







# Quality of Care for Children in Medicaid and CHIP: Findings from the 2017 Child Core Set

#### **Chart Pack**

December 2018

This chart pack is a product of the Medicaid/CHIP Health Care Quality Measures Technical Assistance and Analytic Support Program, sponsored by the Centers for Medicare & Medicaid Services. The program team is led by Mathematica Policy Research, in collaboration with the National Committee for Quality Assurance, Center for Health Care Strategies, Academy Health, and Harbage Consulting.

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#### About the 2017 Child Core Set

Together, Medicaid and the Children's Health Insurance Program (CHIP) served nearly 46 million children in federal fiscal year (FFY) 2017, representing more than 1 in 3 children in the United States and covering nearly half of all births. As the HHS agency responsible for ensuring quality health care coverage for Medicaid and CHIP beneficiaries, the Centers for Medicare & Medicaid Services (CMS) plays a key role in promoting quality health care for children in Medicaid and CHIP. CMS's 2017 core set of health care quality measures for children in Medicaid and CHIP (referred to as the Child Core Set) supports federal and state efforts to collect, report, and use a standardized set of measures to improve the quality of care provided to children covered by Medicaid and CHIP. The 2017 Child Core Set includes 27 measures that address the following domains of care:

- Primary Care Access and Preventive Care
- Maternal and Perinatal Health
- Care of Acute and Chronic Conditions
- Behavioral Health Care
- Dental and Oral Health Services

This Chart Pack summarizes state reporting on the quality of health care furnished to children covered by Medicaid and CHIP during FFY 2017, which generally covers care delivered in calendar year 2016. The Chart Pack includes detailed analysis of state performance on 20 publicly reported measures. For a measure to be publicly reported, data must be provided to CMS by at least 25 states and meet CMS standards for quality.

More information on the Child Core Set, including measure-specific tables, is available at https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/child-core-

set/index.html.

27 measures that address key aspects of health care access and quality for children and pregnant women covered by Medicaid and CHIP

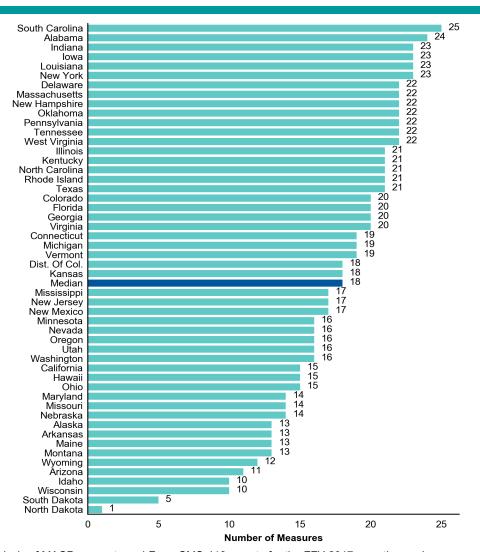


<sup>&</sup>lt;sup>1</sup> Medicaid and CHIP enrollment data for FFY 2017 is available at https://www.medicaid.gov/chip/downloads/fy-2017-childrensenrollment-report.pdf.

## OVERVIEW OF STATE REPORTING OF THE 2017 CHILD CORE SET

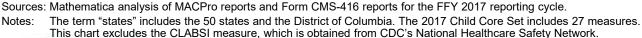


### Number of Child Core Set Measures Reported by States, FFY 2017



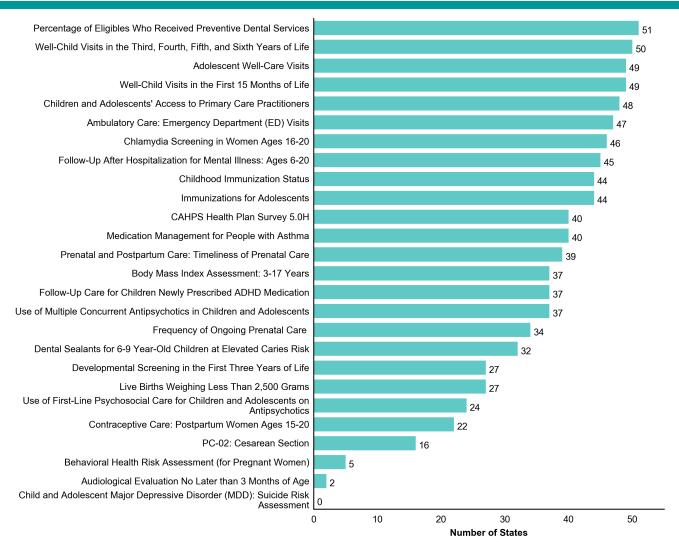
States reported a median of

Child Core Set measures for FFY 2017





### Number of States Reporting the Child Core Set Measures, FFY 2017



states voluntarily reported at least one Child Core Set measure for FFY 2017

Sources: Mathematica analysis of MACPro reports and Form CMS-416 reports for the FFY 2017 reporting cycle.

Notes: The term "states" includes the 50 states and the District of Columbia. The 2017 Child Core Set includes 27 measures. This chart excludes the CLABSI measure, which is obtained from CDC's National Healthcare Safety Network.



### Number of States Reporting the Child Core Set Measures, FFY 2015–2017

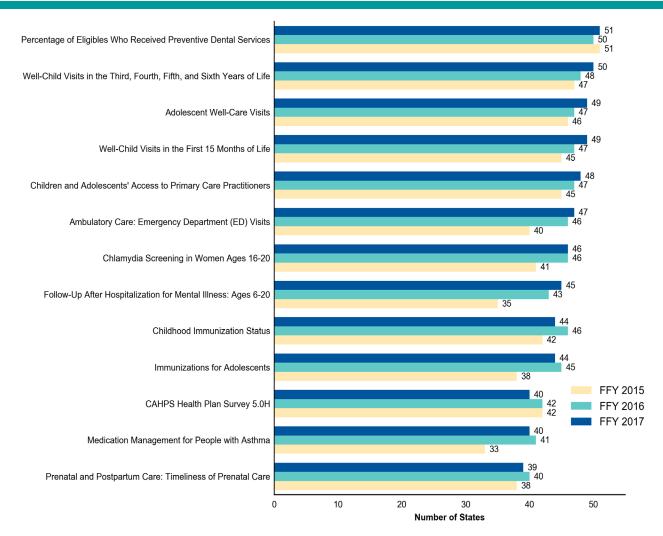


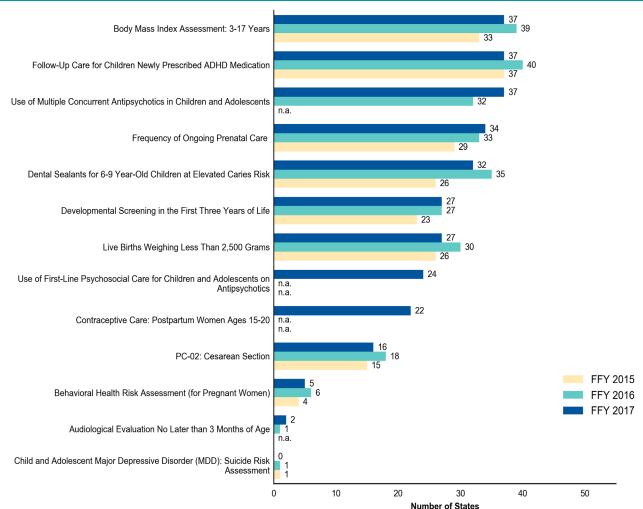
Chart is continued on the next slide.

State reporting increased for

of the 22 measures included in both the 2015 and 2017 Child Core Sets



### Number of States Reporting the Child Core Set Measures, FFY 2015–2017 (continued)



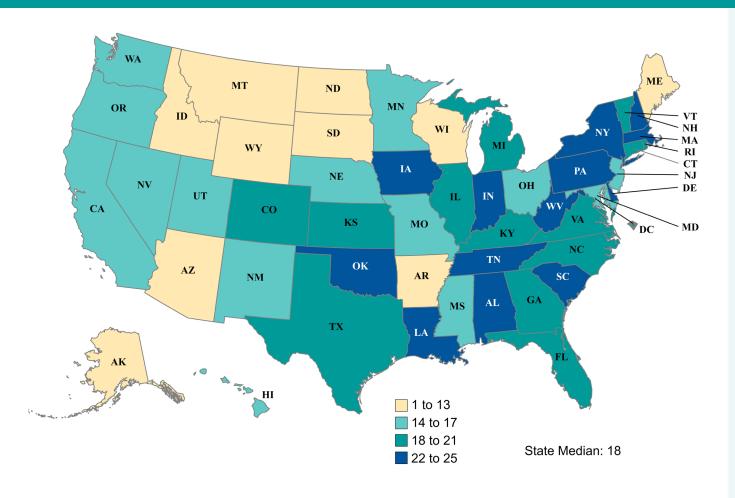
Sources: Mathematica analysis of FFY 2015–2017 MACPro reports and Form CMS-416 reports.

The term "states" includes the 50 states and the District of Columbia. The 2017 Child Core Set includes 27 measures. This chart excludes the CLABSI measure, which is obtained from CDC's National Healthcare Safety Network. Data from previous years may be updated based on new information received after publication of the 2017 Chart Pack.

n.a. = not applicable; measure not included in the Child Core Set for the reporting period.



#### Geographic Variation in the Number of Child Core Set Measures Reported by States, FFY 2017



states reported at least 22 Child Core Set measures for FFY 2017

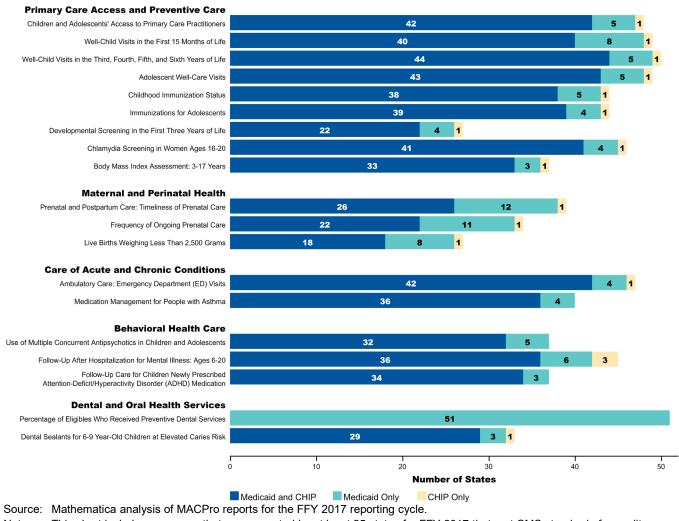
Sources: Mathematica analysis of MACPro reports and Form CMS-416 reports for the FFY 2017 reporting cycle.

Notes: The term "states" includes the 50 states and the District of Columbia. The 2017 Child Core Set includes 27 measures.

This chart excludes the CLABSI measure, which is obtained from CDC's National Healthcare Safety Network.



### Populations Included in Frequently Reported Child Core Set Measures for FFY 2017, By Domain



This chart includes measures that were reported by at least 25 states for FFY 2017 that met CMS standards for quality. The Preventive Dental Services measure was reported by states on the Form CMS-416 reports for children who were enrolled in Medicaid or in Medicaid-expansion CHIP; it does not include children in separate CHIP. This chart excludes the CLABSI measure, which is obtained from CDC's National Healthcare Safety Network.



### Median Performance Rates on Frequently Reported Child Core Set Measures, FFY 2017, By Domain

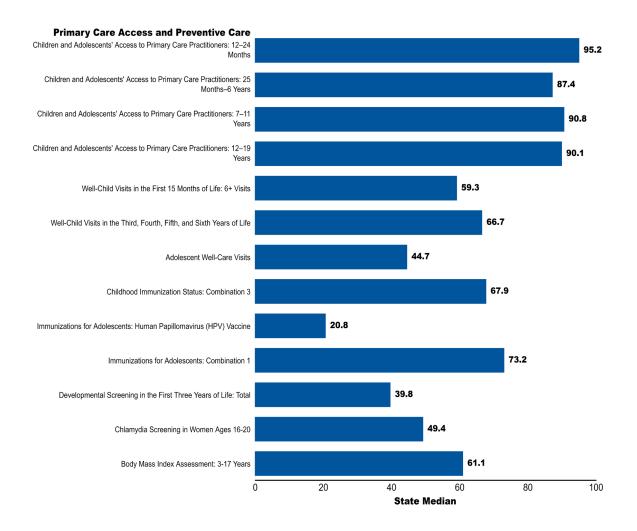
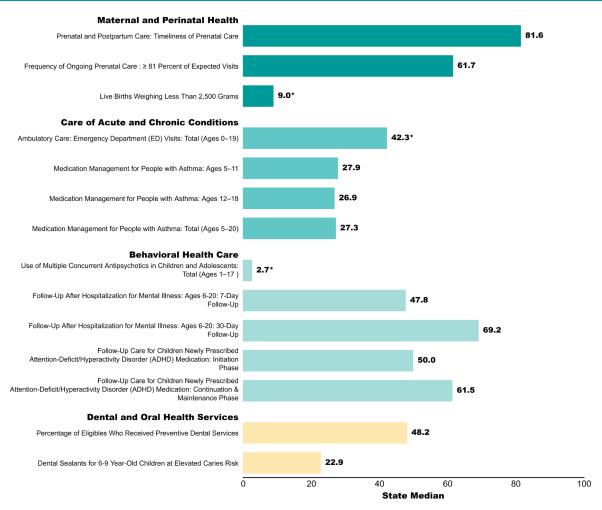


Chart is continued on the next slide.



### Median Performance Rates on Frequently Reported Child Core Set Measures, FFY 2017, By Domain (continued)



Sources: Mathematica analysis of MACPro reports and Form CMS-416 reports for the FFY 2017 reporting cycle.

lotes: This chart includes measures that were reported by at least 25 states for FFY 2017 that met CMS standards for quality.

Medians are reported as percentages for all measures except for Ambulatory Care: ED Visits, which is reported as a rate per 1,000 enrollee months.

\*Lower rates are better for this measure.



#### **Primary Care Access and Preventive Care**

Medicaid and CHIP provide access to well-child visits and other preventive health care services, including immunizations, screenings, and counseling to support healthy living. The Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit is key to ensuring that children and adolescents covered by Medicaid receive appropriate preventive, dental, mental health, developmental, and specialty services. Access to regular primary care services can prevent infectious and chronic disease and other health conditions, help people live longer, healthier lives, and improve the health of the population.

Nine Child Core Set measures of primary care access and preventive care were available for analysis for FFY 2017. These measures are among the most frequently reported measures in the Child Core Set.

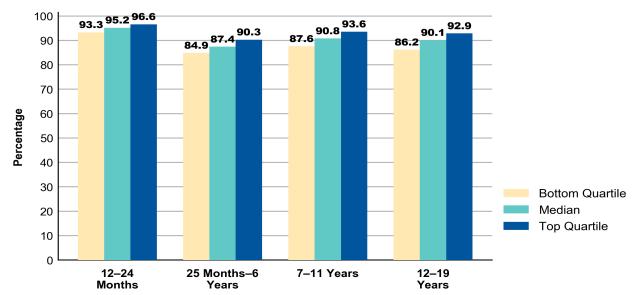
- Children and Adolescents' Access to Primary Care Practitioners
- Well-Child Visits in the First 15 Months of Life
- Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life
- Adolescent Well-Care Visits
- Childhood Immunization Status
- Immunizations for Adolescents
- Developmental Screening in the First Three Years of Life
- Chlamydia Screening in Women Ages 16–20
- Body Mass Index Assessment for Children/Adolescents



### Children and Adolescents' Access to Primary Care Practitioners

Primary care visits offer the opportunity for routine care, such as determining whether children are up to date with immunizations, measuring height and weight, gathering vital signs, offering age-appropriate counseling, and generally assessing a child's wellbeing. A basic measure of access to primary care practitioners (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.

