

## PRIMARY CARE ACCESS AND PREVENTIVE CARE

Access to regular primary care and services that help prevent infectious and chronic disease are important to helping people live longer, healthier lives and improving the health of the population. Medicaid and CHIP help millions of children gain access to wellness visits and other preventive health care services. Preventive services include immunizations, screenings for common chronic and infectious diseases, clinical and behavioral interventions to manage chronic disease and reduce associated risks, and counseling to support healthy living and self-management of chronic disease.

In 2013, CMS launched several new activities to support state efforts to expand access to and improve the quality of preventive health care in Medicaid and CHIP. For example:

- The Promoting Prevention in Medicaid and CHIP technical assistance webinar series, held in spring 2013, featured presentations on the activities of several state Medicaid programs and their collaborations with federal prevention initiatives, managed care organizations, public health departments, and other stakeholders to improve access to preventive care.
- The Medicaid Prevention Learning Network will be launched in fall 2013 and aims to help states increase access to and use of preventive services and improve reporting and performance on CMS's prevention-related quality measures. The Learning Network will provide enhanced technical assistance to states and facilitate exchange of information about promising practices of high impact, effective preventive care delivery.
- New content on Medicaid.gov provides summaries and links to information on prevention-related coverage policy, prevention provisions in the Affordable Care Act that affect Medicaid and CHIP, and opportunities for additional technical assistance.

The eight Child Core Set measures included in this section are those for which information is available from at least 25 states for the FFY 2012 reporting year.<sup>1</sup> These measures are useful in assessing the adequacy of children's and adolescents' access to essential primary and preventive care, and provide insights into the current status of health care quality provided to publicly insured children and areas for improvement. The measures are as follows:

1. Child and Adolescent Access to Primary Care Practitioners
2. Well-Child Visits in the First 15 Months of Life
3. Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life
4. Adolescent Well-Care Visits
5. Childhood Immunization Status
6. Adolescent Immunization Status
7. Chlamydia Screening
8. Body Mass Index Assessment for Children and Adolescents

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<sup>1</sup> Another measure, Ambulatory Care – Emergency Department Visits – is not included in the Appendix due to data quality issues.

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**CHILD AND ADOLESCENT ACCESS TO PRIMARY CARE PRACTITIONERS (CAP)  
Measure Steward: National Committee for Quality Assurance (NCQA)**

Access to primary care practitioners (PCPs) is essential for all children. Whether children have a comprehensive well-care visit or see a PCP when they are sick, all primary care visits offer the opportunity for routine care, such as determining whether children are up to date immunizations, measuring height and weight, gathering vital signs, offering age-appropriate counseling, and generally assessing their well-being. A basic measure of access to PCPs is whether children ages 1 to 6 had a visit in the past year and children ages 7 to 19 had a visit in the past two years.

**Measure Description**

- This measure shows the percentage of children and adolescents ages 12 months to 19 years that had a visit with a PCP. Rates are reported for four age groups: children ages 12 to 24 months and 25 months to 6 years that had a PCP visit during the measurement year and children ages 7 to 11 and 12 to 19 that had a PCP visit during the current or prior measurement year.<sup>2</sup>

- Performance on this measure ranged from 79 to 100 percent for children ages 12 to 24 months and from 75 to 96 percent for children ages 25 months to 6 years. The range across states was wider for the older age groups, ranging from 62 to 97 percent for ages 7 to 11 and from 61 to 97 percent for ages 12 to 19 (Exhibits CAP.3 through CAP.6).

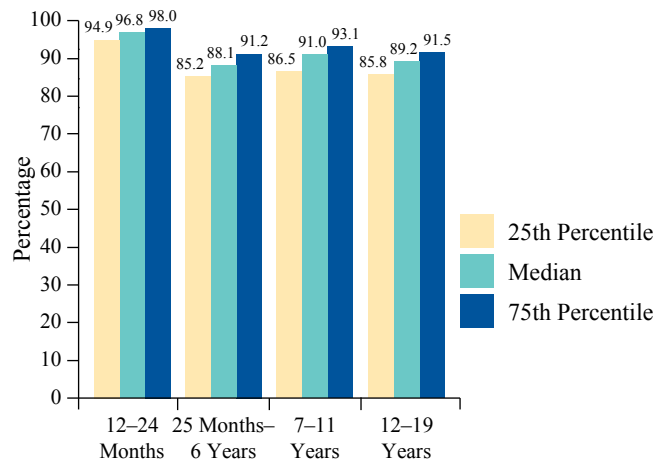
**Overview of State Reporting**

- The number of states reporting the Children and Adolescent Access to PCPs measure increased from 40 states for FFY 2010 to 44 states for FFY 2011 and decreased to 43 states for FFY 2012.<sup>3</sup>
- Of the 43 states reporting the measure for FFY 2012, 29 states reported the measure for both their Medicaid and CHIP populations, 11 reported the measure for their CHIP population only, and 3 reported the measure for their Medicaid population only.
- In FFY 2012, all 43 states reported the measure using Core Set specifications.

**State Performance**

- The median rate among the 43 states reporting the measure for FFY 2012 was highest for the 12-24 month age group, with a median of 97 percent and a 3-point spread between the 25th and 75th percentiles (Exhibit CAP.1). Median rates for other age groups were slightly lower, but still quite high: 88 percent for ages 25 months to 6 years (6-point spread); 91 percent for ages 7 to 11 (7-point spread); and 89 percent for ages 12 to 19 (6-point spread).

**Exhibit CAP.1. Percentage of Children and Adolescents with a PCP Visit in the Past Year (12 to 24 Months and 25 Months to 6 Years) or Past Two Years (7 to 11 Years and 12 to 19 Years), FFY 2012 (n = 43 states)**



Source: Mathematica analysis of FFY 2012 CARTS reports.

<sup>2</sup> This measure is calculated using the administrative method (claims/encounter data) or the hybrid method (claims/encounter data combined with medical record review).

<sup>3</sup> The term “states” includes the 50 states and District of Columbia.

## Trends

- Among the 35 states reporting the measure using Core Set specifications for all three years, the median rates did not change substantially between FFY 2010 and 2012 (Exhibit CAP.2). Across all three years, the rates were highest for the 12-to-24-month age group, exceeding 95 percent each year.

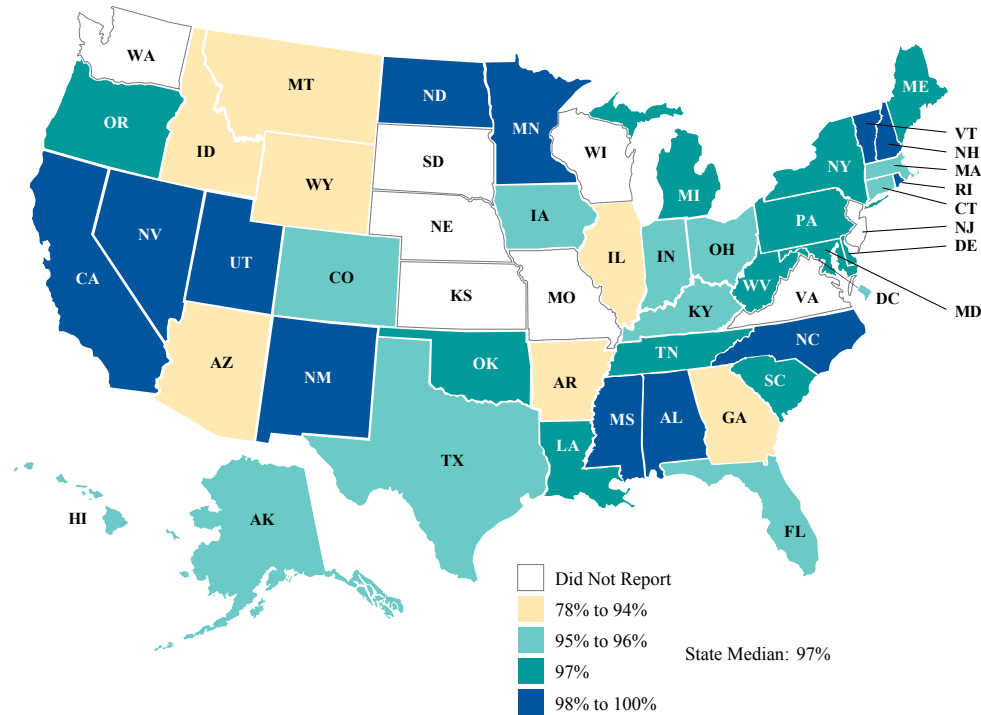
Exhibit CAP.2. Trends in the Percentage of Children and Adolescents with a PCP Visit in the Past Year (12 to 24 Months and 25 Months to 6 Years) or Past Two Years (7 to 11 Years and 12 to 19 Years), FFY 2010–2012 (n = 35 states)

Rate	FFY 2010	FFY 2011	FFY 2012
<b>12 to 24 Months<sup>a</sup></b>			
Mean	95.7	96.4	95.7
Median	96.5	97.1	97.0
25th Percentile	95.6	95.8	95.3
75th Percentile	98.0	98.2	98.2
<b>25 Months to 6 Years</b>			
Mean	88.2	88.4	88.0
Median	90.1	89.3	88.5
25th Percentile	85.9	85.5	85.8
75th Percentile	92.4	91.6	91.8
<b>7 to 11 Years</b>			
Mean	89.9	89.3	88.8
Median	91.5	90.8	91.2
25th Percentile	87.5	87.7	86.5
75th Percentile	93.4	93.0	93.1
<b>12 to 19 Years</b>			
Mean	88.5	88.2	87.8
Median	88.9	89.3	89.7
25th Percentile	86.4	85.6	85.8
75th Percentile	91.6	92.1	91.6

Source: Mathematica analysis of FFY 2010, 2011, and 2012 CARTS reports.

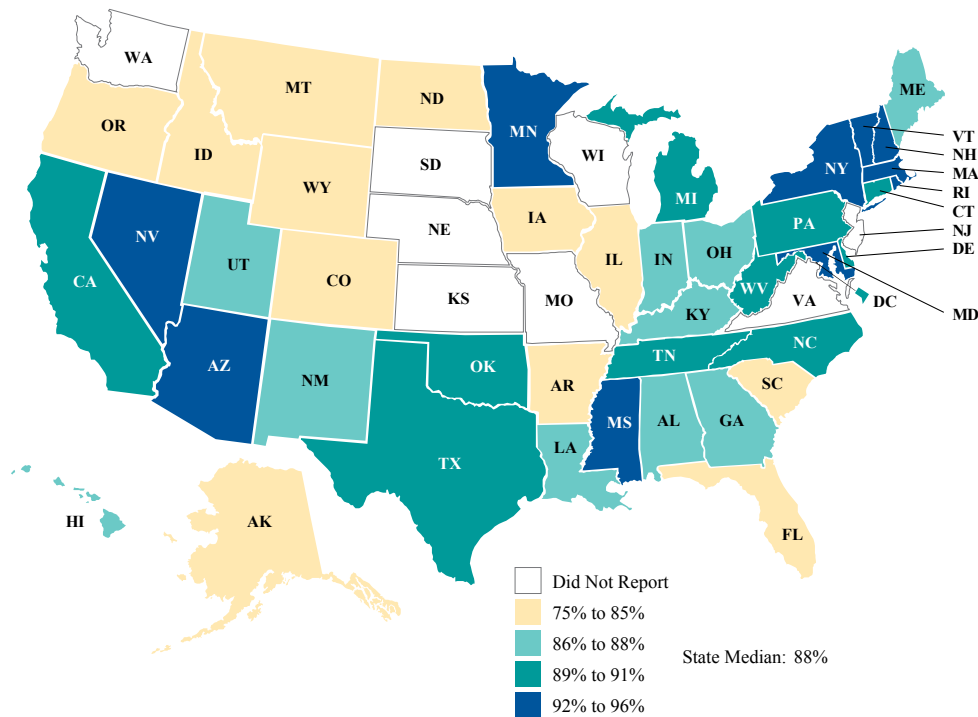
<sup>a</sup>Two states did not report a rate for the 12-to-24-month age group for all three years (n = 33).

Exhibit CAP.3. Geographic Variation in the Percentage of Children Ages 12 to 24 Months with a PCP Visit in the Past Year, FFY 2012 (n = 43 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

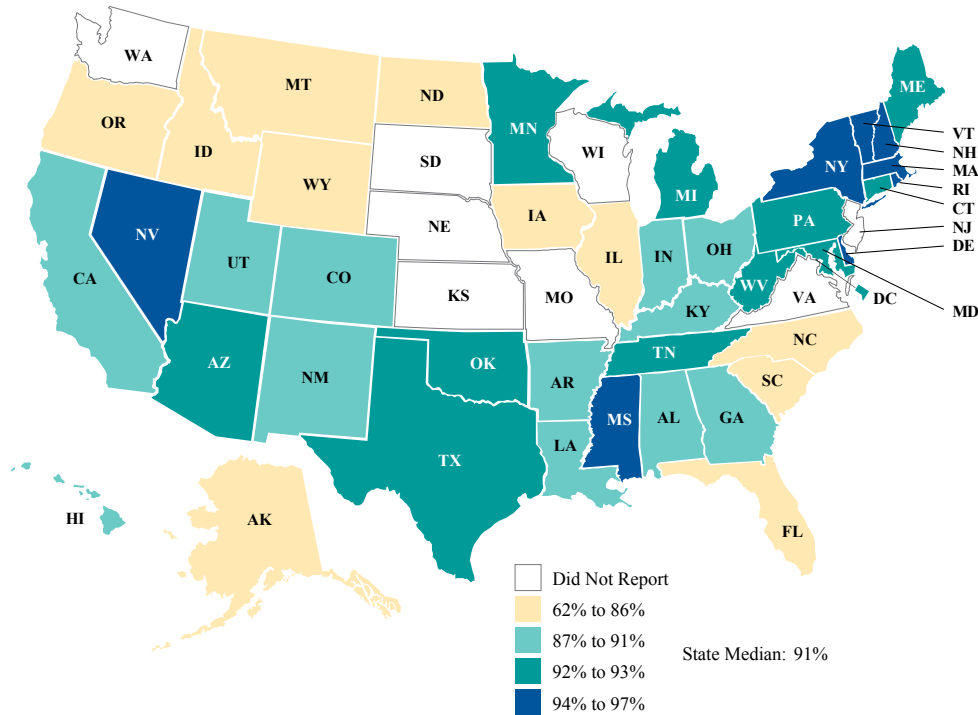
Exhibit CAP.4. Geographic Variation in the Percentage of Children Ages 25 Months to 6 Years with a PCP Visit in the Past Year, FFY 2012 (n = 43 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

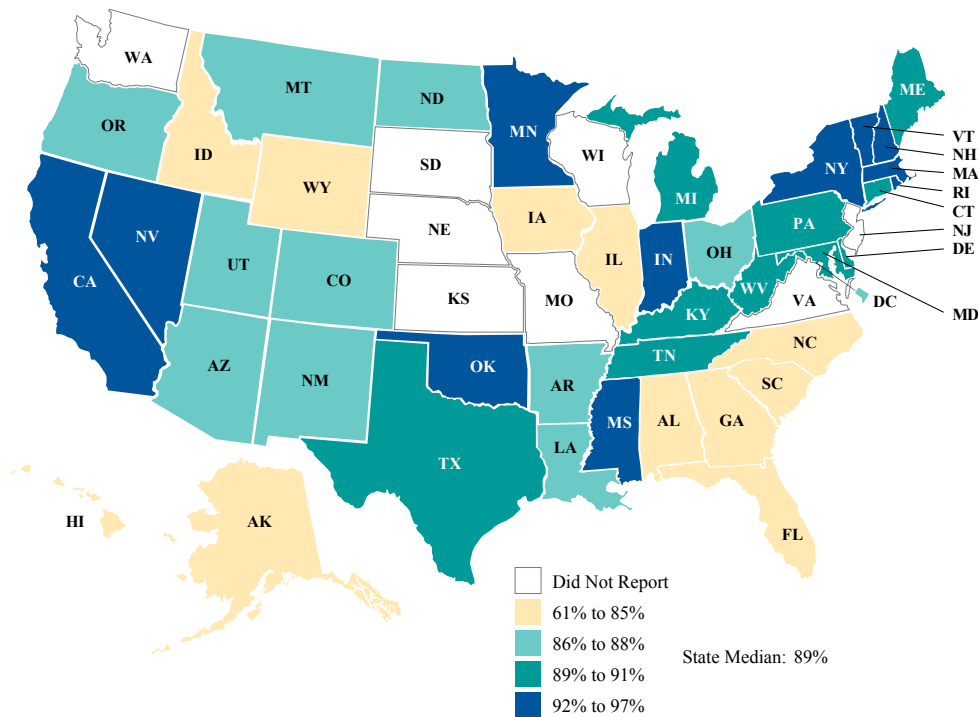
To view state-specific data for this measure, please see Table CAP at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2012.zip>.

