



Centers for Medicare & Medicaid Services

Medicaid & CHIP

Health Care Quality Measures



Quality of Care for Children in Medicaid and CHIP: Findings from the 2018 Child Core Set

Chart Pack

September 2019

■ *This chart pack is a product of the Technical Assistance and Analytic Support for the Medicaid and CHIP Quality Measurement and Improvement Program, sponsored by the Center for Medicaid and CHIP Services. The technical assistance team is led by Mathematica, in collaboration with the National Committee for Quality Assurance, Center for Health Care Strategies, AcademyHealth, and Harbage Consulting.*

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About the 2018 Child Core Set

Together, Medicaid and the Children's Health Insurance Program (CHIP) covered nearly 46 million children in federal fiscal year (FFY) 2018, representing more than 1 in 3 children in the United States and covering 43 percent of all births.^{1,2} 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 2018 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 2018 Child Core Set includes 26 measures.

This Chart Pack summarizes state reporting on the quality of health care furnished to children covered by Medicaid and CHIP during FFY 2018, which generally covers care delivered in calendar year 2017. The Chart Pack includes detailed analysis of state performance on 23 publicly reported measures.³ For a measure to be publicly reported, data must be provided to CMS by at least 25 states and meet CMS standards for data quality. These measures 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

More information about the Child Core Set, including measure-specific tables, is available at <https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-and-child-health-care-quality-measures/child-core-set/index.html>.

¹ Medicaid and CHIP enrollment data for FFY 2018 is available at <https://www.medicaid.gov/chip/downloads/fy-2018-childrens-enrollment-report.pdf>.

² Data on births covered by Medicaid and CHIP is available at https://www.cdc.gov/nchs/data/nvsr/nvsr67/nvsr67_08-508.pdf.

³ This count includes the Consumer Assessment of Healthcare Providers and Systems (CAHPS) measure. State-specific performance data are not available for this measure.

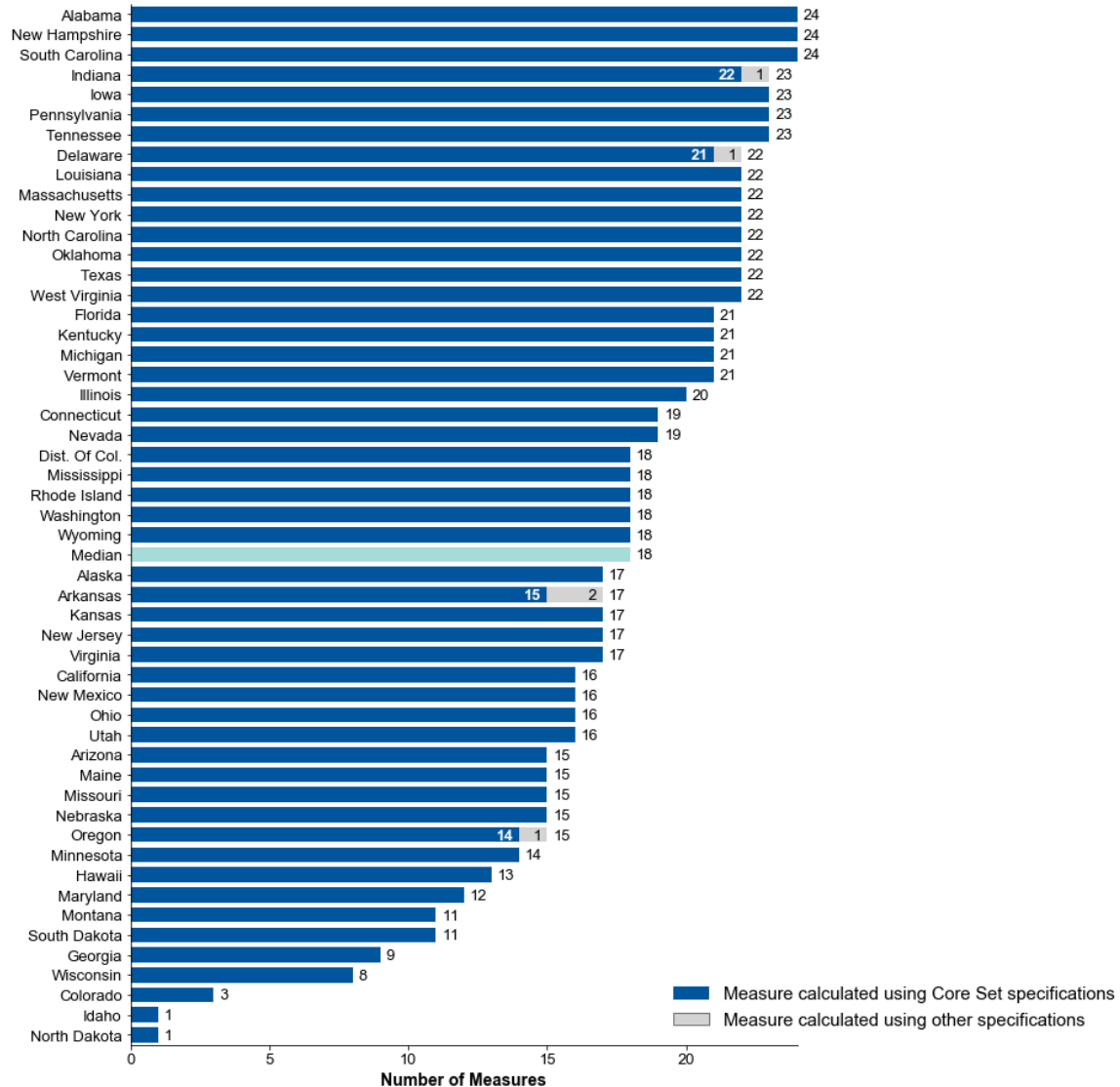
26

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

OVERVIEW OF STATE REPORTING OF THE 2018 CHILD CORE SET



Number of Child Core Set Measures Reported by States, FFY 2018



States reported a median of

18

Child Core Set measures for FFY 2018

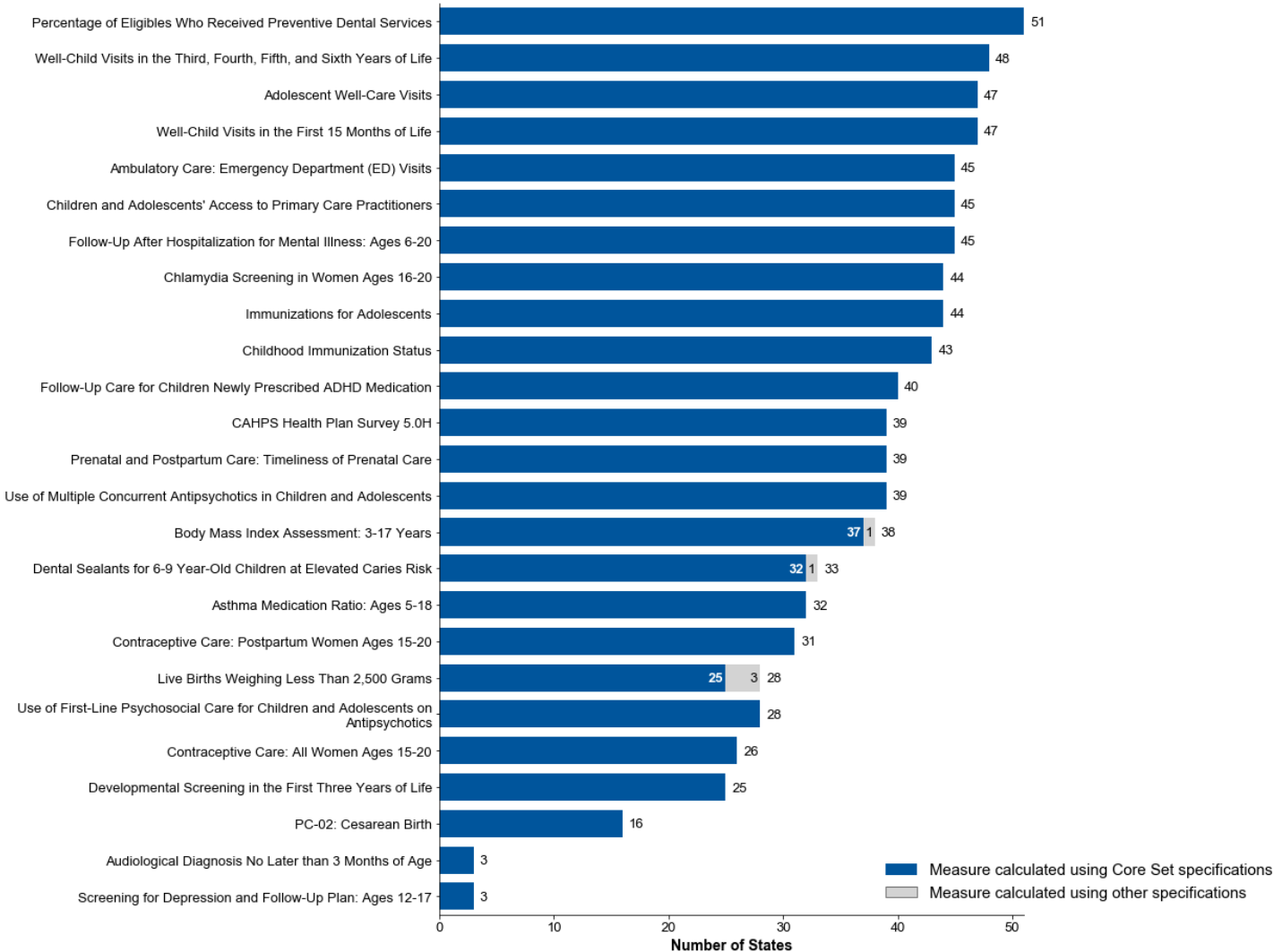
Sources: Mathematica analysis of MACPro reports and Form CMS-416 reports for the FFY 2018 reporting cycle.

Notes: The term “states” includes the 50 states and the District of Columbia. The 2018 Child Core Set includes 26 measures. This chart excludes the CLABSI measure, which is obtained from CDC’s National Healthcare Safety Network

This chart includes all Child Core Set measures that states reported for the FFY 2018 reporting cycle. The state median includes the total number of measures reported by each state. Unless otherwise specified, states used Child Core Set specifications to calculate the measures. Some states calculated Child Core Set measures using “other specifications.” Measures were denoted as using “other specifications” when the state deviated substantially from the Child Core Set specifications, such as using alternate data sources, different populations, or other methodologies.



Number of States Reporting the Child Core Set Measures, FFY 2018



51

states voluntarily reported at least one Child Core Set measure for FFY 2018

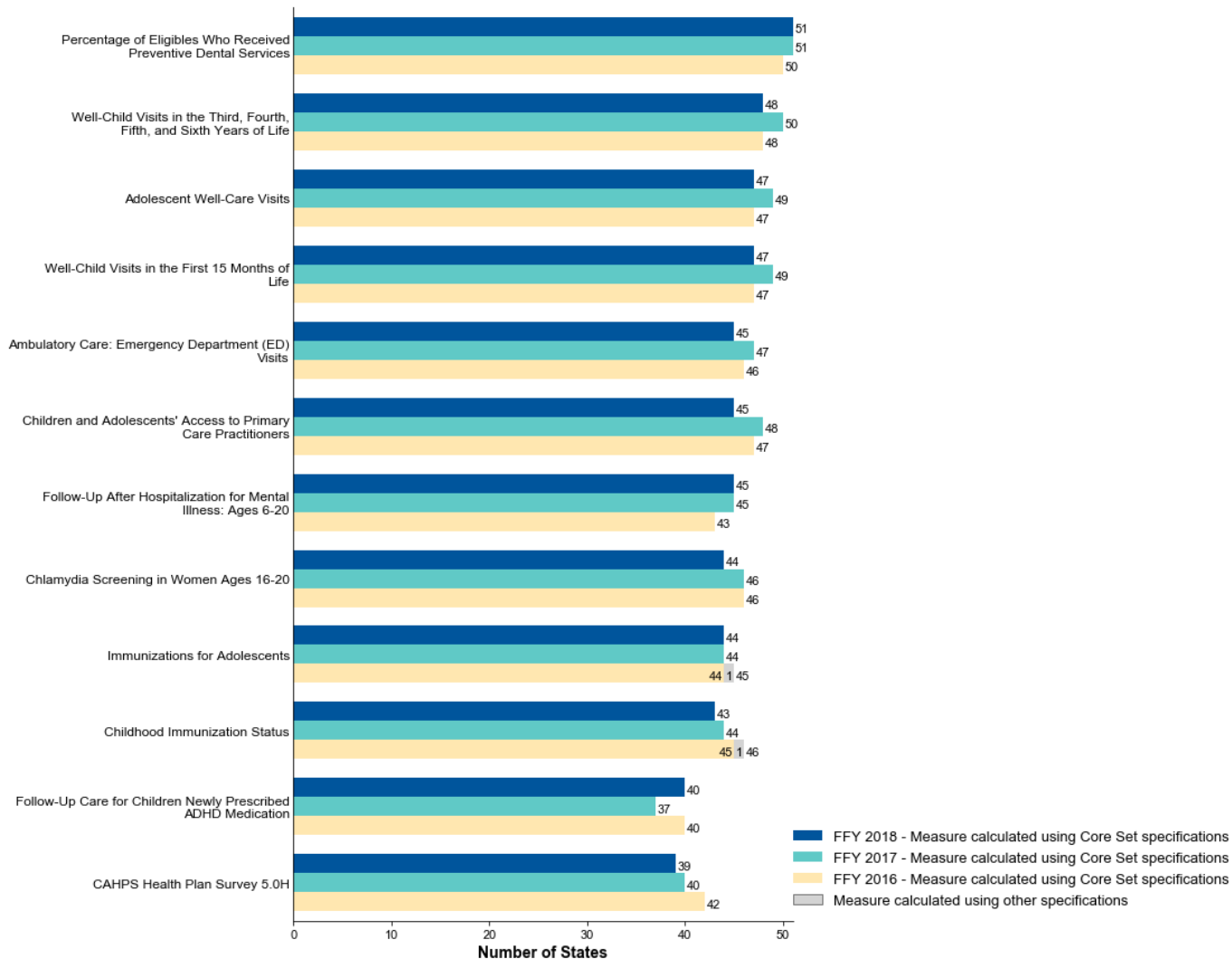
Sources: Mathematica analysis of MACPro reports and Form CMS-416 reports for the FFY 2018 reporting cycle.

Notes: The term "states" includes the 50 states and the District of Columbia. The 2018 Child Core Set includes 26 measures. This chart excludes the CLABSI measure, which is obtained from CDC's National Healthcare Safety Network

This chart includes all Child Core Set measures that states reported for the FFY 2018 reporting cycle. Unless otherwise specified, states used Child Core Set specifications to calculate the measures. Some states calculated Child Core Set measures using "other specifications." Measures were denoted as using "other specifications" when the state deviated substantially from the Child Core Set specifications, such as using alternate data sources, different populations, or other methodologies.



Number of States Reporting the Child Core Set Measures, FFY 2016–2018

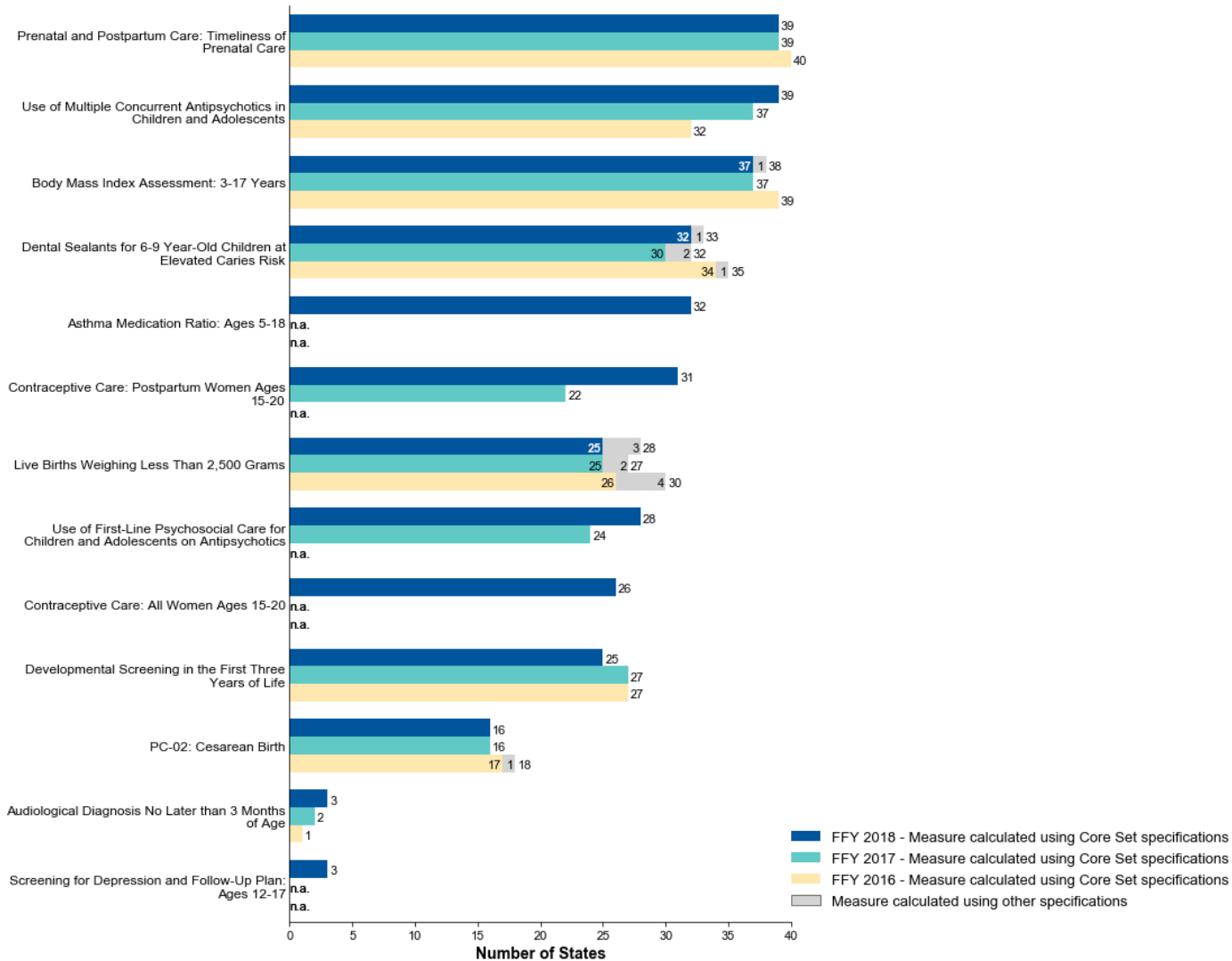


State reporting increased or remained stable for

8 of the 20 measures included in both the 2016 and 2018 Child Core Sets

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Number of States Reporting the Child Core Set Measures, FFY 2016–2018 (continued)



Sources: Mathematica analysis of FFY 2016–2018 MACPro reports and Form CMS-416 reports.

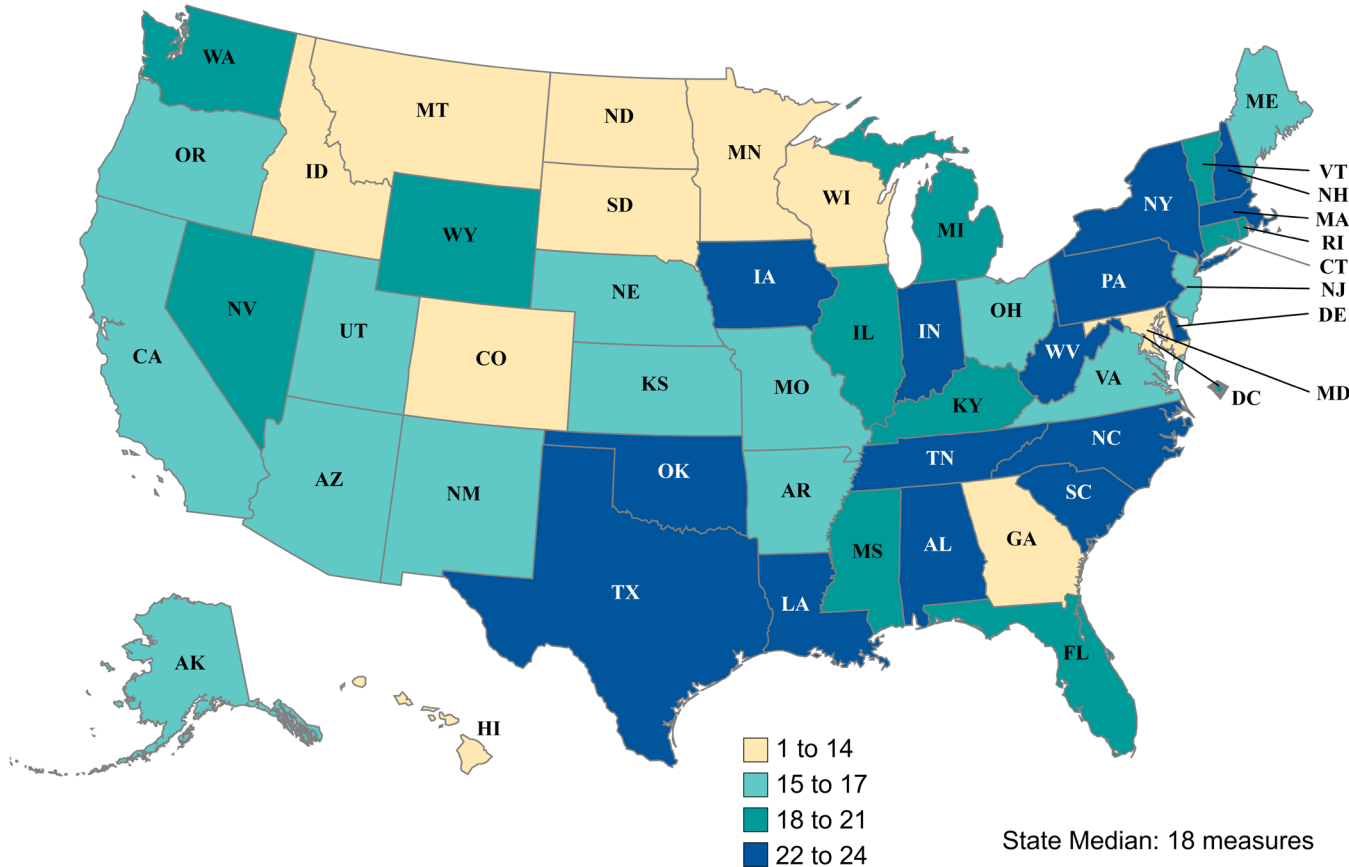
Notes: The term “states” includes the 50 states and the District of Columbia. The 2018 Child Core Set includes 26 measures. This chart excludes the CLABS1 measure, which is obtained from CDC’s National Healthcare Safety Network

This chart includes all Child Core Set measures that states reported for the FFY 2018 reporting cycle. Unless otherwise specified, states used Child Core Set specifications to calculate the measures. Some states calculated Child Core Set measures using “other specifications.” Measures were denoted as using “other specifications” when the state deviated substantially from the Child Core Set specifications, such as using alternate data sources, different populations, or other methodologies. Data from previous years may be updated based on new information received after publication of the 2018 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 2018



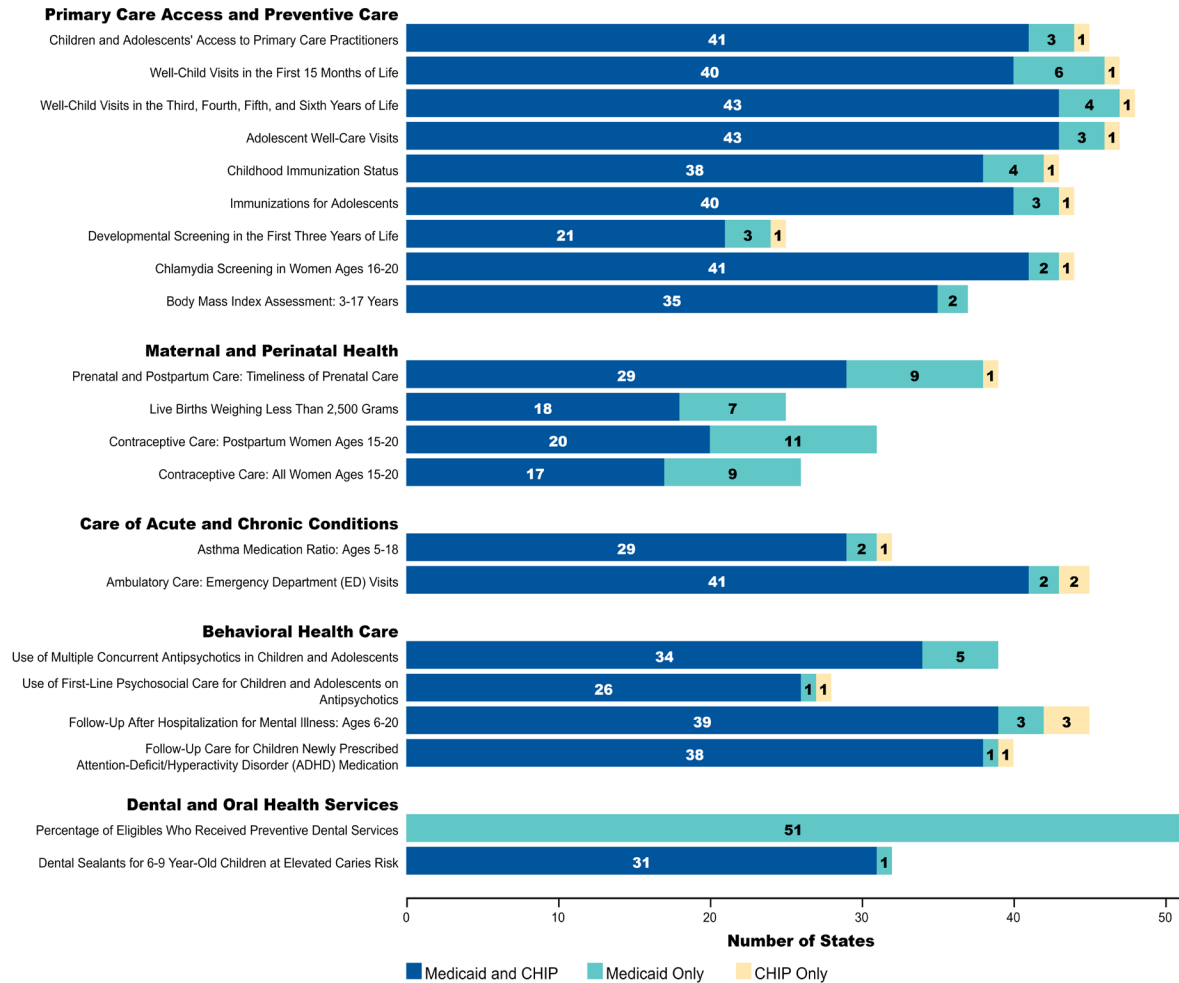
15 states reported at least 22 Child Core Set measures for FFY 2018

Sources: Mathematica analysis of MACPro reports and Form CMS-416 reports for the FFY 2018 reporting cycle.

Notes: The term "states" includes the 50 states and the District of Columbia. The 2018 Child Core Set includes 26 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 2018, By Domain



Sources: Mathematica analysis of MACPro reports and Form CMS-416 reports for the FFY 2018 reporting cycle.

Notes: This chart includes measures that were reported by at least 25 states for FFY 2018 and that met CMS standards for data 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 CLASI measure, which is obtained from CDC's National Healthcare Safety Network, and the CAHPS measure.



