further requested to describe any ways in which it has deviated from the HEDIS technical specifications in using the measure. In addition to the score on the measure, states are asked to include the numerator and denominator and a description of each. This particular requirement is very helpful in determining whether the state's use of the measure is consistent with the HEDIS technical specifications and therefore comparable to the data reported by other states.

For this review, all of the 2005 reports (for state fiscal years ending in 2005) posted on the CMS Web were analyzed. A total of 48 reports, from 47 states and the District of Columbia, were available. (As stated above, no report from Hawaii or Illinois was posted, and Tennessee did not have a SCHIP program that year.)

Most states were conscientious in describing their performance data. In some instances, a state's data on a particular measure was omitted from this analysis because the state deviated too much from the HEDIS specifications to make the information comparable. The most frequent reason for exclusion was use of an age grouping or length of enrollment different from that specified by the HEDIS measure. In other cases, failure to supply all the requested information, particularly the actual numbers for the numerator and denominator, meant it was not possible to be sure the data conformed to HEDIS specifications. In these instances, the data were also omitted from this study.

## MEASURES AND SCORES

### Access

The HEDIS measure description is:

The percentage of children ages 1 through 6 who had a visit with a primary care practitioner within the last year, and the percentage of children and adolescents ages 7 through 18 who had a visit within the last two years. The measure is divided into four age groups: 12–24 months; 25 months–age 6; ages 7–11, and ages 12–19.

A number of the states noted that they modify the HEDIS specifications with regard to the two older age groups and require that the PCP visit has taken place during the last year, as opposed to once in the last two years. Because it is not possible to be sure which states are using this higher standard and which are not, Table 1 (next page) does not try to distinguish between them.

Experts believe all children should have access to PCPs,<sup>5</sup> so this is a key measure. The average score for access to primary care for children between the ages of 12 and 24 months was 95.2 percent; no state scored less than 89.2 percent.

The average rate on this same measure for adolescents—a group difficult to reach—was 82.2 percent. Several states had rates well above this level. The percentage in Kansas was 92.3 percent; West Virginia, 91.4 percent; and New York, 91 percent.

**TABLE 1**  
**Percentage of Children and Adolescents**  
**Having a Visit with a Primary Care Practitioner**

STATE	12–24 months	25 months–age 6	Ages 7–11	Ages 12–18
Alabama	95.0%	88.0%	89.0%	87.0%
Arizona	97.7	90.5	—	—
Colorado	90.5	78.1	88.3	89.2
Connecticut	98.0	94.0	83.0	81.0
Delaware	98.6	89.5	78.6	73.2
Georgia	95.0	87.0	82.0	—
Indiana	95.3	83.7	84.0	83.4
Iowa	89.2	80.6	75.5	79.7
Kansas	97.7	90.8	92.3	92.3
Louisiana	96.7	86.3	87.5	86.8
Maine	94.3	83.3	66.3	62.3
Maryland	94.0	86.0	89.0	85.0
Mississippi	94.0	86.0	89.0	—
Montana	93.5	79.7	85.6	87.9
Nevada	97.8	91.6	92.1	86.8
New Jersey	94.7	93.1	84.0	74.1
New York	96.0	93.0	94.0	91.0
North Carolina	96.4	88.7	90.5	85.8
Oklahoma	91.4	78.2	77.3	77.0
Oregon	96.2	78.5	65.4	—
South Dakota	93.0	87.0	75.0	78.0
Texas	96.8	90.0	92.7	89.3
Virginia	95.1	86.1	85.4	82.2
West Virginia	98.4	94.7	90.0	91.4
<b>No. of States</b>	<b>24</b>	<b>24</b>	<b>23</b>	<b>20</b>
<b>Mean (average)</b>	<b>95.2%</b>	<b>86.9%</b>	<b>84.2%</b>	<b>82.2%</b>
<b>Median</b>	<b>95.2%</b>	<b>87.0%</b>	<b>85.4%</b>	<b>85.4%</b>

### Comprehensive Checkups

Tables 2 and 3 display the scores on the two HEDIS measures designed to track whether a child is getting comprehensive checkups at the intervals

recommended by the pediatric community. Table 2 addresses children during the first 15 months of life. Its HEDIS specifications are:

The percentage of enrollees who turned 15 months old during the measurement year, who were continuously enrolled from 31 days of age and who received either zero, one, two, three, four, five, or six or more well child visits with a primary care practitioner during their first 15 months of life (a total of seven different rates).