Exhibit CAP.5. Geographic Variation in the Percentage of Children Ages 7 to 11 with a PCP Visit in the Past Two Years, FFY 2012 (n = 43 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

Exhibit CAP.6. Geographic Variation in the Percentage of Adolescents Ages 12 to 19 with a PCP Visit in the Past Two Years, FFY 2012 (n = 43 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

To view state-specific data for this measure, please see Table CAP at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2012.zip>.

WELL-CHILD VISITS IN THE FIRST 15 MONTHS OF LIFE (W15)  
Measure Steward: National Committee for Quality Assurance (NCQA)

The American Academy of Pediatrics and Bright Futures recommend nine well-care visits by the time children turn 15 months of age, including a newborn evaluation and evaluations at 3 to 5 days after birth, by 1 month, 2 months, 4 months, 6 months, 9 months, 12 months, and 15 months. Preventive care during infancy includes a health history, physical examination, immunizations, vision and hearing screening, developmental/behavioral assessment, and an oral health risk assessment. In addition, parenting education on a wide range of topics (including breastfeeding and nutrition) is a key component of providing support to new parents. The Core Set measure assesses the percentage of children receiving six or more visits by 15 months.

Measure Description

- This measure shows the percentage of children that turned 15 months old during the measurement year and had 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.<sup>4</sup>

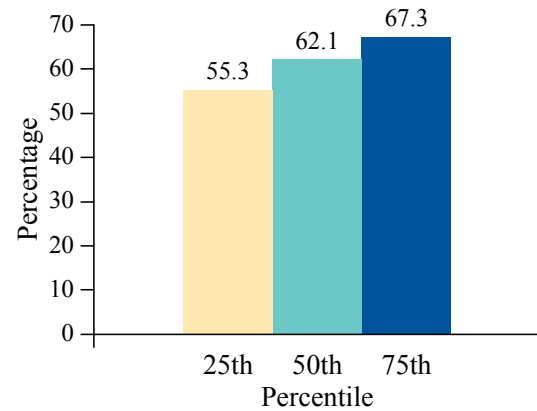
Overview of State Reporting

- The number of states reporting the Well-Child Visits in the First 15 Months of Life measure increased from 40 states for FFY 2010 to 46 states for FFY 2011, then decreased to 43 states for FFY 2012.<sup>5</sup>
- Of the 43 states reporting the measure for FFY 2012, 32 states reported the measure for both their Medicaid and CHIP populations, 8 states reported the measure for their CHIP population only, and 3 states reported the measure for their Medicaid population only.
- In FFY 2012, all 43 states reported the measure using Core Set specifications.

State Performance

- The median rate among the 43 states reporting the measure for FFY 2012 was 62 percent, with a 12-point spread between the 25th and 75th percentiles (Exhibit W15.1).
- Performance on this measure ranged from 23 percent to 88 percent among states, with considerable geographic variation across states (Exhibit W15.3, next page).

Exhibit W15.1. Percentage of Children Receiving 6 or More Well-Child Visits in the First 15 Months of Life, FFY 2012 (n = 43 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

Trends

- Among the 33 states reporting the measure using Core Set specifications for all three years, the median rate with 6 or more visits in the first 15 months of life increased by 6.5 percentage points from FFY 2010 to FFY 2012 (Exhibit W15.2).

Exhibit W15.2. Trends in the Percentage of Children Receiving 6 or More Well-Child Visits in the First 15 Months of Life, FFY 2010–2012 (n = 33 states)

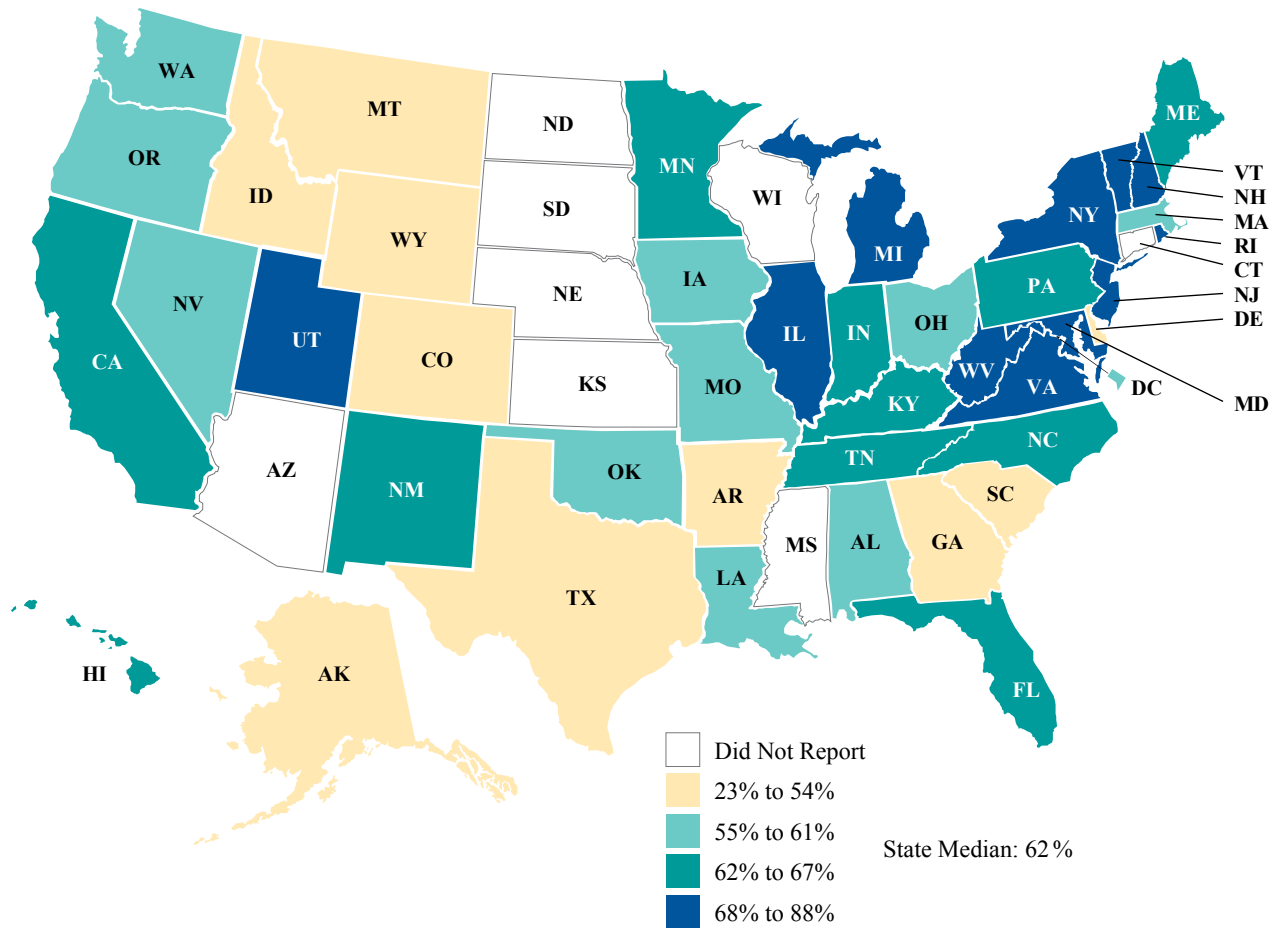
Rate	FFY 2010	FFY 2011	FFY 2012
Mean	52.9	59.4	62.3
Median	55.4	60.5	61.9
25th Percentile	50.9	56.6	55.9
75th Percentile	64.6	69.2	68.8

Source: Mathematica analysis of FFY 2010, 2011, and 2012 CARTS reports.

<sup>4</sup> This measure is calculated using the administrative method (claims/encounter data) or the hybrid method (claims/encounter data combined with medical record review).

<sup>5</sup> The term “states” includes the 50 states and District of Columbia.

Exhibit W15.3. Geographic Variation in the Percentage of Children Receiving 6 or More Well-Child Visits in the First 15 Months of Life, FFY 2012 (n = 43 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

To view state-specific data for this measure, please see Table W15 at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2012.zip>.



WELL-CHILD VISITS IN THE THIRD, FOURTH, FIFTH, AND SIXTH YEARS OF LIFE (W34)  
Measure Steward: National Committee for Quality Assurance (NCQA)

The American Academy of Pediatrics and Bright Futures recommend a comprehensive annual preventive visit at ages 3, 4, 5, and 6. These visits should include a health history, physical examination, immunizations, vision and hearing screening, developmental/behavioral assessment, and an oral health assessment (at ages 3 and 6). In addition, these visits should include age-appropriate anticipatory guidance on a wide range of topics to engage parents in promoting their child’s healthy development. Referrals for follow-up care may occur if physical, social, or emotional issues are detected. A key aim of preventive care during this period is to facilitate a child’s school readiness and address any issues that would interfere with their school attendance and learning.

Measure Description

- This measure shows the percentage of children ages 3 to 6 that had one or more well-child visits with a primary care practitioner during the measurement year.<sup>6</sup>

Overview of State Reporting

- The number of states reporting the Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life measure increased from 42 states for FFY 2010 to 48 states for FFY 2011 and then decreased to 46 states for FFY 2012.<sup>7</sup>
- Of the 46 states reporting the measure for FFY 2012, 34 reported the measure for both their Medicaid and CHIP populations, 10 reported the measure for their CHIP population only, and 2 reported the measure for their Medicaid population only.
- In FFY 2012, all 46 states reported the measure using Core Set specifications.

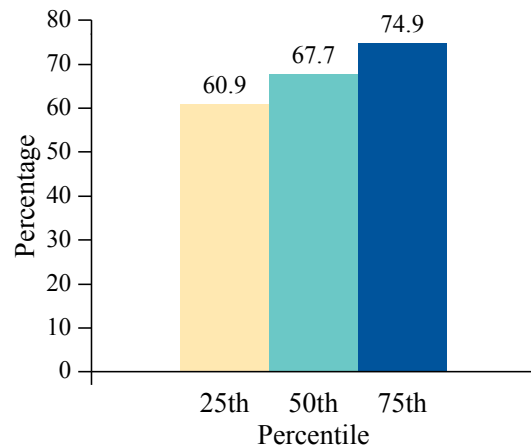
State Performance

- The median rate among the 46 states reporting the measure for FFY 2012 was 68 percent, with a 14-point spread between the 25th and 75th percentiles (Exhibit W34.1).
- Performance on this measure ranged from 40 percent to 85 percent among states, with considerable geographic variation across states (Exhibit W34.3, next page).

<sup>6</sup> This measure is calculated using the administrative method (claims/encounter data) or the hybrid method (claims/encounter data combined with medical record review).

<sup>7</sup> The term “states” includes the 50 states and District of Columbia.

Exhibit W34.1. Percentage of Children Receiving At Least One Well-Child Visit in the Third, Fourth, Fifth, and Sixth Years of Life, FFY 2012 (n = 46 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

Trends

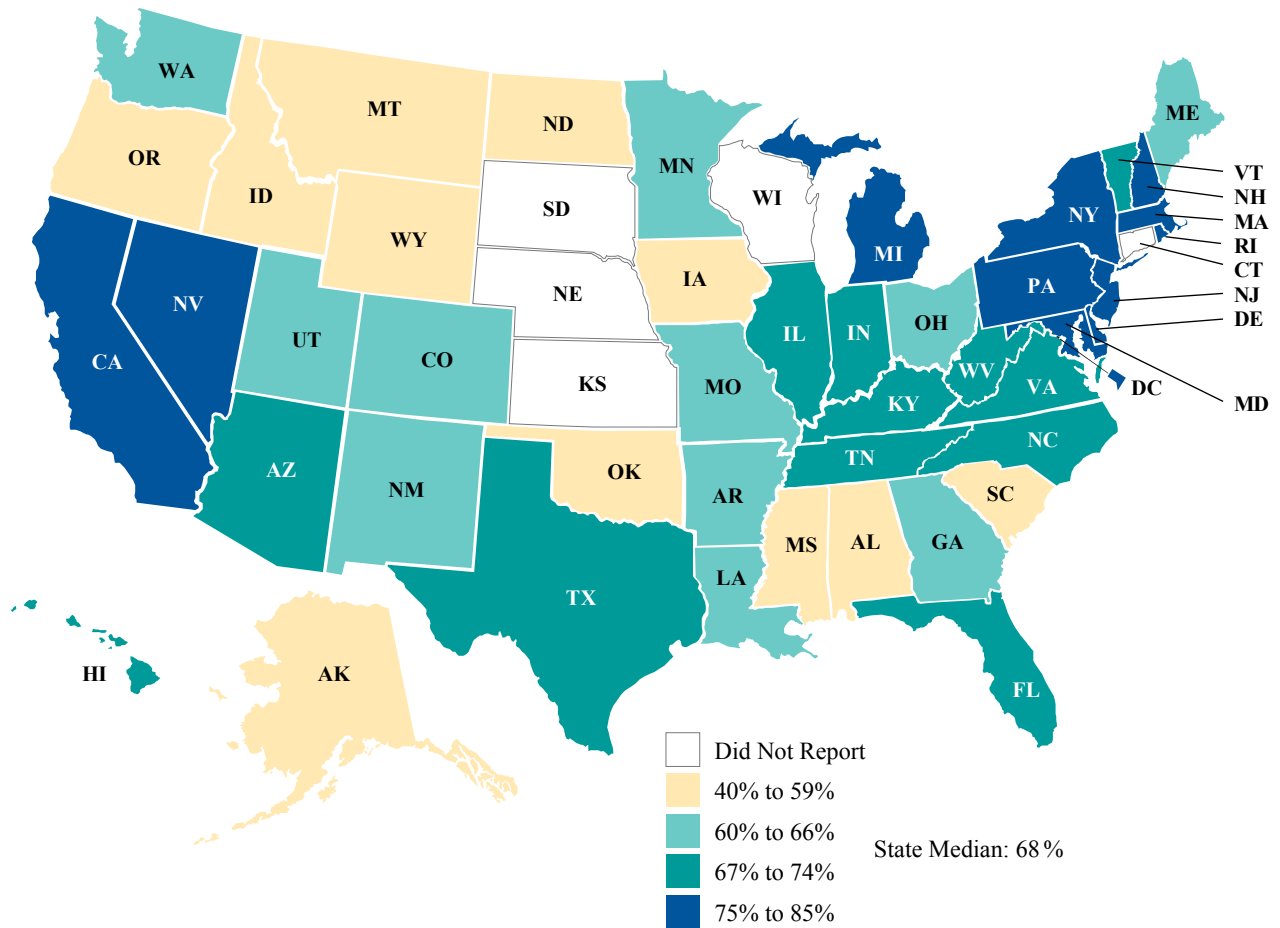
- Among the 37 states reporting the measure using Core Set specifications for all three years, the median rate increased by 3 percentage points from FFY 2010 to FFY 2012 (Exhibit W34.2).

Exhibit W34.2. Trends in the Percentage of Children Receiving At Least One Well-Child Visit in the Third, Fourth, Fifth, and Sixth Years of Life, FFY 2010–2012 (n = 37 states)

Rate	FFY 2010	FFY 2011	FFY 2012
Mean	63.8	66.6	66.9
Median	64.9	69.6	67.7
25th Percentile	58.9	61.5	62.2
75th Percentile	74.1	74.9	75.1

Source: Mathematica analysis of FFY 2010, 2011, and 2012 CARTS reports.

Exhibit W34.3. Geographic Variation in Percentage of Children Receiving At Least One Well-Child Visit in the Third, Fourth, Fifth, and Sixth Years of Life, FFY 2012 (n = 46 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

To view state-specific data for this measure, please see Table W34 at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2012.zip>.

**ADOLESCENT WELL-CARE VISITS (AWC)**  
Measure Steward: National Committee for Quality Assurance (NCQA)

The American Academy of Pediatrics and Bright Futures recommend annual well-care visits during adolescence to promote healthy behaviors, prevent risky ones, and detect conditions that can interfere with a teen’s physical, social, and emotional development. Comprehensive well care includes a physical exam, immunizations, screening, developmental assessment, an oral health risk assessment, and referral for specialized care if necessary. Anticipatory guidance is tailored by age but, in general, covers such topics as physical growth and development, social and academic competence, emotional well-being, risk reduction, and violence and injury prevention. Additional Core Set measures reflect the clinical quality of these visits, including adolescent immunization status, Chlamydia screening among sexually active women, and assessment of body mass index.