Median Performance Rates on Frequently Reported Child Core Set Measures, FFY 2018, By Domain

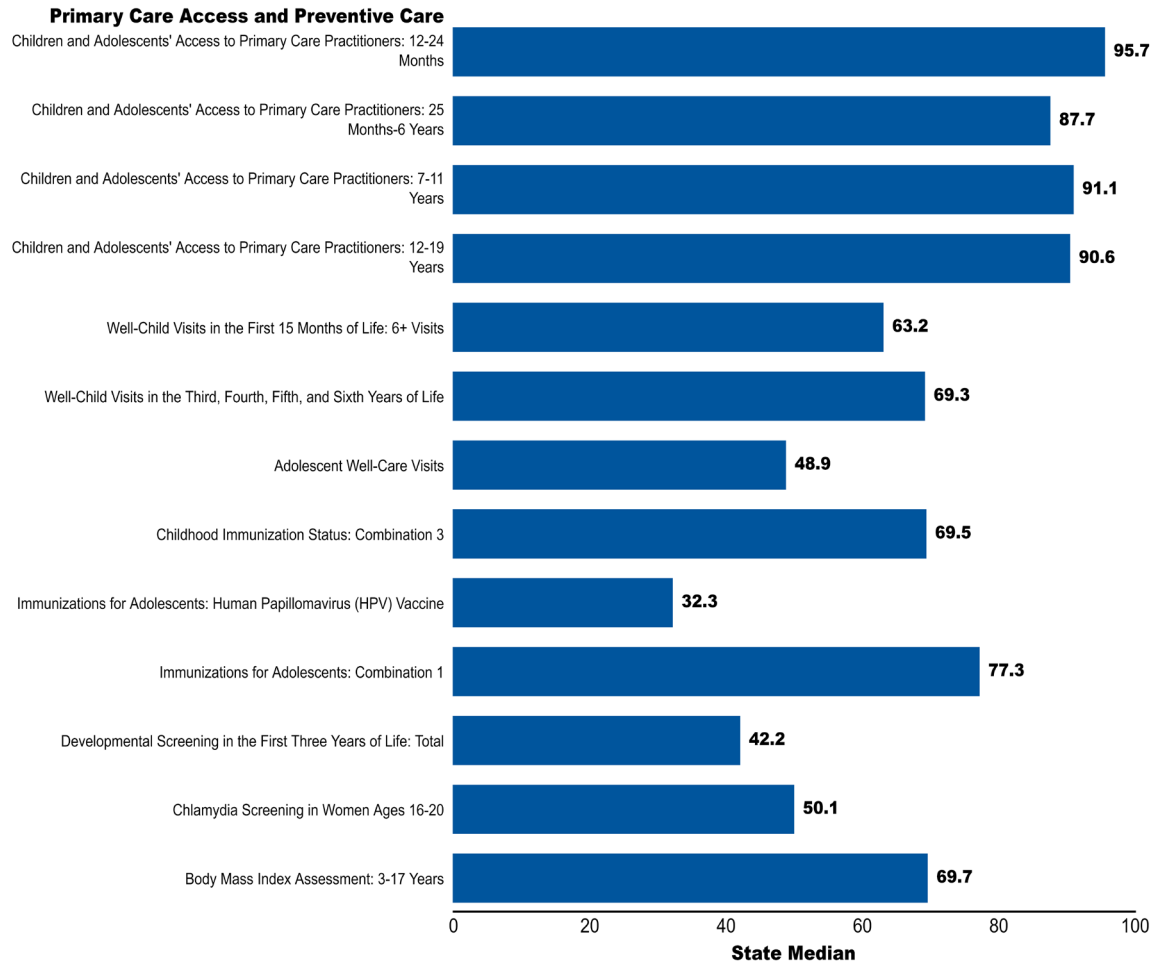


Chart is continued on the next slide.

Median Performance Rates on Frequently Reported Child Core Set Measures, FFY 2018, By Domain (continued)

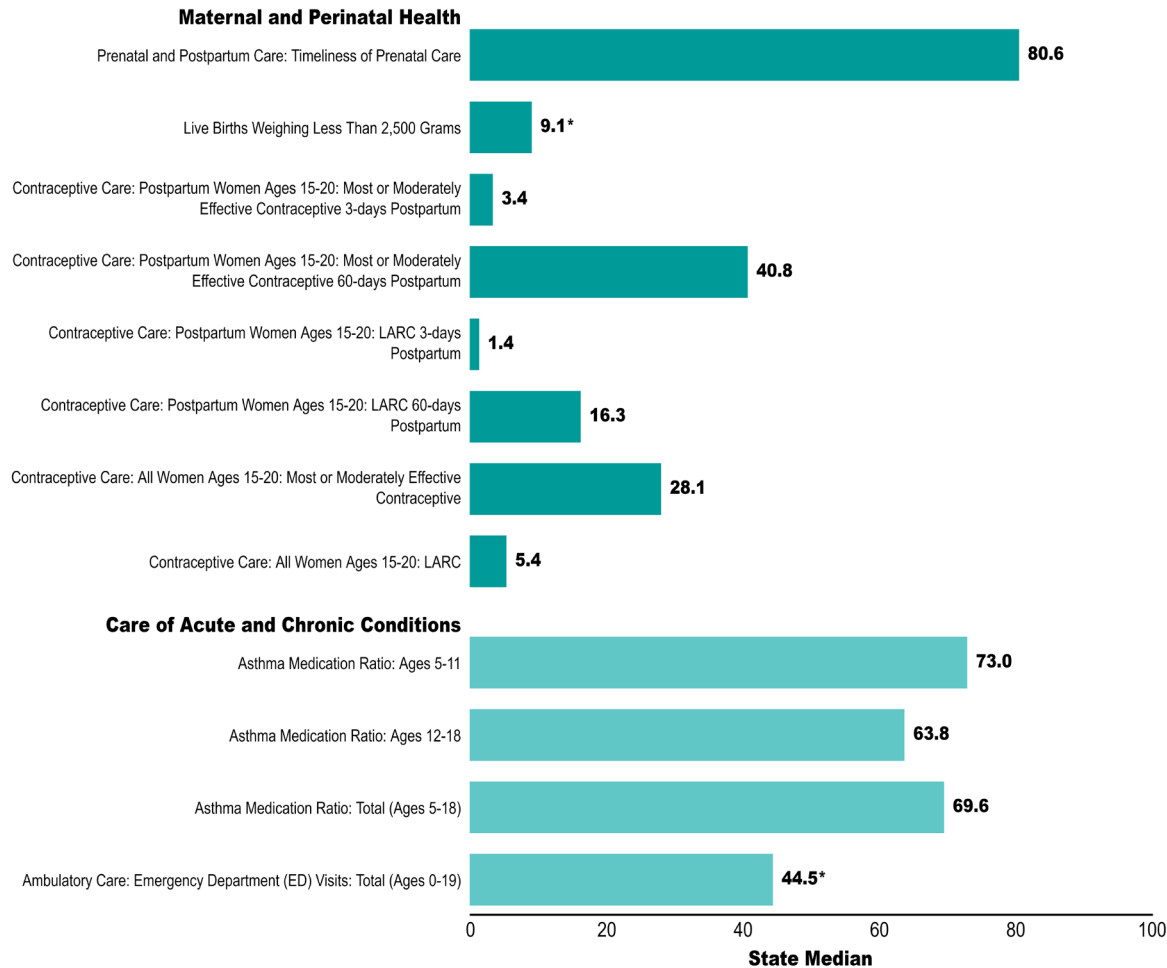
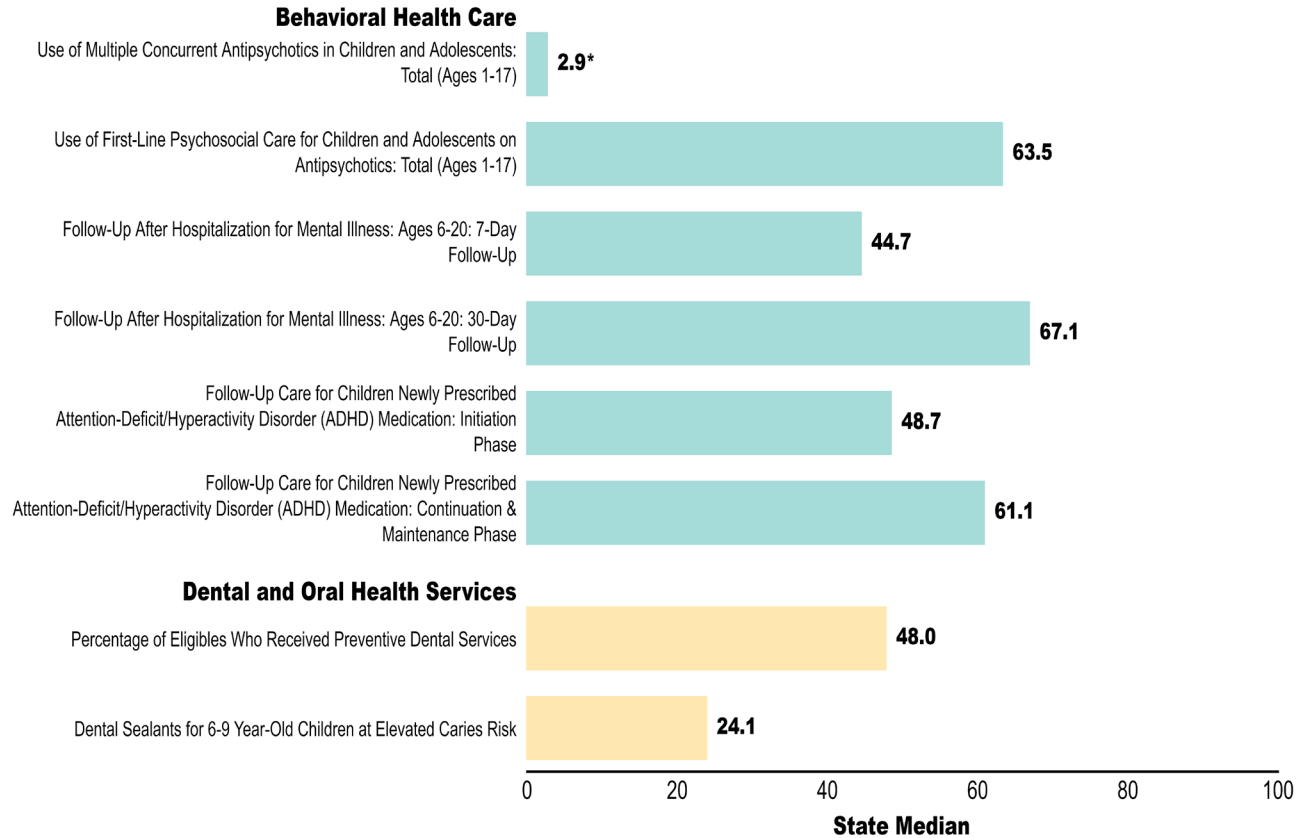


Chart is continued on the next slide.

Median Performance Rates on Frequently Reported Child Core Set Measures, FFY 2018, By Domain (continued)



Sources: Mathematica analysis of MACPro reports and Form CMS-416 reports for the FFY 2018 reporting cycle.

Notes: This chart includes measures that were reported by at least 25 states for FFY 2018 and that met CMS standards for data quality. Medians are reported as percentages for all measures except for Ambulatory Care: ED Visits, which is reported as a rate per 1,000 beneficiary 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.

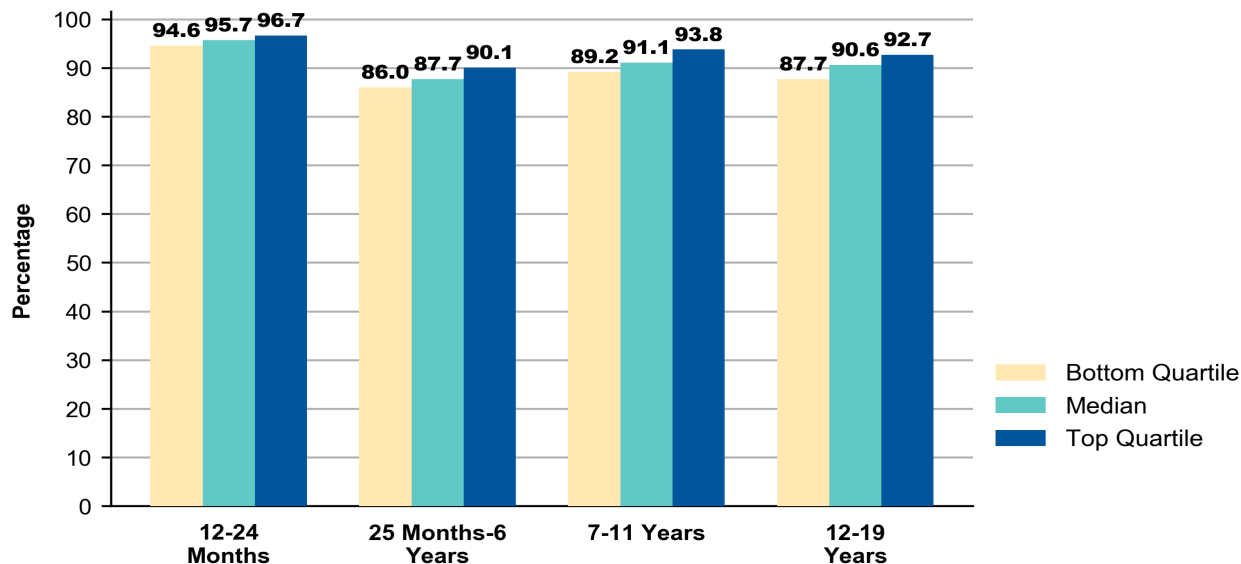
Nine Child Core Set measures of primary care access and preventive care were available for analysis for FFY 2018. These measures are among the most frequently reported measures in the Child Core Set.

- 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 and 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 2018 (n = 45 states)



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: 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.

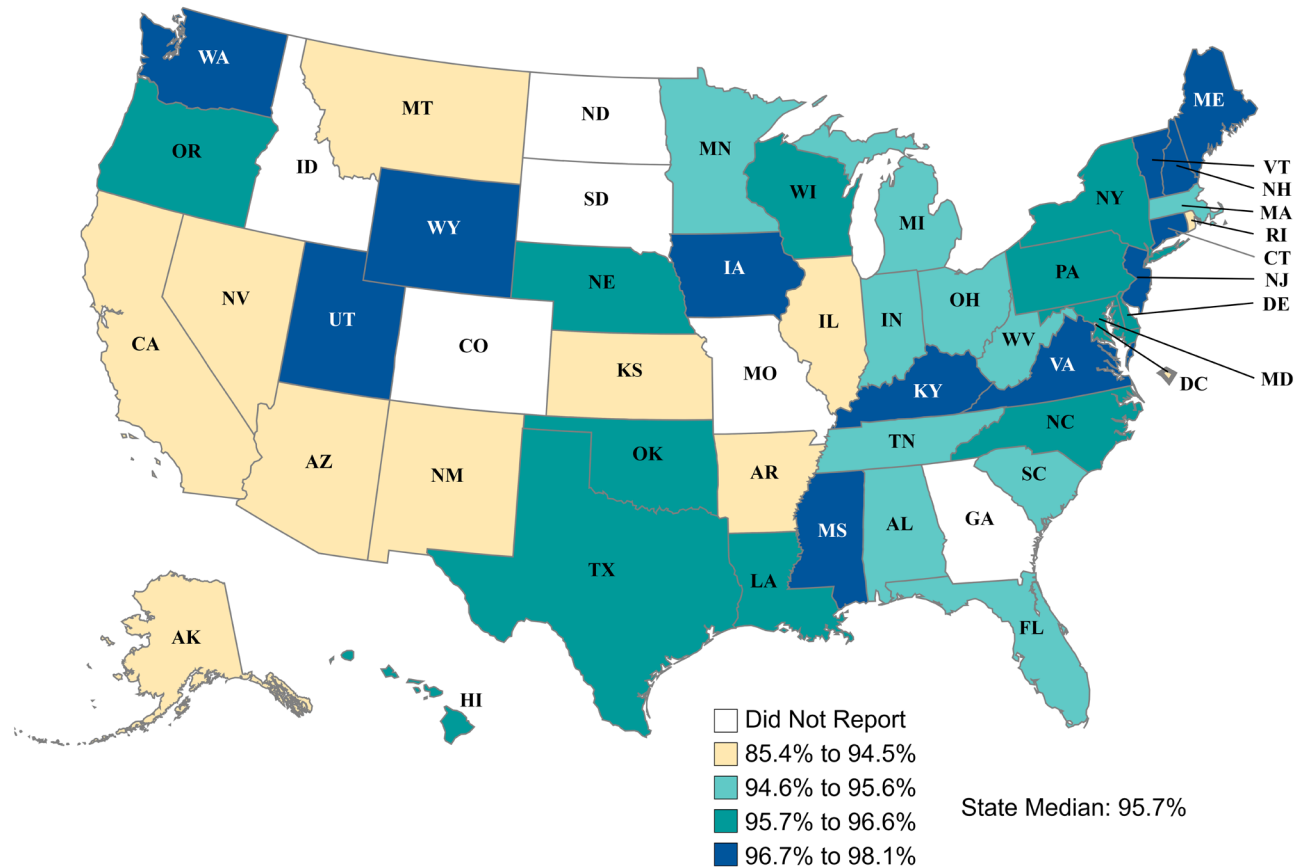
The median percentage of children with a visit to a PCP ranged from

88 percent
to **96** percent
among the four age categories for this measure (45 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 2018 (n = 45 states)

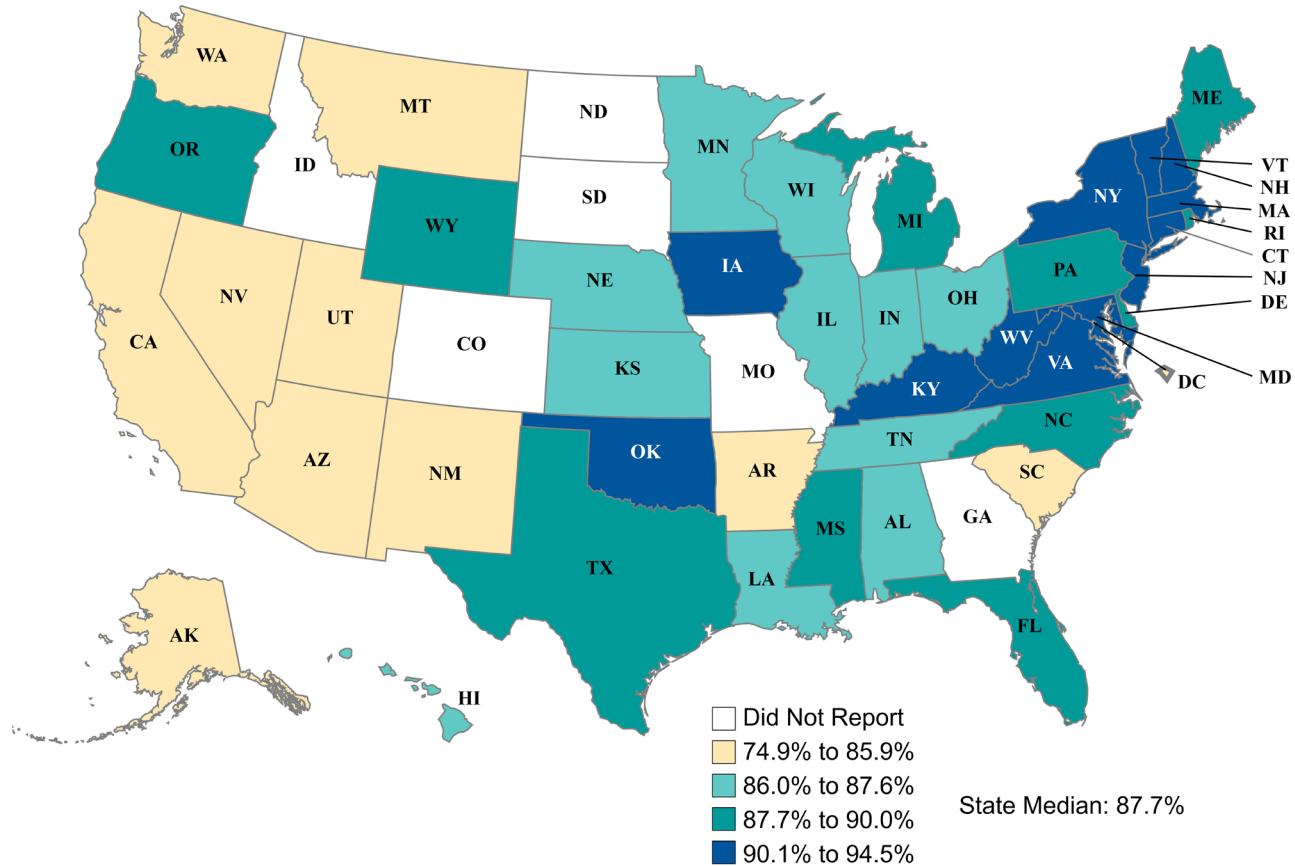


Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

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: 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 2018 (n = 45 states)

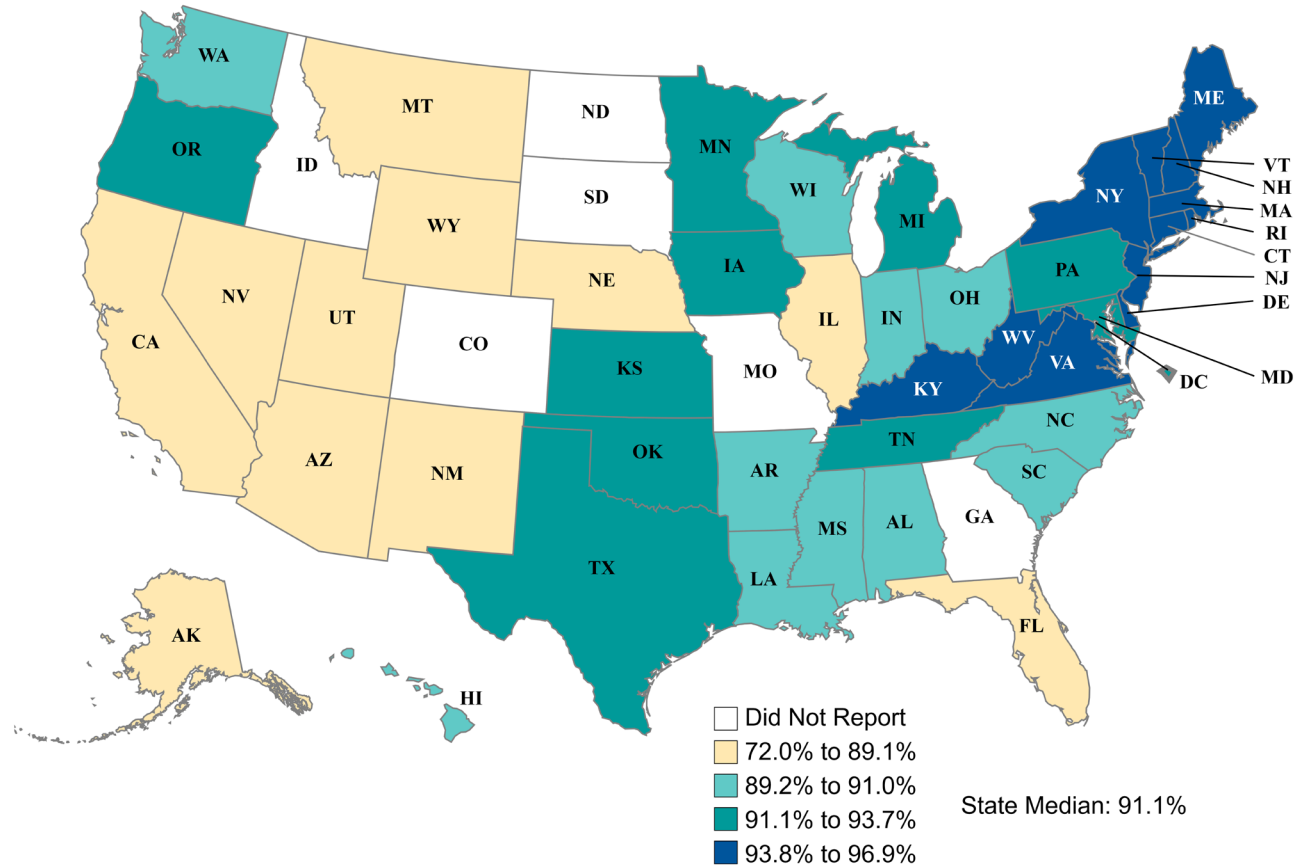


Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

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 2018 (n = 45 states)



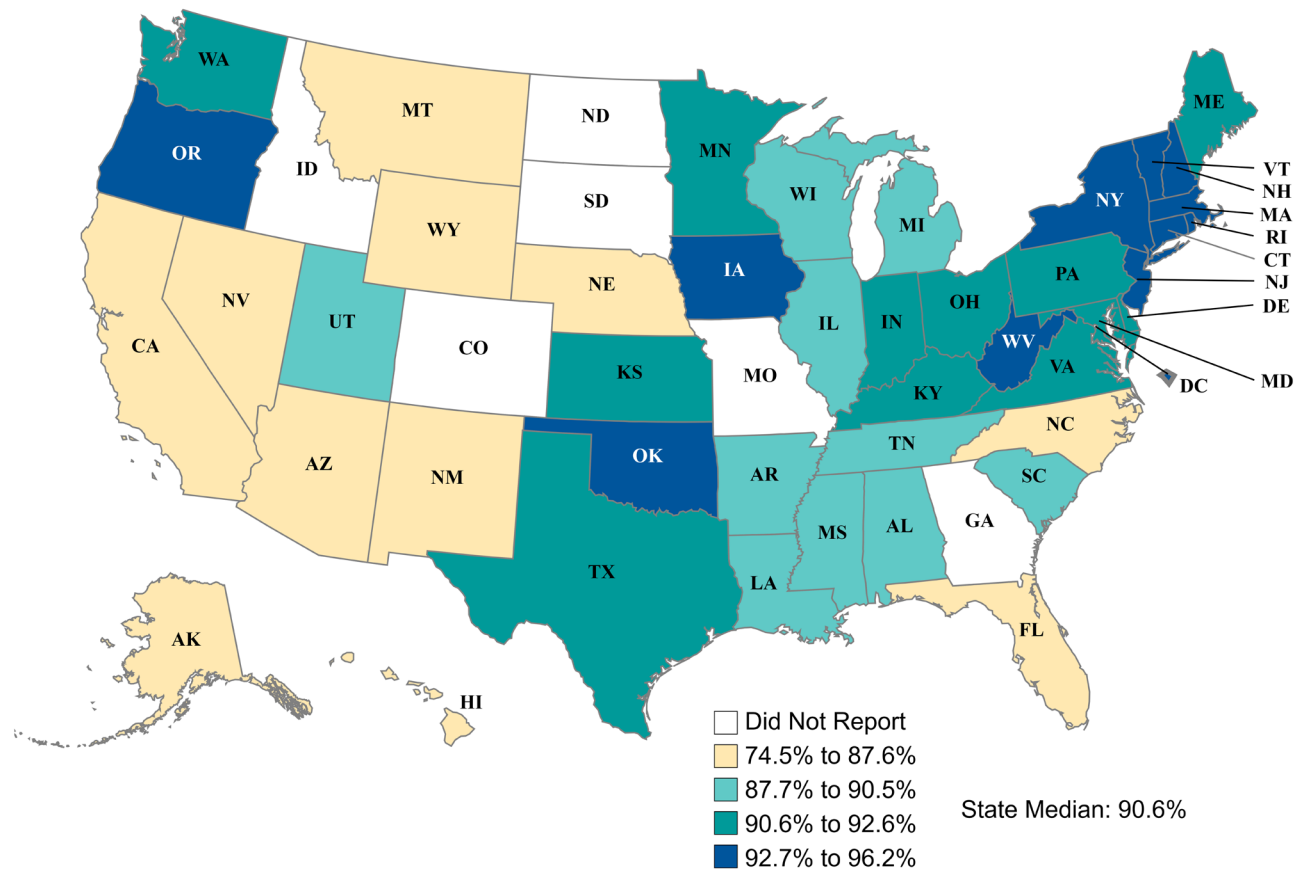
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