Most states using this measure report only the rates for five or more visits or for six or more visits.

States have the option to cover infants in families with incomes up to 185 percent of the federal poverty level (FPL) (for a family of three, this figure was \$29,766.50 in 2005) in their regular Medicaid program, and many states have done so. As a result, the difference between the states' Medicaid income ceiling and the SCHIP income ceiling is very narrow.<sup>6</sup> Therefore the SCHIP infant enrollments in a number of states are too small to yield meaningful performance information. Pennsylvania, for example, could not report on this measure because none of the five participating managed care organizations had 30 or more enrollees in this age group. Minnesota had a sample size of 16; North Carolina, 24. This situation limits the utility of this measure for calculating any national SCHIP figure.

The second HEDIS well child measure, shown in Table 3 (next page), is:

The rate of children ages 3 through 6 who were continuously enrolled in the program during the measurement year with a gap of not more than 45 days and who received at least one comprehensive child health visit in the year.

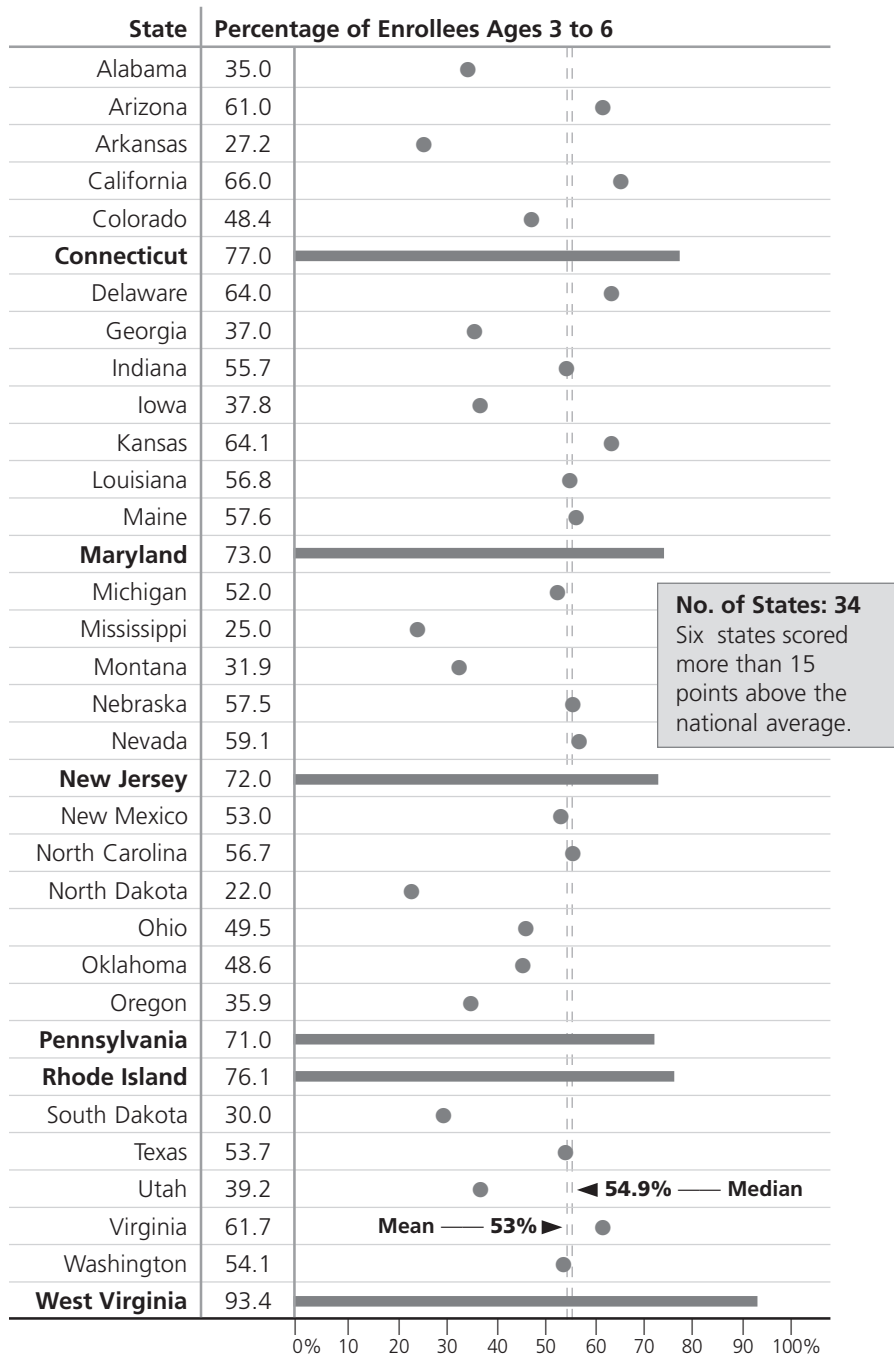
This is the HEDIS measure most consistently used by the states and therefore furnishes the most complete picture of SCHIP performance on a national level. The average score, 53 percent, would not be considered high and offers considerable room for improvement. Several states noted they had undertaken activities designed to boost their rates. Kansas, for example, attributes its 8 point increase from the prior year rate to an educational initiative.