**Measure Description**

- This measure shows the percentage of adolescents ages 12 to 21 that had at least one comprehensive well-care visit with a primary care practitioner or an obstetrical/gynecological practitioner during the measurement year.<sup>8</sup>

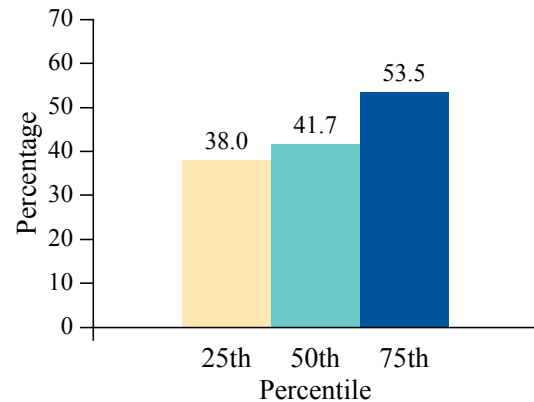
**Overview of State Reporting**

- The number of states reporting the Adolescent Well-Care Visits measure increased from 29 states for FFY 2010 to 43 states for FFY 2011 and remained at 43 states for FFY 2012.<sup>9</sup>
- Of the 43 states reporting the measure for FFY 2012, 32 states reported the measure for both their Medicaid and CHIP populations, 8 reported the measure for their CHIP population only, and 3 reported the measure for their Medicaid population only.
- In FFY 2012, all 43 states reported the measure using Core Set specifications.

**State Performance**

- The median rate among the 43 states reporting the measure for FFY 2012 was 42 percent, with a 16-point spread between the 25th and 75th percentiles (Exhibit AWC.1).
- Performance on this measure ranged from 24 percent to 67 percent among states, with considerable geographic variation across states (Exhibit AWC.3, next page).

Exhibit AWC.1. Percentage of Adolescents with a Well-Care Visit, FFY 2012 (n = 43 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

**Trends**

- Among the 27 states reporting the measure using Core Set specifications for all three years, the median rate remained at 46 between FFY 2010 and FFY 2012 (Exhibit AWC.2).

Exhibit AWC.2. Trends in the Percentage of Adolescents Ages 12 to 21 Receiving At Least One Well-Care Visit, FFY 2010–2012 (n = 27 states)

Rate	FFY 2010	FFY 2011	FFY 2012
Mean	46.1	45.9	46.8
Median	46.3	46.3	46.0
25th Percentile	37.3	37.5	39.6
75th Percentile	56.1	56.4	57.6

Source: Mathematica analysis of FFY 2010, 2011, and 2012 CARTS reports.

<sup>8</sup> This measure is calculated using the administrative method (claims/encounter data) or the hybrid method (claims/encounter data combined with medical record review).

<sup>9</sup> The term “states” includes the 50 states and District of Columbia.



**CHILDHOOD IMMUNIZATION STATUS (CIS)**  
 Measure Steward: National Committee for Quality Assurance (NCQA)

A key indicator of the continuity of primary care is whether children are up to date on their immunizations by age 2. The Centers for Disease Control and Prevention recommends the following immunizations by age 2: four diphtheria, tetanus, and acellular pertussis (DTaP); three polio (IPV); one measles, mumps and rubella (MMR); two H influenza type B (HiB); three hepatitis B (HepB); one chicken pox (VZV); four pneumococcal conjugate (PCV); two hepatitis A (HepA); two or three rotavirus (RV); and two influenza (flu) vaccines. The Childhood Immunization Status measure includes 10 rates for the individual vaccines and 9 combination rates. The most common combination rate reported by states is “Combination 3,” which includes all of the vaccines except HepA, RV, and flu. State performance is measured on the basis of the Combination 3 rate.

**Measure Description**

- This measure shows the percentage of children that turned 2 years old during the measurement year and had specific vaccines and combinations of vaccines by their second birthday. This measure is reported as 10 separate immunization rates and 9 combination rates. State performance is measured on the basis of Combination 3, as noted above.<sup>10</sup>

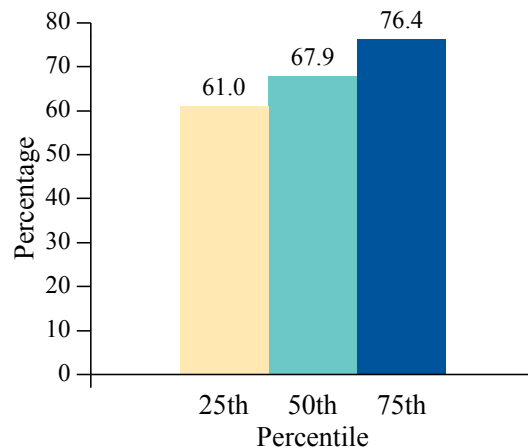
**Overview of State Reporting**

- The number of states reporting the Childhood Immunization Status measure increased from 20 states for FFY 2010 to 30 states for FFY 2011 to 34 states for FFY 2012.<sup>11</sup>
- Of the 34 states reporting the measure for FFY 2012, 28 states reported the measure for both their Medicaid and CHIP populations, 5 reported the measure for their CHIP population only, and 1 reported the measure for their Medicaid population only.
- In FFY 2012, 33 states reported the measure using Core Set specifications (although 2 of these states did not report the Combination 3 rate for FFY 2012). One state used another specification.

**State Performance**

- The median Combination 3 rate among the 31 states using Core Set specifications to report the measure for FFY 2012 was 68 percent, with a 15-point spread between the 25th and 75th percentiles (Exhibit CIS.2, next page).
- Performance on this measure ranged from 4 percent to 92 percent among states, with considerable geographic variation across states (Exhibit CIS.2, next page).

Exhibit CIS.1. Percentage of Children Up to Date on Recommended Immunizations by their Second Birthday, FFY 2012 (n = 31 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

**Trends**

- Trends are not available for this measure. Trends are shown for measures reported by at least 20 states for all three years (FFY 2010 to FFY 2012); 17 states reported this measure for all three years.

<sup>10</sup> This measure is calculated using the administrative method (claims/encounter or registry data) or the hybrid method (claims/encounter data combined with medical record review).

<sup>11</sup> The term “states” includes the 50 states and District of Columbia.



ADOLESCENT IMMUNIZATION STATUS (IMA)  
Measure Steward: National Committee for Quality Assurance (NCQA)

Recommended well care for adolescents includes reviewing their immunization history to ensure they are up to date on their vaccines. Between their 11th and 13th birthdays, adolescents should receive one dose of meningococcal vaccine and one tetanus and diphtheria toxoids and acellular pertussis (Tdap) vaccine or one tetanus and diphtheria toxoids (Td) vaccine. Adolescents should also receive the 3-dose human papillomavirus (HPV) series, although the HPV vaccine is not captured in this quality measure. The Adolescent Immunization Status measure includes two rates for the individual vaccines and one combination rate. State performance is measured on the basis of the combination rate. An indicator of high-quality preventive care for adolescents is being up to date on these vaccines by their 13th birthday.

Measure Description

- This measure shows the percentage of adolescents that turned 13 years old during the measurement year and had one meningococcal and one Tdap or Td vaccine by their 13th birthday. This measure is reported as two separate immunization rates and one combination rate. State performance is measured on the basis of the combination rate.<sup>12</sup>

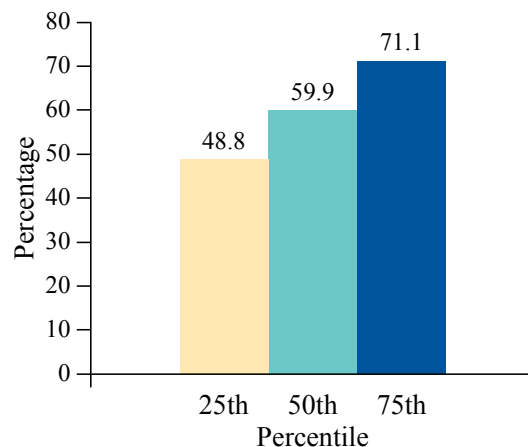
Overview of State Reporting

- The number of states reporting the Adolescent Immunization Status measure increased from 12 states for FFY 2010 to 25 states for FFY 2011 and 32 states for FFY 2012.<sup>13</sup>
- Of the 32 states reporting the measure for FFY 2012, 26 states reported the measure for both their Medicaid and CHIP populations, 4 reported the measure for their CHIP population only, and 2 reported the measure for their Medicaid population only.
- In FFY 2012, 30 states reported the measure using Core Set specifications (although one of these states did not report the combination rate for FFY 2012). One state used another specification.

State Performance

- The median combination rate among the 30 states using Core Set specifications to report the measure for FFY 2012 was 60 percent, with a 22-point spread between the 25th and 75th percentiles (Exhibit IMA.1).
- Performance on this measure ranged from 15 percent to 86 percent among states, with considerable geographic variation across states (Exhibit IMA.2, next page).

Exhibit IMA.1. Percentage of Adolescents Up to Date on Recommended Immunizations by their 13th Birthday, FFY 2012 (n = 30 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

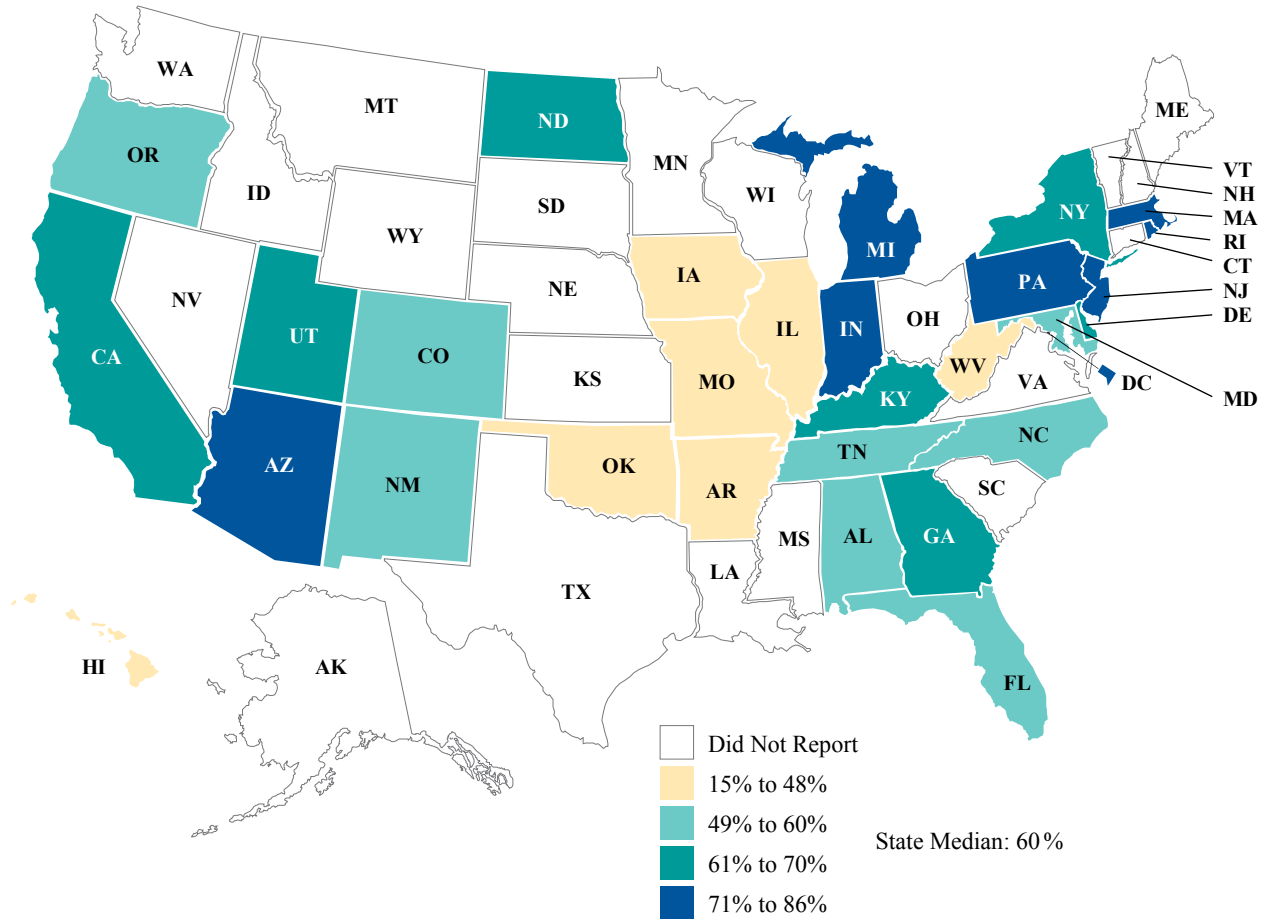
Trends

- Trends are not available for this measure. Trends are shown for measures reported by at least 20 states for all three years (FFY 2010 to FFY 2012); 10 states reported this measure for all three years.

<sup>12</sup> This measure is calculated using the administrative method (claims/encounter or registry data) or the hybrid method (claims/encounter data combined with medical record review).

<sup>13</sup> The term “states” includes the 50 states and District of Columbia.

Exhibit IMA.2. Geographic Variation in the Percentage of Adolescents Up to Date on Recommended Immunizations by their 13th Birthday, FFY 2012 (n = 30 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

To view state-specific data for this measure, please see Table IMA at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2012.zip>.



**CHLAMYDIA SCREENING (CHL)**  
Measure Steward: National Committee for Quality Assurance (NCQA)

Recommended well care for adolescents includes annual screening for Chlamydia for women who are sexually active. Chlamydia is the most commonly reported sexually transmitted infection and easy to cure when it is detected. However, most people have no symptoms and are not aware they are infected. Left untreated, Chlamydia can affect a woman’s ability to have children. This measure is an indicator of the clinical quality of care for adolescents.

**Measure Description**

- This measure shows the percentage of women ages 16 to 20 that were identified as sexually active and had at least one Chlamydia test during the measurement year.<sup>14</sup>

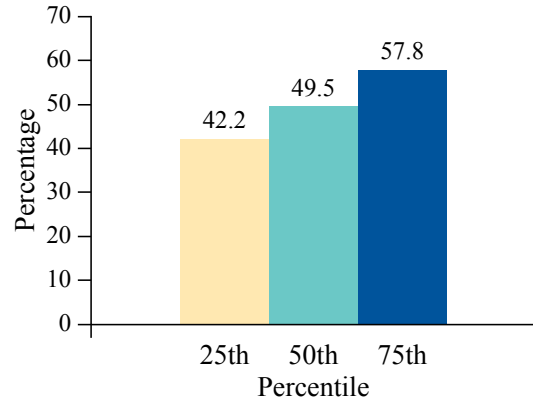
**Overview of State Reporting**

- The number of states reporting the Chlamydia Screening measure increased from 21 states for FFY 2010 to 32 states for FFY 2011 and 35 states for FFY 2012.<sup>15</sup>
- Of the 35 states reporting the measure for FFY 2012, 25 states reported the measure for both their Medicaid and CHIP populations, 5 reported the measure for their CHIP population only, and 5 reported the measure for their Medicaid population only.
- In FFY 2012, all 35 states reported the measure using Core Set specifications.

**State Performance**

- The median rate among the 35 states reporting the measure for FFY 2012 was 50 percent, with a 16-point spread between the 25th and 75th percentiles (Exhibit CHL.1).
- Performance on this measure ranged from 5 percent to 69 percent among states, with considerable geographic variation across states (Exhibit CHL.3, next page).

Exhibit CHL.1. Percentage of Sexually Active Women Ages 16 to 20 Receiving At Least One Test for Chlamydia, FFY 2012 (n = 35 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

**Trends**

- Among the 20 states reporting the measure using Core Set specifications for all three years, the median rate increased by 5 percentage points from FFY 2010 to FFY 2012 (Exhibit CHL.2).