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 2017 (n = 48 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

This measure identifies the percentage of children and adolescents ages 12 months to 19 years who had a visit with a primary care practitioner 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). When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

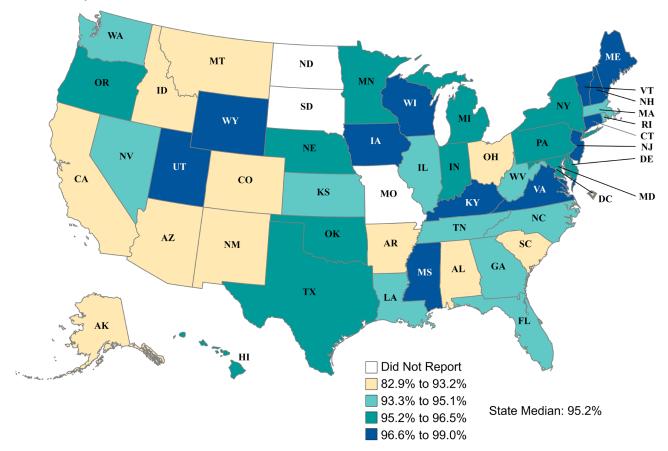
The median percentage of children with a visit to a PCP ranged from

percent percent among the four age categories for this measure (48 states)



### Children and Adolescents' Access to Primary Care Practitioners: 12 to 24 Months (continued)

Geographic Variation in the Percentage of Children and Adolescents with a PCP Visit in the Past Year (12 to 24 Months), FFY 2017 (n = 48 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

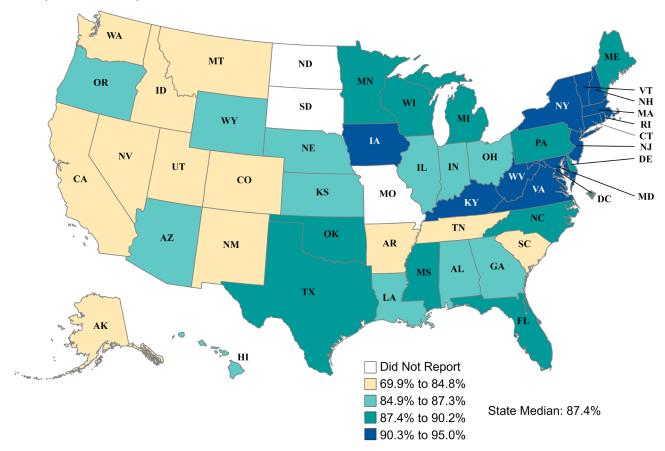
When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



Note:

### Children and Adolescents' Access to Primary Care Practitioners: 25 Months to 6 Years (continued)

Geographic Variation in the Percentage of Children and Adolescents with a PCP Visit in the Past Year (25 Months to 6 Years), FFY 2017 (n = 48 states)



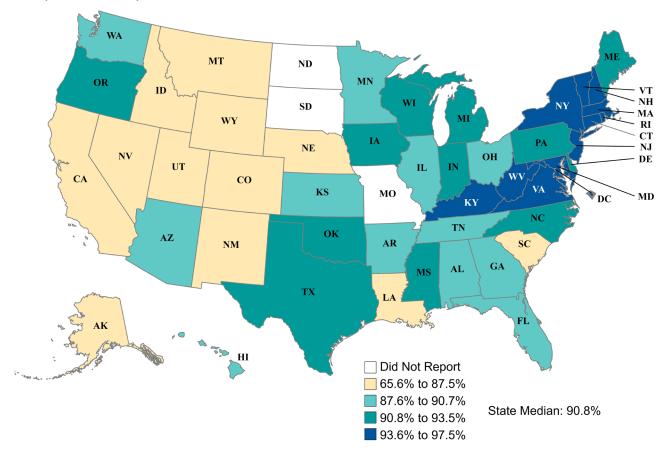
Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



### Children and Adolescents' Access to Primary Care Practitioners: 7 to 11 Years (continued)

Geographic Variation in the Percentage of Children and Adolescents with a PCP Visit in the Past Two Years (7 to 11 Years), FFY 2017 (n = 48 states)



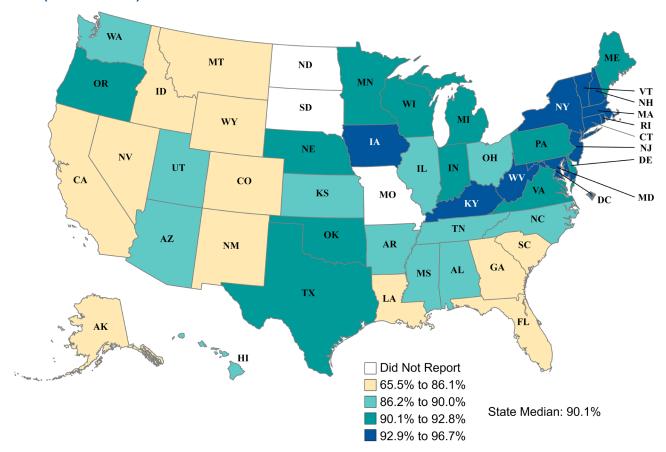
Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



### Children and Adolescents' Access to Primary Care Practitioners: 12 to 19 Years (continued)

Geographic Variation in the Percentage of Children and Adolescents with a PCP Visit in the Past Two Years (12 to 19 Years), FFY 2017 (n = 48 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

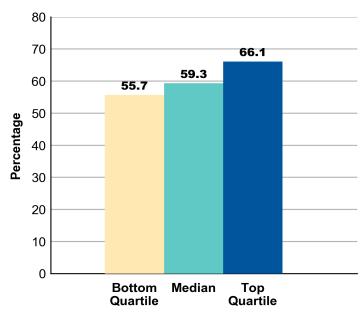


Note:

#### Well-Child Visits in the First 15 Months of Life

The American Academy of Pediatrics and Bright Futures recommend nine well-care visits by the time children turn 15 months of age. These visits should include a health history, physical examination, immunizations, vision and hearing screening, developmental/behavioral assessment, an oral health risk assessment, as well as parenting education on a wide range of topics. In the Child Core Set, state performance is measured as the percentage of children receiving six or more visits by 15 months.

Percentage of Children Receiving Six or More Well-Child Visits in the First 15 Months of Life, FFY 2017 (n = 49 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

This measure identifies the percentage of children who turned 15 months old during the measurement year and who had the following number of well-child visits with a primary care practitioner during their first 15 months of life: 0, 1, 2, 3, 4, 5, and 6 or more visits. This chart shows state reporting for the percentage with 6 or more well-child visits. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

A median of

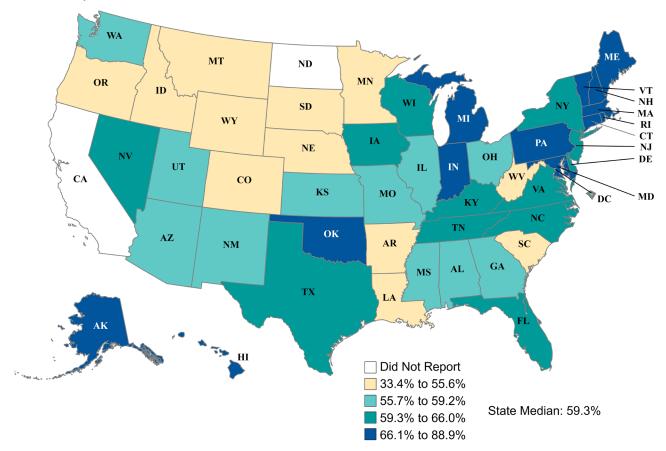
percent of children received six or more well-child visits in the first 15 months of life (49 states)



Notes:

#### Well-Child Visits in the First 15 Months of Life (continued)

Geographic Variation in the Percentage of Children Receiving Six or More Well-Child Visits in the First 15 Months of Life, FFY 2017 (n = 49 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

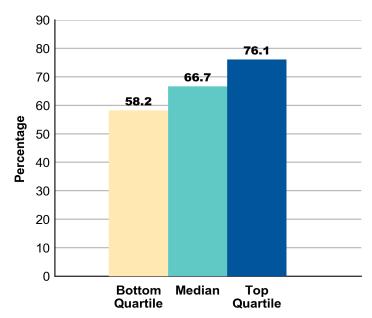
Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



### Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life

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.

Percentage of Children Receiving At Least One Well-Child Visit in the Third, Fourth, Fifth, and Sixth Years of Life, FFY 2017 (n = 50 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

Notes: This measure identifies the percentage of children ages 3 to 6 who had one or more well-child visits with a primary care practitioner during the measurement year. When a state reported separate rates for its Medicaid and CHIP populations, the rates were calculated using the rate for the larger measure-eligible population.

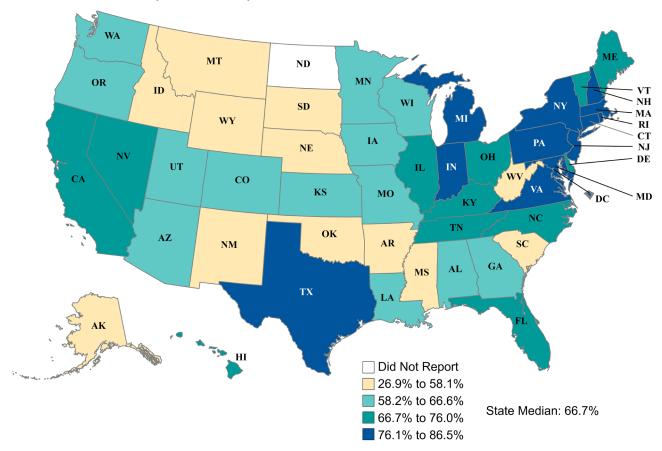
A median of

percent of children received at least one well-child visit in the third, fourth, fifth, and sixth years of life (50 states)



#### Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life (continued)

Geographic Variation in the Percentage of Children Receiving At Least One Well-Child Visit in the Third, Fourth, Fifth, and Sixth Years of Life, FFY 2017 (n = 50 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

Note:

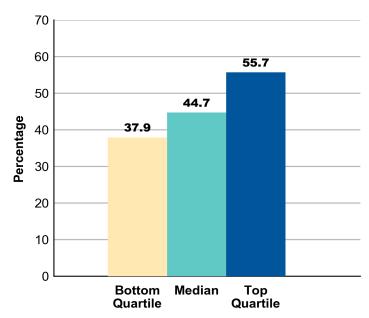
When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



#### Adolescent Well-Care Visits

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.

#### Percentage of Adolescents Ages 12 to 21 Receiving At Least One Well-Care Visit, FFY 2017 (n = 49 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

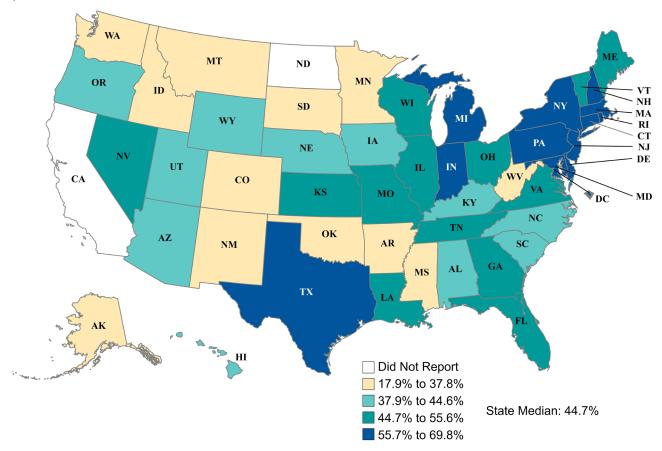
This measure identifies the percentage of adolescents ages 12 to 21 who had at least one comprehensive well-care visit with a primary care practitioner or an obstetrical/gynecological practitioner during the measurement year. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

A median of
percent
of adolescents ages
12 to 21 had at least
one well-care visit
(49 states)



#### Adolescent Well-Care Visits (continued)

#### Geographic Variation in the Percentage of Adolescents Ages 12 to 21 Receiving At Least One Well-Care Visit, FFY 2017 (n = 49 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

Note:

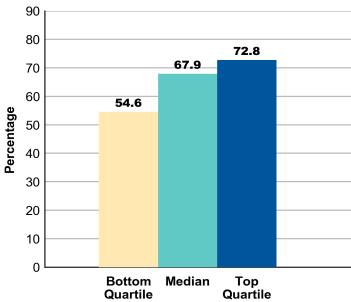
When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



#### Childhood Immunization Status

The frequency of recommended preventive care services, including immunizations and screenings, can be used to indicate the clinical quality of primary care. A key indicator of the continuity of primary care is whether children are up to date on their immunizations. The childhood immunization measure includes 10 individual vaccine rates and 9 combination rates; one of the most commonly reported rates is "Combination 3."

Percentage of Children Up to Date on Recommended Immunizations (Combination 3) by their Second Birthday, FFY 2017 (n = 41 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

This measure identifies the percentage of children who turned 2 years old during the measurement year and had specific vaccines and combinations of vaccines by their second birthday. This chart shows reporting for the Combination 3 rate, which includes four doses of diphtheria, tetanus, and pertussis (DTaP) vaccines, three doses of polio vaccine (IPV), one dose of measles, mumps, and rubella (MMR) vaccine, three doses of haemophilus influenzae type b (HiB) vaccine, three doses of hepatitis B vaccine, one dose of varicella zoster virus (VZV) vaccine, and four doses of pneumococcal conjugate (PCV) vaccine. This chart excludes Oregon, Texas, and Wisconsin, which reported the measure but did not provide data for the Combination 3 rate. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

A median of

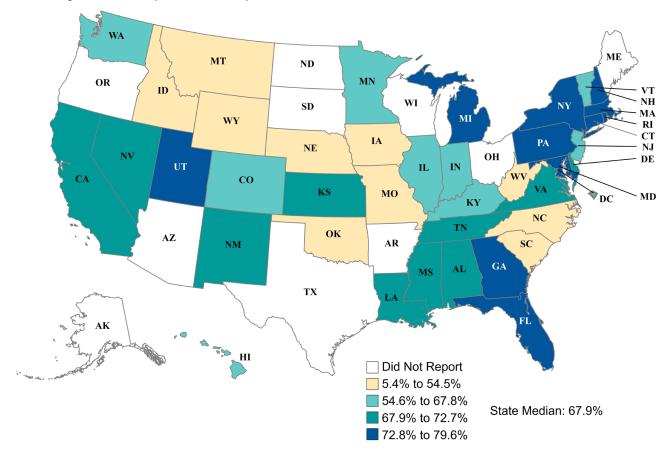
percent of children were up to date on recommended immunizations (Combination 3) by their second birthday (41 states)



Notes:

#### Childhood Immunization Status (continued)

Geographic Variation in the Percentage of Children Up to Date on Recommended Immunizations (Combination 3) by their Second Birthday, FFY 2017 (n = 41 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

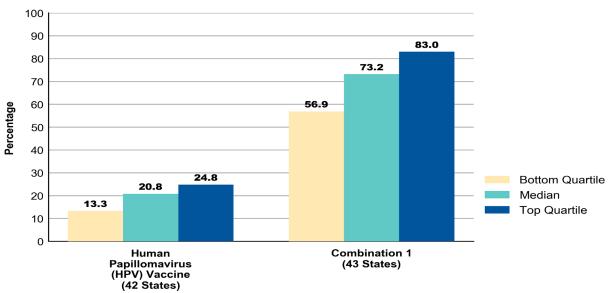
Notes: This chart excludes Oregon, Texas, and Wisconsin, which reported the measure but did not provide data for the Combination 3 rate. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



#### Immunizations for Adolescents

A key indicator of the continuity of primary care is whether adolescents are up to date on their immunizations. The adolescent immunization measure includes three individual vaccine rates: (1) Meningococcal vaccine, (2) Tetanus, diphtheria toxoids, and acellular pertussis vaccine (Tdap), and (3) human papillomavirus (HPV) vaccine. In the Child Core Set, state performance is measured as the percentage of adolescents receiving the HPV vaccine and the recommended doses of both the meningococcal and Tdap vaccine (Combination 1).