Six states (Connecticut, Maryland, New Jersey, Pennsylvania, Rhode Island, and West Virginia) scored 70 percent or higher on this measure, more than 15 percentage points above the national average. These states would appear to be promising sources of best practices for quality improvement initiatives.

**TABLE 2**  
**Percentage of Enrollees Having Five or More, or Six or More, Well Child Visits in the First 15 Months of Life**

STATE	Five or More Visits	Six or More Visits
Alabama	47.0%	27.0%
Arkansas	61.3	45.6
Colorado	—	28.3
Indiana	—	40.7
Kansas	63.5	38.7
Louisiana	60.6	42.9
Maine	77.7	55.1
Maryland	81.0	—
Nevada	—	40.7
New Jersey	—	48.0
New Mexico	—	33.6
Ohio	—	44.0
Oklahoma	—	29.0
Rhode Island	91.3	—
South Dakota	52.0	30.0
Texas	55.8	25.1
Utah	65.4	—
Virginia	—	51.0
<b>No. of States</b>	<b>10</b>	<b>15</b>
<b>Mean (average)</b>	<b>65.6%</b>	<b>38.4%</b>
<b>Median</b>	<b>62.4%</b>	<b>40.7%</b>

**TABLE 3**  
**Percentage of Enrollees Ages 3–6 Receiving at Least One Comprehensive Well Child Visit in the Year, by State**





## Treatment of Children with Persistent Asthma

The fourth HEDIS measure evaluates care given to enrollees ages 5–18 who have persistent asthma and for whom the appropriate controller medications were prescribed. The HEDIS measure, which is not limited to children, is as follows:

The percentage of enrollees ages 5–56 years of age who were enrolled in the plan in the measurement year *and* the prior year, identified in the prior year as having persistent asthma, and were appropriately prescribed medications during the measurement year. Four separate rates are to be calculated, for ages 5–9, 10–17, 18–56, and total.

Twenty-one states reported on this measure (Table 4). Because SCHIP only covers individuals through 18 years of age, the rates for some states include the 18 year olds in the age 10–17 group as well as in the total.

Even with only 21 states reporting on this measure, it is considered a significant start toward a more robust set of data. The average scores are on a par with those of other national HEDIS scores. In calendar year 2003, for example, the average for commercial managed care plans for the 10–17 age group was 68.1 percent.<sup>7</sup> Three states also reported substantial jumps in their average scores between 2002 and 2004, reflecting initiatives undertaken in those states to improve pediatric asthma care in their states. New York’s rates for 5–18 year olds went up by 9 percentage points, North Carolina’s by 10, and Rhode Island’s by 12.5.

## ISSUES AND OUTLOOK

This analysis demonstrates that comparable, useable data for two of the four recommended HEDIS measures are now available to build a national database for SCHIP performance information. At least one component of the third measure, for asthma, is already being used by 21 states and likely will be used more in future years

**TABLE 4**  
**Percentage of Enrollees with Persistent Asthma Receiving Appropriate Asthma Medication, Reported by Three Age Groups**