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 2018 (n = 45 states)



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

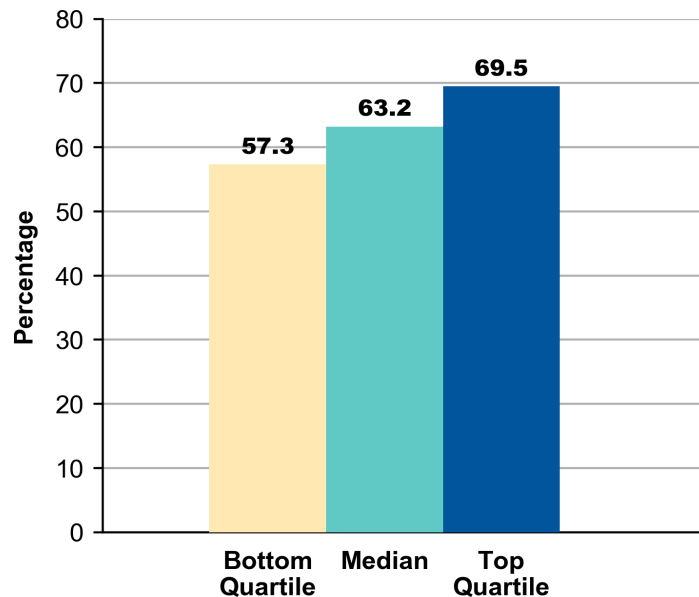
Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



Well-Child Visits in the 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 who received 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 2018 (n = 47 states)



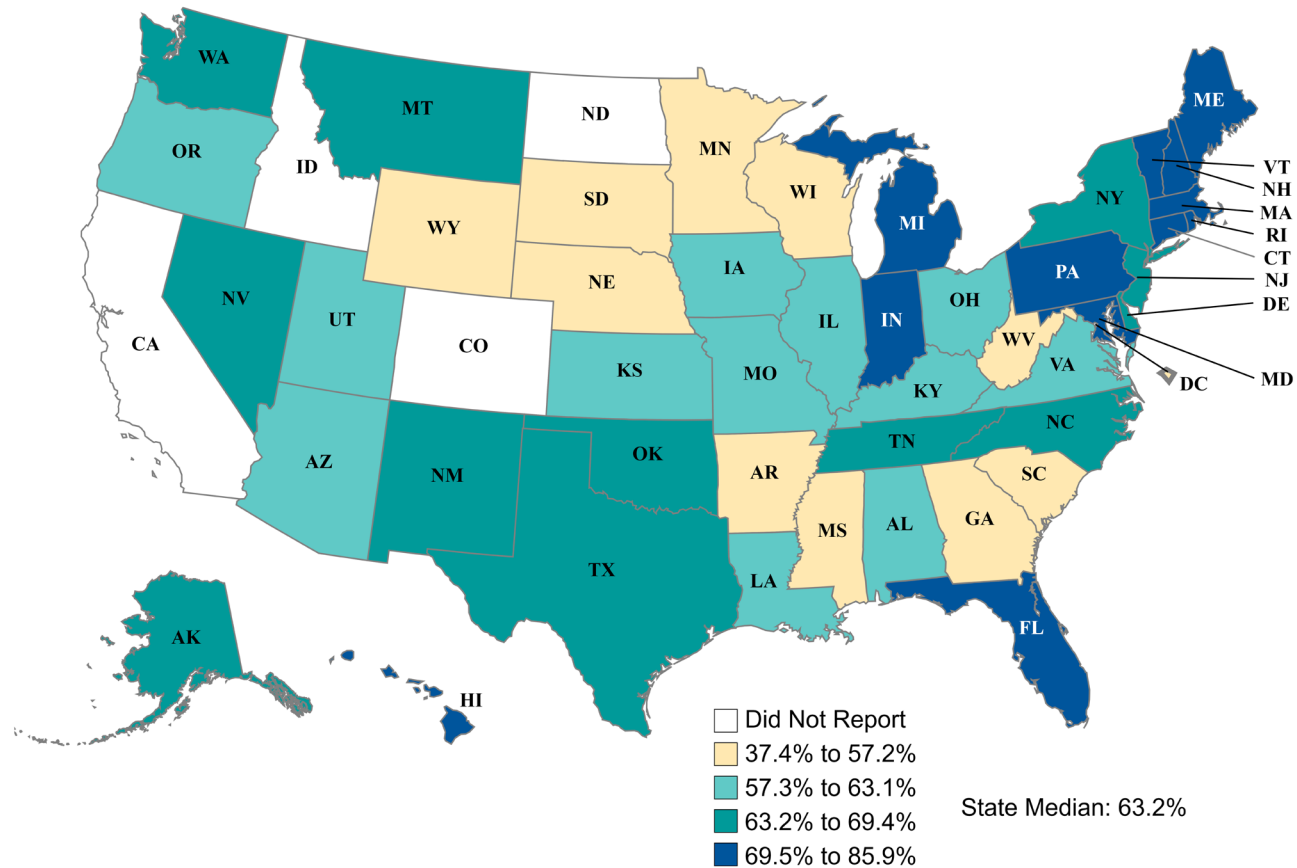
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: 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 **63** percent of children received six or more well-child visits in the first 15 months of life (47 states)

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 2018 (n = 47 states)



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

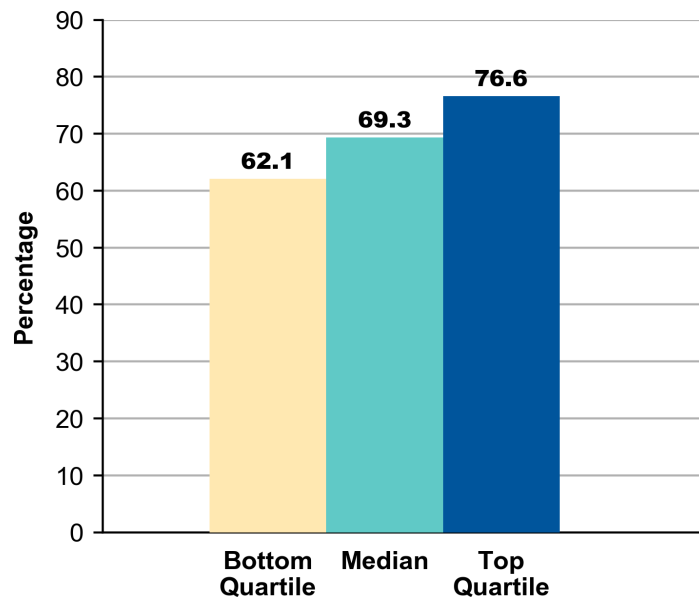
Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



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 2018 (n = 48 states)



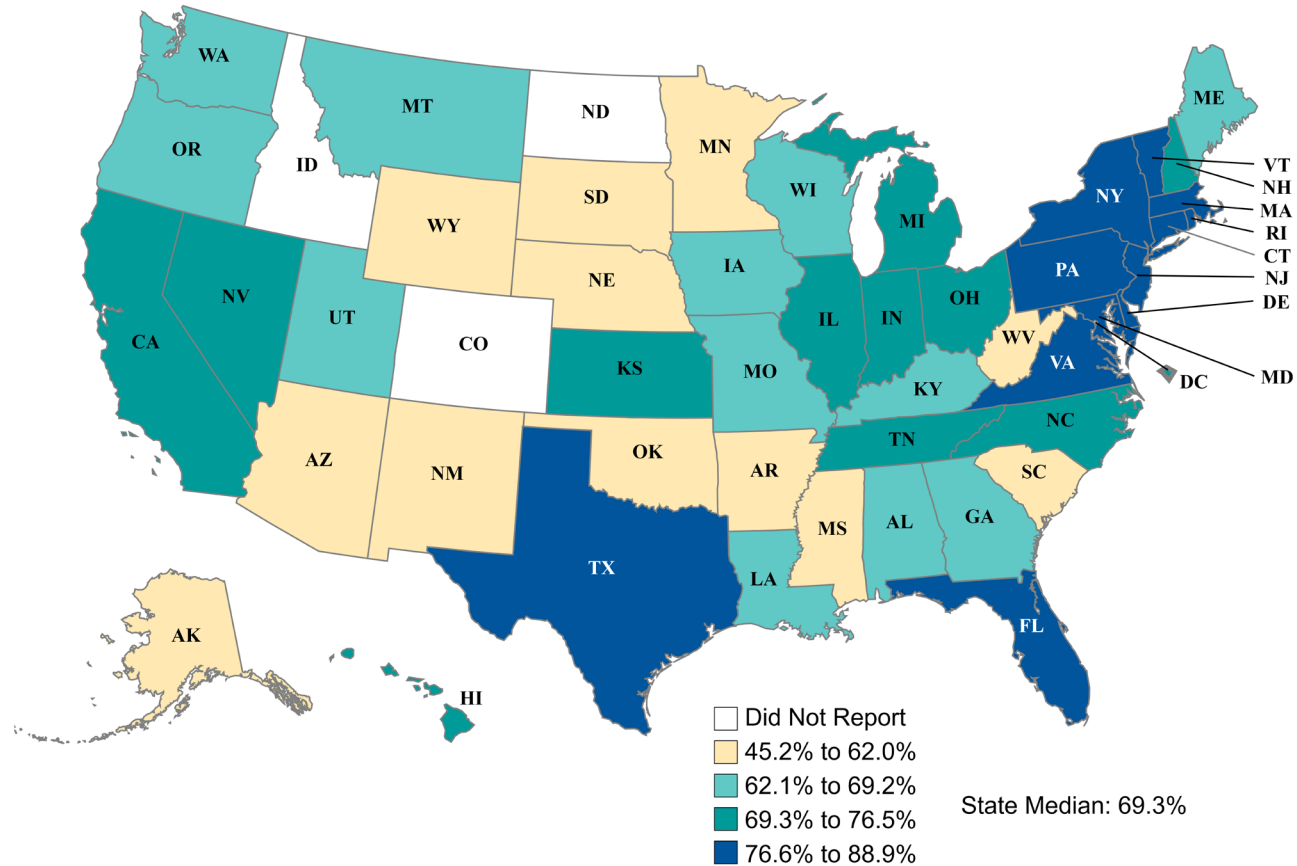
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

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 **69** percent of children received at least one well-child visit in the third, fourth, fifth, and sixth years of life (48 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 2018 (n = 48 states)



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

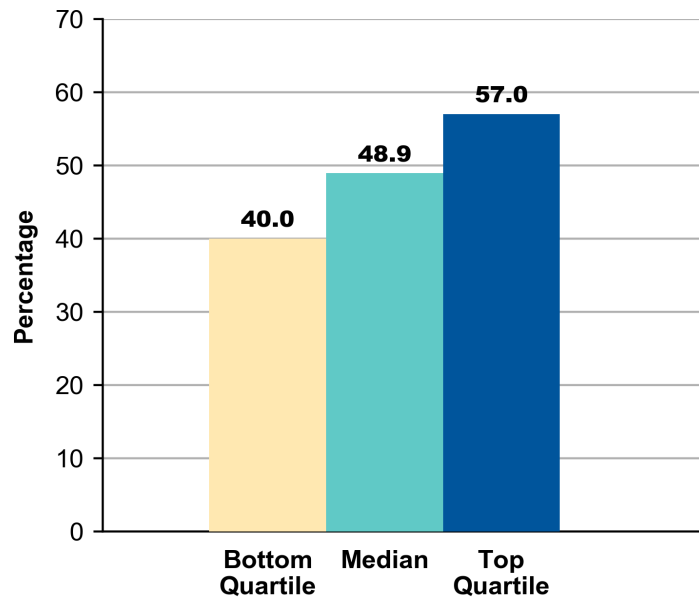
Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



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 2018 (n = 47 states)



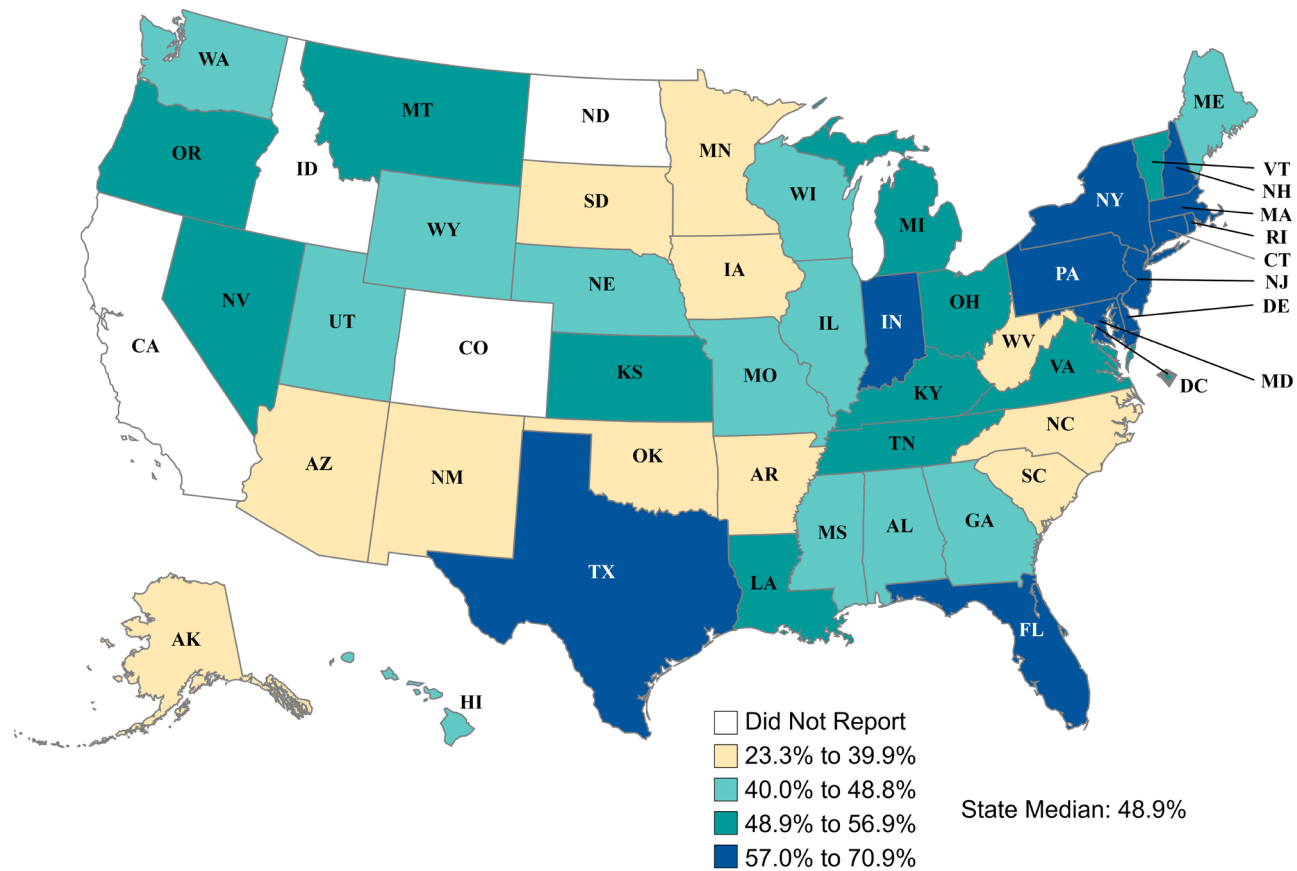
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: 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 **49** percent of adolescents ages 12 to 21 had at least one well-care visit (47 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 2018
(n = 47 states)**



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

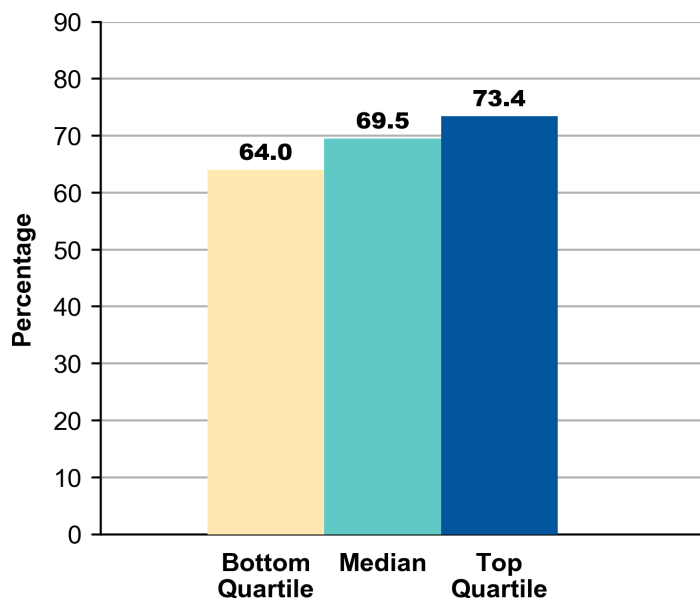
Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



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 2018 (n = 43 states)



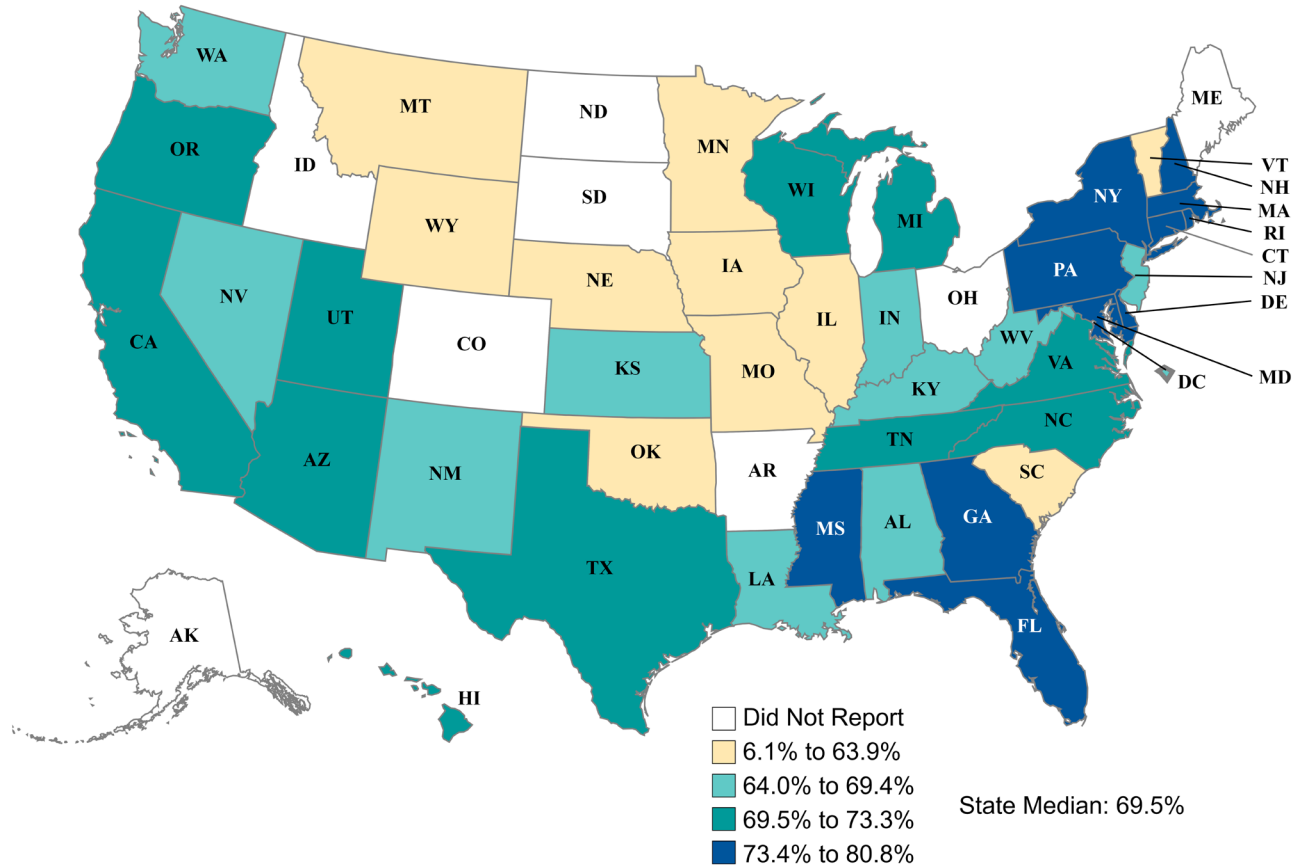
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: 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. 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 **70** percent of children were up to date on recommended immunizations (Combination 3) by their second birthday (43 states)

Childhood Immunization Status (continued)

Geographic Variation in the Percentage of Children Up to Date on Recommended Immunizations (Combination 3) by their Second Birthday, FFY 2018 (n = 43 states)



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

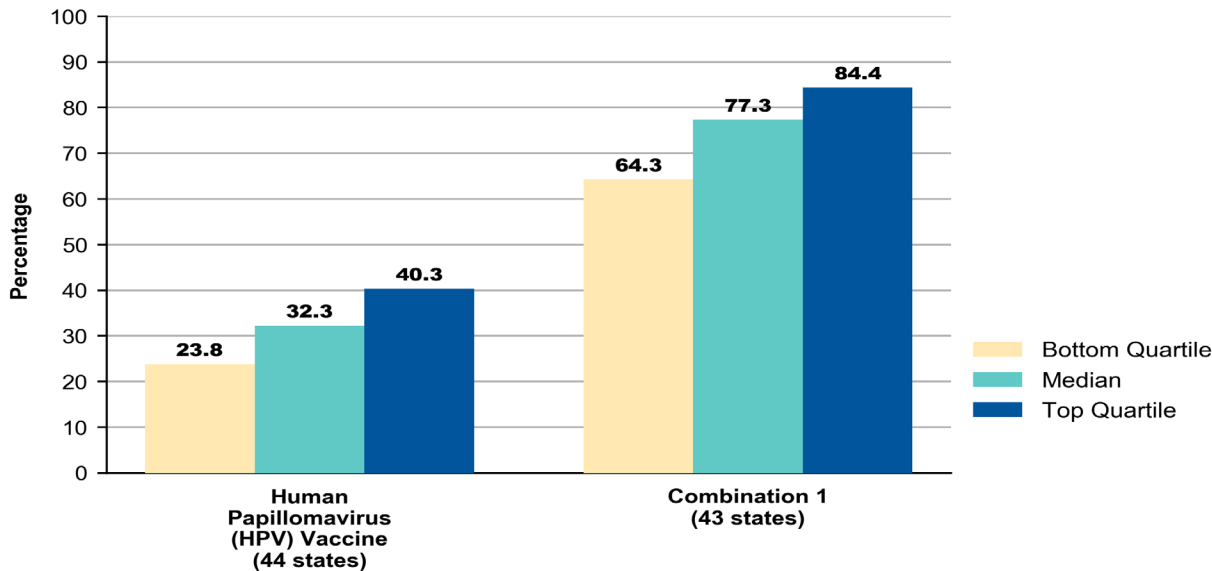
Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



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 (Human Papillomavirus Vaccine and Combination 1) by their 13th Birthday, FFY 2018



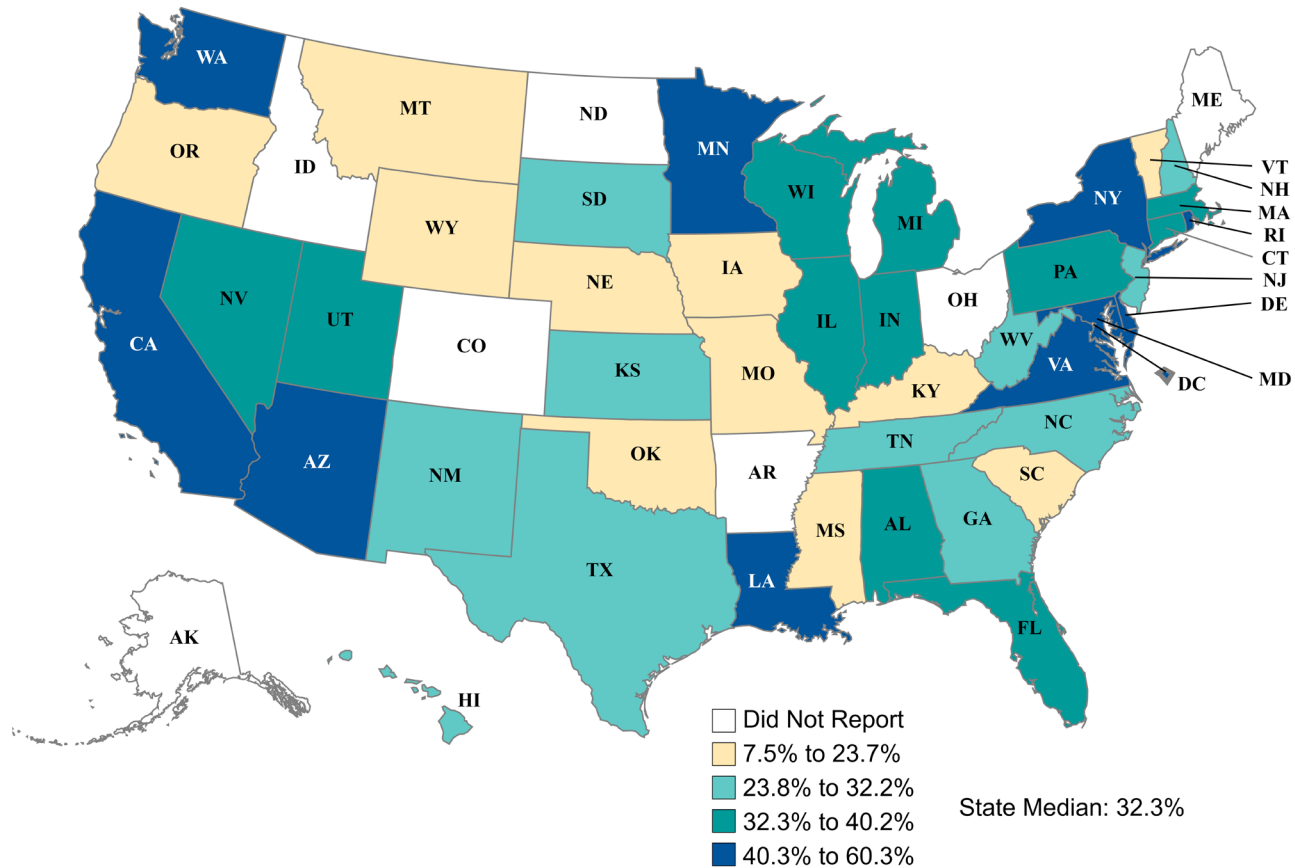
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: 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, diphtheria toxoids and acellular pertussis (Tdap) vaccine, and completed the human papillomavirus (HPV) vaccine series by their 13th birthday. The measure calculates a rate for each vaccine and two combination rates. Specifications for the HPV Vaccine rate changed substantially for FFY 2018 and rates are not comparable with rates reported for previous years. 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 **32** percent of adolescents were up to date on the HPV vaccine (44 states) and **77** percent were up to date on Combination 1 immunizations by their 13th birthday (43 states)

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

Geographic Variation in Percentage of Adolescents Up to Date on Recommended Immunizations (Human Papillomavirus Vaccine) by their 13th Birthday, FFY 2018 (n = 44 states)