#### Percentage of Adolescents Up to Date on Recommended Immunizations (HPV Vaccine and Combination 1) by their 13th Birthday, FFY 2017



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

This measure identifies the percentage of adolescents who turned 13 years old during the measurement year and had one dose of meningococcal vaccine, one tetanus, diptheria toxoids and acellular pertussis (Tdap) vaccine, and three doses of human papillomavirus (HPV) vaccine by their 13th birthday. The measure calculates a rate for each vaccine and two combination rates. This chart shows state reporting for the HPV vaccine rate and the Combination 1 rate (percentage receiving both meningococcal and Tdap vaccines). The HPV rate excludes Idaho and Wisconsin, which reported the measure but did not report the HPV rate. The Combination 1 rate excludes California, which reported the measure but did not report the Combination 1 rate. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

A median of

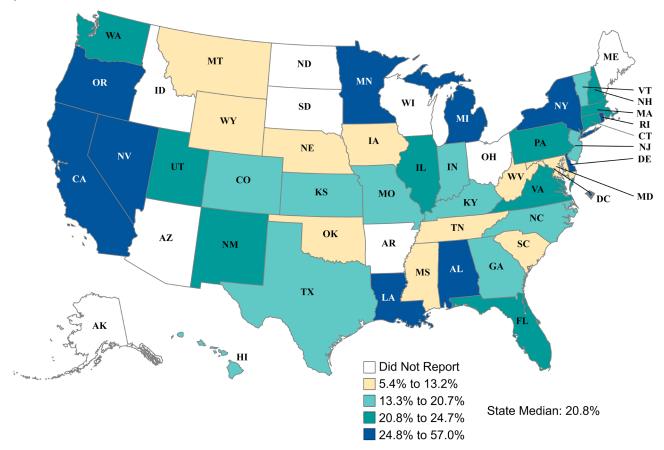
percent
of adolescents were up
to date on the HPV
vaccine and

percent
were up to date on
Combination 1
immunizations by their
13th birthday
(42–43 states)



### Immunizations for Adolescents: Human Papillomavirus (HPV) Vaccination Rate (continued)

Geographic Variation in the Percentage of Adolescents Up to Date on the HPV Vaccine by their 13th Birthday, FFY 2017 (n = 42 states)



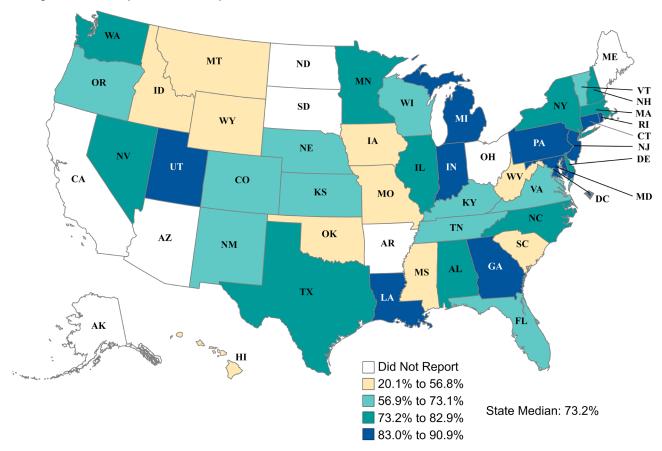
Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

Note: This chart excludes Idaho and Wisconsin, which reported the measure but did not provide data for the HPV rate. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



#### Immunizations for Adolescents: Combination 1 Rate (continued)

Geographic Variation in the Percentage of Adolescents Up to Date on Recommended Immunizations (Combination 1) by their 13th Birthday, FFY 2017 (n = 43 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

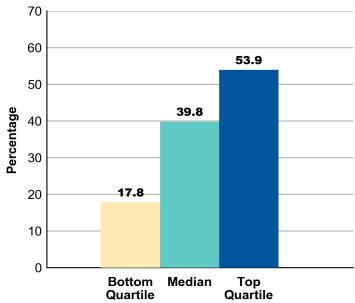
Note: This chart excludes California, which reported the measure but did not provide data for the Combination 1 rate (percentage receiving both meningococcal and Tdap vaccines). When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



#### Developmental Screening in the First Three Years of Life

Early detection of developmental delays and early intervention programs can greatly improve a child's health, social, and academic outcomes. The American Academy of Pediatrics and Bright Futures recommend that developmental screening tests be administered at the 9-, 18-, and 30-month well-child visits. In the Child Core Set, state performance is measured as the percentage of children screened for risk of developmental, behavioral, and social delays using a standardized screening tool in the 12 months preceding or on their first, second, or third birthday.

Percentage of Children Screened for Risk of Developmental, Behavioral, and Social Delays Using a Standardized Screening Tool Preceding or on their First, Second, or Third Birthday, FFY 2017 (n = 27 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

This measure identifies the percentage of children screened for risk of developmental, behavioral, or social delays using a standardized screening tool in the 12 months preceding or on their first, second, or third birthday. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

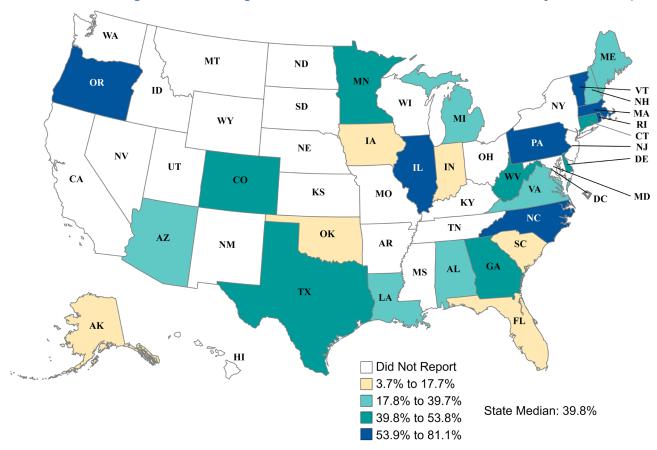
A median of

percent of children were screened for risk of developmental, behavioral, and social delays using a standardized tool in the 12 months preceding or on their first, second, or third birthday (27 states)



#### Developmental Screening in the First Three Years of Life (continued)

Geographic Variation in Percentage of Children Screened for Risk of Developmental, Behavioral, and Social Delays Using a Standardized Screening Tool Preceding or on their First, Second, or Third Birthday, FFY 2017 (n = 27 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

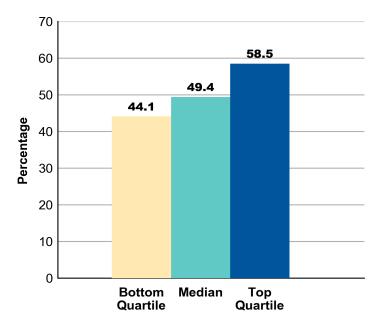
Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



#### Chlamydia Screening in Women Ages 16–20

Chlamydia is the most commonly reported sexually transmitted infection and is 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. Recommended well care for young adult women who are sexually active includes annual screening for chlamydia. The Child Core Set reports chlamydia screening rates for women ages 16 to 20.

Percentage of Sexually Active Women Ages 16 to 20 who were Screened for Chlamydia, FFY 2017 (n = 46 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

Notes: This measure identifies the percentage of women ages 16 to 20 who were sexually active and who had at least one test for chlamydia during the measurement year. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

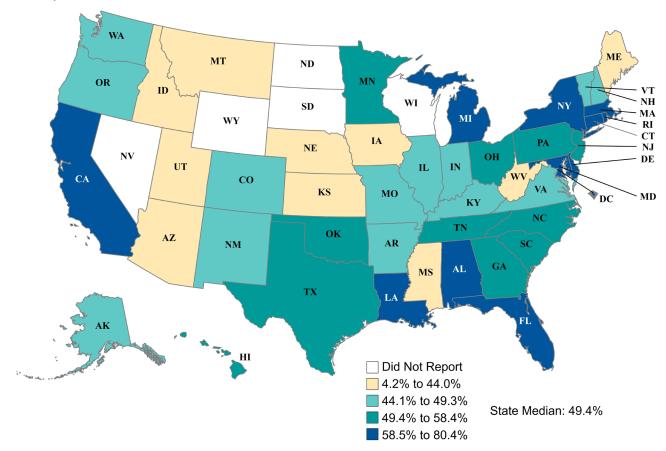
A median of

percent of sexually active women ages 16 to 20 were screened for chlamydia (46 states)



#### Chlamydia Screening in Women Ages 16–20 (continued)

Geographic Variation in the Percentage of Sexually Active Women Ages 16 to 20 who were Screened for Chlamydia, FFY 2017 (n = 46 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

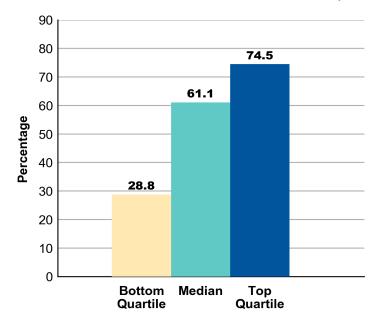


Note:

#### Body Mass Index (BMI) Assessment for Children/Adolescents

Monitoring of BMI helps providers identify children who are overweight or obese and at increased risk for related health complications. The BMI Assessment for Children and Adolescents measure indicates the percentage of beneficiaries with a primary care visit whose BMI percentile was documented in the medical record.

Percentage of Children Ages 3 to 17 who had an Outpatient Visit and whose Body Mass Index Percentile is Documented in the Medical Record, FFY 2017 (37 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

This measure identifies the percentage of children ages 3 to 17 who had an outpatient visit with a primary care practitioner or obstetrical/gynecological practitioner and who had evidence of body mass index percentile documented in the medical record during the measurement year. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

A median of

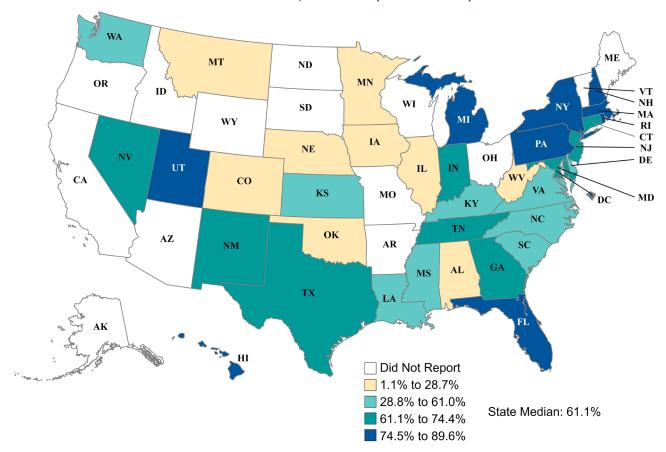
percent of children and adolescents ages 3 to 17 with a primary care visit had their BMI percentile documented in the medical record (37 states)



Notes:

#### Body Mass Index (BMI) Assessment for Children/Adolescents (continued)

Geographic Variation in the Percentage of Children Ages 3 to 17 who had an Outpatient Visit and whose Body Mass Index Percentile is Documented in the Medical Record, FFY 2017 (n = 37 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



Note:

#### **Maternal and Perinatal Health**

As the largest payer for maternity care in the United States, Medicaid has an important role to play in improving perinatal health outcomes. Despite improvements in access to coverage and care, the rate of births reported as preterm or low birth weight among women in Medicaid is higher than the rate for those who are privately insured. The health of a child is affected by a mother's health and the care she receives during pregnancy. When women access the health care system for maternity care, an opportunity is presented to promote services and behaviors to optimize their health and the health of their children.

More information about CMS's efforts to improve maternal and infant health care quality is available at <a href="https://www.medicaid.gov/medicaid/quality-of-care/improvement-initiatives/maternal-and-infant-health/index.html">https://www.medicaid.gov/medicaid/quality-of-care/improvement-initiatives/maternal-and-infant-health/index.html</a>.

Four Child Core Set measures of maternal and perinatal health were available for analysis for FFY 2017.

- Prenatal and Postpartum Care: Timeliness of Prenatal Care
- Frequency of Ongoing Prenatal Care
- · Live Births Weighing Less Than 2,500 Grams
- Pediatric Central Line-Associated Blood Stream Infections



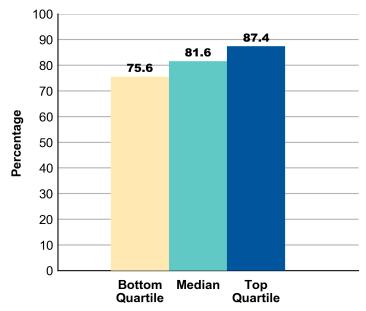
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<sup>&</sup>lt;sup>1</sup> https://www.medicaid.gov/Federal-Policy-Guidance/Downloads/CIB-07-18-2014.pdf

#### Prenatal and Postpartum Care: Timeliness of Prenatal Care

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 or promote access to recommended care. The measure indicates how often pregnant women received timely prenatal care (during the first trimester or within 42 days of Medicaid or CHIP enrollment).