Exhibit CHL.2. Trends in the Percentage of Sexually Active Women Ages 16 to 20 Receiving At Least One Test for Chlamydia, FFY 2010–2012 (n = 20 states)

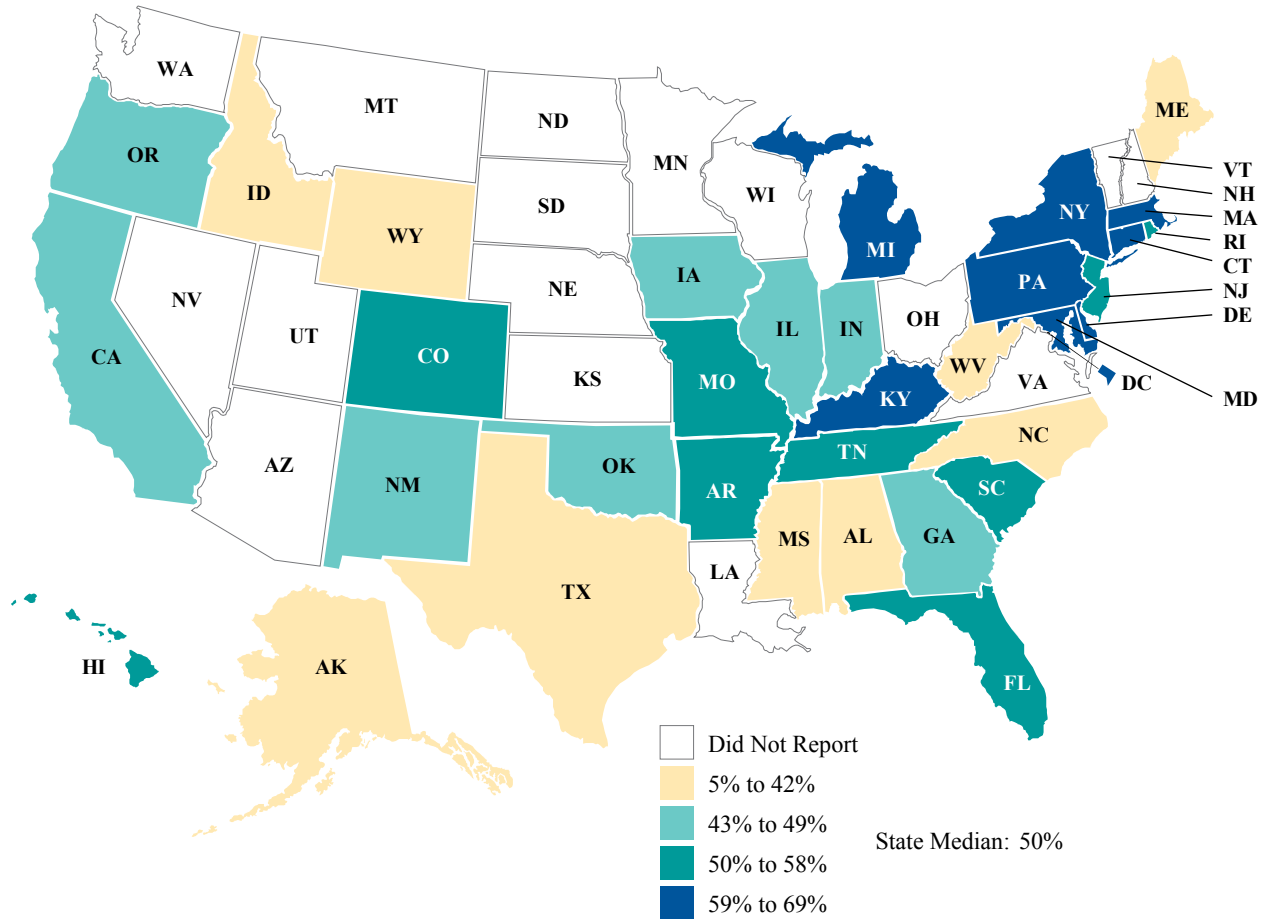
Rate	FFY 2010	FFY 2011	FFY 2012
Mean	41.7	46.1	46.7
Median	44.0	48.4	49.4
25th Percentile	25.1	39.6	39.0
75th Percentile	58.7	59.0	57.2

Source: Mathematica analysis of FFY 2010, 2011, and 2012 CARTS reports.

<sup>14</sup> This measure is calculated using the administrative method (claims/encounter data).

<sup>15</sup> The term “states” includes the 50 states and District of Columbia.

Exhibit CHL.3. Geographic Variation in the Percentage of Sexually Active Women Ages 16 to 20 Receiving At Least One Test for Chlamydia, FFY 2012 (n = 35 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

To view state-specific data for this measure, please see Table CHL at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2012.zip>.

BODY MASS INDEX ASSESSMENT FOR CHILDREN AND ADOLESCENTS (WCC)  
Measure Steward: National Committee for Quality Assurance (NCQA)

Overweight and obesity in childhood pose serious short- and long-term health risks, including higher incidence of chronic diseases (such as high blood pressure, high cholesterol, diabetes, and asthma) and a higher risk of social and emotional problems (such as low self-esteem). Overweight and obesity are frequently assessed based on the child’s body mass index (BMI). BMI is calculated based on a child’s height and weight, adjusting for age and gender. Primary care practitioners can play an important role in detecting and addressing overweight and obesity among children by assessing their BMI. This measure indicates the frequency with which the BMI percentile is recorded in the medical record.

Measure Description

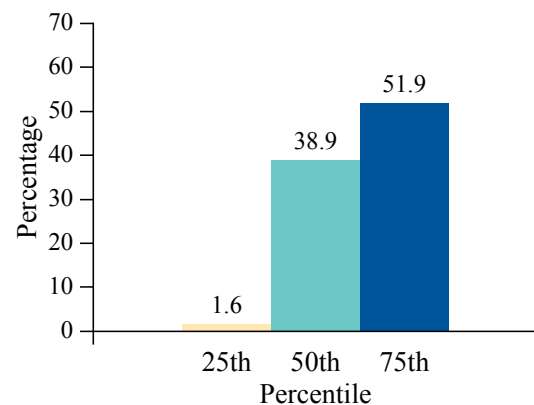
- This measure shows the percentage of children ages 3 to 17 that had an outpatient visit with a primary care practitioner or obstetrical/gynecological provider and whose weight is classified based on BMI percentile for age and gender.<sup>16</sup>

- The 15 states using the hybrid method had a median of 45 percent, whereas the 12 states using the administrative method had a median of 2 percent. Assessment of the BMI percentile is more likely to be noted in medical records than in claims/encounter data.

Overview of State Reporting

- The number of states reporting the BMI Assessment for Children and Adolescents measure increased from 10 states for FFY 2010 to 18 states for FFY 2011 and 27 states for FFY 2012.<sup>17</sup>
- Of the 27 states reporting the measure for FFY 2012, 21 states reported the measure for both their Medicaid and CHIP populations, 3 reported the measure for their CHIP population only, and 3 reported the measure for their Medicaid population only.
- All 27 states reported the measure using Core Set specifications for FFY 2012.

Exhibit WCC.1. Percentage of Children Whose Weight is Classified Based on BMI Percentile, FFY 2012 (n = 27 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

State Performance

- The median rate among the 27 states reporting the measure for FFY 2012 was 39 percent, with a 50-point spread between the 25th and 75th percentiles (Exhibit WCC.1).
- Performance on this measure ranged from 0.1 percent to 89 percent, with considerable geographic variation across states (Exhibit WCC.2, next page).

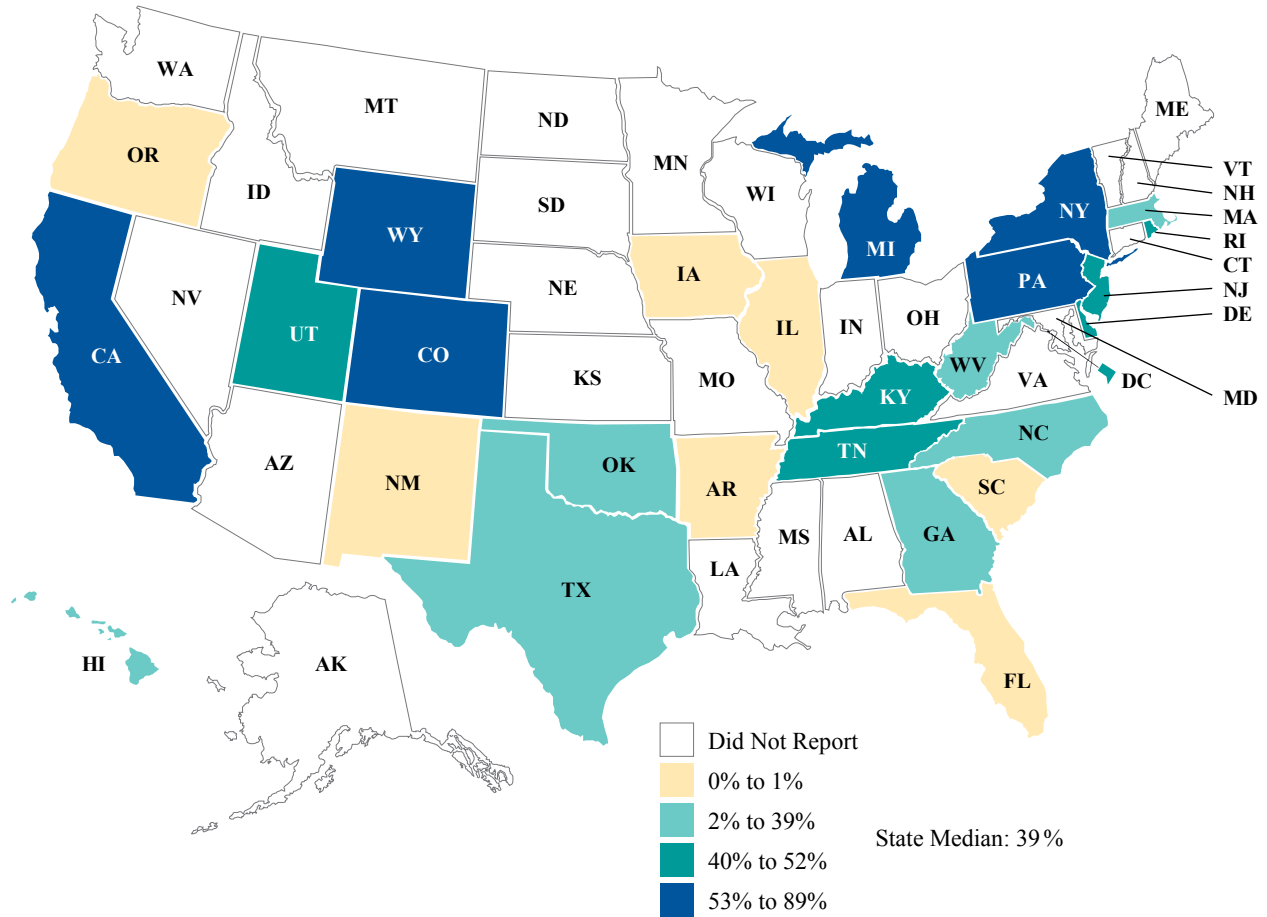
Trends

- Trends are not available for this measure. Trends are shown for measures reported by at least 20 states for all three years (FFY 2010 to FFY 2012); 10 states reported this measure for all three years.

<sup>16</sup> This measure is calculated using the administrative method (claims/encounter data) or the hybrid method (claims/encounter data combined with medical record review).

<sup>17</sup> The term “states” includes the 50 states and District of Columbia.

Exhibit WCC.2. Geographic Variation in the Percentage of Children Whose Weight is Classified Based on BMI Percentile, FFY 2012 (n = 27 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

To view state-specific data for this measure, please see Table WCC at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2012.zip>.

## PERINATAL HEALTH

Two out of every three women enrolled in Medicaid are in their reproductive years (ages 19 to 44) and Medicaid currently finances about 45 percent of all births in the United States. CMS has a major role to play in improving maternity care and birth outcomes, and measuring how care is delivered to pregnant and postpartum women. Despite improvements in access to coverage and care, the rate of preterm births among low-income women enrolled in Medicaid is higher than the rate for all other women (11.9 percent vs. 8.7 percent).<sup>18</sup>

CMS launched two national initiatives in 2012 to help improve perinatal outcomes among Medicaid/CHIP and other payers. One initiative, Strong Start for Mothers and Newborns, which is led by the CMS Innovation Center, includes two primary strategies: (1) testing ways to encourage best practices for reducing the number of early elective deliveries that lack medical indication, across all payer types; and (2) a grant initiative to test and evaluate four models of enhanced prenatal care for reducing preterm births and decreasing the anticipated total cost of medical care during pregnancy, delivery, and the first year of life among women and infants covered by Medicaid/CHIP. In February 2013, CMS awarded grants to 27 recipients to support the testing of enhanced prenatal care through three approaches: (1) group or centering visits, (2) at birth centers, and (3) at maternity care homes.<sup>19</sup> Projects are located in 32 states, the District of Columbia, and Puerto Rico, and will serve more than 80,000 women enrolled in Medicaid or CHIP over a three-year period.

The second initiative, the Expert Panel on Improving Maternal and Infant Outcomes in Medicaid and CHIP (Expert Panel), was launched in June 2012 to explore policy and reimbursement opportunities for Medicaid programs to provide better care, improve birth outcomes, and reduce health care costs for mothers and infants. In August 2013, the Expert Panel presented strategies for CMS leadership to consider as it develops implementation plans to improve birth outcomes. The strategies were selected based on potential impact, available resources, and partnership opportunities.

To support its maternity-focused efforts, CMS identified a core set of eight Medicaid/CHIP maternity measures for voluntary reporting by states. This core set, which consists of five of CMS's Child Core measures and three of the Adult Core Set measures, will be used by CMS to measure progress toward improvement and evaluate efforts.<sup>20</sup>

The two Child Core Set measures included in this section are those for which information is available from at least 25 states for the FFY 2012 reporting year. The measures are as follows:

1. Timeliness of Prenatal Care
2. Frequency of Ongoing Prenatal Care

These measures, along with the measure assessing children's receipt of well-child visits in the first 15 months of life (discussed in the previous section), are three of the five Child Core Set measures that are part of CMS's Maternity Core Set.

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<sup>18</sup> CDC, PRAMS 2008. Infants born preterm (that is, at less than 37 weeks of gestation) are at higher risk of developmental problems and health problems than infants born at full term. Substantial medical and societal costs are also associated with preterm births.

<sup>19</sup> The fourth model, home visiting implemented by the Health Resources and Services Administration (HRSA), will be evaluated along with the other three enhanced models of care.

<sup>20</sup> The CMS Medicaid/CHIP Maternity Core Set is available at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/2013-Core-Set-of-Maternity-Measures.pdf>.

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**TIMELINESS OF PRENATAL CARE (PPC)**  
Measure Steward: National Committee for Quality Assurance (NCQA)

Initiation of prenatal care during the first trimester of pregnancy facilitates a comprehensive assessment of a woman’s health history, pregnancy risk, and health knowledge. Early screening and referrals for specialized care can prevent pregnancy complications resulting from pre-existing health conditions (such as diabetes and high blood pressure) or promote access to recommended care (such as immunizations and oral health services). Moreover, health education and counseling related to having a healthy pregnancy can encourage healthy behaviors (such as healthy eating and weight gain) and reduce risky behaviors (such as tobacco, alcohol and other drug use). This measure indicates how often Medicaid/CHIP enrollees receive timely prenatal care (that is, in the first trimester or within 42 days of Medicaid/CHIP enrollment).

**Measure Description**

- This measure shows the percentage of deliveries of live births that received a prenatal care visit in the first trimester or within 42 days of Medicaid/CHIP enrollment.<sup>21</sup>

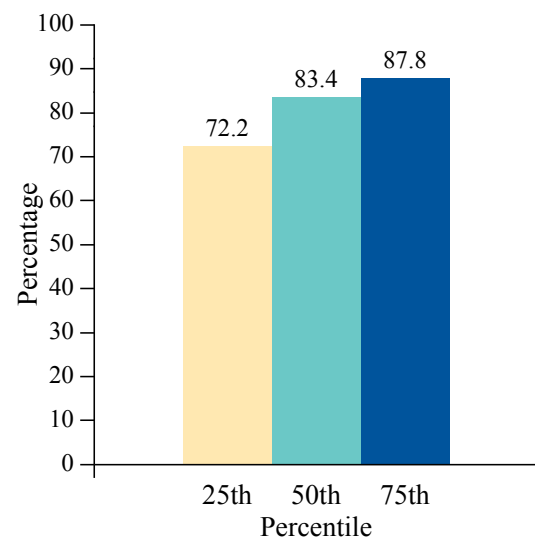
**Overview of State Reporting**

- The number of states reporting the Timeliness of Prenatal Care measure increased from 15 states for FFY 2010 to 24 states for FFY 2011 and 31 states for FFY 2012.<sup>22</sup>
- Of the 31 states reporting the measure for FFY 2012, 20 states reported the measure for both their Medicaid and CHIP populations, 9 reported the measure for their Medicaid population only, and 2 reported the measure for their CHIP population only.
- In FFY 2012, 31 states reported the measure using Core Set specifications.

**State Performance**

- The median rate among the 31 states reporting the measure for FFY 2012 was 83 percent, with a 16-point spread between the 25th and 75th percentiles (Exhibit PPC.1).
- Performance on this measure ranged from 30 percent to 92 percent among states, with considerable geographic variation across states (Exhibit PPC.2, next page).