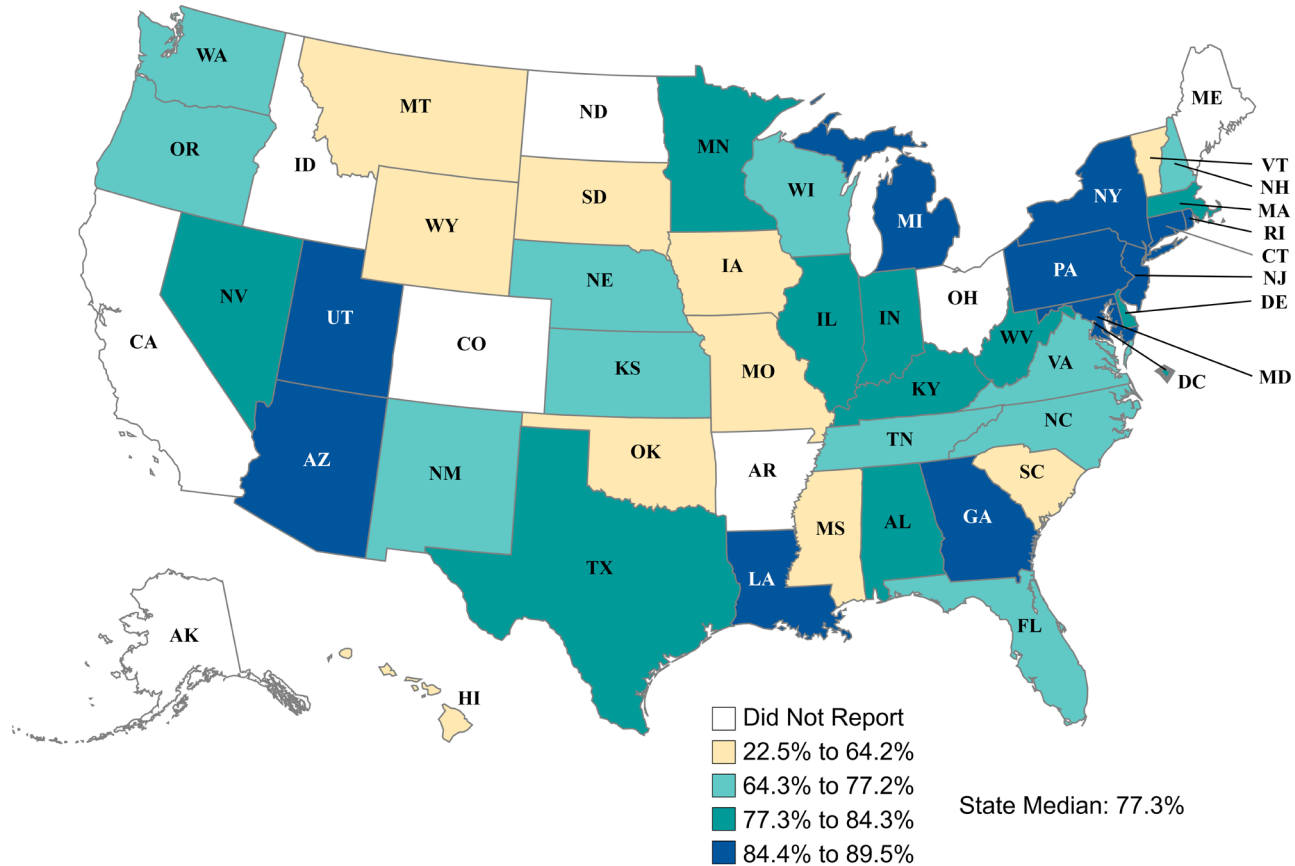
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

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



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 2018 (n = 43 states)



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

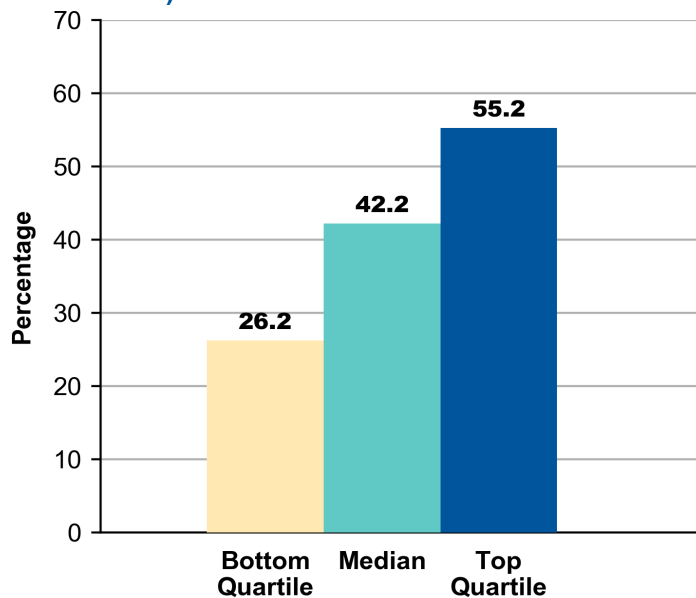
Note: This chart excludes California, which reported the measure but did not provide data for the Combination 1 rate (percentage receiving both meningococcal and Tdap vaccines). When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population 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 2018 (n = 25 states)



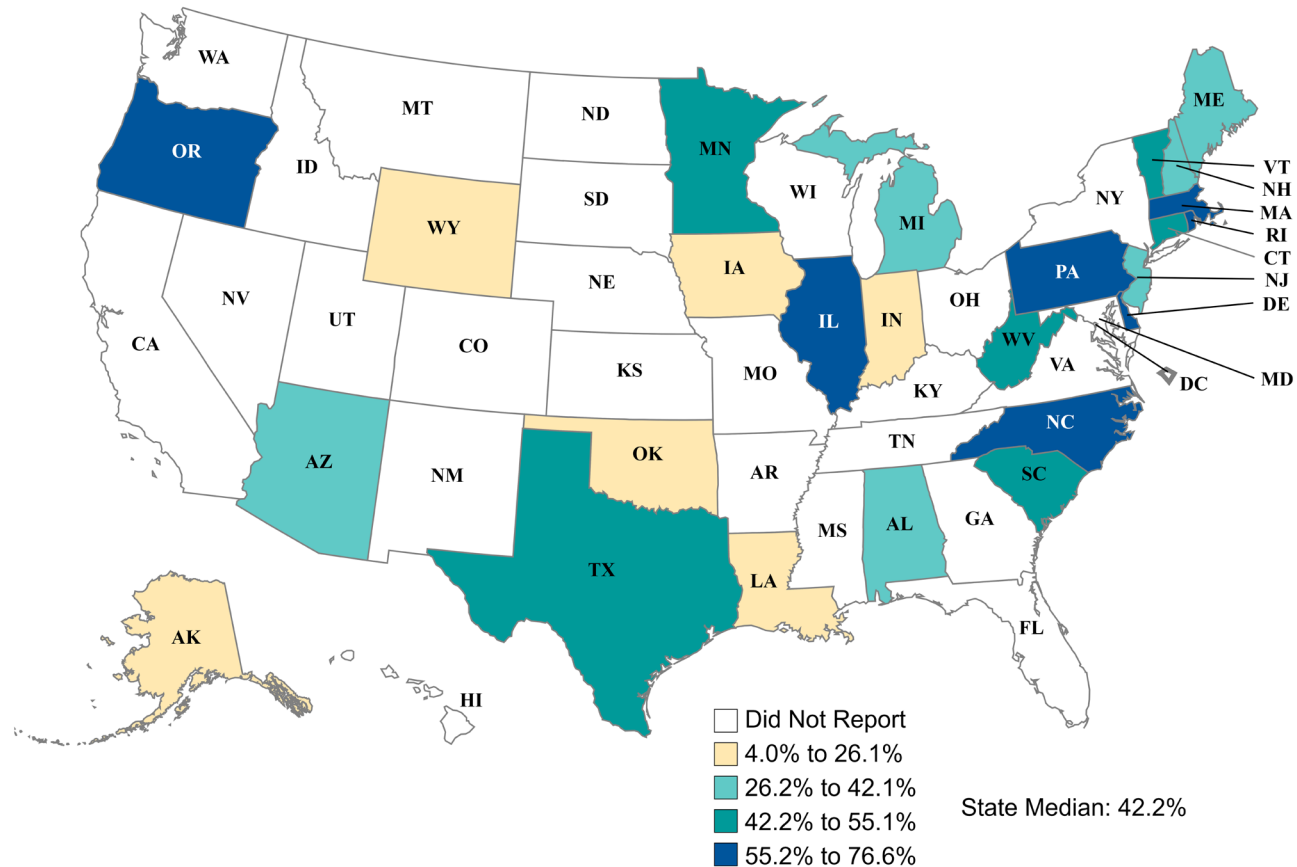
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: This measure identifies the percentage of children screened for risk of developmental, behavioral, or social delays using a standardized screening tool for global developmental screenings in the 12 months preceding or on their first, second, or third birthday. Rates for some states also include non-global developmental screenings. 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 **42** 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 (25 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 2018 (n = 25 states)



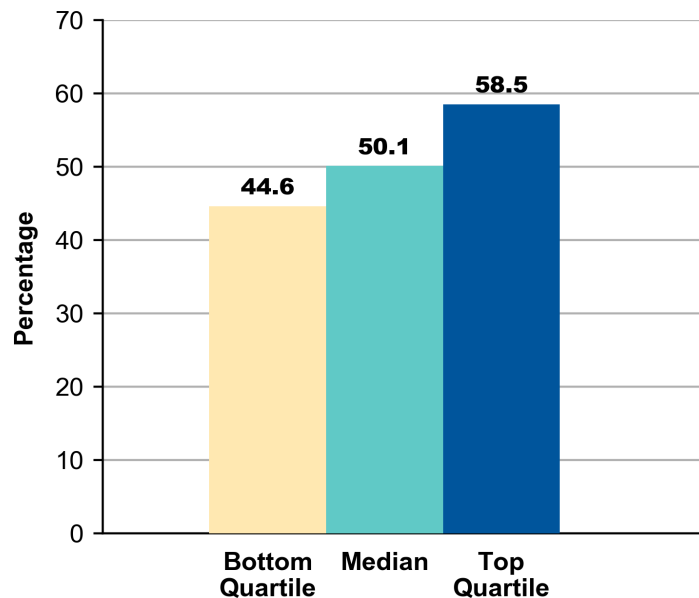
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

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 to 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 2018 (n = 44 states)



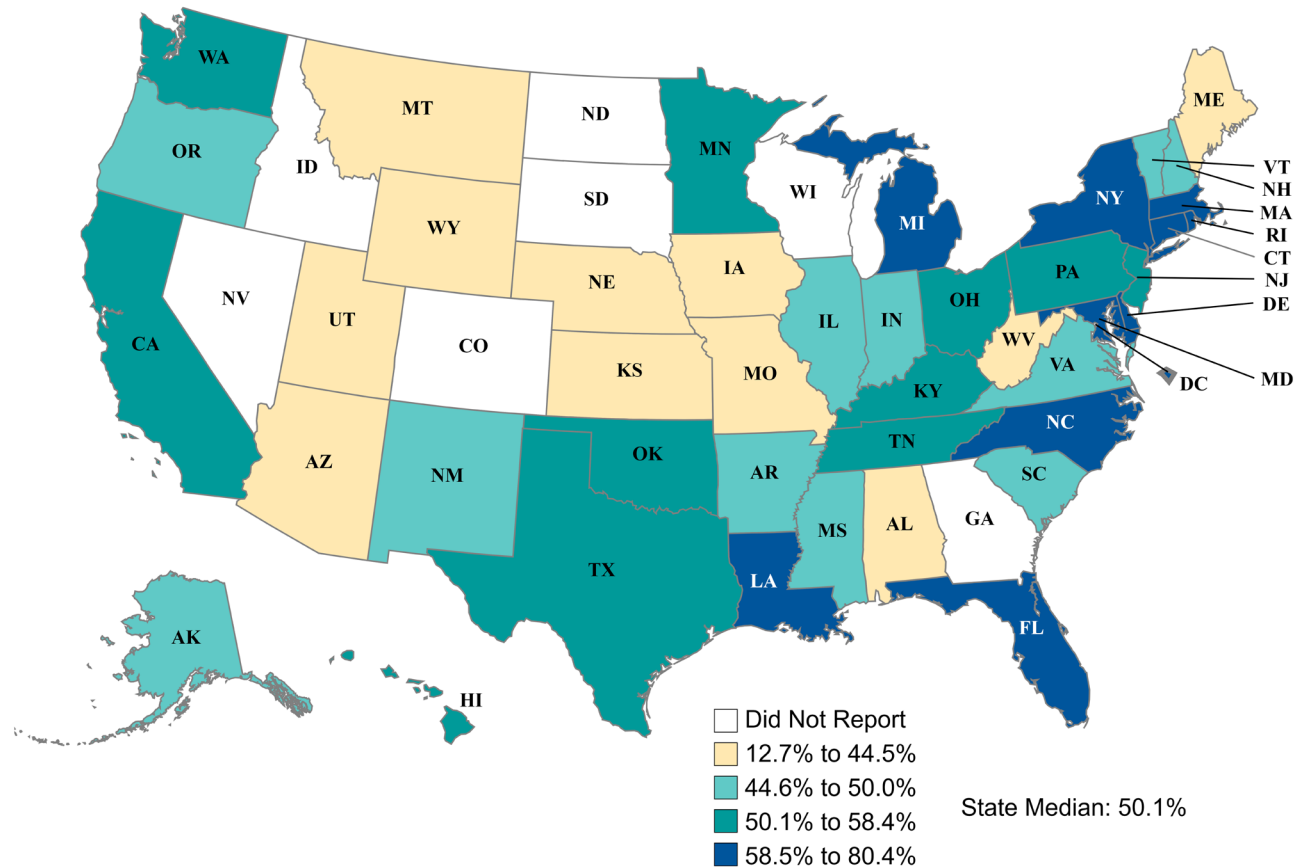
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

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 **50** percent of sexually active women ages 16 to 20 were screened for chlamydia (44 states)

Chlamydia Screening in Women Ages 16 to 20 (continued)

Geographic Variation in the Percentage of Sexually Active Women Ages 16 to 20 who were Screened for Chlamydia, FFY 2018 (n = 44 states)



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

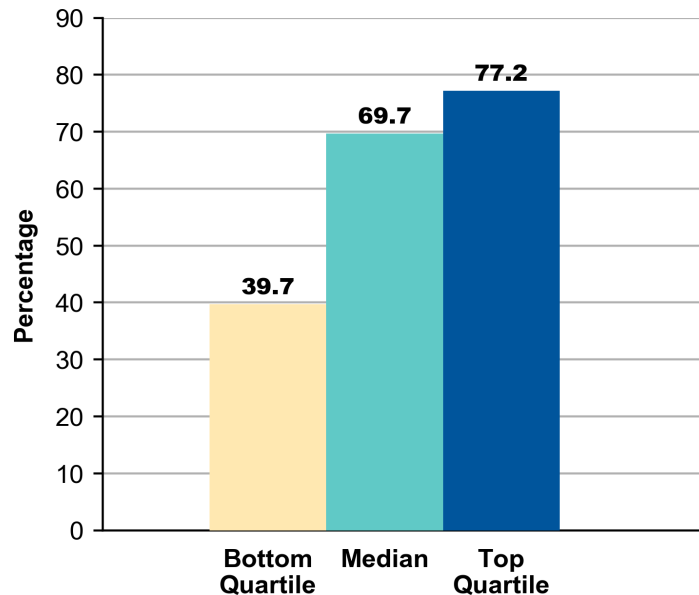
Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



Body Mass Index (BMI) Assessment for Children and 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 was Documented in the Medical Record, FFY 2018 (n = 37 states)



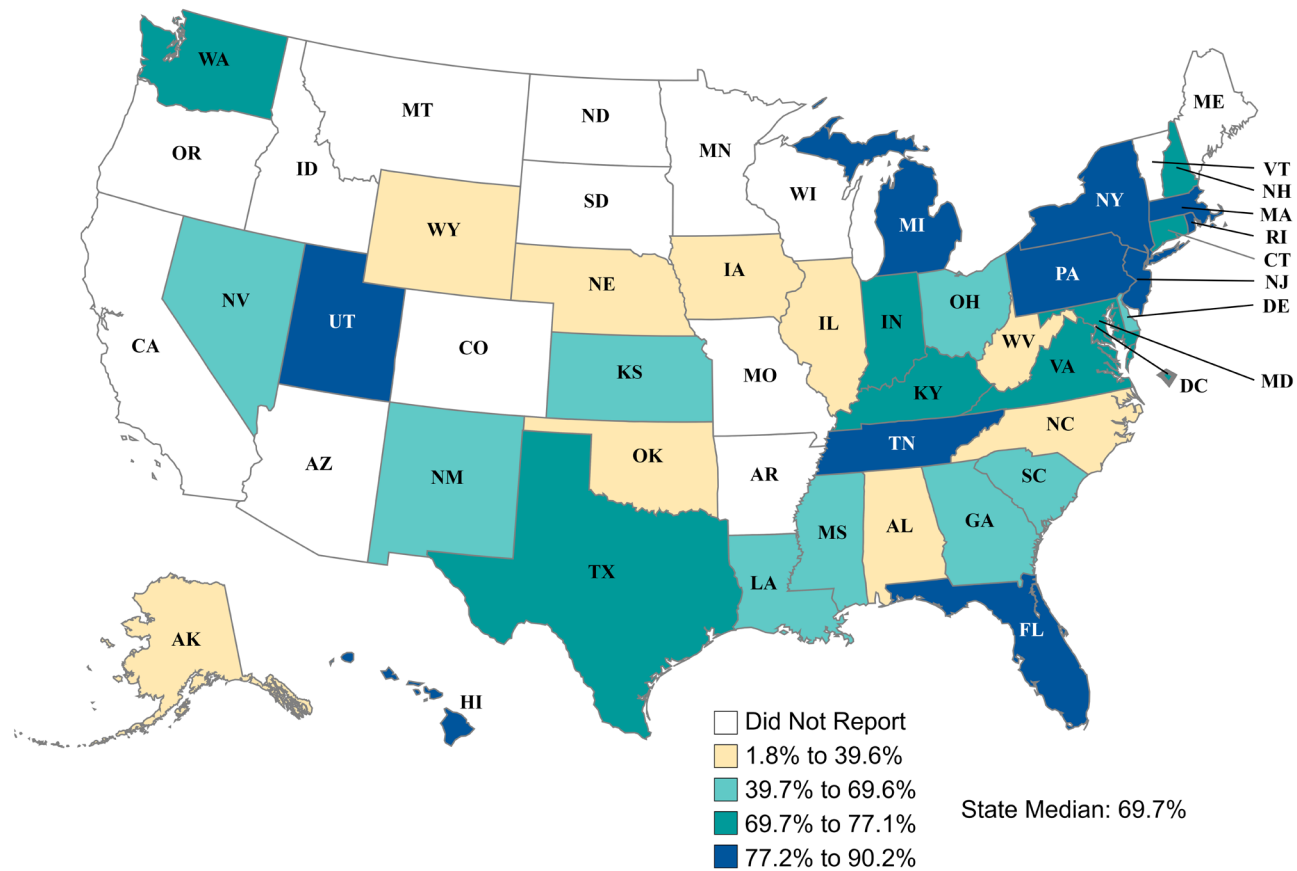
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: 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. This chart excludes Arkansas, which calculated the measure but did not use 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 **70** 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)

Body Mass Index (BMI) Assessment for Children and Adolescents (continued)

Geographic Variation in the Percentage of Children Ages 3 to 17 who had an Outpatient Visit and whose Body Mass Index Percentile was Documented in the Medical Record, FFY 2018 (n = 37 states)



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: This chart excludes Arkansas, which calculated the measure but did not use 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.



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.¹ 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 <https://www.medicaid.gov/medicaid/quality-of-care/improvement-initiatives/maternal-and-infant-health/index.html>.

Five Child Core Set measures of maternal and perinatal health were available for analysis for FFY 2018.

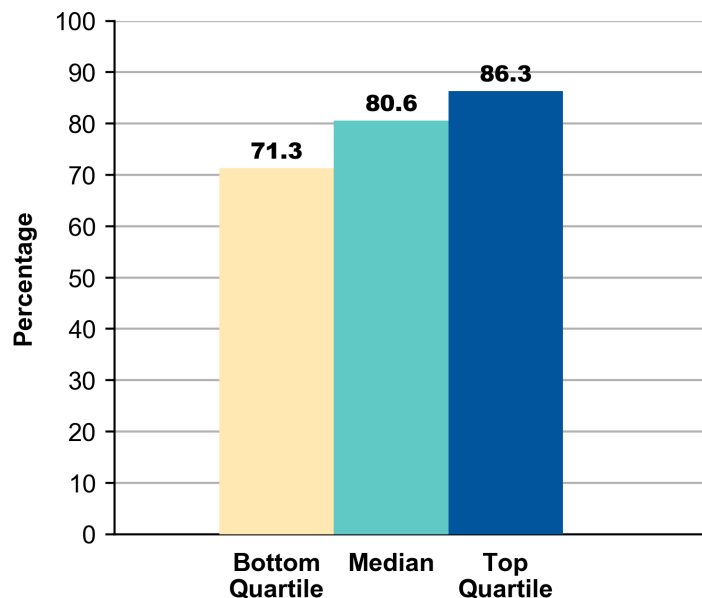
- Prenatal and Postpartum Care: Timeliness of Prenatal Care
- Live Births Weighing Less Than 2,500 Grams
- Contraceptive Care: Postpartum Women Ages 15 to 20
- Contraceptive Care: All Women Ages 15 to 20
- Pediatric Central Line-Associated Blood Stream Infections

¹ <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 2018 (n = 39 states)



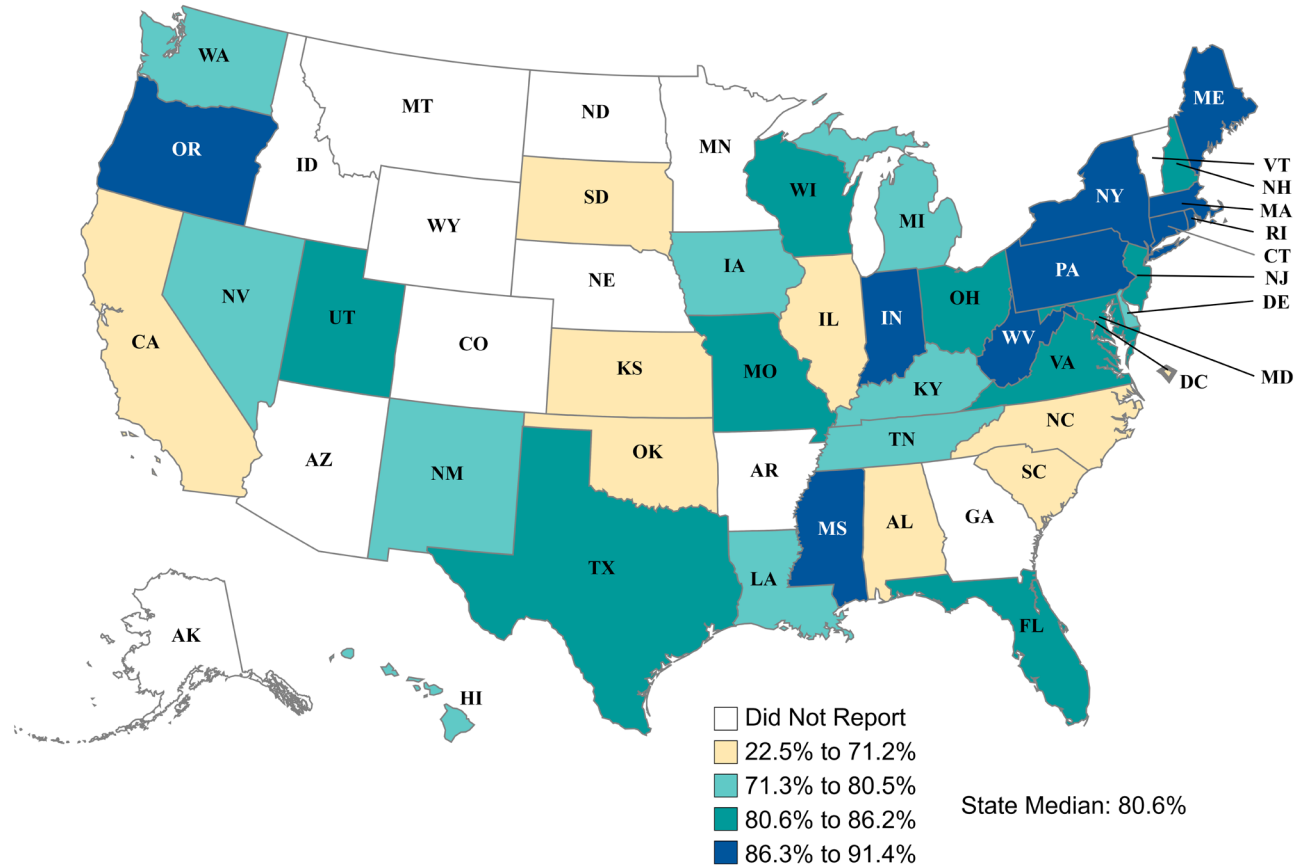
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: 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 **81** percent of pregnant women had a prenatal care visit in the first trimester or within 42 days of Medicaid or CHIP enrollment (39 states)

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 2018 (n = 39 states)



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

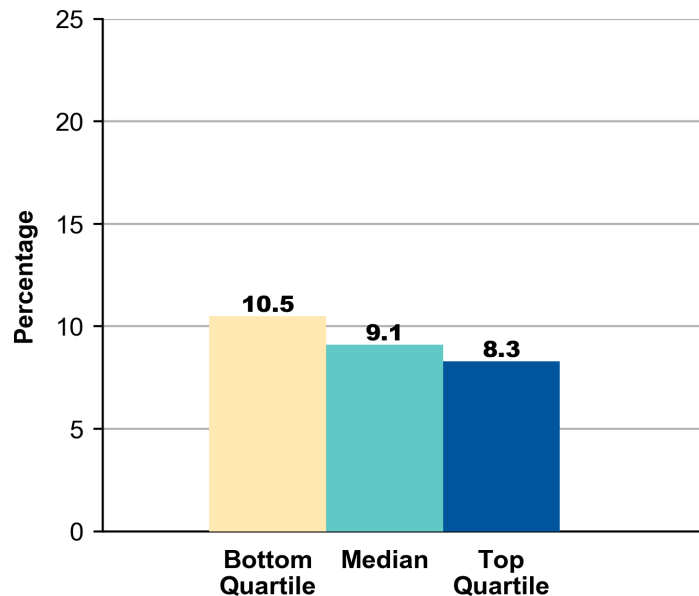
Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.