Percentage of Women Delivering a Live Birth with a Prenatal Care Visit in the First Trimester or within 42 Days of Medicaid or CHIP Enrollment, FFY 2017 (n = 39 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

This measure identifies the percentage of deliveries of live births on or between November 6 of the year prior to the measurement year and November 5 of the measurement year that had a prenatal care visit in the first trimester or within 42 days of enrollment in Medicaid or CHIP. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

A median of

82

percent

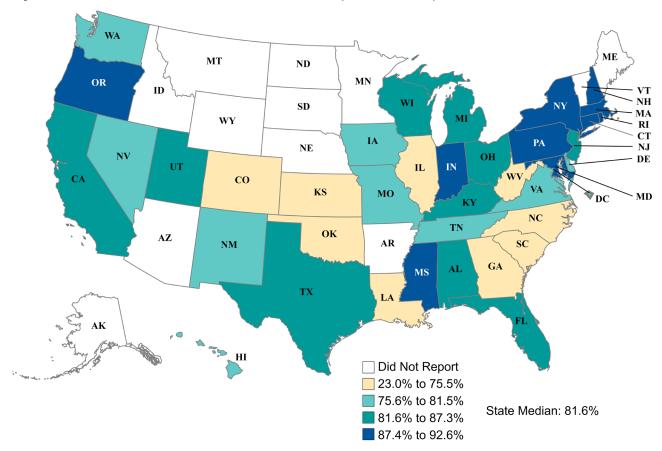
of pregnant women had a prenatal care visit in the first trimester or within 42 days of Medicaid or CHIP enrollment (39 states)



Notes:

#### Prenatal and Postpartum Care: Timeliness of Prenatal Care (continued)

Geographic Variation in the Percentage of Women Delivering a Live Birth with a Prenatal Care Visit in the First Trimester or within 42 Days of Medicaid or CHIP Enrollment, FFY 2017 (n = 39 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

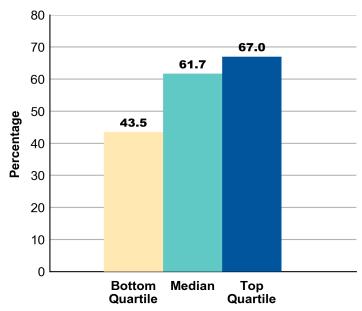


Note:

#### Frequency of Ongoing Prenatal Care

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. Regular prenatal care enables providers to promote positive maternal and infant health outcomes. This measure assesses whether pregnant women had more than 80 percent of the expected number of prenatal care visits.

Percentage of Women Delivering a Live Birth who Received More than 80 Percent of the Expected Number of Prenatal Care Visits, FFY 2017 (n = 34 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

Notes: This measure identifies the percentage of deliveries of live births on or bety

This measure identifies the percentage of deliveries of live births on or between November 6 of the year prior to the measurement year and November 5 of the measurement year that received the following percentages of expected prenatal visits: less than 21 percent, 21-40 percent, 41-60 percent, 61-80 percent, and more than 80 percent. This chart shows state reporting for the percentage with more than 80 percent of expected prenatal visits. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

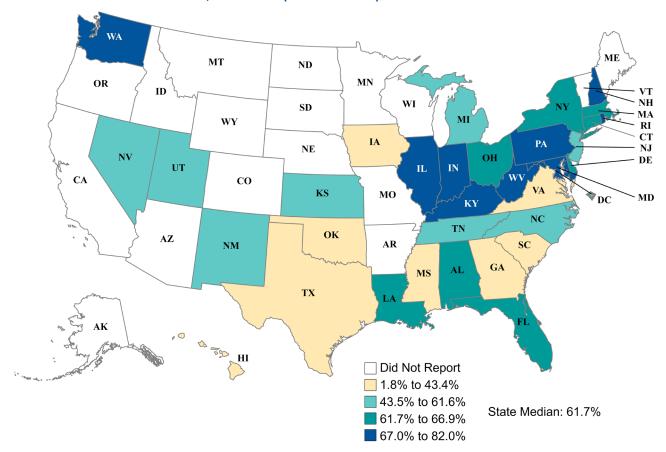
A median of

percent of pregnant women had more than 80 percent of the expected number of prenatal care visits (34 states)



#### Frequency of Ongoing Prenatal Care (continued)

Geographic Variation in the Percentage of Women Delivering a Live Birth who Received More than 80 Percent of the Expected Number of Prenatal Care Visits, FFY 2017 (n = 34 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

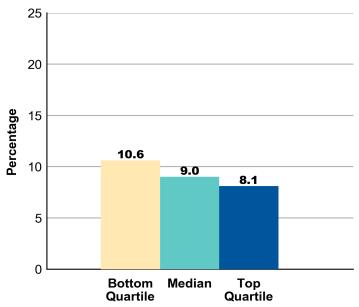
Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



#### Live Births Weighing Less Than 2,500 Grams

An infant's birth weight is a common measure of infant and maternal health and well-being. Infants weighing less than 2,500 grams at birth may experience serious and costly health problems and developmental delays. Pregnant women are at higher risk of a low birth weight baby if they have chronic health conditions (such as high blood pressure or diabetes), low weight gain during pregnancy, high stress levels, or high-risk behaviors (such as drinking alcohol, smoking cigarettes, or using drugs).

Percentage of Live Births Weighing Less Than 2,500 Grams, FFY 2017 (n = 25 states) [Lower rates are better for this measure]



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

This measure identifies the percentage of live births that weighed less than 2,500 grams during the measurement period. This chart excludes Georgia and Indiana, which reported the measure but did not use Child Core Set specifications. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

A median of

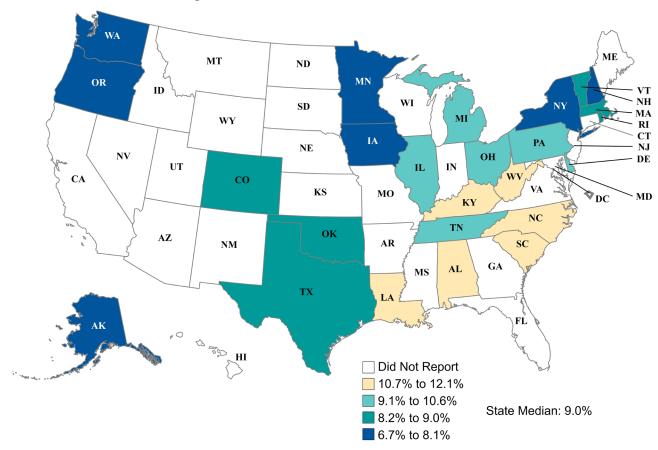
percent of live births financed by Medicaid or CHIP weighed less than 2,500 grams (25 states)



Notes:

#### Live Births Weighing Less Than 2,500 Grams (continued)

Geographic Variation in the Percentage of Live Births Weighing Less Than 2,500 Grams, FFY 2017 (n = 25 states) [Lower rates are better for this measure]



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

Note: This chart excludes Georgia and Indiana, which reported the measure but did not use Child Core Set specifications. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



#### Pediatric Central Line-Associated Blood Stream Infections

Central Line-Associated Blood Stream Infections (CLABSIs) are a significant cause of mortality and morbidity in hospital neonatal intensive care units (NICUs). Premature infants in NICUs are particularly susceptible to infection because of their immature immune systems. This measure reports the rate of CLABSIs in NICUs. The CLABSI measure is obtained from data reported by hospitals to the Centers for Disease Control and Prevention's (CDC's) National Healthcare Safety Network (NHSN). This measure includes all neonatal CLABSI incidents in NICUs, not just those for infants covered by Medicaid/CHIP.

The standardized infection ratio (SIR) compares the observed number of infections reported to the NHSN during 2016 to the predicted number of infections based on the updated 2015 national baseline and risk adjustment calculations. SIRs are only calculated for a state when at least five health care facilities reported 2016 data, and/or at least one infection is predicted to occur. SIRs were assessed for statistical significance using a mid-p exact test. CDC updated the SIR baselines and risk models using 2015 data reported to the NHSN due to (1) several modifications to the NHSN surveillance protocols since the historical baseline time periods, and (2) changes in the size and service characteristics of facilities reporting to NHSN since that time. More information on the updated national baseline is available at <a href="https://www.cdc.gov/nhsn/2015rebaseline/index.html">https://www.cdc.gov/nhsn/2015rebaseline/index.html</a>.

Among the states with CLABSI rates for 2016, the SIRs ranged from 0.256 to 1.613. An SIR significantly lower than 1.0 means that fewer infections occurred than predicted given the 2015 baseline data. An SIR significantly higher than 1.0 means that more infections occurred than predicted given the 2015 baseline data. An SIR not significantly different from 1.0 means that the number of infections is no different than predicted given the 2015 baseline data.

More information on the methods used to assess state performance is available at <a href="https://www.cdc.gov/hai/data/portal/progress-report.html">https://www.cdc.gov/hai/data/portal/progress-report.html</a>. More information on the risk adjustment methodology is available in NHSN's SIR Guide at <a href="https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf">https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf</a>.

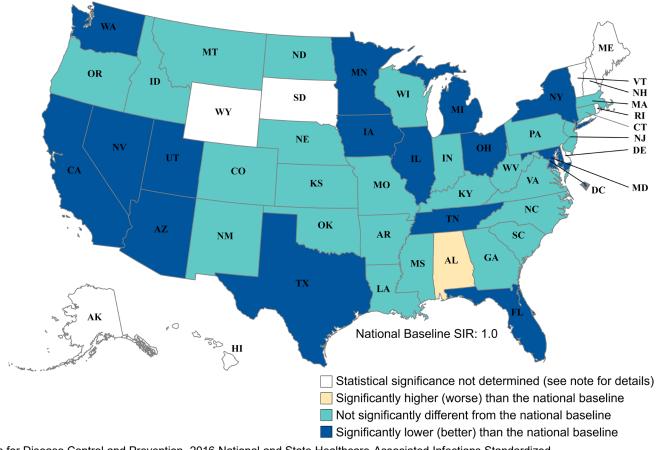
states
had a significantly
lower (better)
standardized infection
ratio (SIR) than the
national baseline (42
states)



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#### Pediatric Central Line-Associated Blood Stream Infections (continued)

Geographic Variation in State Performance on Pediatric Central Line-Associated Blood Stream Infections (CLABSIs): Number of Infections (Reported and Predicted) and Standardized Infection Ratio (SIR), 2016 (n = 42 states)



Source: Centers for Disease Control and Prevention, 2016 National and State Healthcare-Associated Infections Standardized Infection Ratio Report, Table 3d, available https://www.cdc.gov/hai/excel/hai-progress-report/2016-SIR-ACH.xlsx.

Note: This chart indicates whether each state's infection rate, as measured by the SIR, is higher, lower, or not significantly different relative to the 2015 national baseline. Nine states (AK, DE, HI, ME, NH, RI, SD, VT, and WY) had fewer than five facilities report so data are not displayed.



46

#### **Care of Acute and Chronic Conditions**

The extent to which children receive safe, timely, and effective care for acute and chronic conditions is a key indicator of the quality of care provided in Medicaid and CHIP. Visits for routine screening and monitoring play an important role in managing the health care needs of people with acute and chronic conditions, potentially avoiding or slowing disease progression, and reducing costly avoidable hospital admissions and emergency department visits. Children covered by Medicaid have higher rates of physical, developmental, and intellectual health problems than privately insured children. Ensuring that children receive timely, quality care may reduce the need for more costly care later and improve their chances of leading healthy, productive lives.

Two Child Core Set measures of care of acute and chronic conditions were available for analysis for FFY 2017.

- Ambulatory Care: Emergency Department Visits
- Medication Management for People with Asthma

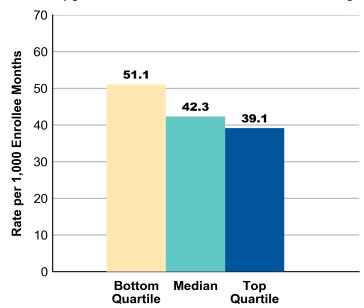


<sup>1</sup> https://firstfocus.org/wp-content/uploads/2014/05/Medicaid-Works.pdf

#### Ambulatory Care: Emergency Department (ED) Visits

Unnecessary visits to a hospital emergency department (ED) may indicate lack of access to more appropriate sources of medical care, such as primary care providers or specialists. Excessive visits to the ED can result in overcrowding and increased ED wait time. Understanding the rate of ED visits among children covered by Medicaid and CHIP can help states identify strategies to improve access to and utilization of appropriate sources of care.

Rate of Emergency Department Visits per 1,000 Enrollee Months for Children Ages 0 to 19, FFY 2017 (n = 47 states) [Lower rates are better for this measure]



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

Notes: This measure identifies the rate of emergency department visits per 1,000 enrollee months among children up to age 19. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

Children ages 0 to 19 had a median of

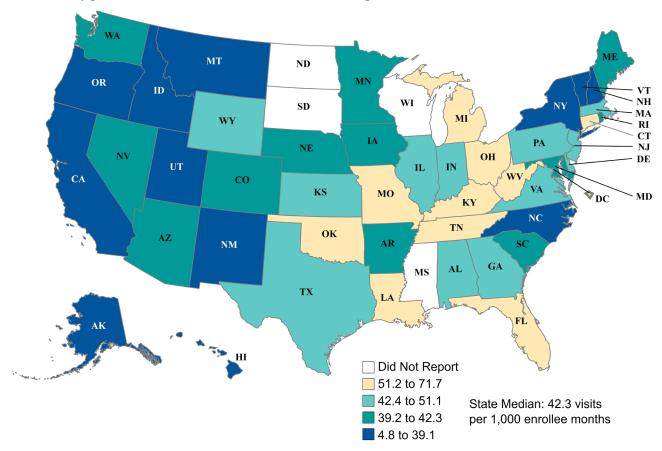
42

emergency department visits per 1,000 enrollee months (47 states)



#### Ambulatory Care: Emergency Department (ED) Visits (continued)

Geographic Variation in the Rate of Emergency Department Visits per 1,000 Enrollee Months for Children Ages 0 to 19, FFY 2017 (n = 47 states) [Lower rates are better for this measure]



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

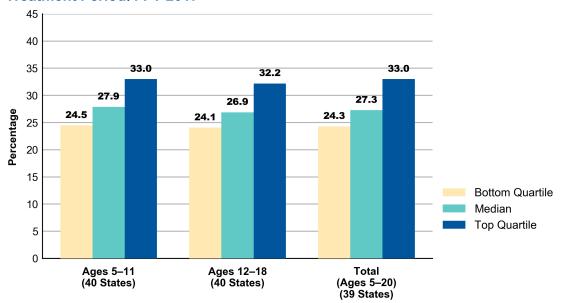
Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



#### Medication Management for People with Asthma

Asthma is a preventable and treatable condition that can be managed through use of appropriate medications. Children with persistent asthma who regularly take their prescribed controller medications experience fewer asthma episodes, resulting in less frequent trips to the emergency department and decreased costs associated with care. This measure is an indicator of consistent use of asthma controller medications among children with moderate to severe asthma.

Percentage of Children Ages 5 to 20\* with Persistent Asthma who were Dispensed Appropriate Medications and Remained on Medication for at Least 75 Percent of their Treatment Period. FFY 2017



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

This measure identifies the percentage of children ages 5 to 20 with persistent asthma who were dispensed appropriate asthma controller medications that they remained on for at least 50 percent and at least 75 percent of their treatment period. This chart shows state reporting for the percentage of children who remained on asthma controller medication for at least 75 percent of their treatment period. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used. The rate for ages 19 to 20 is not displayed because it was not reported by at least 25 states.