Exhibit PPC.1. Percentage of Pregnant Women with a Prenatal Care Visit in the First Trimester or within 42 Days of Medicaid/CHIP Enrollment, FFY 2012 (n = 31 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

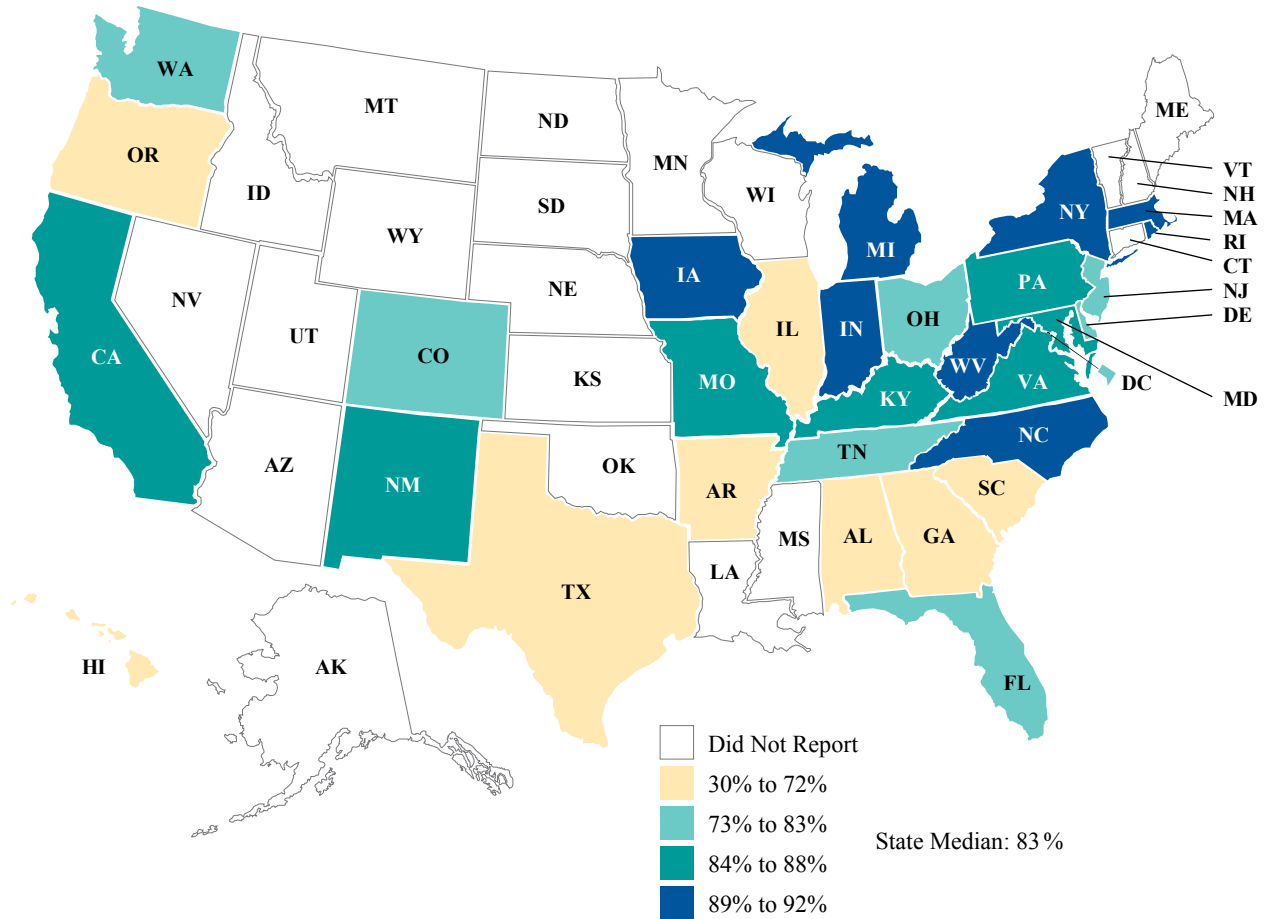
**Trends**

- Trends are not available for this measure. Trends are shown for measures reported by at least 20 states for all three years (FFY 2010 to FFY 2012); 13 states reported this measure for all three years.

<sup>21</sup> This measure is calculated using the administrative method (claims/encounter data) or the hybrid method (claims/encounter data combined with medical record review).

<sup>22</sup> The term “states” includes the 50 states and District of Columbia.

Exhibit PPC.2. Geographic Variation in the Percentage of Pregnant Women with a Prenatal Care Visit in the First Trimester or within 42 Days of Medicaid/CHIP Enrollment, FFY 2012 (n = 31 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

To view state-specific data for this measure, please see Table PPC at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2012.zip>.



FREQUENCY OF ONGOING PRENATAL CARE (FPC)  
Measure Steward: National Committee for Quality Assurance (NCQA)

Ongoing prenatal care enables prenatal care providers to make periodic assessments of a woman’s pregnancy risk and health status, perform recommended screenings and laboratory tests, and provide timely referrals for specialized care. Through regular, ongoing prenatal care, women can develop trusted relationships with their prenatal care providers, facilitating meaningful opportunities for health education and counseling targeted to a woman’s circumstances and stage of pregnancy. Regular prenatal care enables providers to promote positive maternal and infant health outcomes by addressing a wide range of women’s health, social, and emotional issues. The Core Set measure focuses on the extent to which women had more than 80 percent of the expected prenatal care visits.

Measure Description

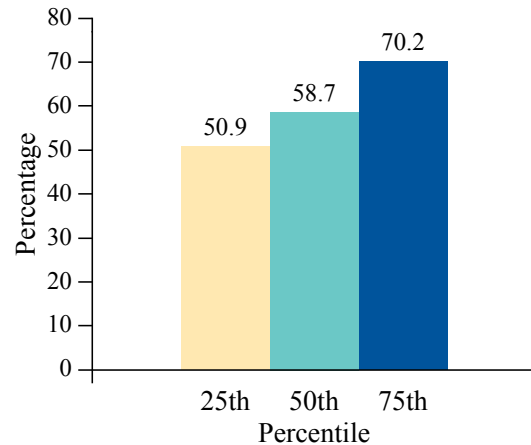
- This measure shows the percentage of deliveries that received the following number of expected prenatal visits:
  - < 21 percent of expected visits
  - 21 percent – 40 percent of expected visits
  - 41 percent – 60 percent of expected visits
  - 61 percent – 80 percent of expected visits
  - > 80 percent of expected visits.<sup>23</sup>

- Performance on this measure ranged from 2 percent to 79 percent among states, with considerable geographic variation across states (Exhibit FPC.2, next page).

Overview of State Reporting

- The number of states reporting the Frequency of Ongoing Prenatal Care measure increased from 12 states for FFY 2010 to 17 states for FFY 2011 and 25 states for FFY 2012.<sup>24</sup>
- Of the 25 states reporting the measure for FFY 2012, 17 states reported the measure for both their Medicaid and CHIP populations, 6 reported the measure for their Medicaid population only, and 2 reported the measure for their CHIP population only.
- In FFY 2012, 25 states reported the measure using Core Set specifications.

Exhibit FPC.1. Percentage of Pregnant Women Receiving More Than 80 Percent of the Expected Number of Prenatal Care Visits, FFY 2012 (n = 25 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

State Performance

- The median rate among the 25 states reporting the measure for FFY 2012 was 59 percent, with a 19-point spread between the 25th and 75th percentiles (Exhibit FPC.1).

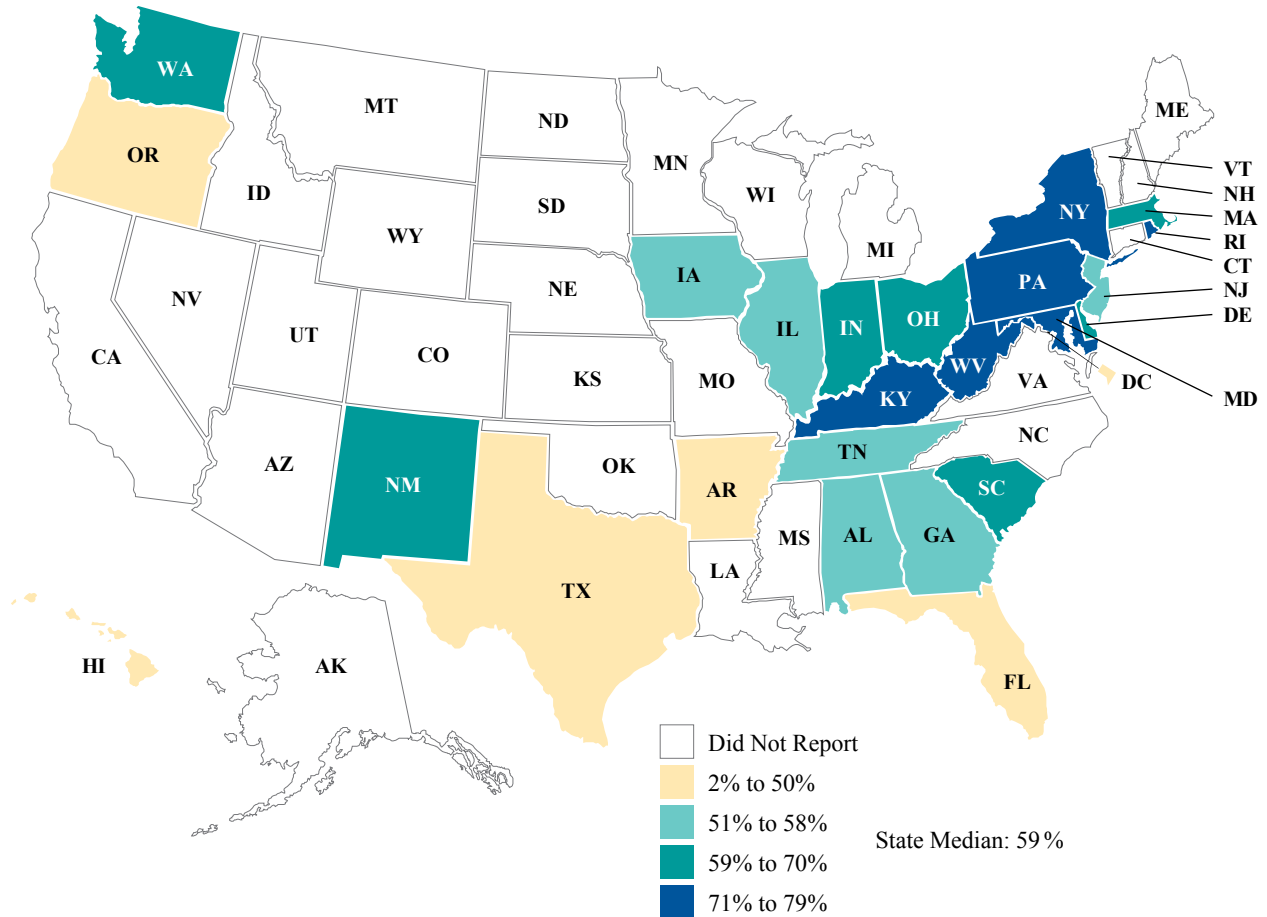
Trends

- Trends are not available for this measure. Trends are shown for measures reported by at least 20 states for all three years (FFY 2010 to FFY 2012); 10 states reported the measure for all three years.

<sup>23</sup> This measure is calculated using the administrative method (claims/encounter data) or the hybrid method (claims/encounter data combined with medical record review).

<sup>24</sup> The term “states” includes the 50 states and District of Columbia.

Exhibit FPC.2. Geographic Variation in the Percentage of Pregnant Women Receiving More Than 80 Percent of the Expected Number of Prenatal Care Visits, FFY 2012 (n = 25 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

To view state-specific data for this measure, please see Table FPC at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2012.zip>.

## MANAGEMENT OF ACUTE AND CHRONIC CONDITIONS

The extent to which children receive safe, timely, and effective care is a key indicator of the quality of care provided in Medicaid and CHIP. Children covered by Medicaid have higher rates of physical, developmental, and intellectual health problems than privately insured children. Therefore, ensuring early detection and effective treatment will reduce the need for more costly care later and improve children's chances of leading healthy, productive lives.

Through Medicaid's Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit, children and adolescents under age 21 are entitled to receive treatment for Medicaid-covered services listed in Section 1905(a) of the Social Security Act if that treatment or service is necessary to "correct or ameliorate" a physical or mental condition.<sup>25</sup> Children enrolled in CHIP Medicaid expansion programs are also entitled to this benefit.

CMS has efforts under way to improve children's access to and use of medically necessary care. For example:

- The CHIPRA-funded, multistate Quality Demonstration Grants include efforts to evaluate provider-based models of care, use of electronic health record systems, and integration of physical and behavioral health services.<sup>26</sup>
- A Health Home provision, authorized by Section 2703 of the Affordable Care Act, gives states two years of an enhanced match to improve care coordination for children and adults with multiple chronic conditions (such as asthma, obesity, and substance use disorder).
- Two recently released informational bulletins provide guidance on (1) coverage of behavioral health services for children with mental health and substance abuse problems, and (2) promotion of trauma-informed services for children.<sup>27</sup>

To support these efforts, CMS has identified several Child Core Set measures to track performance on getting children the "right care in the right setting at the right time." The four Child Core Set measures included in this section are those for which information is available from at least 25 states for the FFY 2012 reporting year:

1. Appropriate Testing for Children with Pharyngitis
2. Follow-Up After Hospitalization for Mental Illness
3. Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder Medication
4. Pediatric Central Line-Associated Blood Stream Infections in Neonatal Intensive Care Units

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<sup>25</sup> Section 1905(a)(r)(5).

<sup>26</sup> See <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Childrens-Health-Insurance-Program-CHIP/CHIPRA-Quality-Demonstration-Grants-Summary.html>.

<sup>27</sup> See <http://medicaid.gov/Federal-Policy-Guidance/Downloads/CIB-05-07-2013.pdf> and <http://medicaid.gov/Federal-Policy-Guidance/Downloads/SMD-13-07-11.pdf>.

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**APPROPRIATE TESTING FOR CHILDREN WITH PHARYNGITIS (CWP)**  
 Measure Steward: National Committee for Quality Assurance (NCQA)

Appropriate administration of a strep test for pharyngitis (sore throat) among children dispensed an antibiotic is an indicator of clinical quality in the delivery of primary care for children. A strep test is required to assess whether a sore throat is caused by a viral rather than a bacterial infection. Antibiotics should be prescribed only for sore throats caused by bacterial infections, and most sore throats in children are caused by viruses. Concerns about overuse of antibiotics and development of antibiotic resistance have led to increased emphasis on conducting a strep test before an antibiotic is prescribed. Therefore, this measure assesses whether providers performed a strep test among children diagnosed with a sore throat and dispensed an antibiotic.

**Measure Description**

- This measure shows the percentage of children ages 2 to 18 that were diagnosed with pharyngitis, dispensed an antibiotic, and received a group A streptococcus (strep) test for the episode.<sup>28</sup>

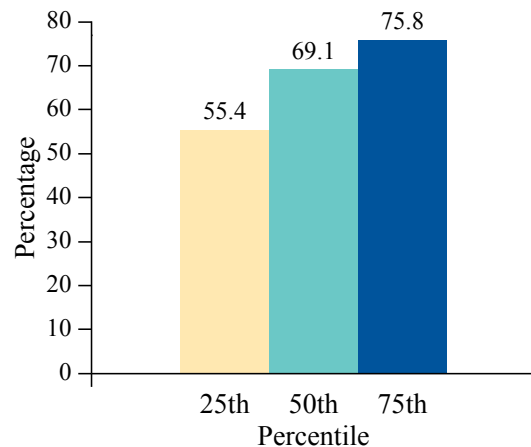
**Overview of State Reporting**

- The number of states reporting the Appropriate Testing for Children with Pharyngitis measure increased from 20 states for FFY 2010 to 28 states for FFY 2011 and 36 states for FFY 2012.<sup>29</sup>
- Of the 36 states reporting the measure for FFY 2012, 24 states reported the measure for both their Medicaid and CHIP populations, 9 reported the measure for their CHIP population only, and 3 reported the measure for their Medicaid population only.
- In FFY 2012, all 36 states reported the measure using Core Set specifications.

**State Performance**

- The median rate among the 36 states reporting the measure for FFY 2012 was 69 percent, with a 20-point spread between the 25th and 75th percentiles (Exhibit CWP.1).
- Performance on this measure ranged from 17 percent to 91 percent among states, with considerable geographic variation across states (Exhibit CWP.3, next page).

**Exhibit CWP.1. Percentage of Children Diagnosed with Pharyngitis, Dispensed an Antibiotic, and Received a Group A Streptococcus Test, FFY 2012 (n = 36 states)**



Source: Mathematica analysis of FFY 2012 CARTS reports.

**Trends**

- Among the 20 states reporting the measure using Core Set specifications for all three years, the median rate for Medicaid/CHIP programs increased by 5 percentage points from FFY 2010 to FFY 2012 (Exhibit CWP.2).