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 2018 (n = 25 states)
[Lower rates are better for this measure]



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

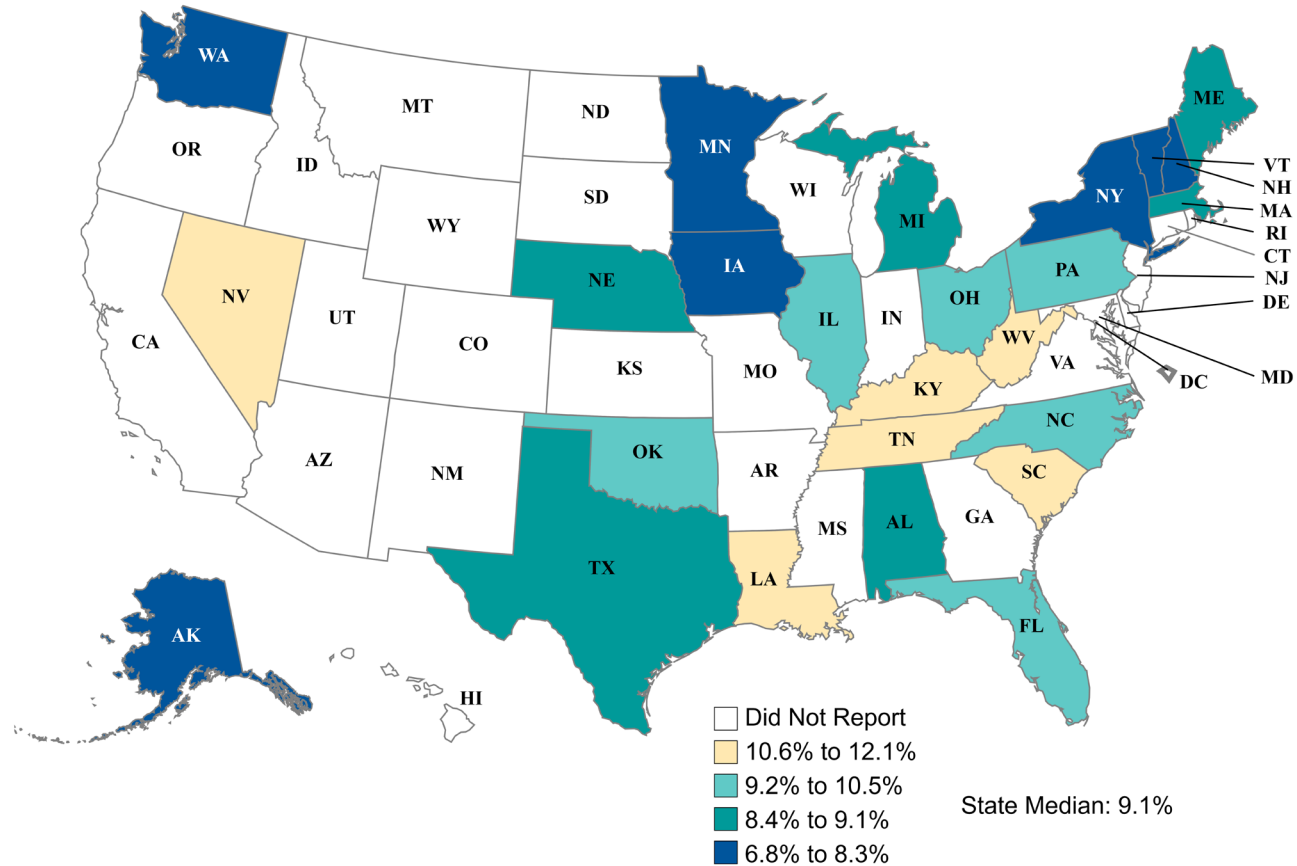
Notes: This measure identifies the percentage of live births that weighed less than 2,500 grams during the measurement period. This chart excludes Arkansas, Delaware, and Indiana, which reported the measure but did not use Child Core Set specifications. When a state reported separate rates for its Medicaid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

A median of **9.1** percent of live births financed by Medicaid or CHIP weighed less than 2,500 grams (25 states)



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

Geographic Variation in the Percentage of Live Births Weighing Less Than 2,500 Grams, FFY 2018 (n = 25 states)
 [Lower rates are better for this measure]



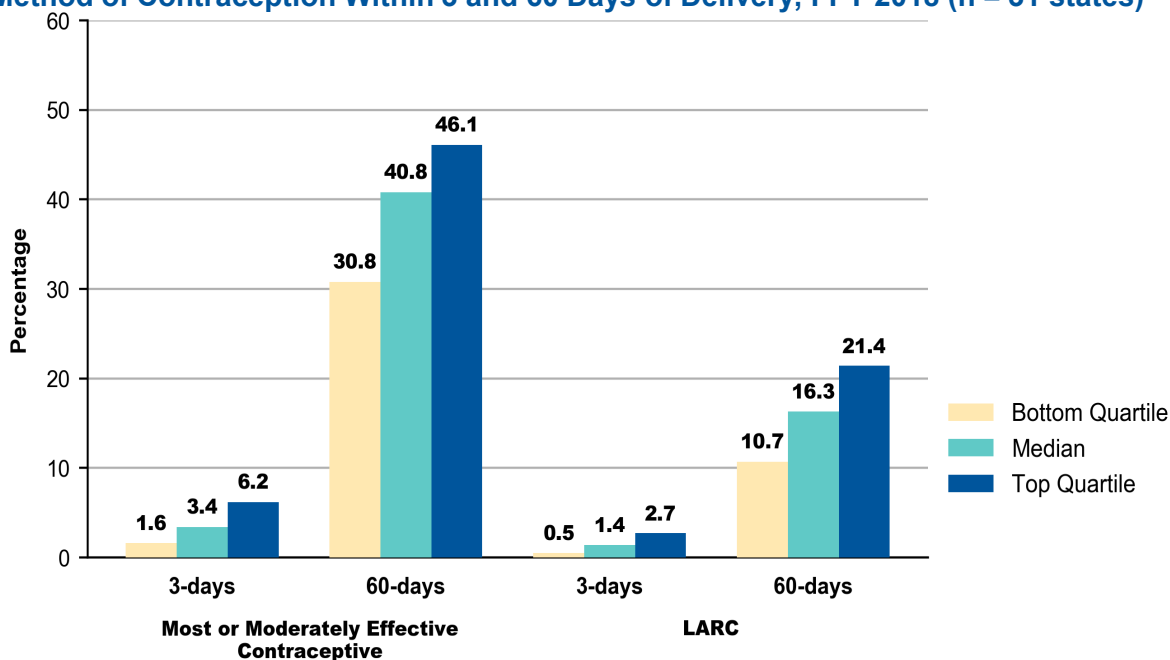
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: This chart excludes Arkansas, Delaware, 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.

Contraceptive Care: Postpartum Women Ages 15 to 20

Access to effective contraceptive care during the postpartum period can improve birth spacing and timing and improve the health outcomes of women and children. This measure assesses the percentage of postpartum women ages 15 through 20 who were provided a most or moderately effective method of contraception or a long-acting reversible method of contraception (LARC) within 3 and 60 days of delivery. Performance on this measure is being publicly reported for the first time for FFY 2018.

Percentage of Postpartum Women Ages 15 to 20 who had a Live Birth and were Provided a Most Effective or Moderately Effective Method of Contraception or Long-Acting Reversible Method of Contraception Within 3 and 60 Days of Delivery, FFY 2018 (n = 31 states)



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: This measure identifies the percentage of postpartum women ages 15 to 20 who had a live birth and who were provided: (1) a most effective or moderately effective method of contraception within 3 and 60 days of delivery; or (2) a long-acting reversible method of contraception (LARC) within 3 and 60 days of delivery. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

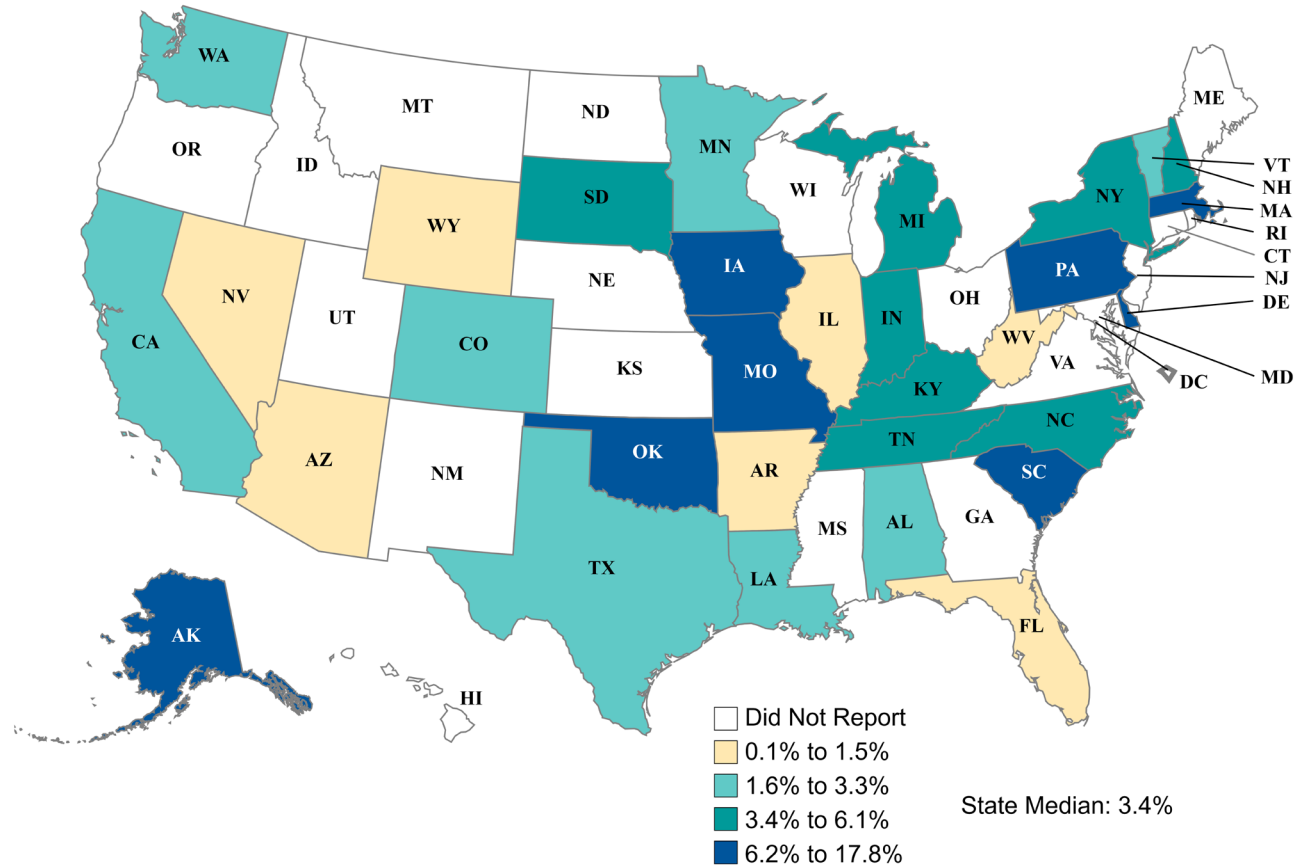
Among postpartum women ages 15 to 20 who had a live birth, a median of

41 percent received a most effective or moderately effective method of contraception within 60 days of delivery (31 states)



Contraceptive Care: Postpartum Women Ages 15 to 20: Most or Moderately Effective Contraceptive 3-days Postpartum (continued)

Geographic Variation in the Percentage of Postpartum Women Ages 15 to 20 Provided a Most Effective or Moderately Effective Method of Contraception Within 3 Days of Delivery, FFY 2018 (n = 31 states)

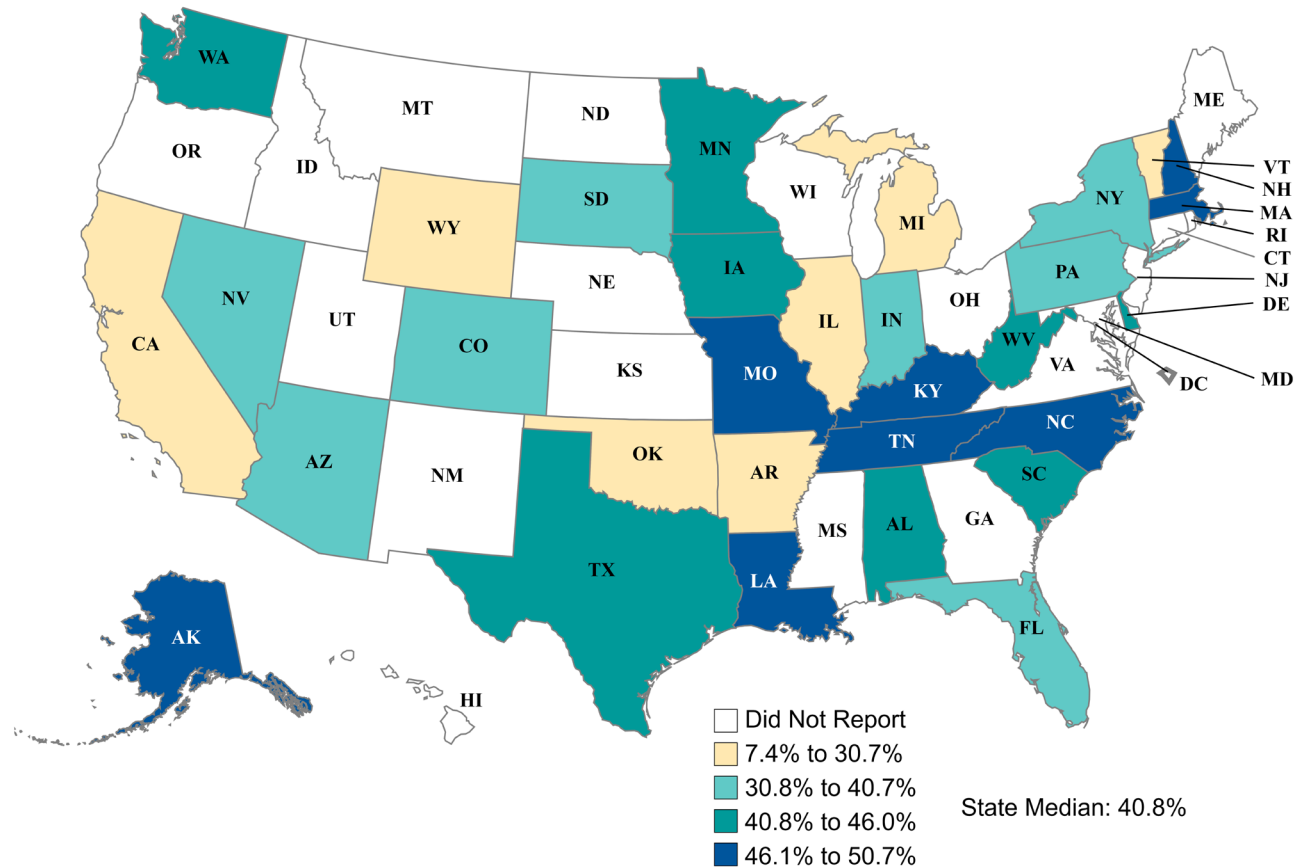


Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

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

Contraceptive Care: Postpartum Women Ages 15 to 20: Most or Moderately Effective Contraceptive 60-days Postpartum (continued)

Geographic Variation in the Percentage of Postpartum Women Ages 15 to 20 Provided a Most Effective or Moderately Effective Method of Contraception Within 60 Days of Delivery, FFY 2018 (n = 31 states)

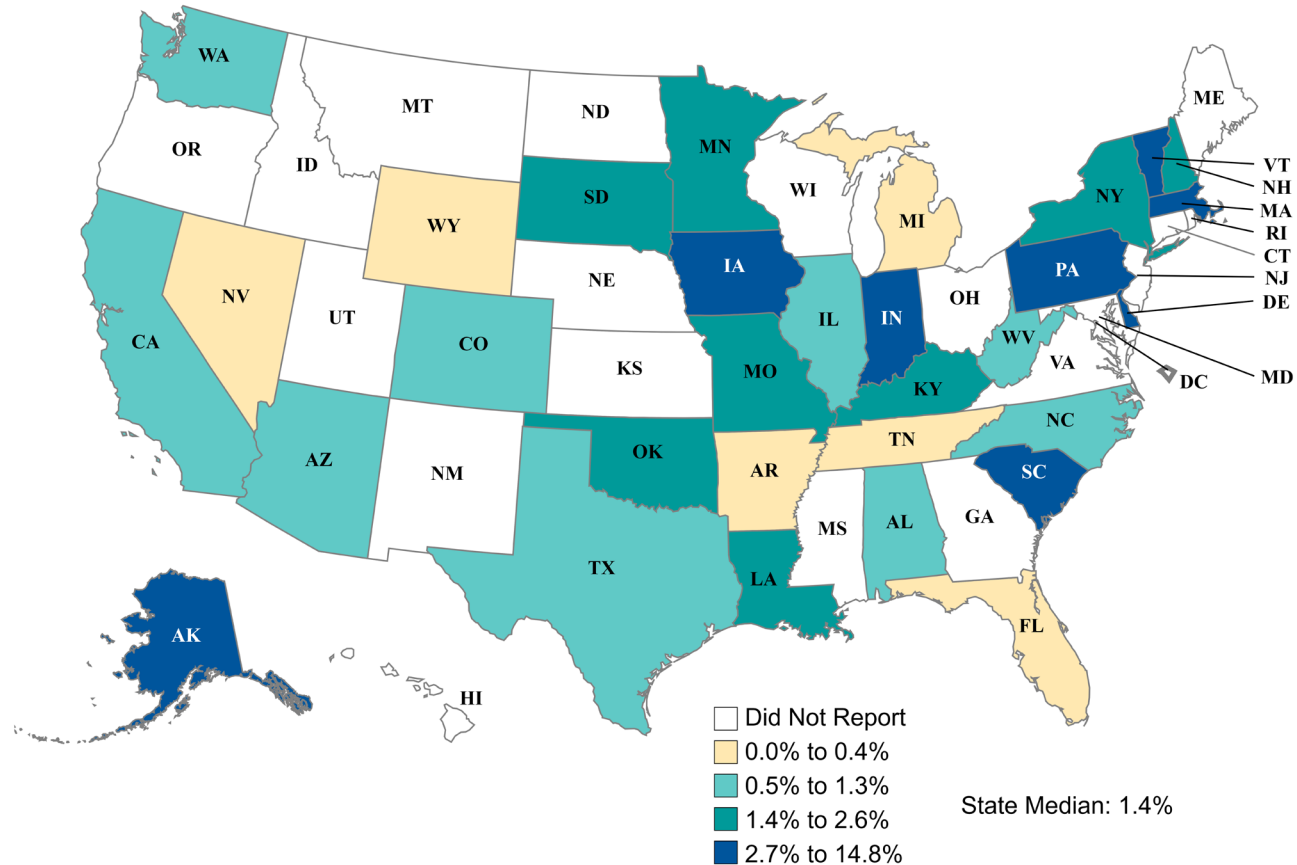


Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

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

Contraceptive Care: Postpartum Women Ages 15 to 20: LARC 3-days Postpartum (continued)

Geographic Variation in the Percentage of Postpartum Women Ages 15 to 20 Provided a Long-Acting Reversible Method of Contraception Within 3 Days of Delivery, FFY 2018 (n = 31 states)

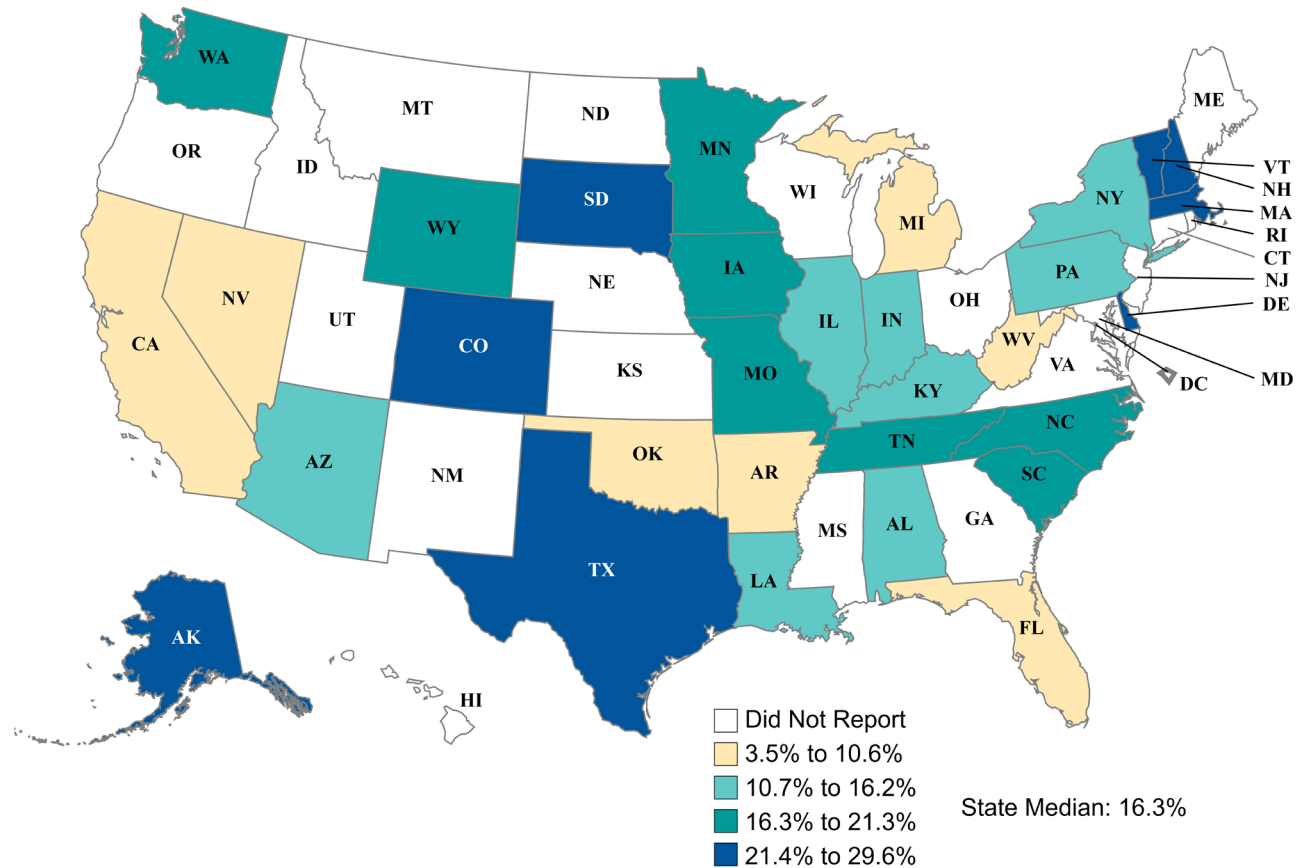


Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

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

Contraceptive Care: Postpartum Women Ages 15 to 20: LARC 60-days Postpartum (continued)

Geographic Variation in the Percentage of Postpartum Women Ages 15 to 20 Provided a Long-Acting Reversible Method of Contraception Within 60 Days of Delivery, FFY 2018 (n = 31 states)



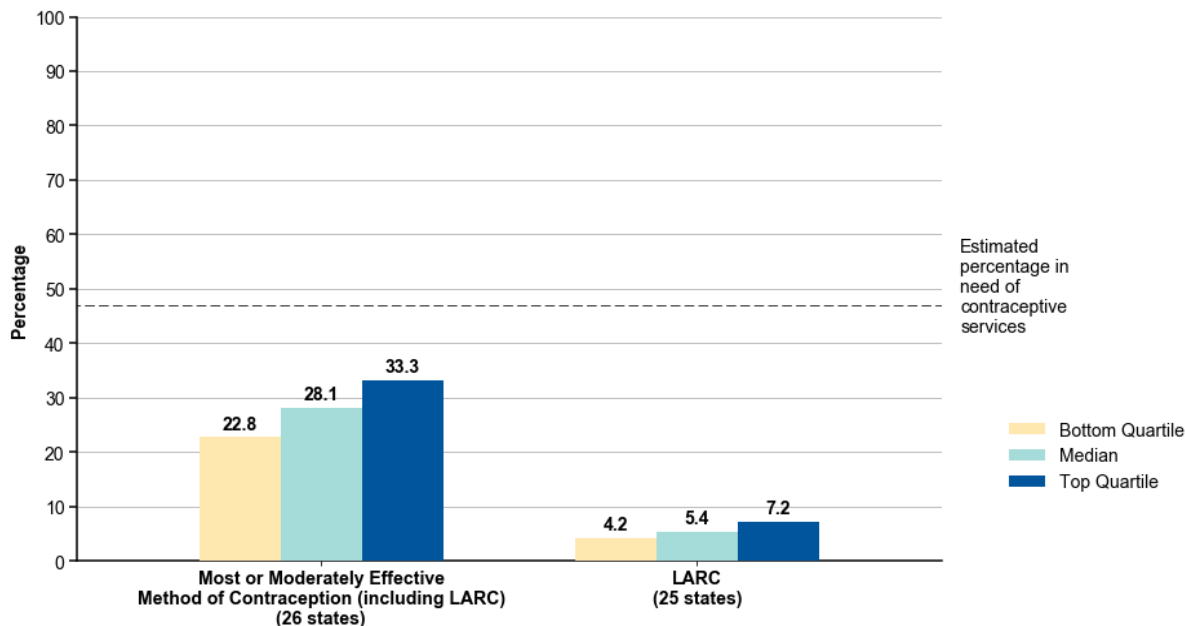
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

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

Contraceptive Care: All Women Ages 15 to 20

Increasing access to effective forms of contraception is a strategy for reducing unintended pregnancy. This measure assesses the percentage of women ages 15 through 20 at risk of unintended pregnancy who were provided a most or moderately effective method of contraception or a long-acting reversible method of contraception (LARC). The goal of this measure is to provide an indicator to assess the provision of most or moderately effective contraceptive methods, and see where there is room for improvement. Research suggests that about 53 percent of women ages 15 to 20 enrolled in Medicaid are not at risk of unintended pregnancy, which should be considered when assessing the potential for improvement on this measure.¹ Performance on this measure is being publicly reported for the first time for FFY 2018.

Percentage of Women Ages 15 to 20 at Risk of Unintended Pregnancy who were Provided a Most Effective or Moderately Effective Method of Contraception or a Long-Acting Reversible Method of Contraception, FFY 2018



Among women ages 15 to 20 at risk of unintended pregnancy, a median of **28** percent received a most or moderately effective method of contraception (26 states)

Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

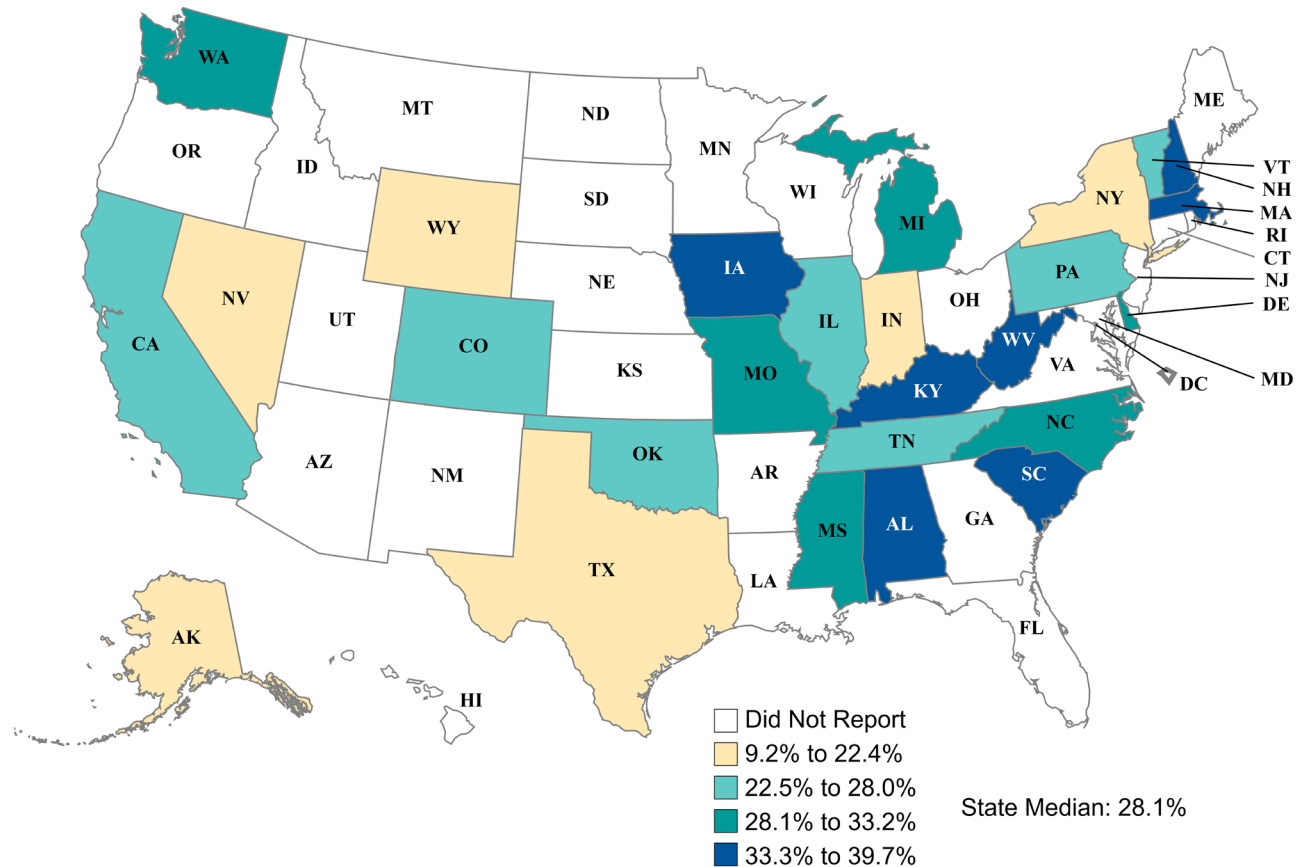
Notes: This measure identifies the percentage of women ages 15 to 20 at risk of unintended pregnancy who were (1) provided a most effective or moderately effective method of contraception, or (2) were provided a long-acting reversible method of contraception (LARC). When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

¹ More information is available at: <https://www.hhs.gov/opa/sites/default/files/interpreting-rates-for-contraceptive-care-measures.pdf>.