\*Data displayed for the total rate include children ages 5 to 20 for 23 states and ages 5 to 18 for 16 states.

percent of children ages 5 to 20 remained on asthma controller medication for at least 75 percent of their treatment period (39 states)

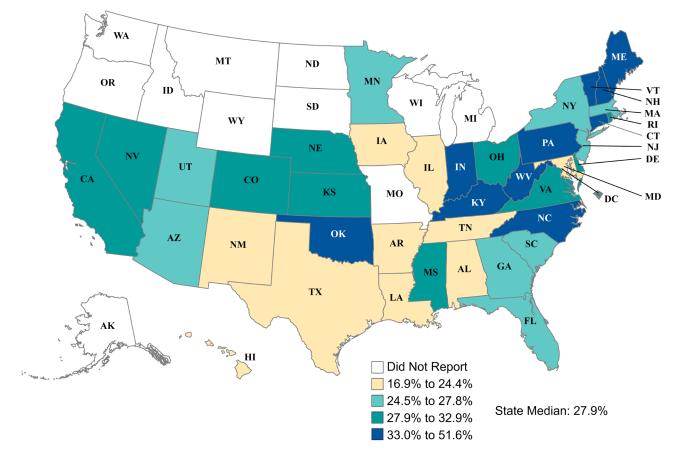


Notes:

#### Medication Management for People with Asthma: Ages 5 to 11 (continued)

Geographic Variation in the Percentage of Children Ages 5 to 11 with Persistent Asthma who were Dispensed Appropriate Medications and Remained on Medication for at Least 75 Percent of their Treatment Period, FFY 2017 (n = 40

states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

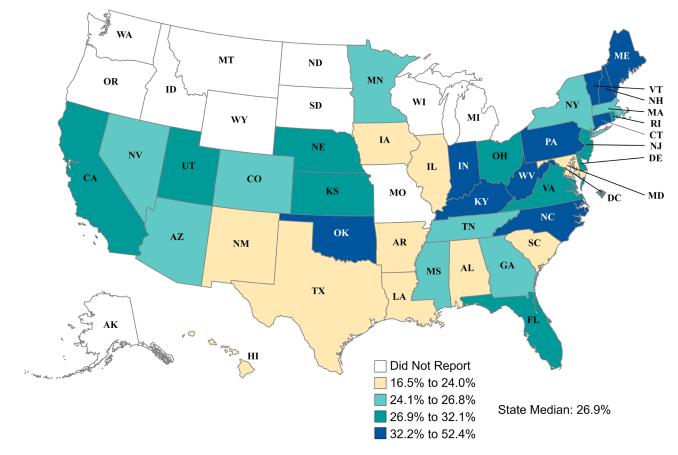
Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



#### Medication Management for People with Asthma: Ages 12 to 18 (continued)

Geographic Variation in the Percentage of Children Ages 12 to 18 with Persistent Asthma who were Dispensed Appropriate Medications and Remained on Medication for at Least 75 Percent of their Treatment Period, FFY 2017 (n = 40)

states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

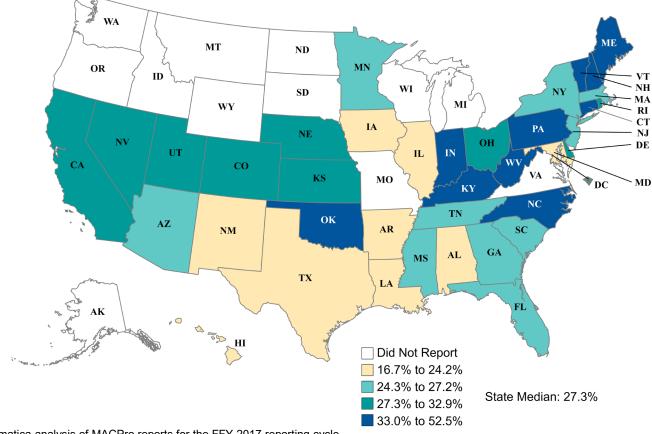
Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



#### Medication Management for People with Asthma: Ages 5 to 20 (continued)

Geographic Variation in the Percentage of Children Ages 5 to 20\* with Persistent Asthma who were Dispensed Appropriate Medications and Remained on Medication for at Least 75 Percent of their Treatment Period, FFY 2017 (n = 39)





Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

Note: This chart excludes Virginia, which reported the measure but did not provide data for the Total (ages 5 to 20) rate. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



<sup>\*</sup>Data displayed in this chart include children ages 5 to 20 for 23 states and ages 5 to 18 for 16 states.

#### **Behavioral Health Care**

As the single largest payers for mental health services in the United States, Medicaid and CHIP play an important role in providing behavioral health care and monitoring the effectiveness of that care. For the purpose of the Child Core Set, the term "behavioral health care" refers to treatment of mental health conditions and other behavioral conditions, such as attention-deficit/hyperactivity disorder (ADHD). Improvement of benefit design and service delivery for behavioral health care in Medicaid and CHIP is a high priority for CMS, in collaboration with other federal agencies, states, providers, and consumers.

Three Child Core Set measures of behavioral health care were available for analysis for FFY 2017.

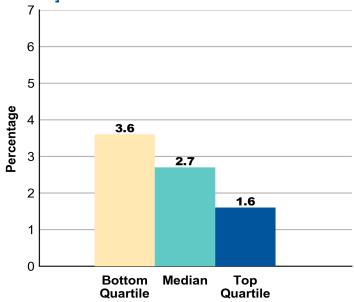
- Use of Multiple Concurrent Antipsychotics in Children and Adolescents
- Follow-Up After Hospitalization for Mental Illness: Ages 6–20
  - Follow-Up Within 7 Days of Discharge
  - Follow-Up Within 30 Days of Discharge
- Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication
  - Initiation Phase
  - · Continuation and Maintenance Phase



## Use of Multiple Concurrent Antipsychotics in Children and Adolescents

Concurrent use of antipsychotic medications in children and adolescents has increased over time. Concerns related to the use of these medications in children have grown due to questions regarding appropriate use, medication management, and side effects. Children in foster care are among the highest users of two or more antipsychotic medications. This measure addresses concerns about the appropriateness and safety of prescribing multiple antipsychotic medications concurrently for a duration of at least 90 days.

Percentage of Children and Adolescents Ages 1 to 17 who were on Two or More Concurrent Antipsychotic Medications for 90 Consecutive Days, FFY 2017 (n = 37 states) [Lower rates are better for this measure]



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

This measure identifies the percentage of children and adolescents ages 1 to 17 who were treated with antipsychotic medications and who were on two or more concurrent antipsychotic medications for at least 90 consecutive days during the measurement year. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

A median of

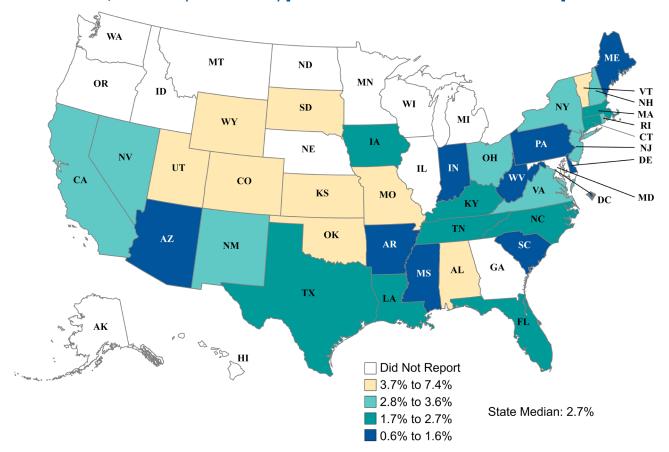
percent
of children and
adolescents treated
with antipsychotics
were on two or more
concurrent
antipsychotics
(37 states)



**55** Revised 12/2018

## Use of Multiple Concurrent Antipsychotics in Children and Adolescents (continued)

Geographic Variation in the Percentage of Children and Adolescents Ages 1 to 17 who were on Two or More Concurrent Antipsychotic Medications, FFY 2017 (n = 37 states) [Lower rates are better for this measure]



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

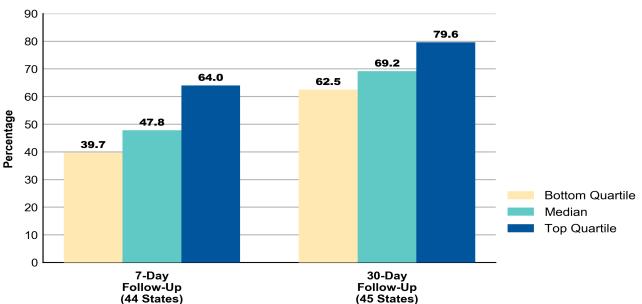


**56** Revised 12/2018

#### Follow-Up After Hospitalization for Mental Illness: Ages 6–20

Follow-up care after hospitalization for mental illness helps improve health outcomes and prevent readmissions in the days following discharge from inpatient mental health treatment. Recommended post-discharge treatment includes a visit with an outpatient mental health provider within 30 days of discharge and ideally, within 7 days of discharge.

## Percentage of Children Ages 6 to 20\* Hospitalized for Treatment of Mental Illness Receiving a Follow-Up Visit within 7 and 30 Days of Discharge, FFY 2017



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

This measure identifies the percentage of discharges for children ages 6 to 20 who were hospitalized for treatment of selected mental illness diagnoses and 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. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

\*Data displayed in this chart include children ages 6 to 20 for 36 states, and age 6 and older for 9 states.

A median of

percent
of children ages 6 to 20
who were hospitalized
for mental illness had a
follow-up visit within 7
days of discharge and

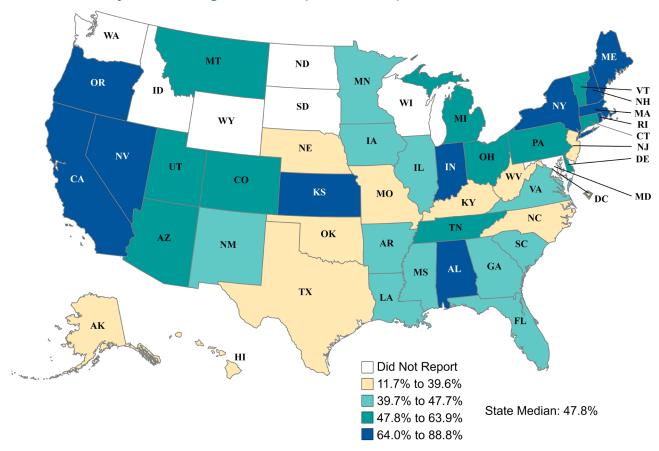
percent had a follow-up visit within 30 days of discharge (44–45 states)



Notes:

## Follow-Up After Hospitalization for Mental Illness Within 7 Days of Discharge (continued)

Geographic Variation in the Percentage of Children Ages 6 to 20\* Hospitalized for Treatment of Mental Illness Receiving a Follow-Up Visit within 7 Days of Discharge, FFY 2017 (n = 44 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

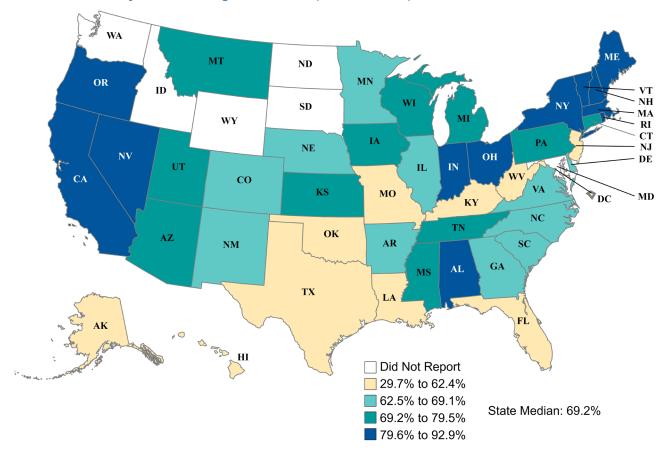
Notes: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

\*Data displayed in this chart include children ages 6 to 20 for 36 states, and age 6 and older for 8 states.



# Follow-Up After Hospitalization for Mental Illness Within 30 Days of Discharge (continued)

Geographic Variation in the Percentage of Children Ages 6 to 20\* Hospitalized for Treatment of Mental Illness Receiving a Follow-Up Visit within 30 Days of Discharge, FFY 2017 (n = 45 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

Notes: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

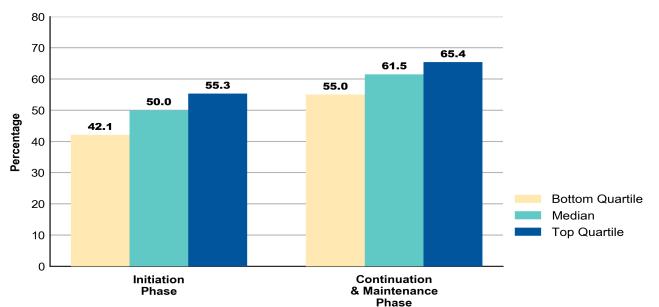


<sup>\*</sup>Data displayed in this chart include children ages 6 to 20 for 36 states, and age 6 and older for 9 states.

#### Follow-Up Care for Children Newly Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication

ADHD is a common chronic condition among school-age children that is often treated with medication. Follow-up care for children prescribed ADHD medication is an indicator of the continuity of care for children with a chronic behavioral health condition. 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 Phase for ongoing medication management and assessment of the child's functioning.

Percentage of Children Ages 6 to 12 Newly Prescribed Medication for ADHD who 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 2017 (n = 37 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle. Notes: This measure identifies the percentage of children newly prescribed attention

This measure identifies the percentage of children newly prescribed attention-deficit/hyperactivity disorder (ADHD) medication who had at least three follow-up visits within a 10-month period, including one follow-up visit with a practitioner with prescribing authority during the 30-day initiation phase and, among those who remained on ADHD medication for at least 210 days, at least two additional follow-up visits with a practitioner during the continuation and maintenance phase. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

A median of

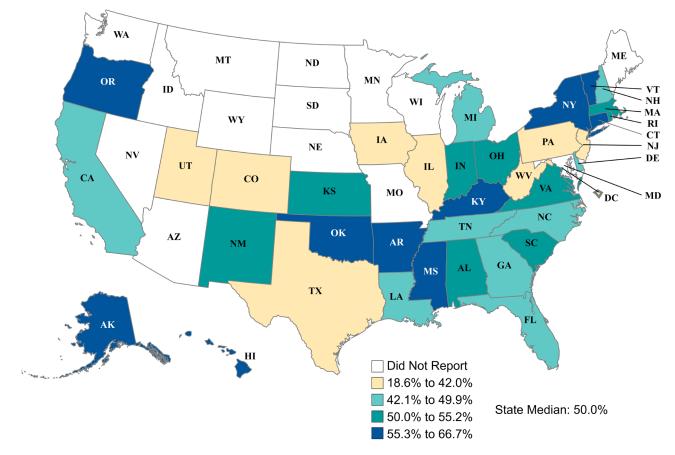
percent of children newly prescribed ADHD medication had a follow-up visit during the 30-day initiation phase and

percent had at least two follow-up visits during the 9-month continuation and maintenance phase (37 states)



## Follow-Up Care for Children Newly Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication: Initiation Phase (continued)

Geographic Variation in the Percentage of Children Ages 6 to 12 Newly Prescribed Medication for ADHD who Received at Least One Visit During the 30-Day Initiation Phase, FFY 2017 (n = 37 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

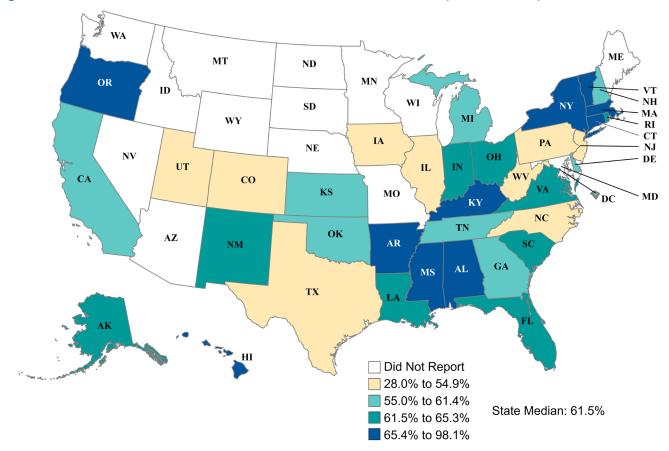
When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



Note:

Follow-Up Care for Children Newly Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication: Continuation and Maintenance Phase (continued)

Geographic Variation in the Percentage of Children Newly Prescribed Medication for ADHD who Received at Least Two Visits During the 9-Month Continuation and Maintenance Phase, FFY 2017 (n = 37 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



Note:

#### **Dental and Oral Health Services**

All children in Medicaid and CHIP have coverage for dental and oral health services. Children's oral health is important to their overall health, both in childhood and later in adulthood. Improving children's access to oral health care in Medicaid and CHIP continues to be a focus of federal and state efforts.