**Exhibit CWP.2. Trends in the Percentage of Children Diagnosed with Pharyngitis, Dispensed an Antibiotic, and Received a Group A Streptococcus Test, FFY 2010–2012 (n = 20 states)**

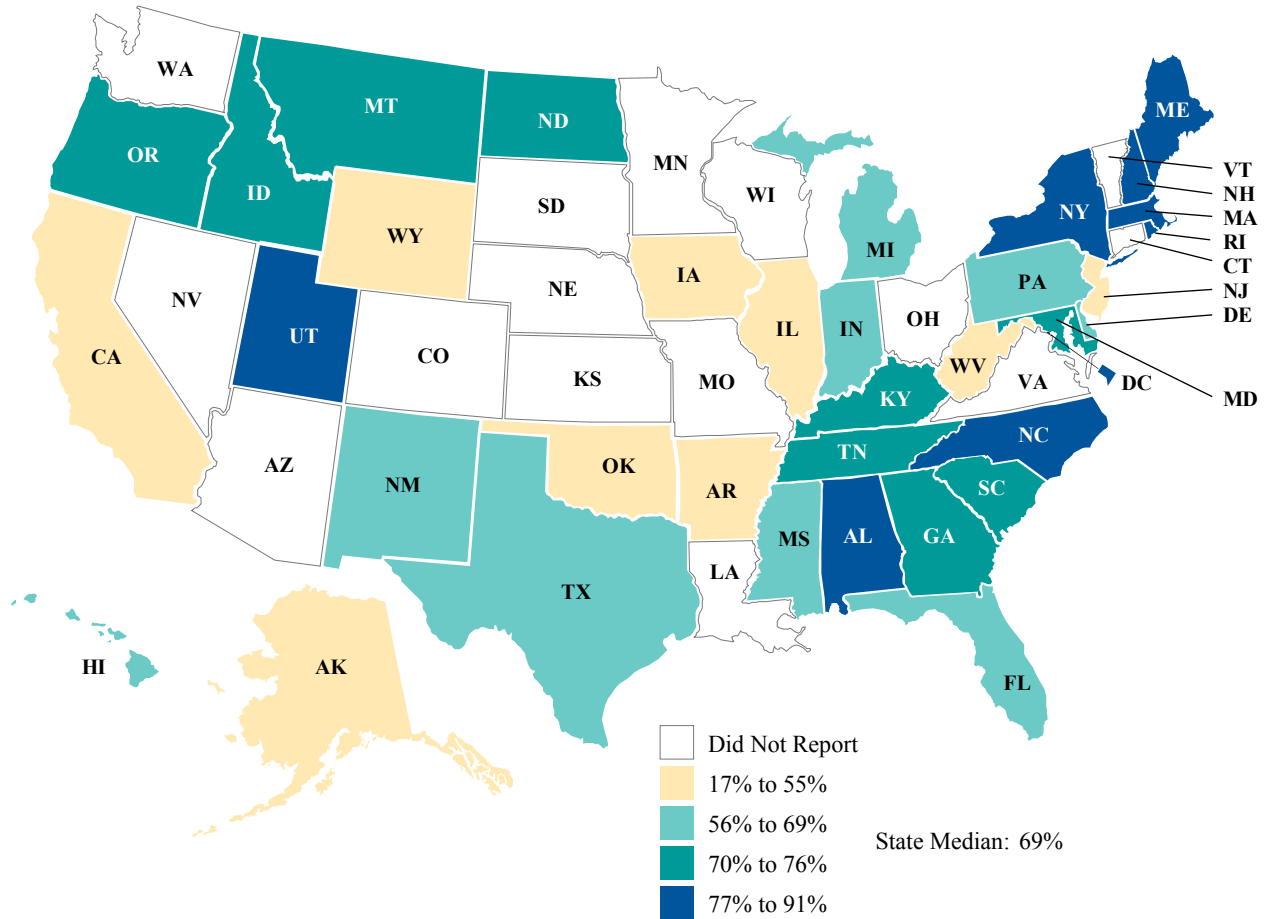
Rate	FFY 2010	FFY 2011	FFY 2012
Mean	62.7	62.9	66.9
Median	65.6	65.3	70.8
25th Percentile	55.5	55.8	58.8
75th Percentile	72.8	72.8	78.0

Source: Mathematica analysis of FFY 2010, 2011, and 2012 CARTS reports.

<sup>28</sup> This measure is calculated using the administrative method (claims/encounter data).

<sup>29</sup> The term “states” includes the 50 states and District of Columbia.

Exhibit CWP.3. Geographic Variation in the Percentage of Children Diagnosed with Pharyngitis, Dispensed an Antibiotic, and Received a Group A Streptococcus Test, FFY 2012 (n = 36 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

To view state-specific data for this measure, please see Table CWP at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2012.zip>.

FOLLOW-UP AFTER HOSPITALIZATION FOR MENTAL ILLNESS (FUH)  
Measure Steward: National Committee for Quality Assurance (NCQA)

After a child receives inpatient treatment for mental illness, follow-up outpatient mental health treatment is necessary to manage medications, continue therapy, facilitate transitions to home and school, and generally prevent readmissions due to the lack of continuous care. The first visit with an outpatient mental health provider should take place within 30 days of discharge and ideally, within 7 days of discharge. This measure is an indicator of the coordination of care across settings (inpatient and outpatient) for children with behavioral health conditions.

Measure Description

- This measure shows the percentage of discharges for children ages 6 to 20 hospitalized for treatment of selected mental health disorders who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 7 days of discharge and within 30 days of discharge.<sup>30</sup>

- Performance on the 7-day follow-up visit measure ranged from 7 percent to 80 percent among state and from 16 percent to 94 percent for the 7-day follow-up visit measure, with considerable geographic variation across states (Exhibits FUH.2 and FUH.3, next page).
- Although the Child Core Set measure is specified to include discharges for children ages 6 to 20, 9 of the 27 states reporting this measure for FFY 2012 noted that their rates are not limited to children and include individuals over age 20.<sup>32</sup>

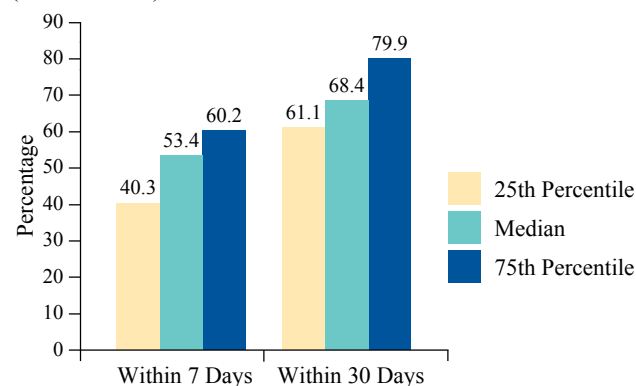
Overview of State Reporting

- The number of states reporting the Follow-Up After Hospitalization for Mental Illness measure increased from 11 states for FFY 2010 to 24 states for FFY 2011 and 27 states for FFY 2012.<sup>31</sup>
- Of the 27 states reporting the measure for FFY 2012, 21 states reported the measure for both their Medicaid and CHIP populations, 5 reported the measure for their CHIP population only, and 1 reported the measure for their Medicaid population only.
- In FFY 2012, 27 states reported the measure using Core Set specifications.

State Performance

- The median rate among the 27 states reporting the measure for FFY 2012 was 68 percent for a follow-up visit within 30 days of discharge (with a 19-point spread between the 25th and 75th percentiles). The median rate for a follow-up visit within 7 days of discharge was 53 percent (with a 20-point spread) (Exhibit FUH.1).

Exhibit FUH.1. Percentage of Discharges for Mental Illness for Children Ages 6 to 20 Receiving a Follow-Up Visit within 7 and 30 Days of Discharge, FFY 2012 (n = 27 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

Trends

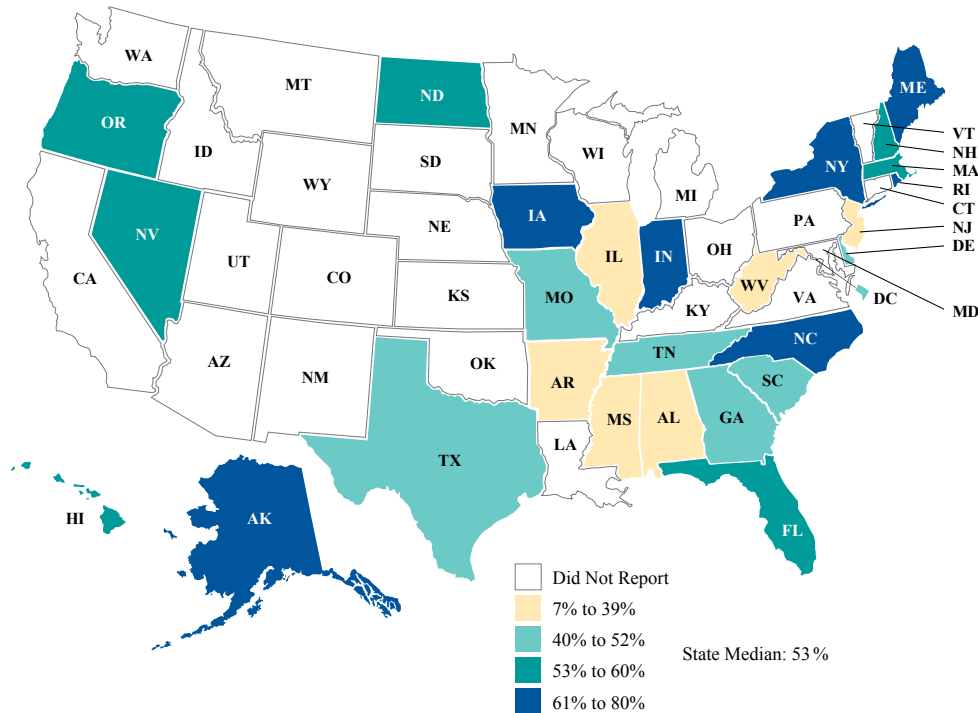
- Trends are not available for this measure. Trends are shown for measures reported by at least 20 states for all three years (FFY 2010 to FFY 2012); 7 states reported this measure for all three years.

<sup>30</sup> This measure is calculated using the administrative method (claims/encounter data).

<sup>31</sup> The term “states” includes the 50 states and District of Columbia.

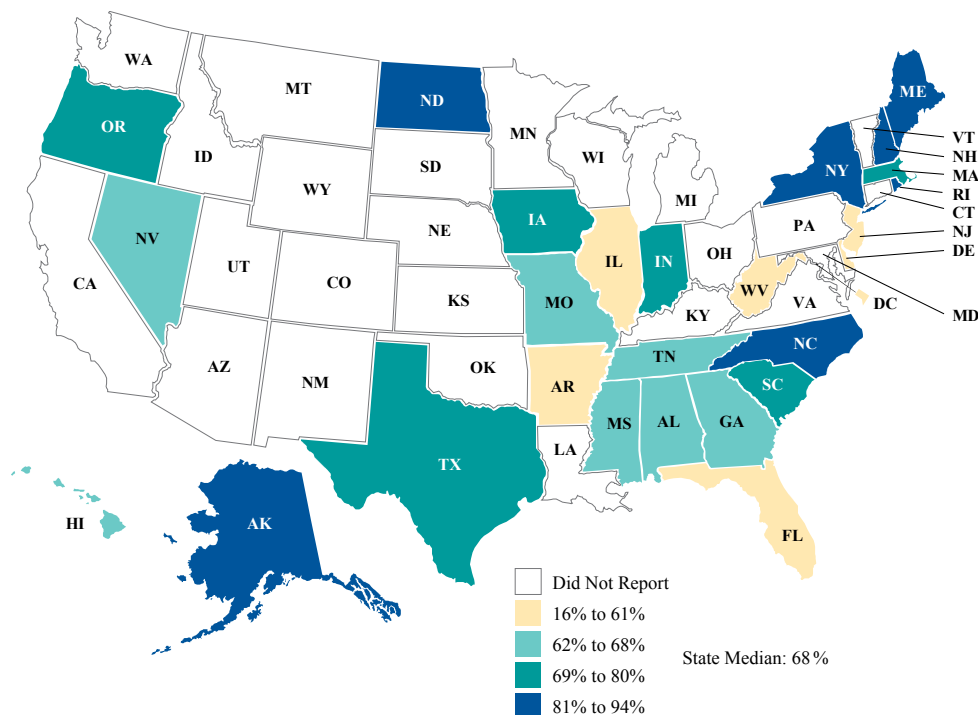
<sup>32</sup> The HEDIS measure, on which the Core Set measure is based, includes individuals 6 years of age and over and does not disaggregate this measure for children ages 6 to 20.

Exhibit FUH.2. Geographic Variation in the Percentage of Discharges for Mental Illness for Children Ages 6 to 20 Receiving a Follow-Up Visit within 7 Days of Discharge, FFY 2012 (n = 27 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

Exhibit FUH.3. Geographic Variation in the Percentage of Discharges for Mental Illness for Children Ages 6 to 20 Receiving a Follow-Up Visit within 30 Days of Discharge, FFY 2012 (n = 27 states)



Source: Mathematica analysis of FFY 2012 CARTS reports.

To view state-specific data for this measure, please see Table FUH at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2012.zip>.



## FOLLOW-UP CARE FOR CHILDREN PRESCRIBED ATTENTION-DEFICIT/HYPERACTIVITY DISORDER MEDICATION (ADD)

Measure Steward: National Committee for Quality Assurance (NCQA)

Attention-deficit/hyperactivity disorder (ADHD) is a common chronic condition among school-age children, associated with academic, behavior, and relationship problems, and often treated with medication to improve children’s functioning. Among those newly prescribed an ADHD medication, clinical guidelines recommend a follow-up visit within the first 30 days (the Initiation Phase) for medication management. Among those remaining on ADHD medication, two additional visits are recommended during the 9-month Continuation and Maintenance (C&M) Phase for ongoing medication management and assessment of the child’s functioning. This measure shows the clinical quality and continuity of care for children with a chronic condition.

### Measure Description

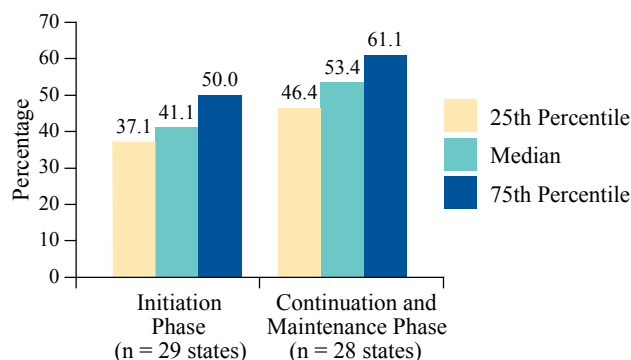
- This measure shows the percentage of children newly prescribed ADHD medication that had at least three follow-up visits within a 10-month period, one of which was within 30 days from the time the first ADHD medication was dispensed. Two rates are reported: one for the Initiation Phase and one for the C&M Phase.<sup>33</sup>

- Performance on this measure ranged from 18 percent to 66 percent among states for the Initiation Phase and from 5 percent to 100 percent for the C&M Phase, with considerable geographic variation across states (Exhibit ADD.2, next page).

### Overview of State Reporting

- The number of states reporting the Follow-Up Care for Children Prescribed ADHD Medication measure increased from 15 states for FFY 2010 to 24 states for FFY 2011 and 29 states for FFY 2012.<sup>34</sup>
- Of the 29 states reporting the measure for FFY 2012, 23 states reported the measure for both their Medicaid and CHIP populations, 4 reported the measure for their CHIP population only, and 2 reported the measure for their Medicaid population only.
- In FFY 2012, all 29 states reported the measure using Core Set specifications (although one of these states did not report a rate for the C&M Phase).

Exhibit ADD.1. Percentage of Children Prescribed Medication for ADHD that Received At Least One Visit during the 30-Day Initiation Phase and At Least Two Visits during the 9-Month Continuation and Maintenance Phase, FFY 2012



Source: Mathematica analysis of FFY 2012 CARTS reports.