Contraceptive Care: All Women Ages 15 to 20: Most or Moderately Effective Contraceptive (continued)

Geographic Variation in the Percentage of Women Ages 15 to 20 at Risk of Unintended Pregnancy who were Provided a Most Effective or Moderately Effective Method of Contraception, FFY 2018 (n = 26 states)

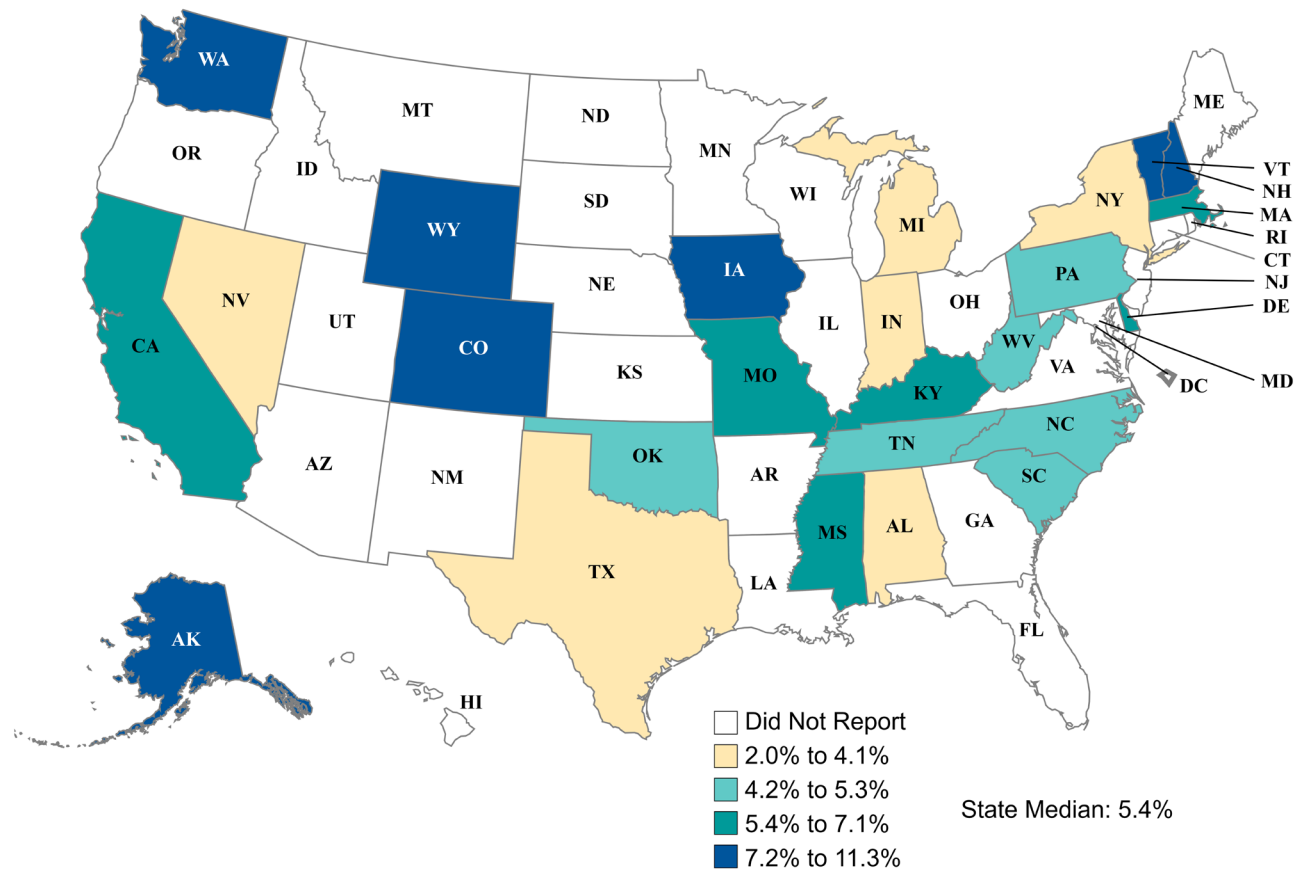


Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

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

Contraceptive Care: All Women Ages 15 to 20: LARC (continued)

Geographic Variation in the Percentage of Women Ages 15 to 20 at Risk of Unintended Pregnancy who were Provided a Long-Acting Reversible Method of Contraception, FFY 2018 (n = 25 states)



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: This chart excludes Illinois, which reported the measure but did not provide data for the LARC rate. 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 or CHIP.

The standardized infection ratio (SIR) compares the observed number of infections reported to the NHSN during 2017 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 2017 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 <https://www.cdc.gov/nhsn/2015rebaseline/index.html>.

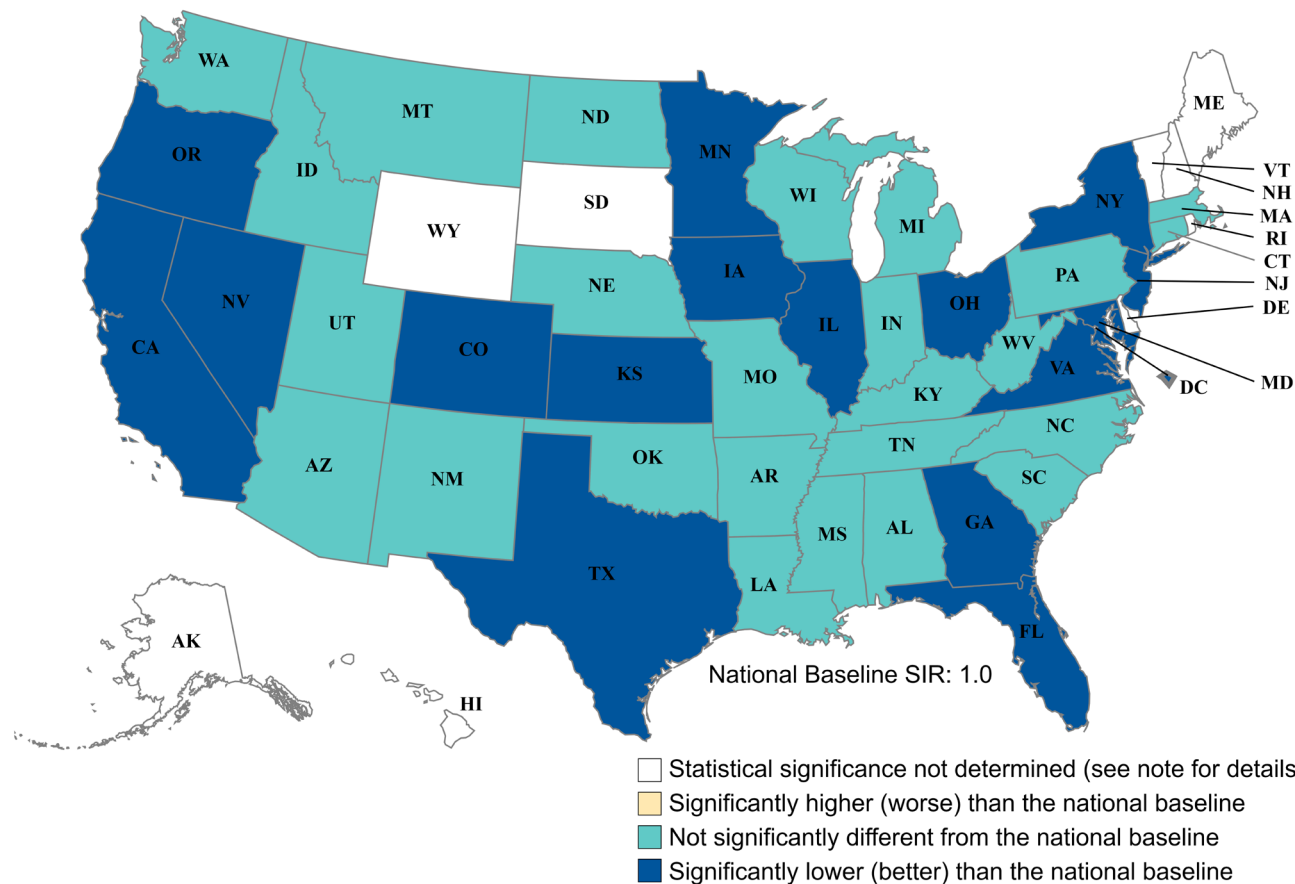
Among the states with CLABSI rates for 2017, the SIRs ranged from 0.222 to 1.406. An SIR significantly lower than 1.0 means that fewer infections occurred than predicted given the 2015 baseline data. An SIR significantly higher than 1.0 means that more infections occurred than predicted given the 2015 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 <https://www.cdc.gov/hai/data/portal/progress-report.html>. More information on the risk adjustment methodology is available in NHSN's SIR Guide at <https://www.cdc.gov/nhsn/pdfs/ps-analysis-resources/nhsn-sir-guide.pdf>.

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

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), 2017 (n = 42 states)



Source: Centers for Disease Control and Prevention, 2017 National and State Healthcare-Associated Infections Standardized Infection Ratio Report, Table 3d, available <https://www.cdc.gov/hai/excel/hai-progress-report/2017-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.



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.¹ 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 2018.

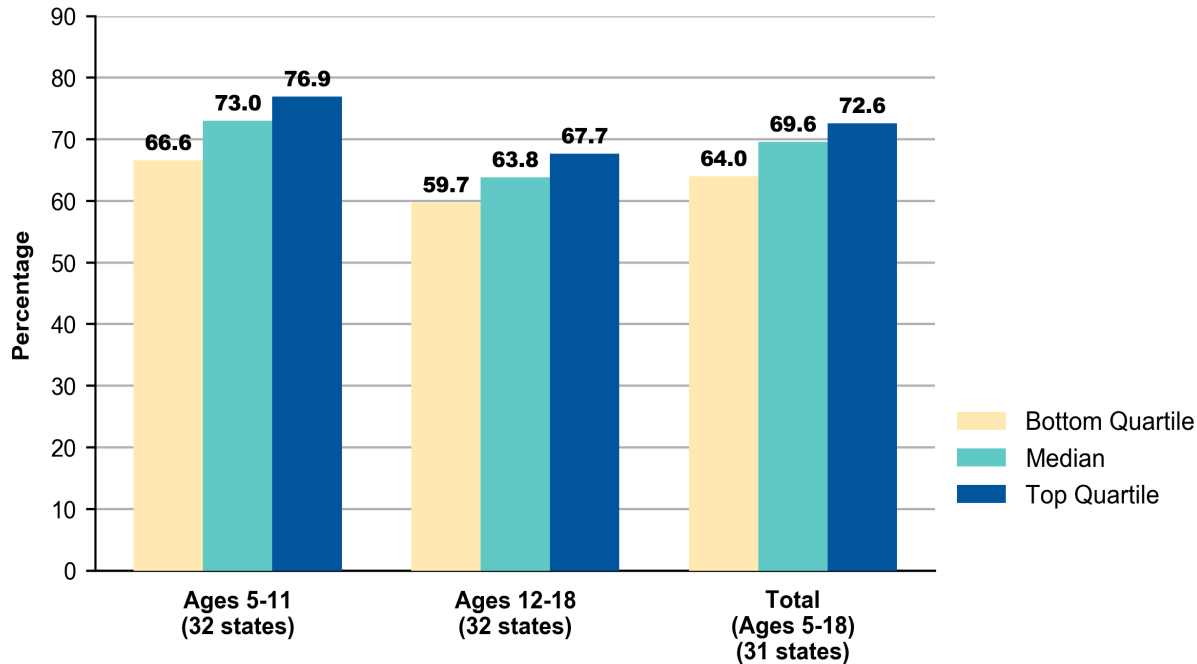
- Asthma Medication Ratio: Ages 5 to 18
- Ambulatory Care: Emergency Department Visits

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

Asthma Medication Ratio: Ages 5 to 18

Asthma affects more than six million children under age 18 in the United States. Uncontrolled asthma among children can result in hospitalizations, lost school days, and a higher risk of falling behind in school. The National Heart Lung and Blood Institute recommends long-term asthma control medications for children with persistent asthma. This measure assesses the percentage of children with persistent asthma who were dispensed appropriate asthma controller medications. Performance on this measure is being publicly reported for the first time for FFY 2018.

Percentage of Children Ages 5 to 18 with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater, FFY 2018 (n = 32 states)



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: This measure identifies the percentage of children ages 5 to 18 with persistent asthma who had a ratio of controller medications to total asthma medications of 0.50 or greater 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.

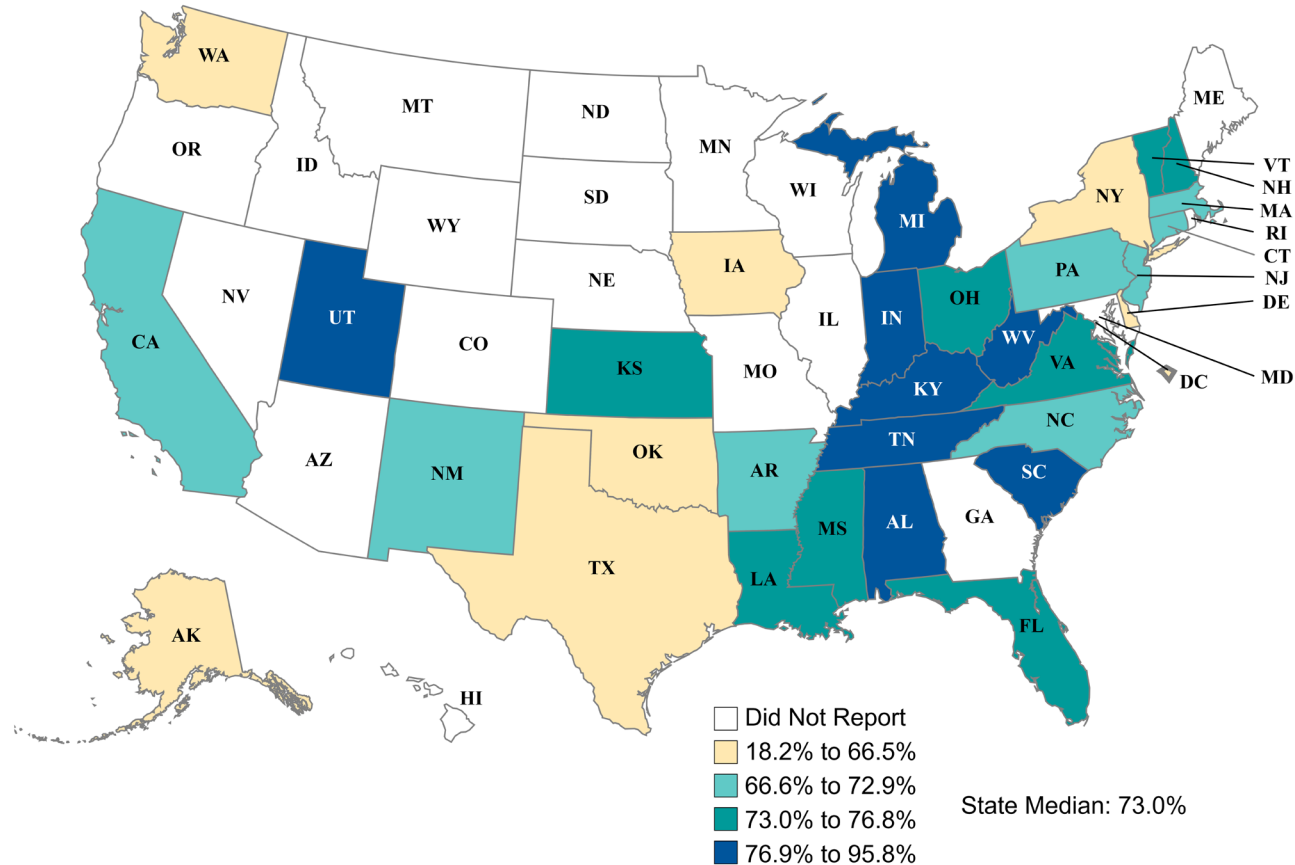
A median of

70

percent of children ages 5 to 18 with persistent asthma had a ratio of controller medications to total asthma medications of 0.50 or greater (31 states)

Asthma Medication Ratio: Ages 5 to 11 (continued)

Geographic Variation in the Percentage of Children Ages 5 to 11 with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater, FFY 2018 (n = 32 states)

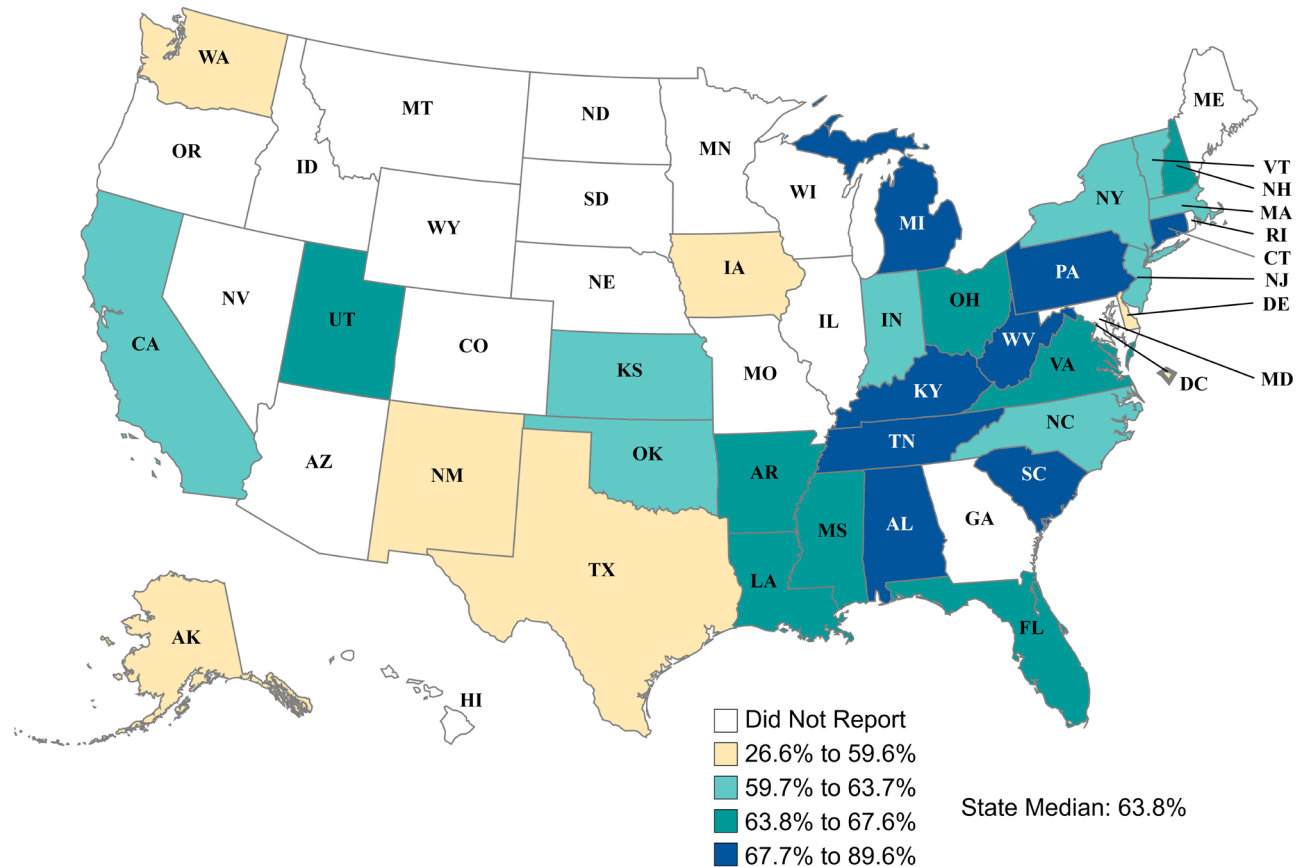


Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

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

Asthma Medication Ratio: Ages 12 to 18 (continued)

Geographic Variation in the Percentage of Children Ages 12 to 18 with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater, FFY 2018 (n = 32 states)



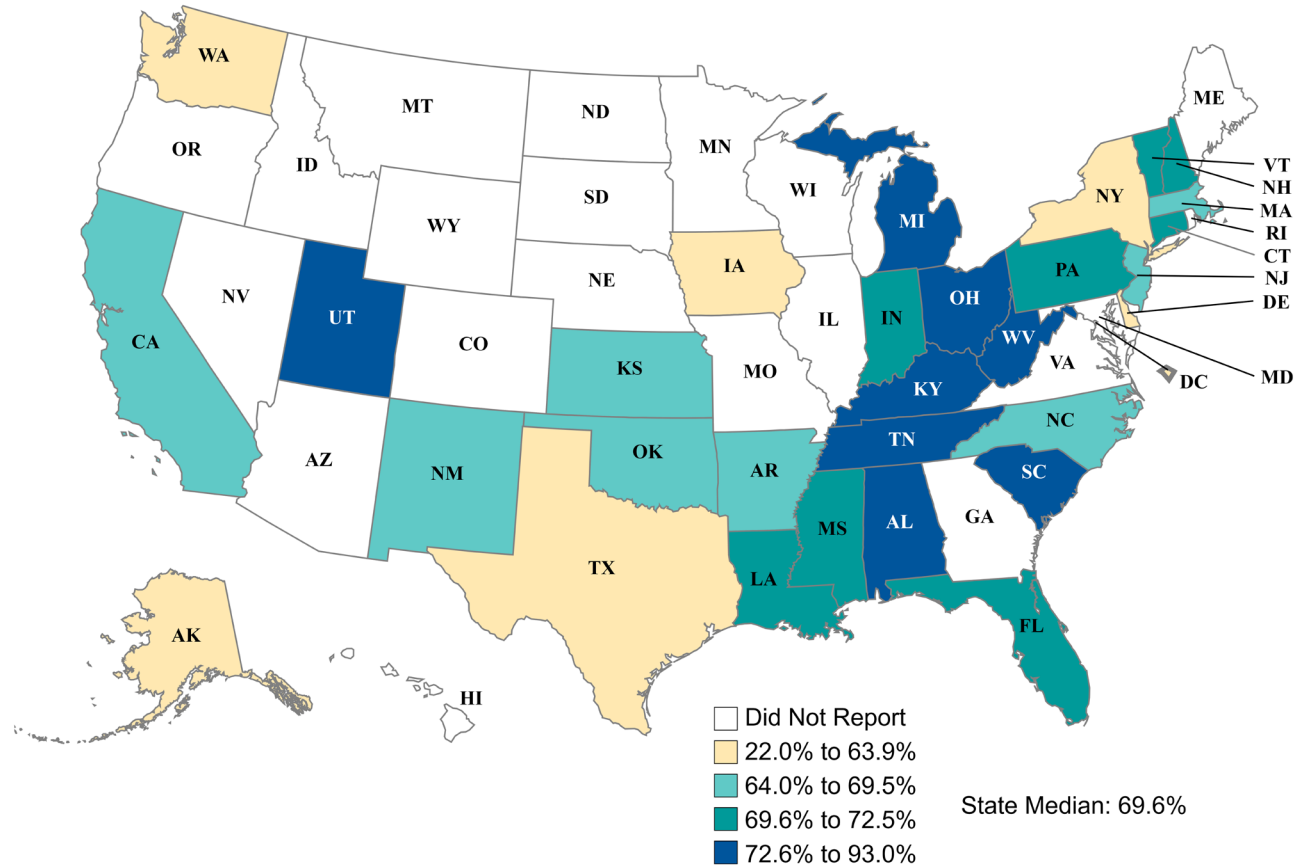
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

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



Asthma Medication Ratio: Ages 5 to 18 (continued)

Geographic Variation in the Percentage of Children Ages 5 to 18 with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater, FFY 2018 (n = 31 states)



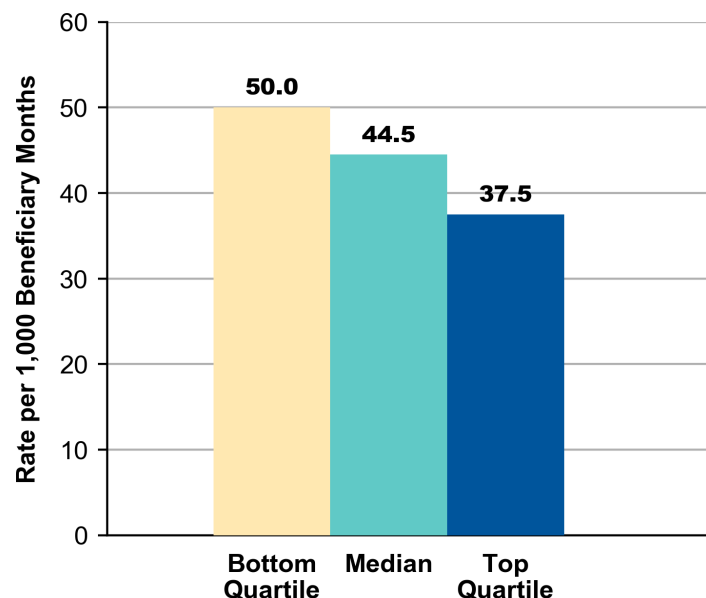
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: This chart excludes Virginia, which reported the measure but did not provide data for the Total (Ages 5 to 18) rate. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

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 Beneficiary Months for Children Ages 0 to 19, FFY 2018 (n = 44 states) [Lower rates are better for this measure]



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: This measure identifies the rate of emergency department visits per 1,000 beneficiary months among children up to age 19. This chart excludes Virginia, which used Child Core Set specifications to calculate the measure but did not provide data for the Total (Ages 0 to 19) rate. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

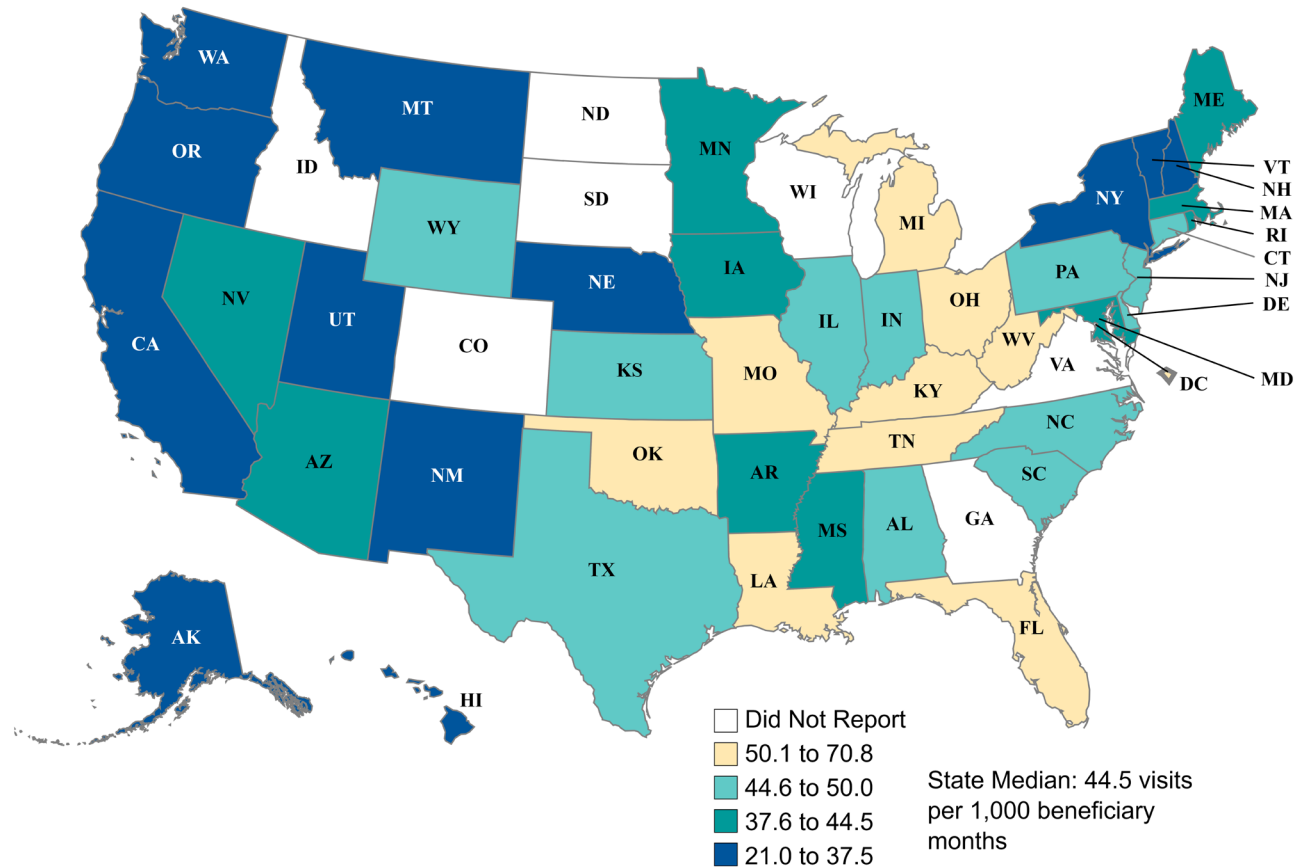
Children ages 0 to 19 had a median of

45

emergency department visits per 1,000 beneficiary months (44 states)

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

Geographic Variation in the Rate of Emergency Department Visits per 1,000 Beneficiary Months for Children Ages 0 to 19, FFY 2018 (n = 44 states) [Lower rates are better for this measure]



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: This chart excludes Virginia, which used Child Core Set specifications to calculate the measure but did not provide data for the Total (Ages 0 to 19) rate. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

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.