More information about CMS's efforts to improve the quality of dental and oral health services is available at <a href="https://www.medicaid.gov/medicaid/benefits/dental/index.html">https://www.medicaid.gov/medicaid/benefits/dental/index.html</a>.

Two measures of dental and oral health services were available for analysis for FFY 2017.

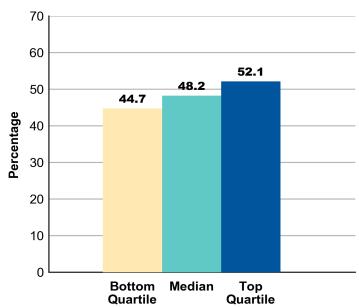
- Percentage of Eligibles Who Received Preventive Dental Services
- Dental Sealants for 6–9 Year Old Children at Elevated Caries Risk



## Percentage of Eligibles Who Received Preventive Dental Services

Tooth decay, or dental caries, is one of the most common chronic diseases of children, and 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 percentage of children ages 1 to 20 who received preventive dental services.

## Percentage of Eligibles Ages 1 to 20 who Received Preventive Dental Services, FFY 2017 (n = 50 states)



Source: Mathematica analysis of Form CMS-416 reports (annual EPSDT report), Lines 1b and 12b, for the FFY 2017 reporting cycle.

This measure identifies the percentage of children ages 1 to 20 who are covered by Medicaid or CHIP Medicaid Expansion programs for at least 90 continuous days, are eligible for Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) services, and who received at least one preventive dental service during the measurement period. This chart excludes Idaho, which reported the measure but did not use Child Core Set specifications.

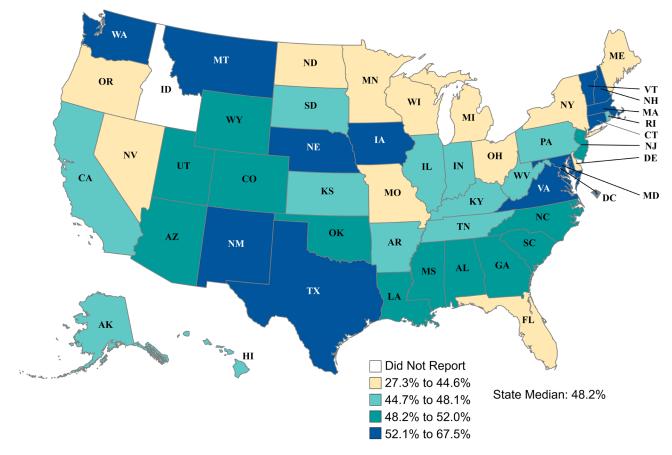
A median of
percent
of children ages 1 to 20
received a preventive
dental service
(50 states)



Note:

# Percentage of Eligibles Who Received Preventive Dental Services (continued)

Geographic Variation in the Percentage of Eligibles Ages 1 to 20 who Received Preventive Dental Services, FFY 2017 (n = 50 states)



Source: Mathematica analysis of Form CMS-416 reports (annual EPSDT report), Lines 1b and 12b, for the FFY 2017 reporting cycle

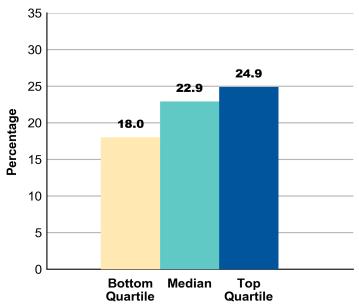
Note: This chart excludes Idaho, which reported the measure but did not use Child Core Set specifications.



## Dental Sealants for 6–9 Year Old Children at Elevated Caries Risk

Clinical evidence suggests that sealants should be placed on children's primary and permanent teeth when it is determined that a child is at risk of experiencing caries. This measure assesses the percentage of children at elevated risk for dental caries who received a sealant on a first permanent molar.

Percentage of Children Ages 6 to 9 at Elevated Risk of Dental Caries who Received a Sealant on a Permanent First Molar, FFY 2017 (n = 30 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

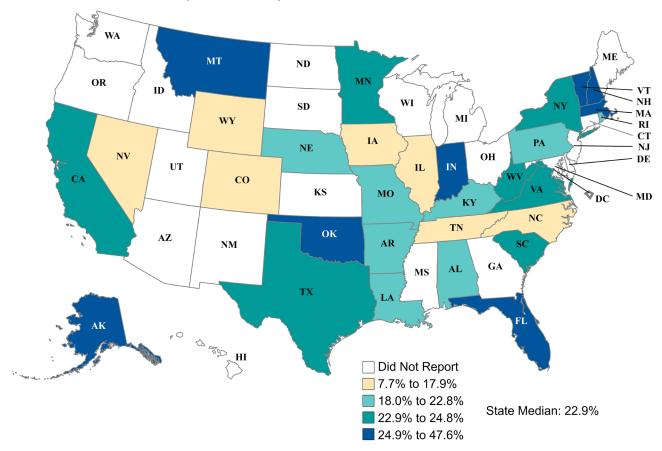
This measure identifies the percentage of children ages 6 to 9 at elevated risk of dental caries (i.e., "moderate" or "high" risk) who received a sealant on a permanent first molar tooth during the measurement year. This chart excludes Maine and Oregon, which reported the measure but did not use Child Core Set specifications. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

percent of children ages 6 to 9 at elevated caries risk received a dental sealant on a first permanent molar (30 states)



#### Dental Sealants for 6–9 Year Old Children at Elevated Caries Risk (continued)

Geographic Variation in the Percentage of Children Ages 6 to 9 at Elevated Risk of Dental Caries who Received a Sealant on a Permanent First Molar, FFY 2017 (n = 30 states)



Source: Mathematica analysis of MACPro reports for the FFY 2017 reporting cycle.

Notes: This chart excludes Maine and Oregon, which reported the measure but did not use Child Core Set specifications. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



# TRENDS IN STATE PERFORMANCE, FFY 2015–2017



## Trends in State Performance, FFY 2015–2017: Introduction

CMS assessed trends in median state performance on 16 Child Core Set measures publicly reported from FFY 2015 to FFY 2017. Trends are presented for measures reported by at least 20 states in all three years and that met CMS standards for quality.

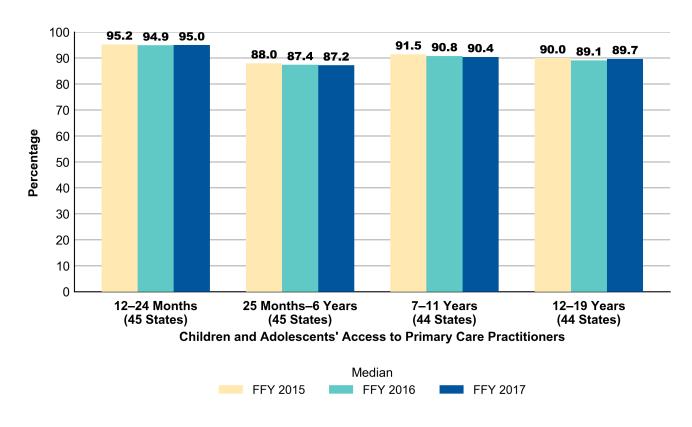
Many factors may affect changes in the performance rates reported by states on the Child Core Set measures. While shifts in access and quality may account for some of the changes in performance over time, other factors noted by states include changes in:

- The method and data used to calculate the measures
- The populations included in the measures (such as managed care versus fee-for-service)
- Other aspects of their Medicaid program that could affect reporting (such as transitions in data systems or delivery systems).



## Trends in State Performance, FFY 2015–2017: Primary Care Access and Preventive Care

States had consistently high performance rates on Children and Adolescents' Access to Primary Care Practitioners across all three years.



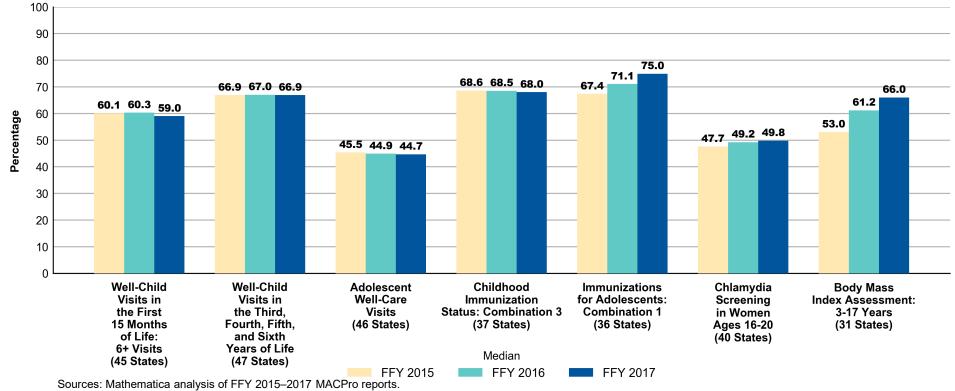
Sources: Mathematica analysis of FFY 2015-2017 MACPro reports.

otes: This chart includes the states that reported the measure using Child Core Set specifications for all three years. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used. Data from previous years may be updated based on new information received after publication of the 2017 Chart Pack.



## Trends in State Performance, FFY 2015–2017: Primary Care Access and Preventive Care (continued)

Rates of recommended preventive care increased significantly between FFY 2015 and FFY 2017 for the Immunizations for Adolescents (Combination 1), Chlamydia Screening in Women Ages 16-20, and Body Mass Index (BMI) Assessment for Children/Adolescents measures. The increase in the median rate for BMI Assessment for Children/Adolescents may be due in part to the use of medical chart review to more accurately capture the information for this measure. Median performance rates did not change significantly for other measures of primary care access and preventive care.

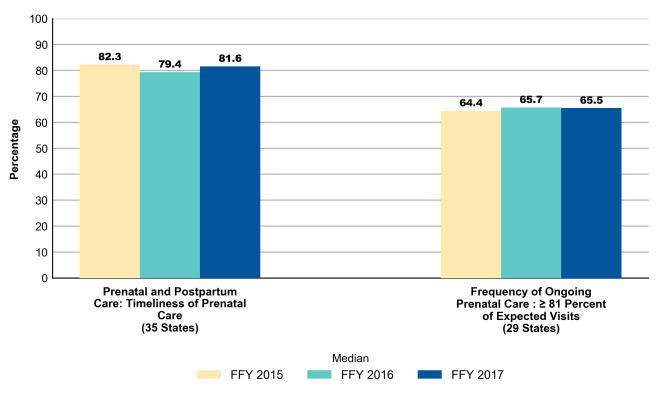


This chart includes the states that reported each measure using Child Core Set specifications for all three years. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used. Data from previous years may be updated based on new information received after publication of the 2017 Chart Pack.



#### Trends in State Performance, FFY 2015–2017: Maternal and Perinatal Health

The median rates for the Prenatal and Postpartum Care: Timeliness of Prenatal Care and Frequency of Ongoing Prenatal Care measures did not change significantly from FFY 2015 to FFY 2017.



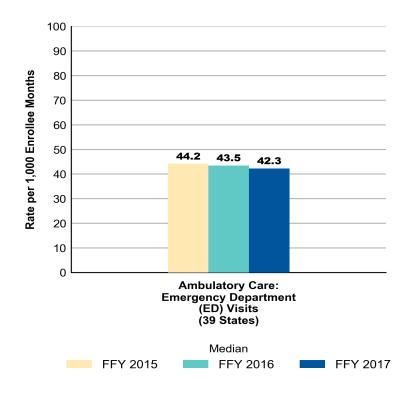
Sources: Mathematica analysis of FFY 2015-2017 MACPro reports.

otes: This chart includes the states that reported each measure using Child Core Set specifications for all three years. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used. Data from previous years may be updated based on new information received after publication of the 2017 Chart Pack.



#### Trends in State Performance, FFY 2015–2017: Care of Acute and Chronic Conditions

The median rate for the Ambulatory Care: Emergency Department (ED) Visits measure did not change significantly from FFY 2015 to FFY 2017. The rate is reported as emergency department visits per 1,000 enrollee months. Lower rates are better for this measure.



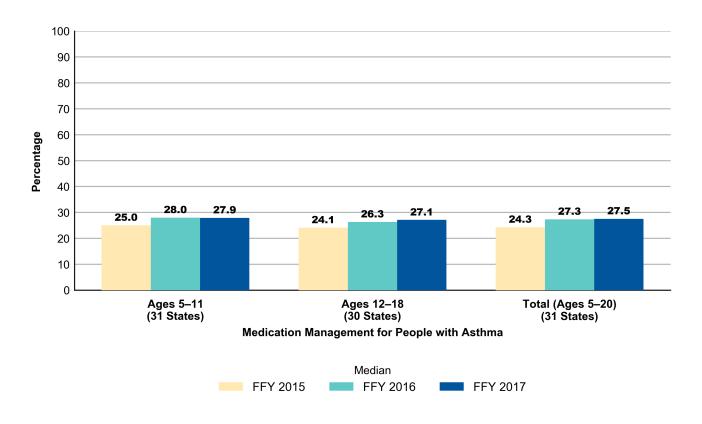
Sources: Mathematica analysis of FFY 2015–2017 MACPro reports.

lotes: This chart includes the states that reported the measure using Child Core Set specifications for all three years. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used. Data from previous years may be updated based on new information received after publication of the 2017 Chart Pack.



#### Trends in State Performance, FFY 2015–2017: Care of Acute and Chronic Conditions (continued)

Median state performance on the Medication Management for People with Asthma measure increased significantly from FFY 2015 to FFY 2017.



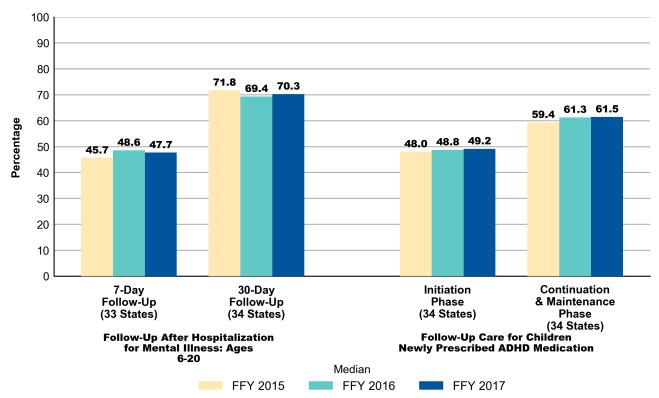
Sources: Mathematica analysis of FFY 2015-2017 MACPro reports.

otes: This chart includes the states that reported the measure using Child Core Set specifications for all three years. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used. The rate for ages 19–20 is not displayed because it was not reported by at least 20 states in all three years. Data from previous years may be updated based on new information received after publication of the 2017 Chart Pack.