### State Performance

- The median rate among the states reporting the measure for FFY 2012 was 41 percent for the Initiation Phase (29 states) and 53 percent for the C&M Phase (28 states), with a 13- and 15-point spread between the 25th and 75th percentiles (Exhibit ADD.1).<sup>35</sup>

### Trends

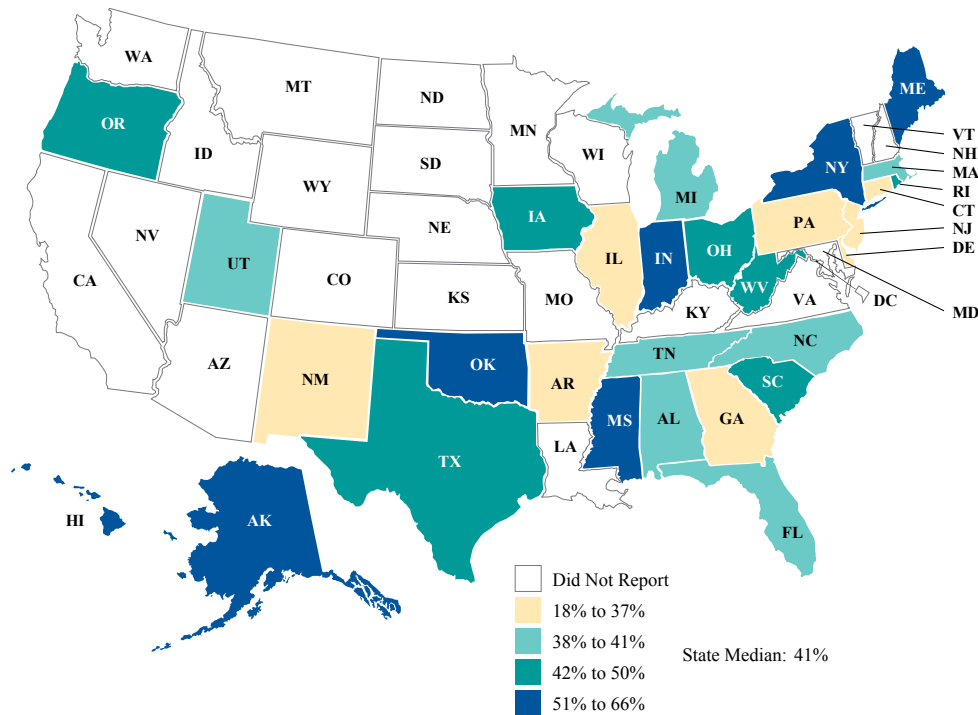
- Trends are not available for this measure. Trends are shown for measures reported by at least 20 states for all three years (FFY 2010 to FFY 2012); 15 states reported this measure for all three years.

<sup>33</sup> This measure is calculated using the administrative method (claims/encounter data).

<sup>34</sup> The term “states” includes the 50 states and District of Columbia.

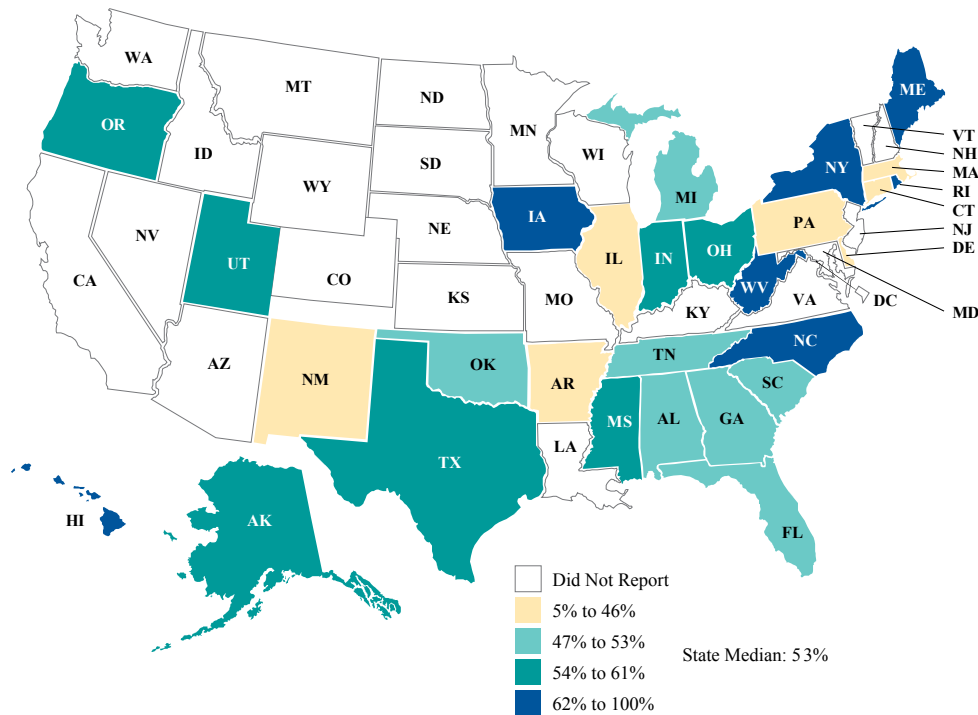
<sup>35</sup> The rate for the C&M Phase is based on those children who had at least one visit in the 30-day Initiation Phase.

Exhibit ADD.2. Geographic Variation in the Percentage of Children Prescribed Medication for ADHD that Received At Least One Visit during the 30-Day Initiation Phase, FFY 2012



Source: Mathematica analysis of FFY 2012 CARTS reports.

Exhibit ADD.3. Geographic Variation in the Percentage of Children Prescribed Medication for ADHD that Received At Least Two Visits during the 9-Month Continuation and Maintenance Phase, FFY 2012



Source: Mathematica analysis of FFY 2012 CARTS reports.

To view state-specific data for this measure, please see Table ADD at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2012.zip>.

## CENTRAL LINE-ASSOCIATED BLOOD STREAM INFECTIONS IN NEONATAL INTENSIVE CARE UNITS (CLABSI)

Measure Steward: Centers for Disease Control and Prevention (CDC)

Central Line-Associated Blood Stream Infections (CLABSIs) are a significant cause of mortality and morbidity in hospital neonatal intensive care units (NICUs). Improper insertion of central lines (an intravascular catheter that terminates at or close to the heart or in one of the great vessels) can cause life-threatening infections. Premature infants in NICUs are particularly susceptible to infection because of their immature immune systems. Neonatal CLABSIs are preventable through changes in the safety culture in NICUs, including the use of proper insertion techniques and maintenance protocols. Efforts to prevent CLABSIs are effective in reducing infections, saving lives, and reducing health care costs. This measure is an indicator of state performance in reducing CLABSIs in NICUs.

### Measure Description

- This measure shows the rate of CLABSIs in NICUs. The Child Core Set measure also includes the rate of CLABSIs in pediatric intensive care units (PICUs). At this time, data on CLABSIs occurring in PICUs are not available.
- The Standardized Infection Ratio (SIR) is the summary measure used to track CLABSIs over time. The SIR compares the number of infections reported in a facility or state to the baseline U.S. experience, adjusting for several risk factors that have been found to be associated with differences in infection rates.
- The SIR indicates whether the rate of infections increased, decreased, or did not change significantly relative to the baseline (calculated using data for 2006–2008). The SIR is evaluated based on the 95 percent confidence interval and the baseline population SIR of 1.
- This measure is obtained from data reported by hospitals to the CDC National Healthcare Safety Network. The measure includes all neonatal CLABSI events not just those for infants covered by Medicaid/CHIP.

### Overview of State Reporting

- In 2011, CDC calculated state-level CLABSI rates for 40 states.<sup>36</sup> CDC does not calculate rates for states that had fewer than five facilities reporting (Exhibit CLABSI.1, next page).

### State Performance

- Of the 40 states, 28 had a significant decrease in infections since the baseline period and 12 had no change in infections since the baseline period (Exhibit CLABSI.1). No states had a significant increase in infections.
- Among the 40 states with CLABSI rates for 2011, the SIRs ranged from 0.233 to 1.307 (Exhibit CLABSI.2). An SIR less than 1 means that fewer infections occurred relative to what would have been predicted given the baseline data. An SIR greater than 1 means that more infections occurred relative to what would have been predicted given the baseline data. An SIR equal to 1 means that the number of infections is no different than the baseline period. The percentage change is determined by calculating 1 minus the SIR; for example, an SIR of 0.233 signifies a 76.7 percent reduction from the baseline period, while an SIR of 1.307 indicates a 30.7 percent increase. Whether an increase or decrease is significant is determined by evaluating the SIR based on the 95 confidence interval and the baseline population SIR of 1.<sup>37</sup>

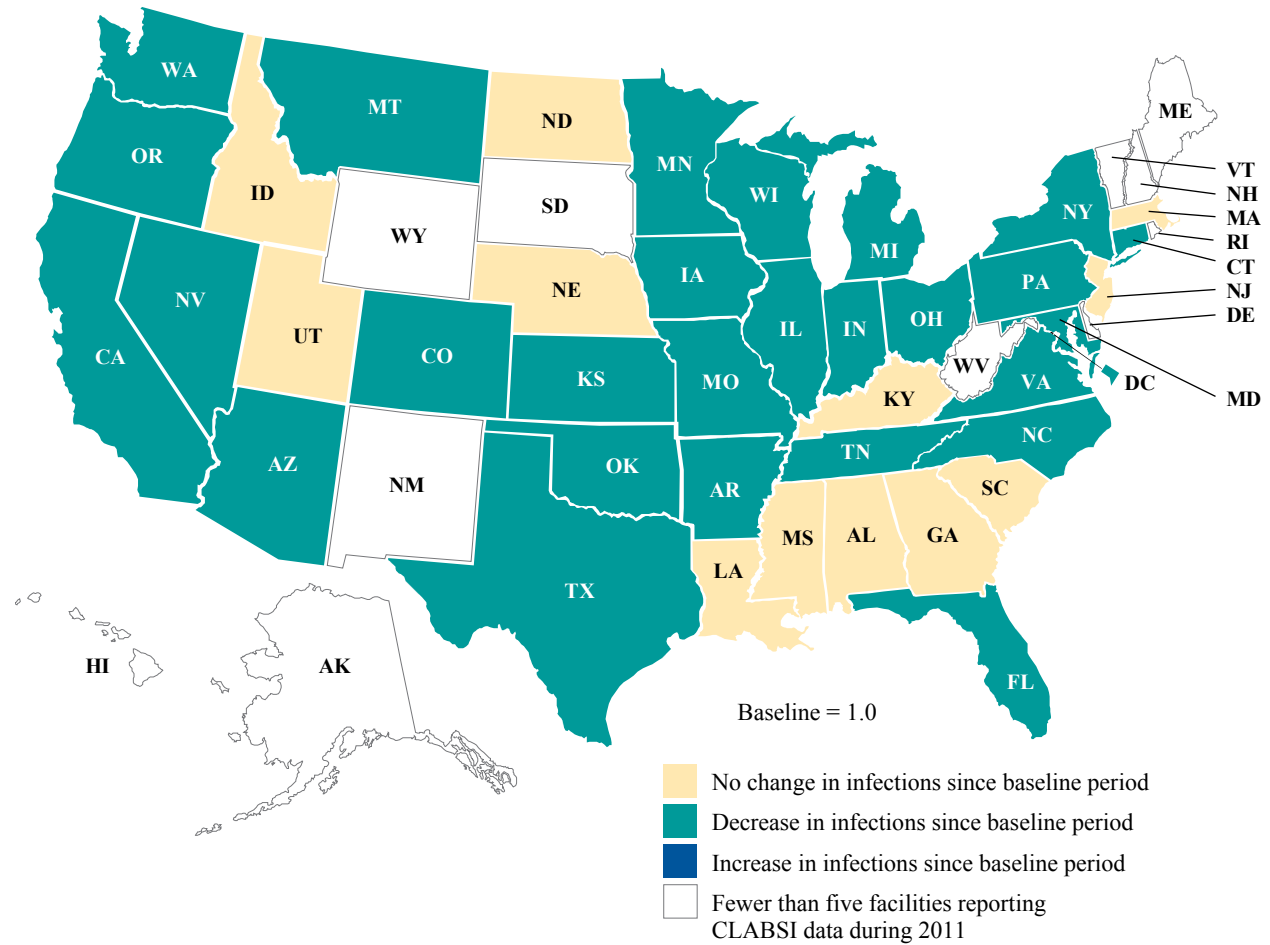
### Progress

- The national goal for CLABSIs in all ICUs (including non-neonatal ICUs) is 0.51 by the end of 2013. The CLABSI rate in NICUs was 0.65 in the 40 states in 2011.
- Although no states reported an increase in CLABSIs in NICUs since the baseline period, there is room for improvement for states to meet the Secretary's Goal for reducing CLABSIs by 50 percent by the end of 2013.

<sup>36</sup> The term "states" includes the 50 states and District of Columbia.

<sup>37</sup> For further information on the methods used to assess state performance, see the CDC 2011 National and State Healthcare-Associated Infections Standardized Infection Ratio Report, available at [http://www.cdc.gov/hai/pdfs/SIR/SIR-Report\\_02\\_07\\_2013.pdf](http://www.cdc.gov/hai/pdfs/SIR/SIR-Report_02_07_2013.pdf).

Exhibit CLABSI.1. Geographic Variation in State Performance on Central Line-Associated Blood Stream Infections in Neonatal Intensive Care Units, 2011



Source: Centers for Disease Control and Prevention, 2011 National and State Healthcare-Associated Infections Standardized Infection Ratio Report, Table 3d, available at [http://www.cdc.gov/hai/pdfs/SIR/SIR-Report\\_02\\_07\\_2013.pdf](http://www.cdc.gov/hai/pdfs/SIR/SIR-Report_02_07_2013.pdf).

To view state-specific data for this measure, please see Table CLABSI at <http://www.medicare.gov/Medicare-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FY-2012.zip>.

To view a CMS-convened workgroup report on state reporting of the CLABSI measure, please see <http://www.medicare.gov/Medicare-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/CLABSI-Workgroup-Report.pdf>.



Exhibit CLABSI.2 (continued)

Source: Centers for Disease Control and Prevention, 2011 National and State Healthcare-Associated Infections Standardized Infection Ratio Report, Table 3d, available at [http://www.cdc.gov/hai/pdfs/SIR/SIR-Report\\_02\\_07\\_2013.pdf](http://www.cdc.gov/hai/pdfs/SIR/SIR-Report_02_07_2013.pdf).

Notes: This figure includes data for 40 states. Data are displayed if at least 5 facilities reported CLABSI data during the reporting period; 11 states (AK, DE, HI, ME, NH, NM, RI, SD, VT, WV, and WY) had fewer than 5 facilities reporting. The term “states” includes the 50 states and the District of Columbia.

Data are included from all NICU locations, including Level II/III and Level III nurseries. For this report, umbilical-line and central line-associated bloodstream infections are both considered CLABSIs.

\*The Standardized Infection Ratio (SIR) compares the actual number of healthcare-associated infections (HAIs) in a facility or state with the baseline U.S. experience, adjusting for several risk factors that have been found to be most associated with differences in infection rates. Evaluation is determined using the 95 percent confidence interval around the SIR. If the SIR is 1, the number of infections reported is the same as the number of infections predicted given the baseline data, indicating there has been no change in infections since the baseline period. If the SIR is less than 1, the number of infections reported is less than the number of infections predicted given the baseline data, indicating that infections have been prevented since the baseline period. If the SIR is greater than 1, the number of infections reported is greater than the number of infections predicted given the baseline data, indicating that infections have increased since the baseline period. More information is available at: [http://www.cdc.gov/hai/surveillance/QA\\_stateSummary.html](http://www.cdc.gov/hai/surveillance/QA_stateSummary.html).

## DENTAL AND ORAL HEALTH SERVICES

States' efforts over the past decade have resulted in improved access to dental care for children covered by Medicaid and CHIP. Between 2007 and 2011, almost half of all states achieved at least a 10 percentage point increase in the proportion of enrolled children who received a preventive dental service during the reporting year.<sup>38</sup> Despite considerable progress in pediatric oral health care in recent years, tooth decay remains the most common chronic disease among children. As such, children's oral health continues to be a primary focus of improvement efforts in both Medicaid and CHIP, through which all enrolled children have dental coverage.

Over the past several years, CMS has worked with federal and state partners, the dental and medical provider communities, and other stakeholders to continue to improve children's access to dental care. Launched in April 2010, CMS's Oral Health Initiative has two goals: (1) increase the proportion of Medicaid and CHIP children ages 1 to 20 who receive a preventive dental service by 10 percentage points; and (2) increase the proportion of Medicaid and CHIP children ages 6 to 9 who receive a sealant on a permanent molar by 10 percentage points.

In April 2013, CMS set state-specific baselines and FFY 2015 goals for children's use of preventive dental services, based on data reported by states on the FFY 2011 Form CMS-416.<sup>39</sup> CMS invited Medicaid agencies to develop Oral Health Action Plans as a roadmap to achieving these goals.

CMS offers technical assistance to states to develop and implement their Oral Health Action Plans. It also hosts a quarterly series of webinars entitled *The CMS Learning Lab: Improving Oral Health Through Access*.<sup>40</sup> In September 2013, CMS released a strategy guide highlighting effective approaches for state Medicaid programs. It also released oral health education materials available for order at no cost.<sup>41</sup>

Important components of these efforts are the data used to set baselines and monitor progress. To improve the completeness and accuracy of data, CMS initiated a quality improvement process for FFY 2010 Form CMS-416 data, from which the data originate. Data are checked against a series of audit criteria intended to identify possible reporting and arithmetic errors. This audit has been made a permanent part of the data-submission process.

State performance related to children's access to dental care is evaluated through two measures in the Child Core Set.<sup>42</sup> The measures are as follows:

1. Preventive Dental Services
2. Dental Treatment Services

To streamline reporting and reduce burden on states, in FFY 2012, CMS began calculating these measures on behalf of states using data from the CMS-416. The two dental measures were reported by at least 25 states for the FFY 2012 reporting year and are included in this section.