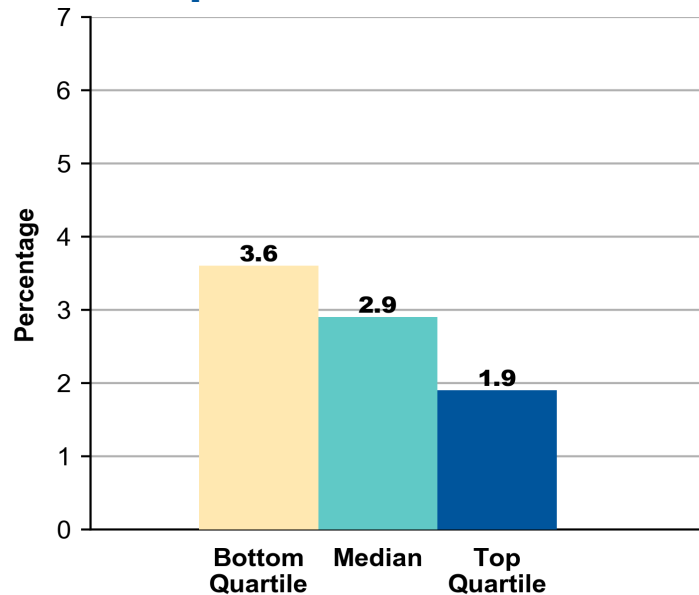
Four Child Core Set measures of behavioral health care were available for analysis for FFY 2018.

- Use of Multiple Concurrent Antipsychotics in Children and Adolescents
- Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics
- Follow-Up After Hospitalization for Mental Illness: Ages 6 to 20
- Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication

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 at Least 90 Consecutive Days, FFY 2018 (n = 39 states) [Lower rates are better for this measure]



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: 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.

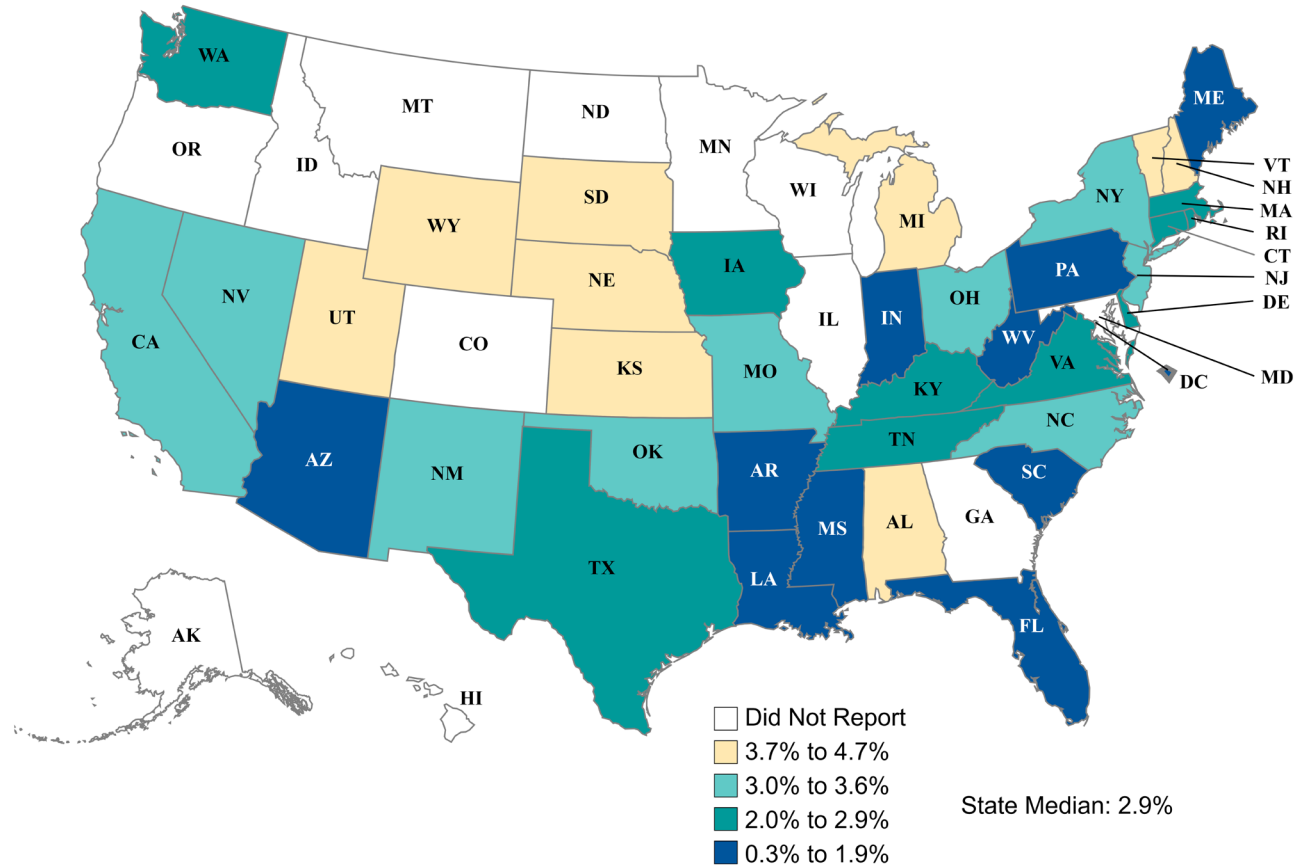
A median of

3 percent

of children and adolescents treated with antipsychotic medications were on two or more concurrent antipsychotic medications (39 states)

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 for at Least 90 Consecutive Days, FFY 2018 (n = 39 states) [Lower rates are better for this measure]



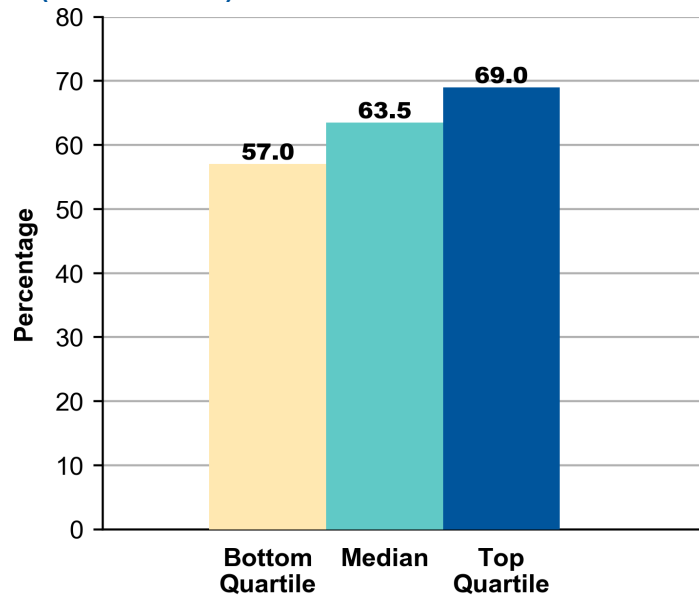
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

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

Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics

To avoid the risks associated with unnecessary use of antipsychotic medications, psychosocial care is recommended as the first-line treatment for most psychiatric conditions in children and adolescents. This measure assesses whether children and adolescents with conditions for which antipsychotic medications are not indicated had documentation of psychosocial care as first-line treatment before being prescribed an antipsychotic medication. Performance on this measure is being publicly reported for the first time for FFY 2018.

Percentage of Children and Adolescents who had a New Prescription for an Antipsychotic Medication and had Documentation of Psychosocial Care as First-Line Treatment, FFY 2018 (n = 28 states)



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: This measure identifies the percentage of children and adolescents ages 1 to 17 who had a new prescription for an antipsychotic medication and had documentation of psychosocial care as first-line treatment. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

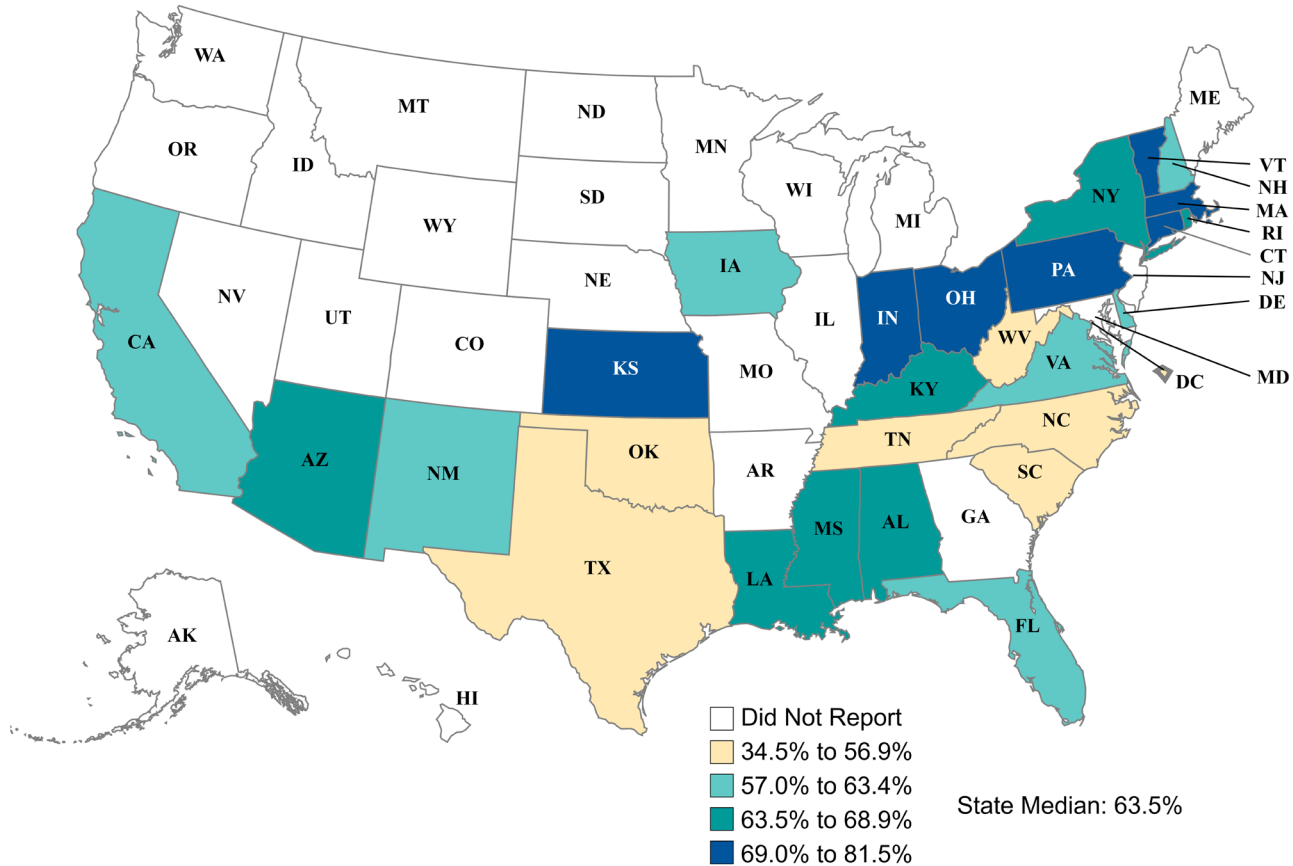
A median of

64

percent of children and adolescents who had a new prescription for an antipsychotic medication had documentation of psychosocial care as first-line treatment (28 states)

Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics (continued)

Geographic Variation in the Percentage of Children and Adolescents who had a New Antipsychotic Prescription and Documentation of Psychosocial Care as First-Line Treatment, FFY 2018 (n = 28 states)

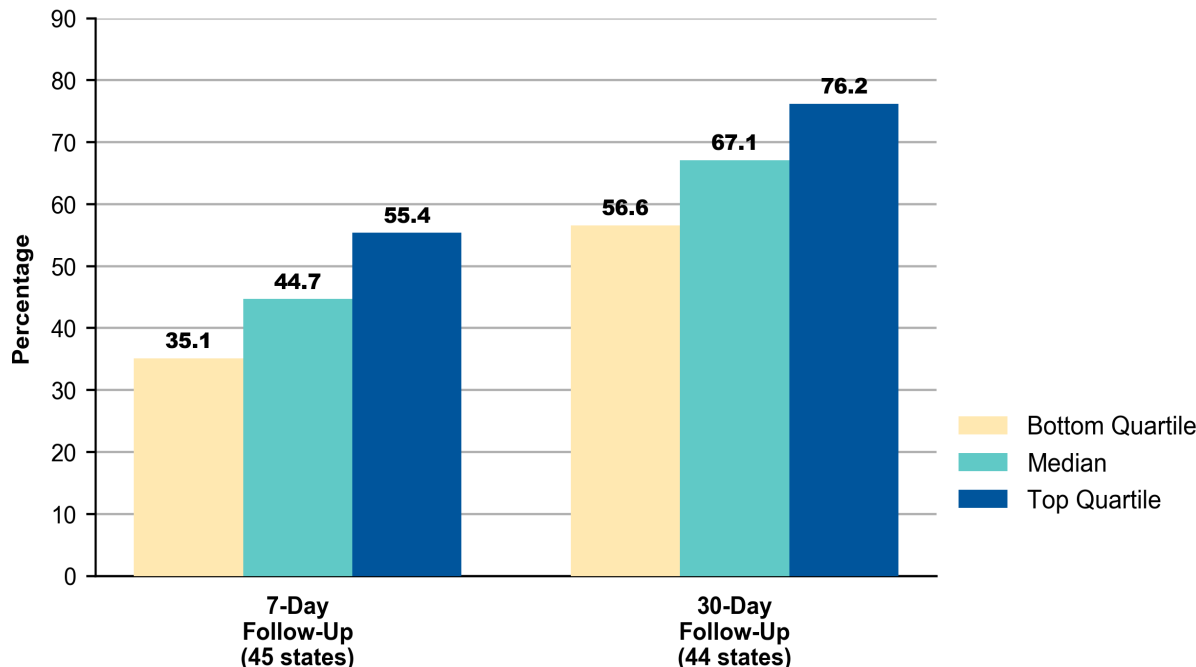


Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.
 Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

Follow-Up After Hospitalization for Mental Illness: Ages 6 to 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 after discharge and ideally, within 7 days after discharge.

Percentage of Discharges for Children* Hospitalized for Treatment of Mental Illness with a Follow-Up Visit with a Mental Health Practitioner within 7 and 30 Days After Discharge, FFY 2018



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

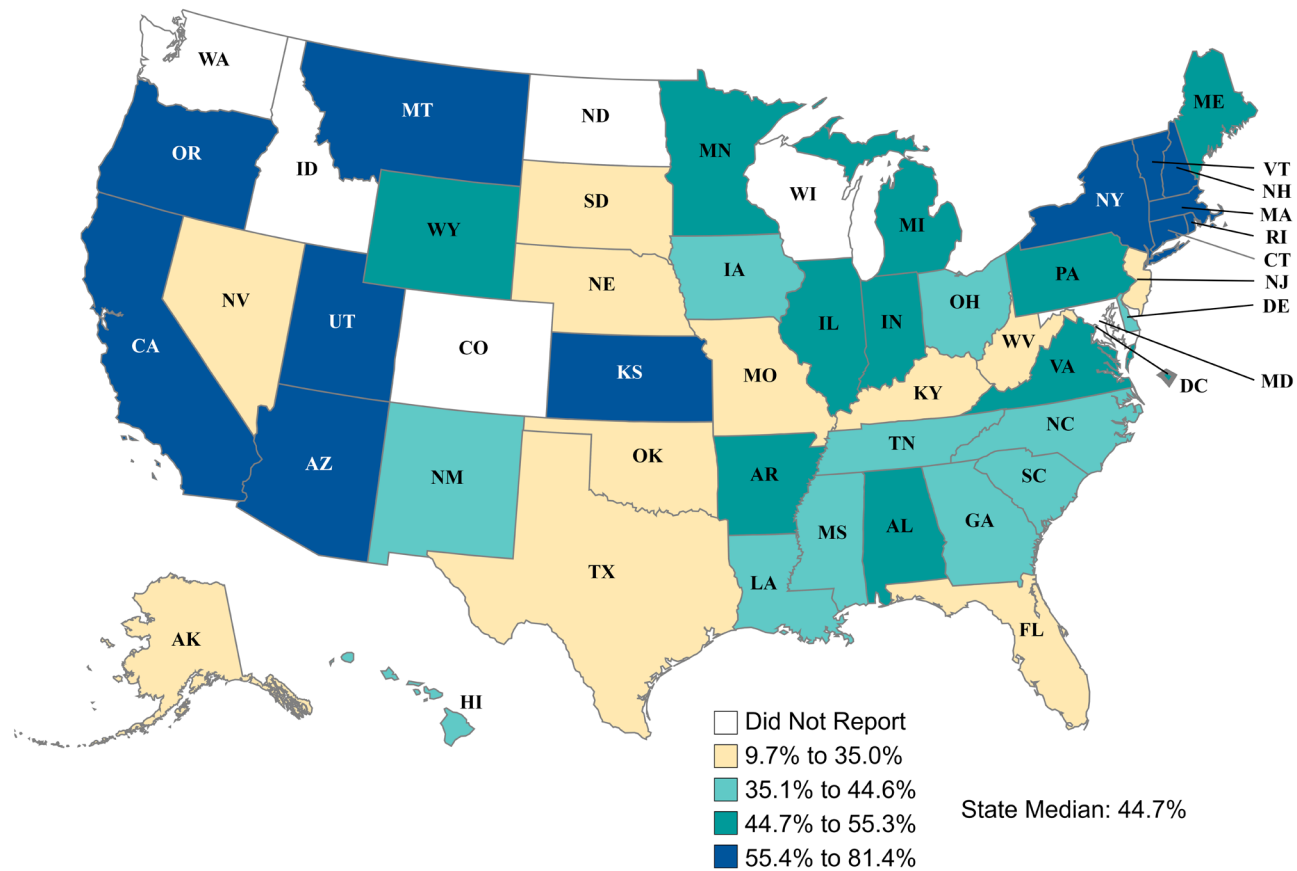
Notes: This measure identifies the percentage of discharges for children ages 6 to 20 who were hospitalized for treatment of selected mental illness diagnoses with a follow-up visit with a mental health practitioner within 7 days after discharge and within 30 days after discharge. Specifications for this measure changed substantially for FFY 2018 and rates are not comparable with rates reported for previous years. 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 ages 6 to 20 for 31 states, and age 6 and older for 14 states.

A median of **45** percent of children ages 6 to 20 who were hospitalized for mental illness had a follow-up visit within 7 days after discharge (45 states) and **67** percent had a follow-up visit within 30 days after discharge (44 states)

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

Geographic Variation in the Percentage of Discharges for Children* Hospitalized for Treatment of Mental Illness with a Follow-Up Visit with a Mental Health Practitioner within 7 After Discharge, FFY 2018 (n = 45 states)



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

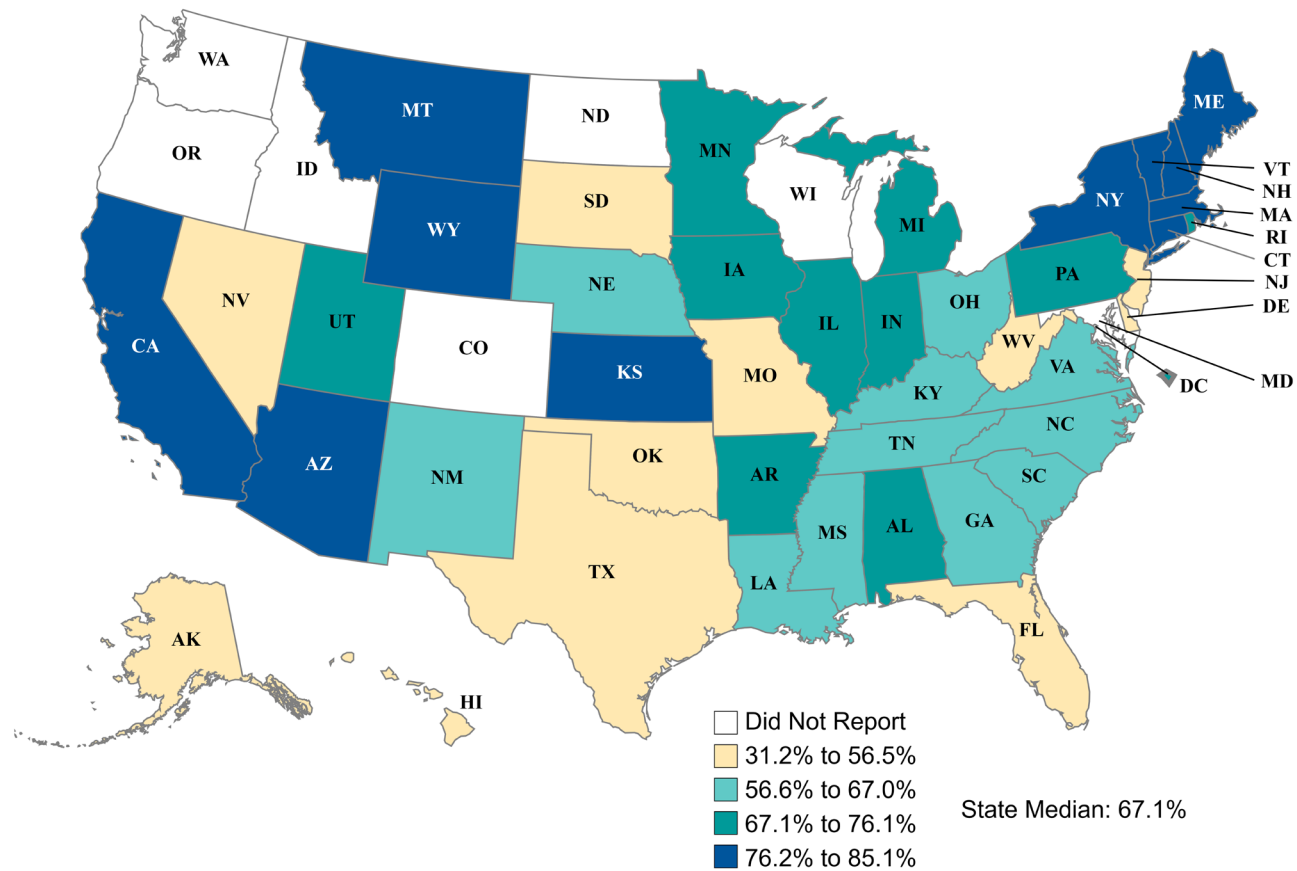
Note: When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

*Data displayed in this chart include ages 6 to 20 for 31 states, and age 6 and older for 14 states.



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

Geographic Variation in the Percentage of Discharges for Children* Hospitalized for Treatment of Mental Illness with a Follow-Up Visit with a Mental Health Practitioner within 30 Days After Discharge, FFY 2018 (n = 44 states)



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: This chart excludes Oregon, which reported the measure but did not provide data for the 30-Day Follow-Up rate. When a state reported separate rates for its Medicaid and CHIP populations, the rate for the larger measure-eligible population was used.

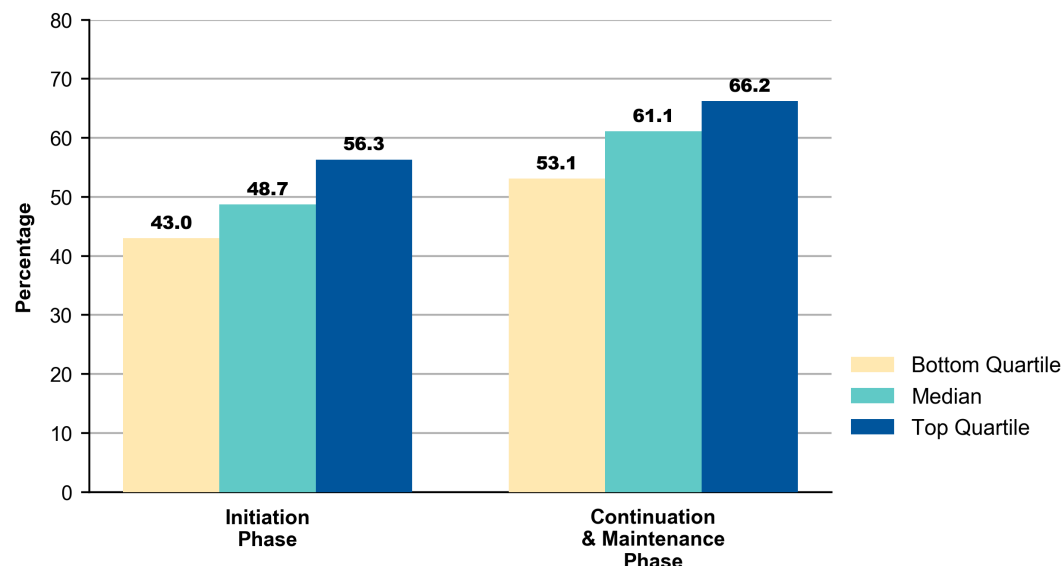
*Data displayed in this chart include ages 6 to 20 for 30 states, and age 6 and older for 14 states.