#### Trends in State Performance, FFY 2015–2017: Behavioral Health Care

Median state performance on the Follow-Up Care for Children Prescribed ADHD Medication measure increased significantly for the Continuation and Maintenance Phase from FFY 2015 to FFY 2017; performance for the Initiation Phase did not change significantly. Median state performance on the Follow-Up After Hospitalization for Mental Illness: Ages 6-20 measure also did not change significantly over the three-year period.



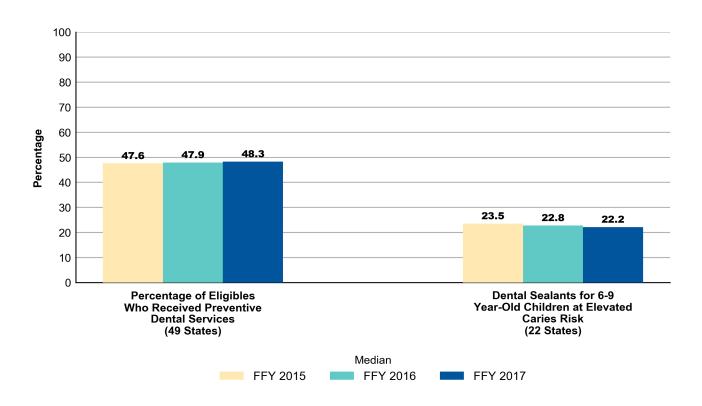
Sources: Mathematica analysis of FFY 2015-2017 MACPro reports.

tes: This chart includes the states that reported each measure using Child Core Set specifications for all three years. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used. Data from previous years may be updated based on new information received after publication of the 2017 Chart Pack.



#### Trends in State Performance, FFY 2015–2017: Dental and Oral Health Services

Median state performance on the preventive dental service measure increased significantly from FFY 2015 to FFY 2017. Median state performance on the dental sealant measure did not change significantly during this period.



Sources: Mathematica analysis of FFY 2015-2017 MACPro reports and FFY 2015-2017 Form CMS-416 reports.

Note: This chart includes the states that reported each measure using Child Core Set specifications for all three years. When a state reported separate rates for its Medicaid and CHIP populations for the Dental Sealant measure, the rate for the larger measure-eligible population was used. Data from previous years may be updated based on new information received after publication of the 2017 Chart Pack.



# REFERENCE TABLES AND ADDITIONAL RESOURCES



#### Overview of State Reporting of the Child Core Set Measures, FFY 2017

	Number of Measures Reported	State Reported at Least One Measure for Both Medicaid and CHIP Populations	Children and Adolescents' Access to PCPs	Well-Child Visits in the First 15 Months of Life	Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life	Adolescent Well-Care Visits	Childhood Immunization Status	Immuniz	Developmental Screening in the First Three Years of Life	Chlamyd 16-20	Body Mass Index Assessment for Children and Adolescents	Audiological Evaluation No Later Than 3 Months of Age	Contraceptive Care-Postpartum Women Ages 15-20		Frequency of Ongoing Prenatal Care	Percentage of Live Births Weighing Less Than 2,500 Grams	PC-02: Cesarean Section	Behavioral Health Risk Assessment (for Pregnant Women)	Ambulatory Care: Emergency Department (ED) Visits	Medication Management for People with Asthma	Use of Multiple Concurrent Antipsychotics in Children and Adolescents	Follow-Up After Hospitalization for Mental Illness: Ages 16-20	Use of F Childred Antipsy	Follow-Up Care for Children Newly Prescribed ADHD Medication	Child and Adolescent Major Depressive Disorder: Suicide Risk Assessment	Percentage of Eligibles Who Received Preventive Dental Services	_ a	CAHPS Health Plan Survey 5.0H, Child Version (Medicaid)
Total	18 (Median)	47	48	49	50	49	44	44	27	46	37	2	22	39	34	27	16	5	47	40	37	45	24	37	0	51	32	40
Alabama	24	Х	Х	Χ	Χ	Χ	Χ	Χ	Χ	Χ	X	Х	Χ	Χ	Χ	Χ	Χ		Х	Χ	Х	Χ	X	Χ		Х	Χ	Х
Alaska	13	Х	Х	X	X	Χ			Χ	Χ						Χ			Χ			Χ		Χ		Х	Χ	X
Arizona	11		Х	X	X	Χ			Χ	Χ									Χ	Χ	Х	Χ				Х		
Arkansas	13	Х	Х	X	X	Χ				Χ							X		Х	Х	Х	Χ		Х		Х	Χ	
California	15	Х	Х		Х		Х	Х		Х			Х	Х					Х	Х	Х	Х	X	Х		Х	Х	
Colorado	20	Х	Х	X	X	Χ	Χ	Χ	Χ	Χ	Χ			Χ		Χ	Χ		Χ	Χ	Х	Χ		Χ		Х	Χ	X
Connecticut	19	Х	Х	X	X	Χ	Х	X	Χ	Х	Х			Χ	X				Х	Χ	Х	Χ	X	Χ		Х		X
Delaware	22	Х	Х	Χ	X	Χ	X	X	X	Χ	Х		Х	Χ	Χ	Χ	X	Х	Х	Χ	Х	Χ		Χ		Х		X
Dist. of Col.	18	Х	Х	X	X	Х	Х	Х		Х	Х			Х	Х				Х	Х	Х	X	X	Х		Х		X
Florida	20	Х	Х	Х	Х	Х	Х	Х	X	Х	Х			Х	Х				Х	Х	Х	Х	Х	Х		Х	Х	Х
Georgia	20	Х	Х	X	X	Χ	Χ	Χ	Χ	Χ	Χ			Χ	Χ	Χ	Χ	Х	Χ	Χ		Χ		Χ		Х		X
Hawaii	15	Х	Х	X	X	Χ	Х	Х		Χ	Χ			Χ	Χ				Х	Χ		Χ		Χ		Х		
Idaho	10	Х	Х	X	X	Χ	Х	Х		Χ									Χ							Х		X
Illinois	21	Х	X	X	X	Χ	Χ	Χ	Χ	Χ	Χ		Χ	Χ	Χ	Х	Χ		Χ	Χ		X		Χ		Х	Х	X
Indiana	23	Х	Х	Х	Х	Х	Х	Х	Χ	Х	Х		Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х		Х	Χ	Х
Iowa	23	Х	Х	Χ	Χ	Χ	Х	Χ	Χ	Χ	Х		Х	Χ	Χ	Χ	Х		Х	Χ	Х	Χ	Х	Χ		Х	Χ	Х
Kansas	18	Х	Х	X	X	Χ	Χ	Χ		Χ	Χ			Χ	Χ				Χ	Χ	Х	Χ	X	Χ		Х		X
Kentucky	21	Х	Х	X	X	Χ	Χ	Χ		Χ	Χ		Χ	Χ	Χ	Χ			Χ	Χ	Х	Χ	X	Χ		Х	Χ	X
Louisiana	23	Х	Х	X	X	Χ	Χ	Χ	Χ	Χ	Χ		Χ	Χ	Χ	Χ	Χ		Χ	Χ	Х	Χ	X	Χ		Х	Χ	X
Maine	13	Х	Х	X	X	Χ			Χ	Χ									Χ	Χ	Х	Χ				Х	Χ	X



### Overview of State Reporting of the Child Core Set Measures, FFY 2017 (continued)

	Number of Measures Reported	State Reported at Least One Measure for Both Medicaid and CHIP Populations	Children and Adolescents' Access to PCPs	Well-Child Visits in the First 15 Months of Life	Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life	Adolescent Well-Care Visit	Childhood Immunization Status	Immunizations for Adolescents	Developmental Screening in the First Three Years of Life	Chlamydia Screening in Women: Ages 16–20	Body Mass Index Assessment for Children and Adolescents	Audiological Evaluation No Later Than 3 Months of Age	Contraceptive Care-Postpartum Women Ages 15-20	Prenatal and Postpartum Care: Timeliness of Prenatal Care	Frequency of Ongoing Prenatal Care	Percentage of Live Births Weighing Less Than 2,500 Grams	PC-02: Cesarean Section	Behavioral Health Risk Assessment (for Pregnant Women)	_	Medication Management for People with Asthma	Use of Multiple Concurrent Antipsychotics in Children and Adolescents	Follow-Up After Hospitalization for Mental Illness: Ages 16–20	Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	Follow-Up Care for Children Newly Prescribed ADHD Medication	Child and Adolescent Major Depressive Disorder: Suicide Risk Assessment	Percentage of Eligibles Who Received Preventive Dental Services	Dental Sealants for 6–9 Year Old Children at Elevated Caries Risk	CAHPS Health Plan Survey 5.0H, Child Version (Medicaid)
Maryland Massachusetts	14 22	X X	X X	X X	X X	X X	X X	X X	 X	X X	X X		 X	X	X X	 X			X X	X X	 X	 V	 X	 V		X X	 X	Х
Michigan	19		x	X	X	X	X	X	X	X	X		X	^ Y	^	X	^ Y		X	^	^	X X	^	X X		X		 X
Minnesota	16	X	X	X	X	X	X	X	X	X	X		X			X			X	X		X				X	X	
Mississippi	17	X	X	X	X	X	X	X		X	X			Χ	Х					X	Х	X	X	Χ		X		Х
Missouri	14	Х		Х	Χ	Х	Х	Х		Х			Х	Х					Х		Х	Х				Х	Х	Х
Montana	13	X	Х	X	X	X	Χ	X		X	Χ								Х			Χ				Х	Χ	X
Nebraska	14	X	Х	Χ	X	Χ	Χ	Χ		Χ	Χ								Х	Χ		Χ				Х	Х	X
Nevada	16	Х	Х	Χ	X	Χ	Χ	Χ			Χ			Χ	Χ				Х	Χ	Х	Χ				Х	Χ	X
New Hampshire	22		Х	Х	Х	Х	Χ	Х	Х	Х	Х		Х	Х	Х	Χ			Х	Х	Х	X	Х	Х		Х	Χ	Х
New Jersey	17	X	Х	Χ	X	Χ	Χ	Χ		Χ	Χ			Χ	Χ				Х	Χ	Х	Χ		Χ		Х		X
New Mexico	17	Х	Х	X	X	X	X	X		Х	Х			X	X				Х	Х	Х	Х	X	X		Х		
New York	23	X	X	X	X	Х	Х	X		Х	Х		X	X	X	X	Х	Х	X	X	X	Х	X	X		Х	Х	X
North Carolina North Dakota	21 1	X	X	Х	Х	Х	X	Χ	Х	X	Х		Х	Х	Χ	Х			Х	Х	Х	Х	Х	Х		X	Х	
	-																											
Ohio Oklahoma	15	X	X	X X	X X	X X	 V	 X	 X	X X	 X		 X	X	X X	X X			X	X X	X	X X	 X	X X		X		X
Oregon	22 16	X	X	X	X	X	X X	X	X	X	^		^	^ Y	^	X			X	^	^	X	^	X		X	X X	X
Pennsylvania	22	X	X	X	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X		X		X	X	X
Rhode Island	21	X	X	X	X	X	X	X	X	X	X			X	X	X			X	X	X	X	X	X		X	X	X



### Overview of State Reporting of the Child Core Set Measures, FFY 2017 (continued)

	Number of Measures Reported	State Reported at Least One Measure for Both Medicaid and CHIP Populations	Children and Adolescents' Access to PCPs	Well-Child Visits in the First 15 Months of Life	Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life	Adolescent Well-Care Visit	Childhood Immunization Status	Immunizations for Adolescents	Developmental Screening in the First Three Years of Life	Chlamydia Screening in Women: Ages 16–20	Body Mass Index Assessment for Children and Adolescents	logical	Contraceptive Care- Postpartum Women Ages 15-20	Prenatal and Postpartum Care: Timeliness of Prenatal Care	Frequency of Ongoing Prenatal Care	Percentage of Live Births Weighing Less Than 2,500 Grams	PC-02: Cesarean Section	Behavioral Health Risk Assessment (for Pregnant Women)	Ambulatory Care: Emergency Department (ED) Visits	Medication Management for People with Asthma	Use of Multiple Concurrent Antipsychotics in Children and Adolescents	Follow-Up After Hospitalization for Mental Illness: Ages 16–20	Firs on all	Follow-Up Care for Children Newly Prescribed ADHD Medication	Child and Adolescent Major Depressive Disorder: Suicide Risk Assessment	Percentage of Eligibles Who Received Preventive Dental Services	Dental Sealants for 6–9 Year Old Children at Elevated Caries Risk	CAHPS Health Plan Survey 5.0H, Child Version (Medicaid)
South Carolina	25	Х	Х	X	X	Χ	Χ	Χ	Χ	Χ	Χ	Х	Χ	Χ	Χ	Χ	Χ	Χ	Х	Χ	Х	Χ	X	Χ		Х	Χ	Х
South Dakota	5	Х		Х	Х	Х															Х					Х		
Tennessee	22	Х	Х	Х	X	Х	Χ	Х		Х	Χ		Χ	Χ	Χ	Х	Χ		Х	Х	Х	Χ	Х	Χ		Х	Χ	X
Texas	21	Х	Х	X	X	Х	Х	Х	Χ	X	X			X	Х	Χ			Х	Х	Х	Х	X	Х		Х	Χ	X
Utah	16	Х	Х	Х	Х	Х	Х	Х		Х	Х			Х	Х				Х	Х	Х	Х		Х		Х		
Vermont	19	Х	Х	X	X	Χ	Χ	X	Χ	Χ			Χ			Χ			Х	Χ	Х	Χ	X	Χ		Х	Χ	X
Virginia	20	Х	Х	X	X	Χ	Χ	Х	Χ	Χ	Χ			Χ	Χ				Х	Χ	Х	Χ	X	Χ		Х	Χ	X
Washington	16	Х	Х	X	X	Х	Χ	Χ		Χ	Χ		Χ	Χ	Χ	Χ	Χ		Х							Х		X
West Virginia	22	Х	Х	X	X	Х	Χ	Χ	Χ	Χ	Χ		Χ	Χ	Χ	Χ			Х	Χ	Х	Χ	X	Χ		Х	Χ	X
Wisconsin	10	Х	Х	X	X	Х	Χ	Χ						Χ								Χ				Х		X
Wyoming	12	Х	Х	Х	Х	Х	Х	Х					Х						Х		Х					Х	X	X

Sources: Mathematica analysis of MACPro reports and Form CMS-416 reports for the FFY 2017 reporting cycle.

Notes: The term "states" includes the 50 states and the District of Columbia. The 2017 Child Core Set includes 27 measures. This chart excludes data for the CLABSI measure, which is obtained from CDC's National Healthcare Safety Network.

X = measure was reported by the state; -- = measure was not reported by the state.