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<sup>38</sup> See <http://medicaid.gov/Federal-Policy-Guidance/Downloads/CIB-04-18-13.pdf>.

<sup>39</sup> Ibid.

<sup>40</sup> See *CMS Learning Lab*, available at <http://www.medicicaid.gov/Medicicaid-CHIP-Program-Information/By-Topics/Benefits/Dental-Care.html>.

<sup>41</sup> These materials are available at <http://www.insurekidsnow.gov/professionals/dental/index.html>.

<sup>42</sup> The two Child Core Set dental measures parallel reporting on lines 12b and 12c of the Form CMS-416.

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PREVENTIVE DENTAL SERVICES (PDENT)  
Measure Steward: Centers for Medicare & Medicaid Services

Tooth decay, or dental caries, is the most common chronic disease of children. It is a growing problem: among children ages 2 to 5, the prevalence of early childhood caries increased 15 percent between 1988–1994 and 1999–2004. Low-income children suffer disproportionately from tooth decay: in 1999–2004, 32 percent of children in households with incomes above 200 percent of the federal poverty level (FPL) had tooth decay, compared with 54 percent of children in households with incomes below 100 percent of FPL. The disease is almost entirely preventable through a combination of good oral health habits at home, a healthy diet, and early and regular use of preventive dental services. This measure assesses the extent to which children are receiving preventive dental services.

Measure Description

- This measure shows the percentage of children ages 1 to 20, eligible for Medicaid or CHIP Medicaid Expansion programs (that is, eligible for the EPSDT benefit), enrolled for at least 90 continuous days, who received preventive dental services.<sup>43</sup>
- The EPSDT benefit provides comprehensive and preventive health care services, including dental services, for children under age 21 who are enrolled in Medicaid.<sup>44</sup>

Overview of State Reporting

- The number of states reporting the Preventive Dental Services measure in CARTS increased from 22 states for FFY 2010 to 37 for FFY 2011.<sup>45</sup> In FFY 2010 and 2011, states reported data on this measure in two ways: through CARTS and Form CMS-416 (the annual EPSDT report). The number of states reporting may vary depending on the data source used for public reporting.<sup>46</sup>
- To reduce state reporting burden and have a single information source, in FFY 2012, CMS formally began calculating this measure on behalf of states based on data submitted as part of the CMS-416. It should be noted, however, that performance data from the CMS-416 have been presented for

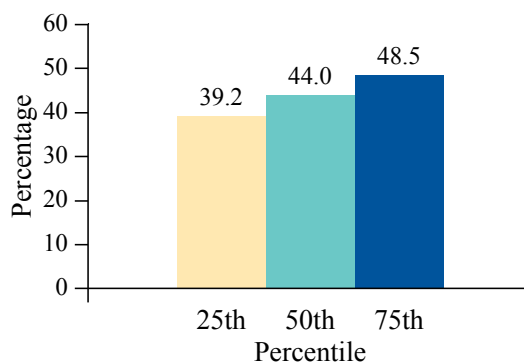
this measure since the 2011 Secretary’s Report.

- For the FFY 2012 Core Measures reporting cycle, all 51 states submitted data for this measure on the FFY 2011 CMS-416.<sup>47</sup>

State Performance

- The median rate among the 51 states reporting the measure for the FFY 2012 Core Measures reporting cycle was 44 percent, with a 9-point spread between the 25th and 75th percentiles (Exhibit PDENT.1).
- Performance on this measure ranged from 14 percent to 58 percent among states, with considerable geographic variation across states (Exhibit PDENT.3, next page).

Exhibit PDENT.1. Percentage of Children Receiving Preventive Dental Services, FFY 2012 Core Measures Reporting Cycle (n = 51 states)



Source: Mathematica analysis of FFY 2011 CMS-416 reports.

<sup>43</sup> This measure is calculated using the administrative method (claims/encounter data).

<sup>44</sup> <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Early-and-Periodic-Screening-Diagnostic-and-Treatment.html>.

<sup>45</sup> The term “states” includes the 50 states and District of Columbia.

<sup>46</sup> The 2011 and 2012 Secretary’s Reports reflect the number of states reporting the dental measures in CARTS, whereas the performance data for this Report are drawn from the CMS-416 and represent all 51 states. CMS formally began calculating this measure on behalf of states using CMS-416 data for the FFY 2012 Core Measures reporting cycle.

<sup>47</sup> States are to submit the CMS-416 report to CMS by April 1st of each year. At the time of this writing, CMS had not received enough FFY 2012 data from states to make meaningful comparisons. As such, this Report includes data submitted by states on the FFY 2011 CMS-416.

Trends

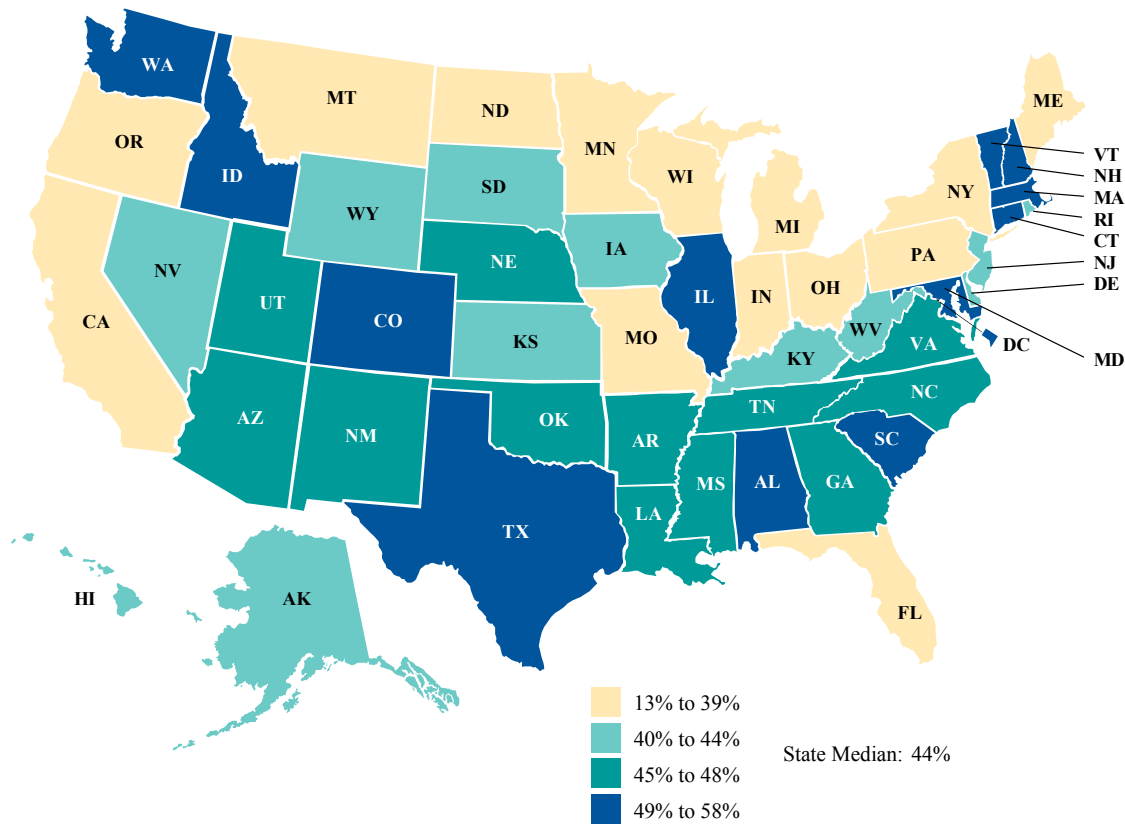
- Among the 51 states reporting data for this measure on the CMS-416 for two years using the new reporting definition,<sup>48</sup> the median rate increased by less than 1 percentage point between the FFY 2011 and FFY 2012 reporting cycles (Exhibit PDENT.2).

Exhibit PDENT.2. Trends in the Percentage of Children Receiving Preventive Dental Services, FFY 2011–2012 Core Measures Reporting Cycles (n = 51 states)

Rate	FFY 2011	FFY 2012
U.S. Total	40.8	41.5
Median	43.2	44.0
25th Percentile	38.2	39.2
75th Percentile	46.8	48.5

Source: Mathematica analysis of FFY 2010 and 2011 CMS-416 reports.

Exhibit PDENT.3. Geographic Variation in the Percentage of Children Receiving Preventive Dental Services, FFY 2012 Core Measures Reporting Cycle (n = 51 states)



Source: Mathematica analysis of FFY 2011 CMS-416 reports.

To view state-specific data for this measure, please see Table PDENT at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2012.zip>.

<sup>48</sup> Starting with the FFY 2010 CMS-416, the population of children for whom the receipt of dental services was to be reported shifted from all children, regardless of length of enrollment, to children covered by Medicaid for at least 90 continuous days.

DENTAL TREATMENT SERVICES (TDENT)  
Measure Steward: Centers for Medicare & Medicaid Services

Tooth decay, or dental caries, is the most common chronic disease of children. If left untreated, tooth decay can negatively affect a child’s physical and social development and school performance. The prevalence of untreated tooth decay among children ages 2 to 5 increased 7 percent between 1988–1994 and 1999–2004. Among children ages 2 to 11, untreated tooth decay disproportionately affects low-income children: in 1999–2004, 33 percent of children in households with incomes below 100 percent of the federal poverty level (FPL) had untreated tooth decay, compared with 28 percent of children between 100 and 200 percent of FPL and 15 percent of those above 200 percent of FPL. This measure assesses the extent to which children are receiving dental treatment services.

Measure Description

- This measure shows the percentage of children ages 1 to 20 eligible for Medicaid or CHIP Medicaid Expansion programs (that is, individuals eligible for the EPSDT benefit), enrolled for at least 90 continuous days, who received dental treatment services.<sup>49</sup>
- The EPSDT benefit provides comprehensive and preventive health care services, including dental services, for children under age 21 who are enrolled in Medicaid.<sup>50</sup>

Overview of State Reporting

- The number of states reporting the Dental Treatment Services measure in CARTS increased from 19 states for FFY 2010 to 35 for FFY 2011.<sup>51</sup> In FFY 2010 and 2011, states reported data on this measure in two ways: through CARTS and Form CMS-416 (the annual EPSDT report). The number of states reporting may vary depending on the data source used for public reporting.<sup>52</sup>
- To reduce state reporting burden and have a single information source, in FFY 2012, CMS formally began calculating this measure on behalf of states based on data

<sup>49</sup> This measure is calculated using the administrative method (claims/encounter data).

<sup>50</sup> <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Benefits/Early-and-Periodic-Screening-Diagnostic-and-Treatment.html>.

<sup>51</sup> The term “states” includes the 50 states and District of Columbia.

<sup>52</sup> The 2011 and 2012 Secretary’s Reports reflect the number of states reporting the dental measures in CARTS, whereas the performance data for this Report are drawn from the CMS-416 and represent all 51 states. CMS formally began calculating this measure on behalf of states using CMS-416 data for the FFY 2012 Core Measures reporting cycle.

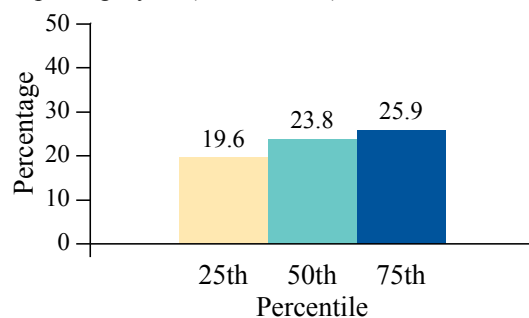
submitted as part of the CMS-416. It should be noted, however, that performance data from the CMS-416 have been presented for this measure since the 2011 Secretary’s Report.

- For the FFY 2012 Core Measures reporting cycle, all 51 states submitted data for this measure on the FFY 2011 CMS-416.<sup>53</sup>

State Performance

- The median rate among the 51 states reporting the measure for the FFY 2012 Core Measures reporting cycle was 24 percent, with a 6-point spread between the 25th and 75th percentiles (Exhibit TDENT.1).
- Performance on this measure ranged from 8 percent to 51 percent among states, with considerable geographic variation across states (Exhibit TDENT.3, next page).

Exhibit TDENT.1. Percentage of Children Receiving Dental Treatment Services, FFY 2012 Core Measures Reporting Cycle (n = 51 states)



Source: Mathematica analysis of FFY 2011 CMS-416 reports.

<sup>53</sup> States are to submit the CMS-416 report to CMS by April 1st of each year. At the time of this writing, CMS had not received enough FFY 2012 data from states to make meaningful comparisons. As such, this Report includes data submitted by states on the FFY 2011 CMS-416.

Trends

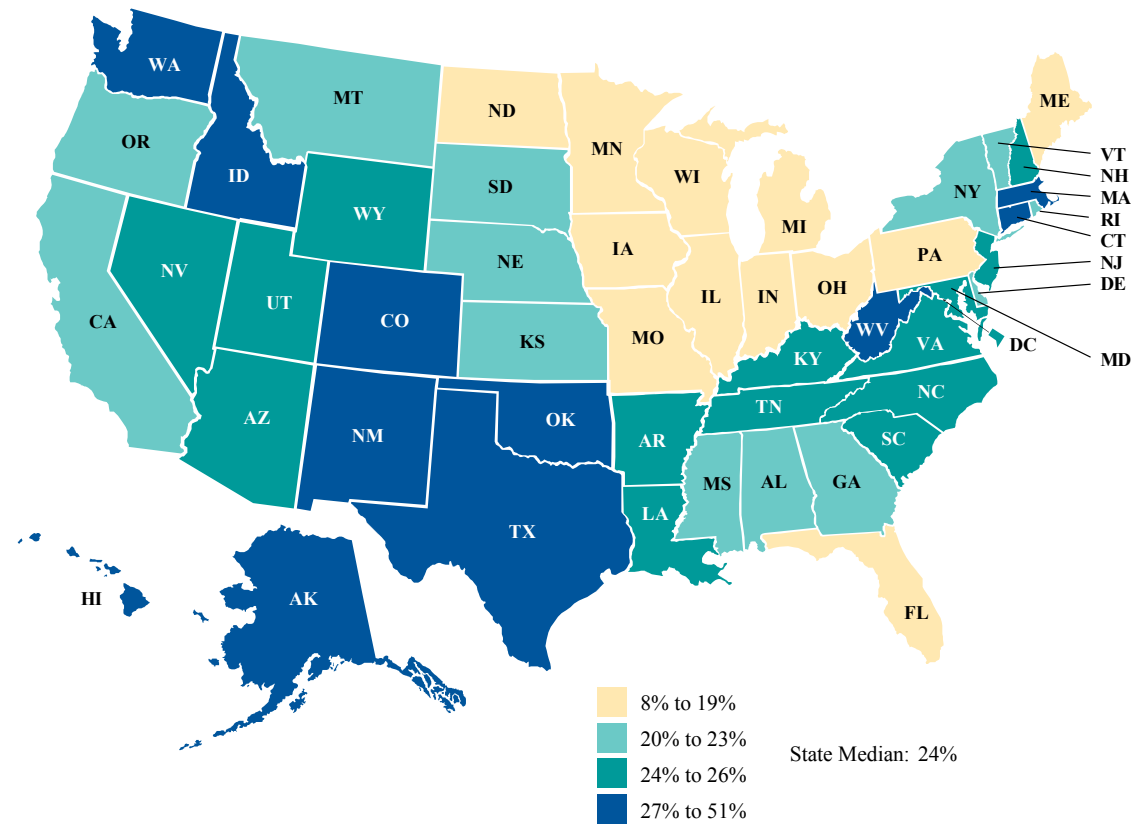
- Among the 51 states reporting data for this measure on the CMS-416 for two years using the new reporting definition,<sup>54</sup> the median rate increased by less than 1 percentage point between the FFY 2011 and FFY 2012 reporting cycles (Exhibit TDENT.2).

Exhibit TDENT.2. Trends in the Percentage of Children Receiving Dental Treatment Services, FFY 2011–2012 Core Measures Reporting Cycles (n = 51 states)

Rate	FFY 2011	FFY 2012
U.S. Total	23.0	23.1
Median	23.5	23.8
25th Percentile	20.2	19.6
75th Percentile	25.8	25.9

Source: Mathematica analysis of FFY 2010 and 2011 CMS-416 reports.

Exhibit TDENT.3. Geographic Variation in the Percentage of Children Receiving Dental Treatment Services, FFY 2012 Core Measures Reporting Cycle (n = 51 states)



Source: Mathematica analysis of FFY 2011 CMS-416 reports.

To view state-specific data for this measure, please see Table TDENT at <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2012.zip>.

<sup>54</sup> Starting with the FFY 2010 CMS-416, the population of children for whom the receipt of dental services was to be reported shifted from all children, regardless of length of enrollment, to children covered by Medicaid for at least 90 continuous days.