STATE	Ages 5–9	Ages 10–17 (18)	Ages 5–18
Alabama	79.0%	75.0%	76.0%
Arkansas	76.1	74.8	75.3
Florida	62.0	57.0	—
Georgia	73.0	71.0	—
Indiana	60.0	64.0	—
Kansas	—	—	77.0
Maine	72.3	56.0	63.3
Maryland	69.0	—	—
Michigan	—	—	76.0
Mississippi	80.0	78.0	—
Montana	—	—	68.7
New Mexico	—	—	70.1
New York	—	—	72.0
North Carolina	79.4	75.1	75.8
Oklahoma	72.1	65.7	—
Pennsylvania	—	—	72.7
Rhode Island	—	—	74.5
South Dakota	50.0	56.0	53.0
Texas	71.0	68.6	70.0
Washington	64.9	62.3	—
West Virginia	92.6	85.4	87.8
<b>No. of States</b>	<b>15</b>	<b>14</b>	<b>14</b>
<b>Mean (average)</b>	<b>70.7%</b>	<b>67.5%</b>	<b>72.3%</b>
<b>Median</b>	<b>72.1%</b>	<b>67.2%</b>	<b>73.6%</b>

as control of asthma is becoming an increasingly popular quality improvement initiative among states.<sup>8</sup> The 2006 state reports, which were due to CMS at the end of calendar year 2006, will furnish an additional rich store of information and may permit some trends to be elucidated.

The 2005 report data indicate that children and adolescents enrolled in SCHIP are receiving not only coverage, but care. It also identifies some areas where improvement is needed, such as comprehensive well child care, and suggests that one of the recommended core measures, the measurement of well child care visits for infants, should be replaced.

Because one of the stated CMS goals for FY 2008 is to improve health care quality across SCHIP, the collection and use of performance measures will become more important. The act of compiling this one-year “snapshot” of SCHIP measures raised several key technical and policy questions. They include:

- How can states most effectively be encouraged to report on a core set of methods and to use consistent methodology in doing so? Have they the necessary financial resources?
- What kind of ongoing technical support do states need to accomplish a consistent reporting process, particularly states that have no HMO contracts and may be unfamiliar with the NCQA requirements and the HEDIS measures?
- In what forum might it be appropriate to address changes to the recommended set of measures, such as broadening the scope of the measures to include such domains as customer satisfaction and inpatient care but without creating undue burdens for providers and/or the states?
- How can weak performers best be helped to identify improvement initiatives, such as those adopted by other states (or entities such as HMOs), that might be useful models?
- Can the data also be mined to identify disparities in care?

Purchasers, providers, parents, and children could all benefit from consideration of these questions. SCHIP has already taken great strides toward providing health coverage for children; with some reflection and additional action, states may be able to further improve quality of care and access to care as the program continues to mature.

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## ENDNOTES

1. Center for Children and Families, figure 2 of “Too Close to Turn Back: Covering America’s Children,” Georgetown University Health Policy Institute, December 12, 2006, p. 3; available at <http://ccf.georgetown.edu/pdfs/121206tooclosereport.pdf>.
2. SCHIP annual reports are available at [www.cms.hhs.gov/NationalSCHIPPolicy/06\\_SCHIPAnnualReports.asp](http://www.cms.hhs.gov/NationalSCHIPPolicy/06_SCHIPAnnualReports.asp).

Endnotes / continued ►

**Endnotes** / continued

3. Department of Health and Human Services (HHS), "FY 2008 Budget in Brief," p. 65; available at [www.hhs.gov/budget/08budget/2008BudgetInBrief.pdf](http://www.hhs.gov/budget/08budget/2008BudgetInBrief.pdf).
4. HHS, "FY 2008 Budget in Brief," pp. 59 and 65.
5. See American Academy of Pediatrics, "AAP Endorsed Principles on Access"; available at [www.aap.org/advocacy/principles.doc](http://www.aap.org/advocacy/principles.doc).
6. For a state-by-state description of income eligibility levels for children in Medicaid and SCHIP, see "Income eligibility levels and cost sharing for children in Medicaid and SCHIP," July 2005, National Academy for State Health Policy; available at [www.nashp.org/Files/Elig\\_and\\_cost\\_sharing\\_Aug\\_2005.pdf](http://www.nashp.org/Files/Elig_and_cost_sharing_Aug_2005.pdf).
7. National Committee for Quality Assurance, *The State of Health Care Quality 2004* (Washington, DC: 2004); available at [www.ncqa.org/communications/SOMC/SOHC2004.pdf](http://www.ncqa.org/communications/SOMC/SOHC2004.pdf).
8. A 2006 survey of state Medicaid and SCHIP officials done by Health Management Associates for the National Association of Children's Hospitals found 10 states reported that they have recently undertaken asthma improvement initiatives in their programs. See *Quality Performance Measurement in Medicaid and SCHIP: Results of a 2006 National Survey of State Officials*, pp. 26–28.



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