### Performance Rates on Frequently Reported Child Core Set Measures, FFY 2017

		Number of States Reporting Using				
Measure Name	Rate Definition	Core Set Specifications	Mean	Median	Bottom Quartile	Top Quartile
Primary Care Access and Preventive Care						
Children and Adolescents' Access to Primary Care Practitioners	Percentage with a PCP Visit in the Past Year: Ages 12–24 Months	48	94.7	95.2	93.3	96.6
Children and Adolescents' Access to Primary Care Practitioners	Percentage with a PCP Visit in the Past Year: Ages 25 Months–6 Years	48	86.9	87.4	84.9	90.3
Children and Adolescents' Access to Primary Care Practitioners	Percentage with a PCP Visit in the Past Two Years: Ages 7–11 Years	48	89.8	90.8	87.6	93.6
Children and Adolescents' Access to Primary Care Practitioners	Percentage with a PCP Visit in the Past Two Years: Ages 12–19 Years	48	88.8	90.1	86.2	92.9
Well-Child Visits in the First 15 Months of Life	Percentage of Children who had 6 or More Well-Child Visits with a PCP during the First 15 Months of Life	49	59.7	59.3	55.7	66.1
Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life	Percentage who had 1 or More Well-Child Visits with a PCP: Ages 3–6	50	66.0	66.7	58.2	76.1
Adolescent Well-Care Visit	Percentage with at Least 1 Well-Care Visit with a PCP or an OB/GYN Practitioner: Ages 12–21	49	46.0	44.7	37.9	55.7
Childhood Immunization Status	Percentage Up-to-Date on Immunizations (Combination 3) by their Second Birthday	41	58.7	67.9	54.6	72.8
Immunizations for Adolescents	Percentage Receiving Three Doses of Human Papillomavirus (HPV) Vaccine by their 13th Birthday	42	21.0	20.8	13.3	24.8
Immunizations for Adolescents	Percentage Up-to-Date on Immunizations (Combination 1) by their 13th Birthday	43	68.3	73.2	56.9	83.0
Developmental Screening in the First Three Years of Life	Percentage Screened for Risk of Developmental, Behavioral, and Social Delays Using a Standardized Screening Tool: Ages 0–3	27	39.4	39.8	17.8	53.9
Chlamydia Screening in Women	Percentage of Sexually Active Women Screened for Chlamydia: Ages 16–20	46	49.7	49.4	44.1	58.5
Body Mass Index Assessment for Children and Adolescents	Percentage who had an Outpatient Visit with a PCP or OB/GYN Practitioner who had Body Mass Index Percentile Documented in the Medical Record: Ages 3–17	37	52.3	61.1	28.8	74.5



# Performance Rates on Frequently Reported Child Core Set Measures, FFY 2017 (continued)

Measure Name	Rate Definition	Number of States Reporting Using Core Set Specifications	Mean	Median	Bottom Quartile	Top Quartile
Maternal and Perinatal Health						
Prenatal and Postpartum Care: Timeliness of Prenatal Care	Percentage of Women Delivering a Live Birth with a Prenatal Care Visit in the First Trimester or within 42 Days of Medicaid/CHIP Enrollment	39	77.9	81.6	75.6	87.4
Frequency of Ongoing Prenatal Care	Percentage of Women Delivering a Live Birth who had at Least 81 Percent of Expected Prenatal Visits	34	57.1	61.7	43.5	67.0
Live Births Weighing Less Than 2,500 Grams	Percentage of Live Births that Weighed Less than 2,500 Grams [Lower rates are better]	25	9.3	9.0	10.6	8.1
Care of Acute and Chronic Conditions						
Ambulatory Care: Emergency Department Visits	Emergency Department Visits per 1,000 Enrollee-Months: Ages 0–19 [Lower rates are better]	47	44.3	42.3	51.1	39.1
Medication Management for People with Asthma	Percentage with Persistent Asthma who were Dispensed Appropriate Medication and Remained on Medication for at Least 75 Percent of Treatment Period: Ages 5–11	40	29.2	27.9	24.5	33.0
Medication Management for People with Asthma	Percentage with Persistent Asthma who were Dispensed Appropriate Medication and Remained on Medication for at Least 75 Percent of Treatment Period: Ages 12–18	40	28.6	26.9	24.1	32.2
Medication Management for People with Asthma	Percentage with Persistent Asthma who were Dispensed Appropriate Medication and Remained on Medication for at Least 75 Percent of Treatment Period: Ages 5–20	39	28.9	27.3	24.3	33.0
Behavioral Health Care						
Use of Multiple Concurrent Antipsychotics in Children and Adolescents	Percentage on Two or More Concurrent Antipsychotic Medications: Ages 1–17 [Lower rates are better]	37	2.7	2.7	3.6	1.6
Follow-Up After Hospitalization for Mental Illness	Percentage of Hospitalizations for Mental Illness with a Follow-Up Visit Within 7 Days of Discharge: Ages 6–20	44	51.5	47.8	39.7	64.0
Follow-Up After Hospitalization for Mental Illness	Percentage of Hospitalizations for Mental Illness with a Follow-Up Visit Within 30 Days of Discharge: Ages 6–20	45	69.5	69.2	62.5	79.6



#### Performance Rates on Frequently Reported Child Core Set Measures, FFY 2017 (continued)

Measure Name	Rate Definition	Number of States Reporting Using Core Set Specifications	Mean	Median	Bottom Quartile	Top Quartile
Behavioral Health Care (continued)						
Follow-Up Care for Children Newly Prescribed ADHD Medication	Percentage Newly Prescribed ADHD Medication with 1 Follow-Up Visit During the 30-Day Initiation Phase: Ages 6–12	37	48.1	50.0	42.1	55.3
Follow-Up Care for Children Newly Prescribed ADHD Medication	Percentage Newly Prescribed ADHD Medication with at Least 2 Follow-Up Visits During the 10-Month Continuation and Maintenance Phase: Ages 6–12	37	58.6	61.5	55.0	65.4
Dental and Oral Health Services						
Percentage of Eligibles Who Received Preventive Dental Services	Percentage with at Least 1 Preventive Dental Service: Ages 1–20	50	47.6	48.2	44.7	52.1
Dental Sealants for 6–9 Year Old Children at Elevated Caries Risk	Percentage at Elevated Risk of Dental Caries (Moderate or High Risk) who Received a Sealant on a Permanent First Molar Tooth: Ages 6–9	30	22.8	22.9	18.0	24.9

Sources: Mathematica analysis of MACPro reports and Form CMS-416 reports for the FFY 2017 reporting cycle.

Notes: The term "states" includes the 50 states and the District of Columbia.

This table includes measures that were reported by at least 25 states for FFY 2017 that met CMS standards for quality. This table includes data for states that indicated they used Child Core Set specifications to report the measures and excludes states that indicated they used other specifications and states that did not report the measures for FFY 2017. Means are calculated as the unweighted average of all state rates. In cases where a state reported separate rates for its Medicaid and CHIP populations, the rate for the program with the larger measure-eligible population was used. Measure-specific tables are available at <a href="https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/child-core-set/index.html">https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/child-core-set/index.html</a>.

The CLABSI and the CAHPS Health Plan Survey measures are excluded from this table because they use a summary statistic different from those in this table.

The Medication Management for People with Asthma rate for ages 19–20 is not displayed because it was not reported by at least 25 states.

a Combination 3 includes DTaP; three doses of IPV; one dose of MMR; three doses of HiB; three doses of HepB, one dose of VZV; and four doses of PCV.

<sup>b</sup> Combination 1 includes one dose of meningococcal vaccine and Tdap vaccine.



# Changes in Performance Rates on Frequently Reported Child Core Set Measures, FFY 2015–2017

Measure Name	Rate Definition	Number of States Reporting Using Core Set Specifications FFY 2015-2017	FFY 2015 Median	FFY 2016 Median	FFY 2017 Median
Primary Care Access and Preventive	Care				
Children and Adolescents' Access to Primary Care Practitioners	Percentage with a PCP Visit in the Past Year: Ages 12–24 Months	45	95.2	94.9	95.0
Children and Adolescents' Access to Primary Care Practitioners	Percentage with a PCP Visit in the Past Year: Ages 25 Months–6 Years	45	88.0	87.4	87.2
Children and Adolescents' Access to Primary Care Practitioners	Percentage with a PCP Visit in the Past Two Years: Ages 7–11 Years	44	91.5	90.8	90.4
Children and Adolescents' Access to Primary Care Practitioners	Percentage with a PCP Visit in the Past Two Years: Ages 12–19 Years	44	90.0	89.1	89.7
Well-Child Visits in the First 15 Months of Life	Percentage of Children who had 6 or More Well-Child Visits with a PCP during the First 15 Months of Life	45	60.1	60.3	59.0
Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life	Percentage who had 1 or More Well-Child Visits with a PCP: Ages 3–6	47	66.9	67.0	66.9
Adolescent Well-Care Visit	Percentage with at Least 1 Well-Care Visit with a PCP or an OB/GYN Practitioner: Ages 12–21	46	45.5	44.9	44.7
Childhood Immunization Status	Percentage Up-to-Date on Immunizations (Combination 3) by their Second Birthday	37	68.6	68.5	68.0
Immunizations for Adolescents	Percentage Receiving Meningoccal Conjugate and Tdap Vaccines (Combination 1) by their 13th Birthday	36	67.4	71.1	75.0
Chlamydia Screening in Women	Percentage of Sexually Active Women Screened for Chlamydia: Ages 16–20	40	47.7	49.2	49.8
Body Mass Index Assessment for Children and Adolescents	Percentage who had an Outpatient Visit with a PCP or OB/GYN Practitioner and who had Body Mass Index Percentile Documented in the Medical Record: Ages 3–17	31	53.0	61.2	66.0
Maternal and Perinatal Health					
Prenatal and Postpartum Care: Timeliness of Prenatal Care	Percentage of Women Delivering a Live Birth with a Prenatal Care Visit in the First Trimester or within 42 Days of Medicaid/CHIP Enrollment	35	82.3	79.4	81.6
Frequency of Ongoing Prenatal Care	Percentage of Women Delivering a Live Birth who had More Than 80 Percent of Expected Prenatal Visits	29	64.4	65.7	65.5



# Changes in Performance Rates on Frequently Reported Child Core Set Measures, FFY 2015–2017 (continued)

Measure Name	Rate Definition	Number of States Reporting Using Core Set Specifications FFY 2015-2017	FFY 2015 Median	FFY 2016 Median	FFY 2017 Median
Care of Acute and Chronic Conditions					
Ambulatory Care: Emergency Department Visits	Emergency Department Visits per 1,000 Enrollee-Months: Ages 0–19 [Lower rates are better]	39	44.2	43.5	42.3
Medication Management for People with Asthma	Percentage with Persistent Asthma who were Dispensed Appropriate Medication and Remained on Medication for at Least 75 Percent of Treatment Period: Ages 5–11	31	25.0	28.0	27.9
Medication Management for People with Asthma	Percentage with Persistent Asthma who were Dispensed Appropriate Medication and Remained on Medication for at Least 75 Percent of Treatment Period: Ages 12–18	30	24.1	26.3	27.1
Medication Management for People with Asthma	Percentage with Persistent Asthma who were Dispensed Appropriate Medication and Remained on Medication for at Least 75 Percent of Treatment Period: Ages 5–20	31	24.3	27.3	27.5
Behavioral Health Care					
Follow-Up After Hospitalization for Mental Illness	Percentage of Hospitalizations for Mental Illness with a Follow-Up Visit Within 7 Days of Discharge: Ages 6–20	33	45.7	48.6	47.7
Follow-Up After Hospitalization for Mental Illness	Percentage of Hospitalizations for Mental Illness with a Follow-Up Visit Within 30 Days of Discharge: Ages 6–20	34	71.8	69.4	70.3
Follow-Up Care for Children Newly Prescribed ADHD Medication	Percentage Newly Prescribed ADHD Medication with 1 Follow-Up Visit During the 30-Day Initiation Phase: Ages 6–12	34	48.0	48.8	49.2
Follow-Up Care for Children Newly Prescribed ADHD Medication	Percentage Newly Prescribed ADHD Medication with at Least 2 Follow-Up Visits During the 10-Month Continuation and Maintenance Phase: Ages 6–12	34	59.4	61.3	61.5



#### Changes in Performance Rates on Frequently Reported Child Core Set Measures, FFY 2015–2017 (continued)

Measure Name	Rate Definition	Number of States Reporting Using Core Set Specifications FFY 2015-2017	FFY 2015 Median	FFY 2016 Median	FFY 2017 Median
Dental and Oral Health Services					
Percentage of Eligibles Who Received Preventive Dental Services	Percentage with at Least 1 Preventive Dental Service: Ages 1–20	49	47.6	47.9	48.3
Dental Sealants for 6–9 Year Old Children at Elevated Caries Risk	Percentage at Elevated Risk of Dental Caries (Moderate or High Risk) who Received a Sealant on a Permanent First Molar Tooth: Ages 6–9	22	23.5	22.8	22.2

Sources: Mathematica analysis of FFY 2015–2017 MACPro reports, and FFY 2015–2017 Form CMS-416 reports.

Notes: The term "states" includes the 50 states and the District of Columbia.

This table includes measures that were reported by 20 or more states using Child Core Set specifications for all three years (FFY 2015–2017). When a state reported separate rates for its Medicaid and CHIP populations, the median rates were calculated using the rate for the larger measure-eligible population. The results for each measure reflect only the states that reported on the measure for all three years. The Medication Management for People with Asthma rate for ages 19–20 is not displayed because it was not reported by 20 states for all three years. Data from previous years may be updated based on new information received after publication of the 2017 Chart Pack.

Measure-specific tables are available at https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/child-core-set/index.html.



#### **Acronyms**

ADHD Attention-Deficit/Hyperactivity Disorder

BMI Body Mass Index

CAHPS Consumer Assessment of Healthcare Providers and Systems

CDC Centers for Disease Control and Prevention

CHIP Children's Health Insurance Program

CLABSI Central Line-Associated Bloodstream Infection

CMS Centers for Medicare & Medicaid Services

DTaP Diphtheria, Tetanus, and Pertussis

ED Emergency Department

EPSDT Early and Periodic Screening, Diagnostic, and Treatment

FFY Federal Fiscal Year

HepB Hepatitis B

HHS U.S. Department of Health and Human Services

HiB Haemophilus Influenzae Type B

HPV Human Papillomavirus



#### **Acronyms (continued)**

IPV Inactivated Polio Vaccine

MACPro Medicaid and CHIP Program System

MMR Measles, Mumps, and Rubella

NHSN National Healthcare Safety Network

NICU Neonatal Intensive Care Unit

OB/GYN Obstetrical/gynecological

PC Perinatal Care

PCP Primary Care Practitioner

PCV Pneumococcal Conjugate Vaccine

SIR Standardized Infection Ratio

Tdap Tetanus, Diphtheria Toxoids and Pertussis Vaccine

VZV Varicella-Zoster Virus



#### **Additional Resources**

Additional resources related to the Child Core Set are available at <a href="https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/child-core-set/index.html">https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/child-core-set/index.html</a>.

#### These resources include:

- Technical Specifications and Resource Manuals for the Child Core Set
- Technical assistance resources for states
- Other background information on the Child Core Set.

For more information about the Child Core Set, please contact MACQualityTA@cms.hhs.gov.