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 2018 (n = 40 states)



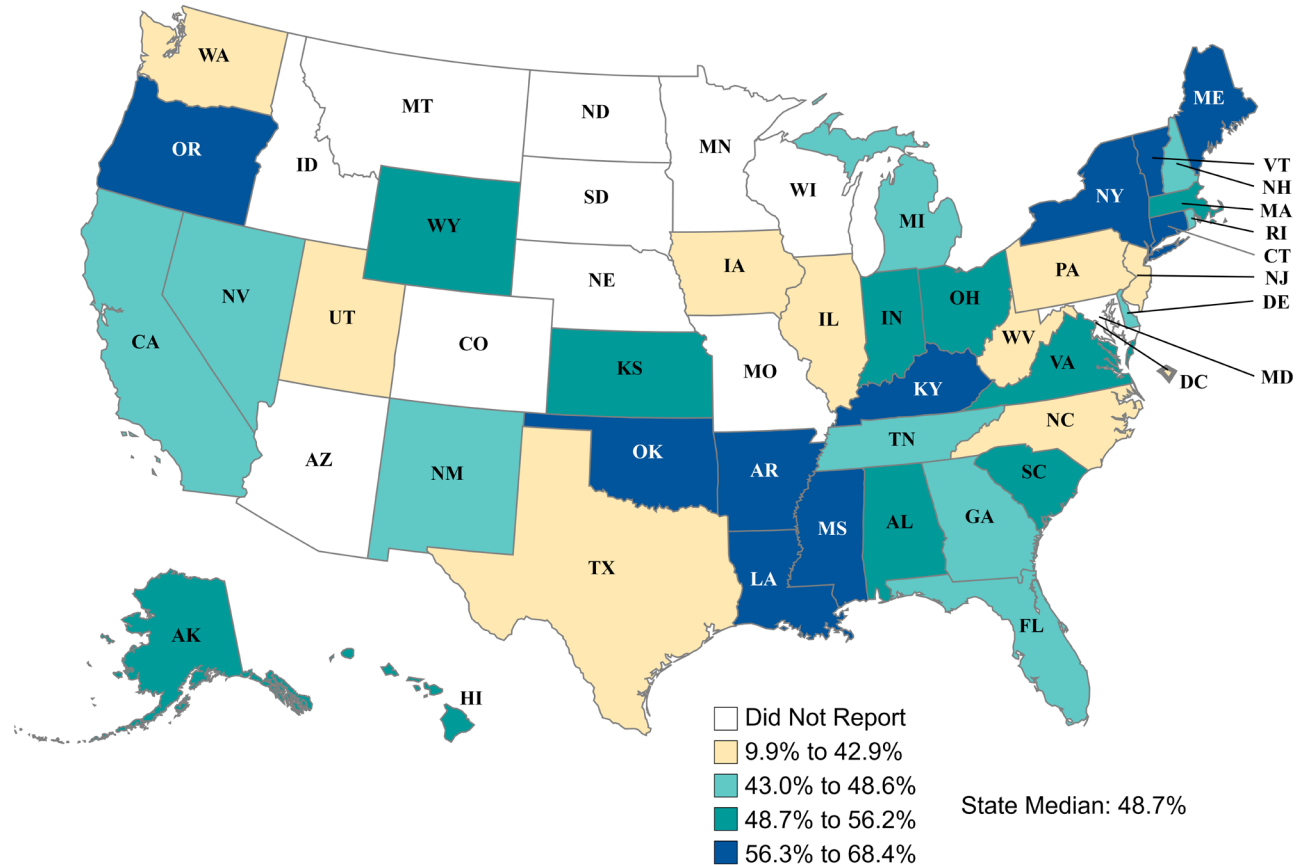
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: This measure identifies the percentage of children ages 6 to 12 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 **49** percent of children newly prescribed ADHD medication had a follow-up visit during the 30-day initiation phase and **61** percent had at least two follow-up visits during the 9-month continuation and maintenance phase (40 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 2018 (n = 40 states)



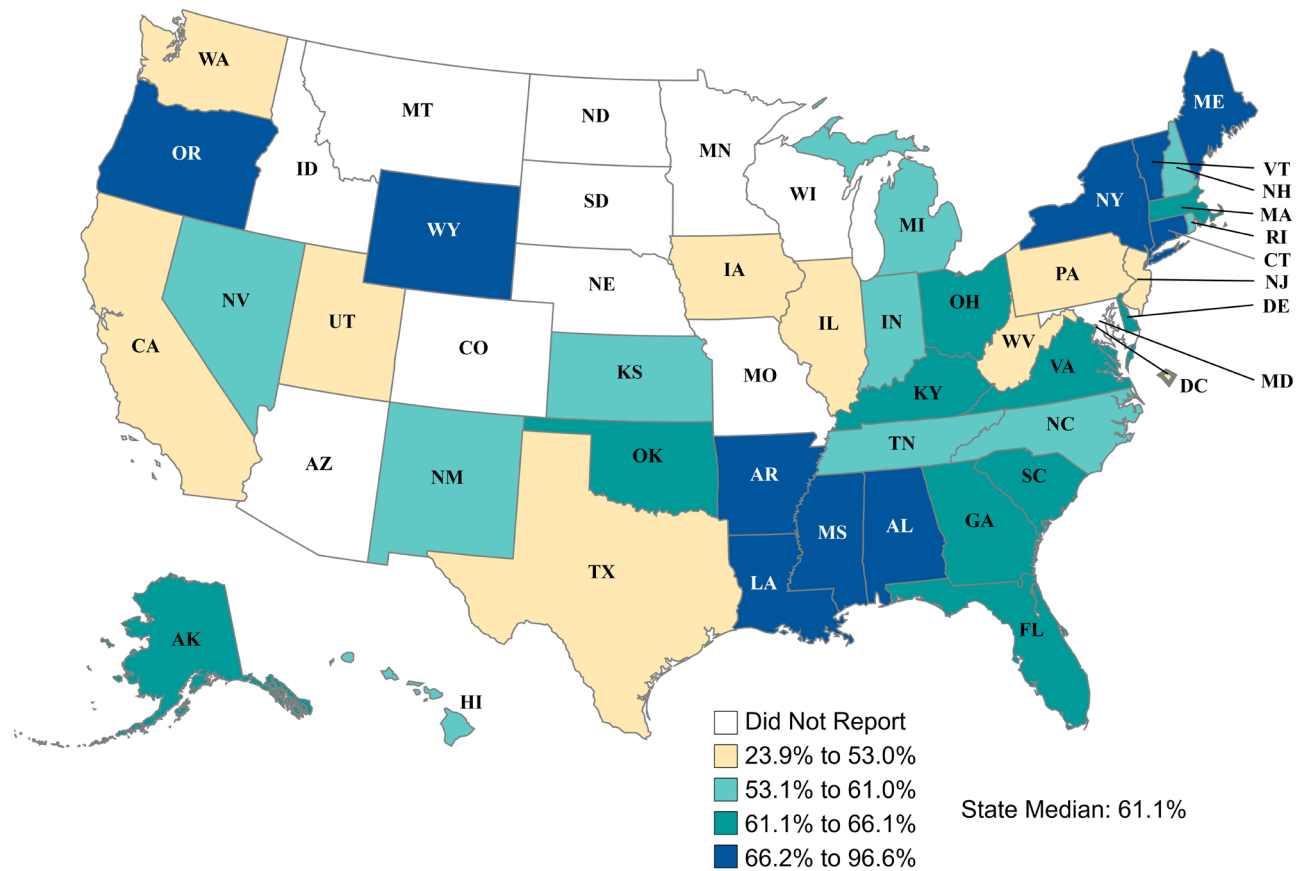
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

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



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 2018 (n = 40 states)



Source: Mathematica analysis of MACPro reports for the FFY 2018 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.



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 <https://www.medicaid.gov/medicaid/benefits/dental/index.html>.

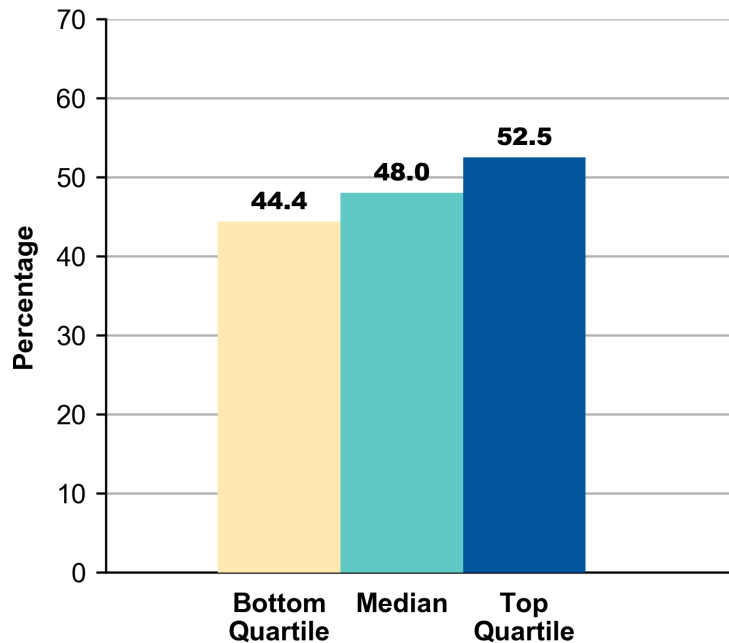
Two measures of dental and oral health services were available for analysis for FFY 2018.

- 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 2018 (n = 51 states)



A median of **48** percent of children ages 1 to 20 received a preventive dental service (51 states)

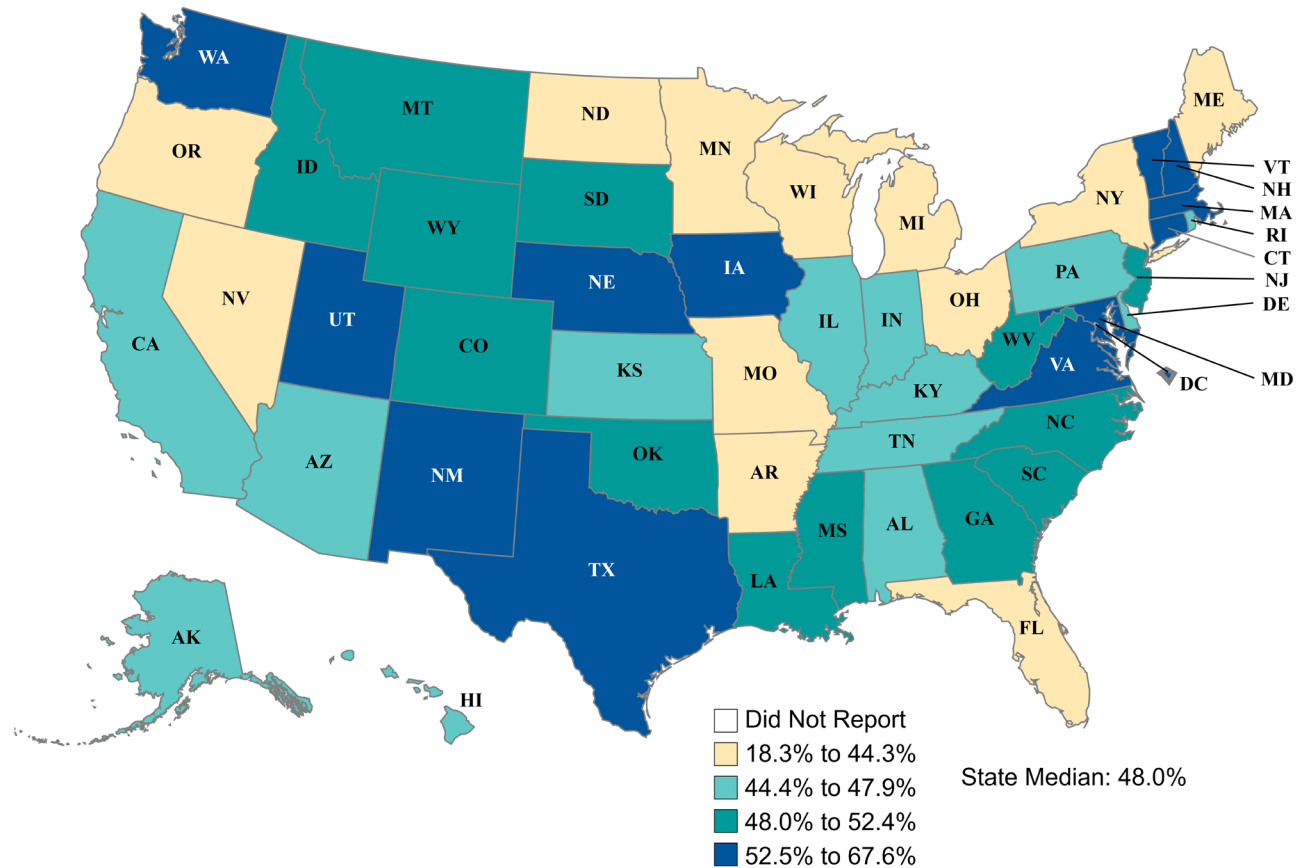
Source: Mathematica analysis of Form CMS-416 reports (annual EPSDT report), Lines 1b and 12b, for the FFY 2018 reporting cycle.

Note: 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.



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 2018
(n = 51 states)**

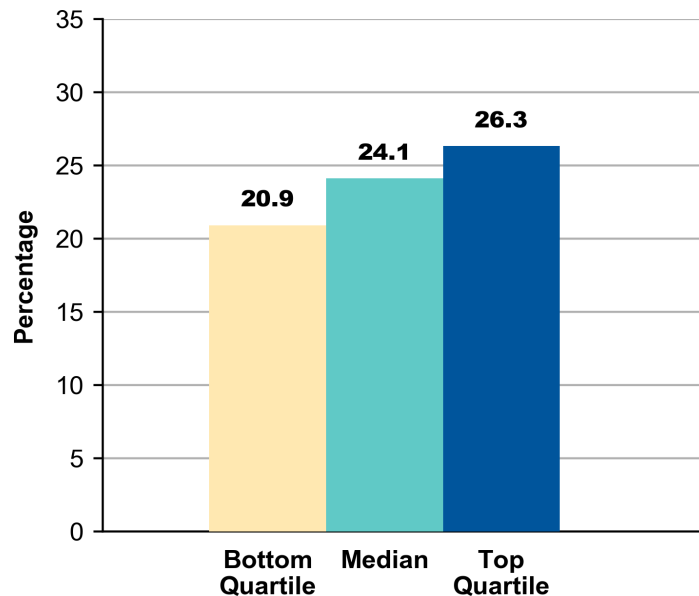


Source: Mathematica analysis of Form CMS-416 reports (annual EPSDT report), Lines 1b and 12b, for the FFY 2018 reporting cycle.

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 2018 (n = 32 states)



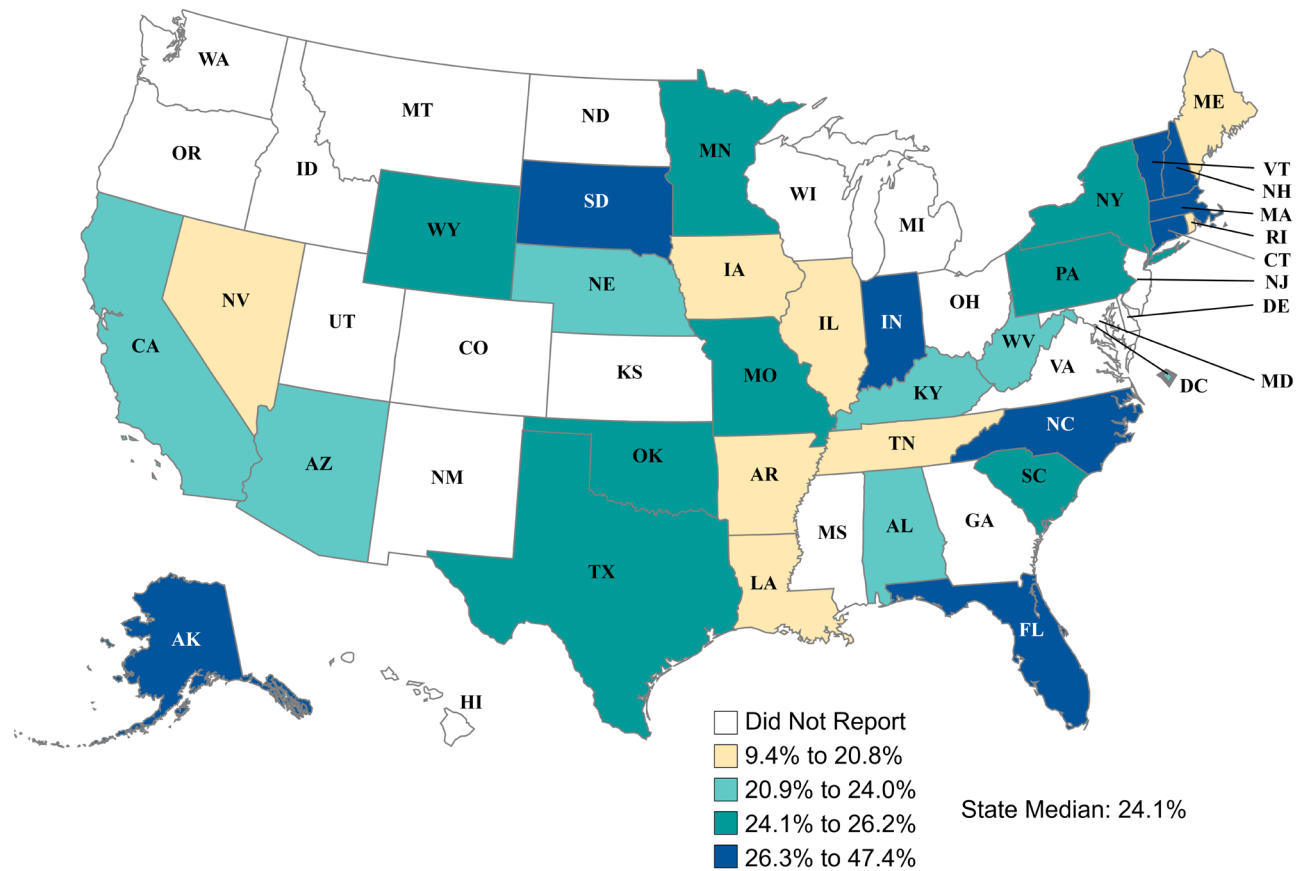
Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: 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 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.

A median of **24** percent of children ages 6 to 9 at elevated caries risk received a dental sealant on a first permanent molar (32 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 2018 (n = 32 states)



Source: Mathematica analysis of MACPro reports for the FFY 2018 reporting cycle.

Notes: This chart excludes 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 2016–2018



Trends in State Performance, FFY 2016–2018: Introduction

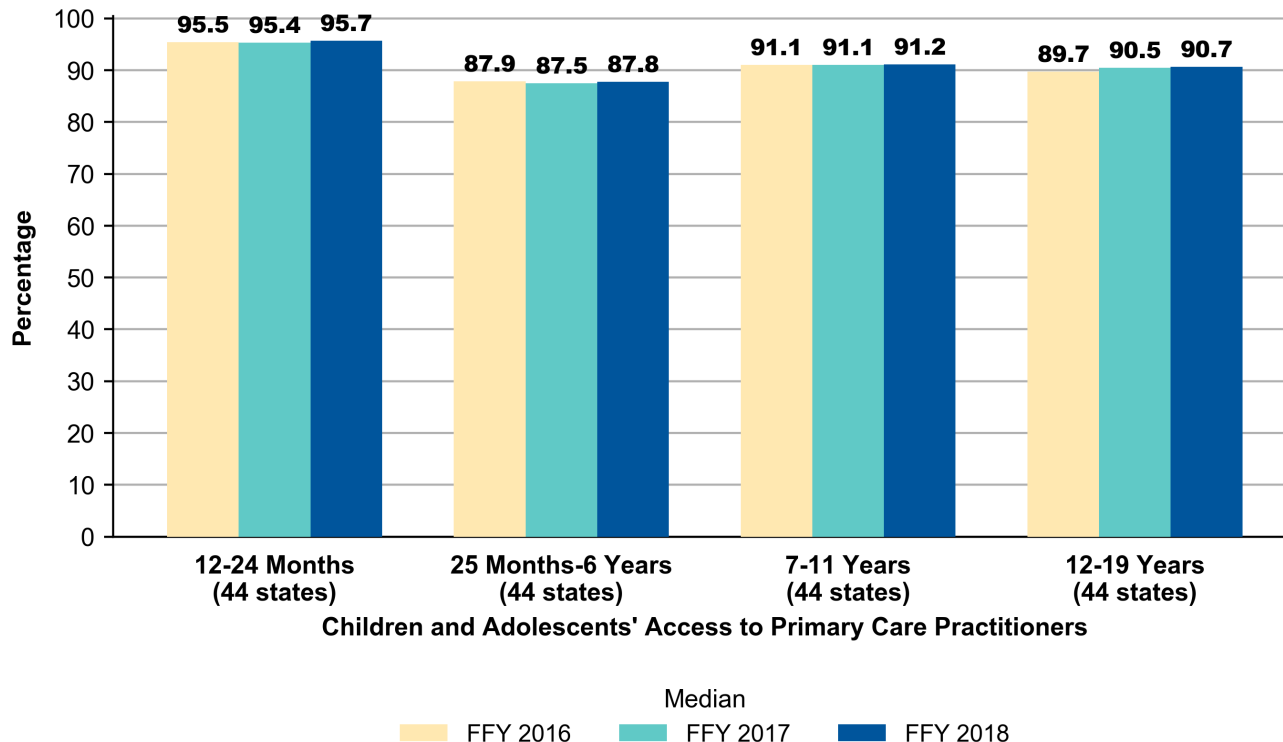
CMS assessed trends in median state performance on 15 Child Core Set measures publicly reported from FFY 2016 to FFY 2018. Trends are presented for measures reported by at least 20 states in all three years and that met CMS standards for data quality.

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 2016–2018: 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.

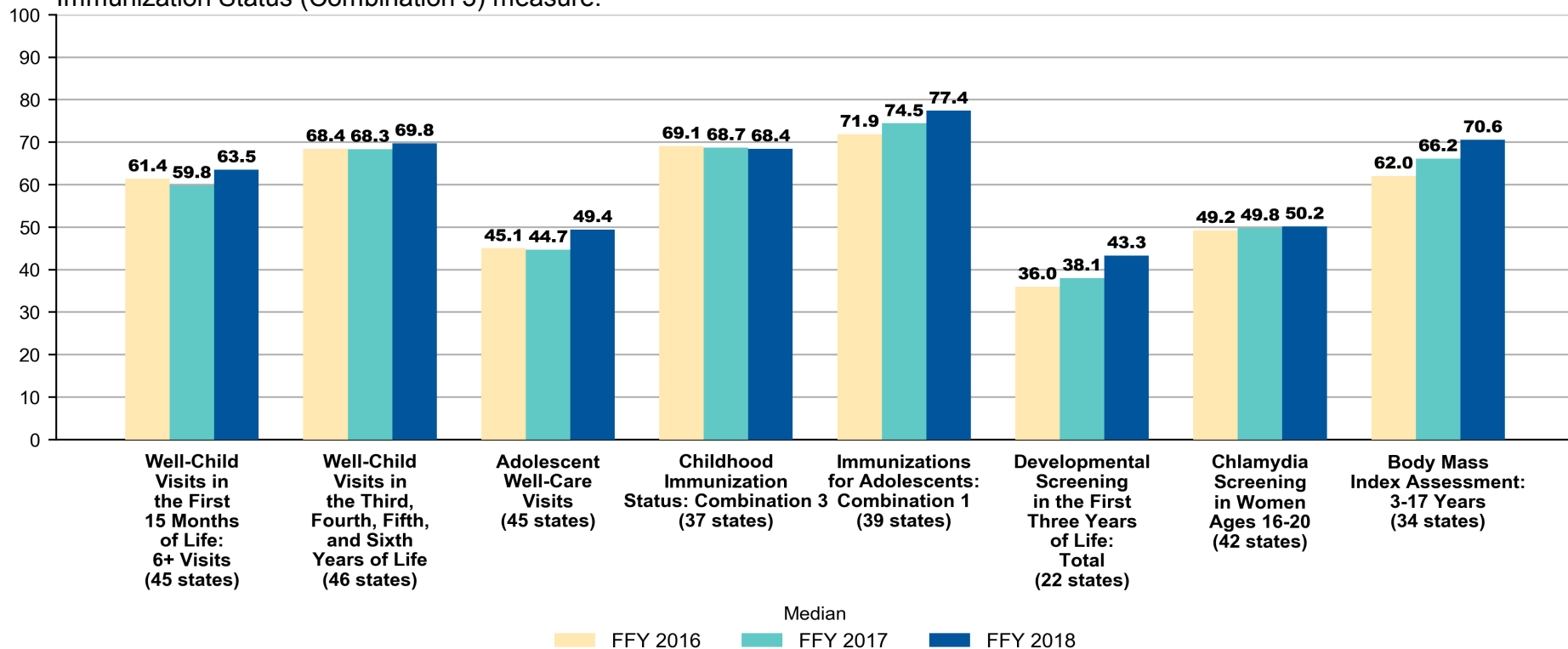


Source: Mathematica analysis of FFY 2016–2018 MACPro reports.

Notes: 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 2018 Chart Pack.

Trends in State Performance, FFY 2016–2018: Primary Care Access and Preventive Care (continued)

Rates of recommended preventive care increased significantly between FFY 2016 and FFY 2018 for the 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; Immunizations for Adolescents (Combination 1); Developmental Screening; Chlamydia Screening in Women Ages 16 to 20; and Body Mass Index (BMI) Assessment for Children and Adolescents measures. The increase in the median rate for BMI Assessment for Children and Adolescents may be due in part to the use of medical chart review to more accurately capture the information for this measure. Median performance did not change significantly during this period for the Childhood Immunization Status (Combination 3) measure.



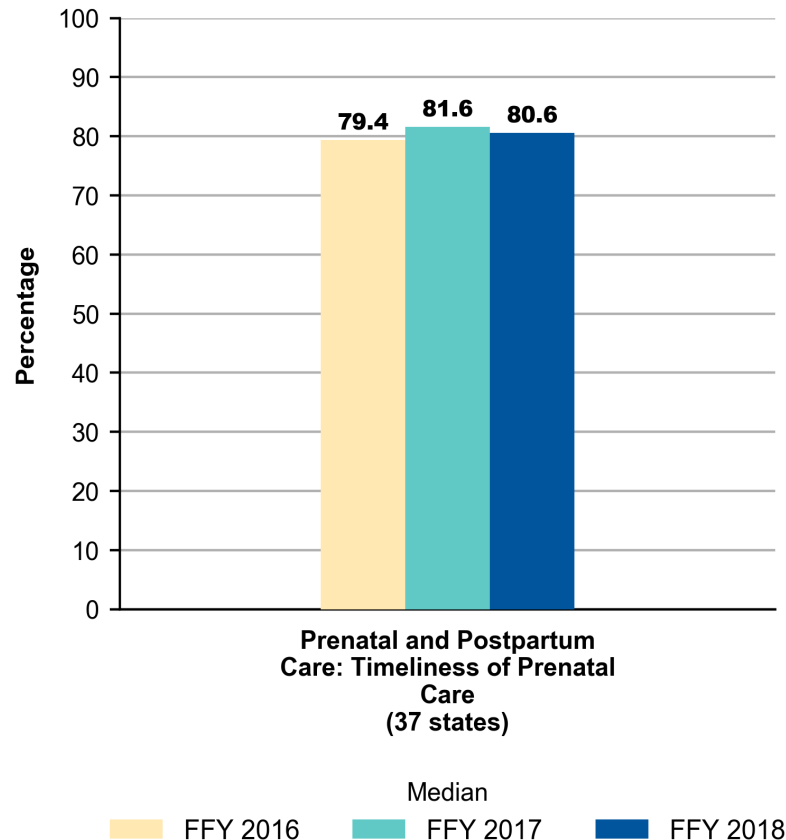
Source: Mathematica analysis of FFY 2016–2018 MACPro reports.

Notes: 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 2018 Chart Pack.



Trends in State Performance, FFY 2016–2018: Maternal and Perinatal Health

Median performance on the Prenatal and Postpartum Care: Timeliness of Prenatal Care measure did not change significantly from FFY 2016 to FFY 2018.

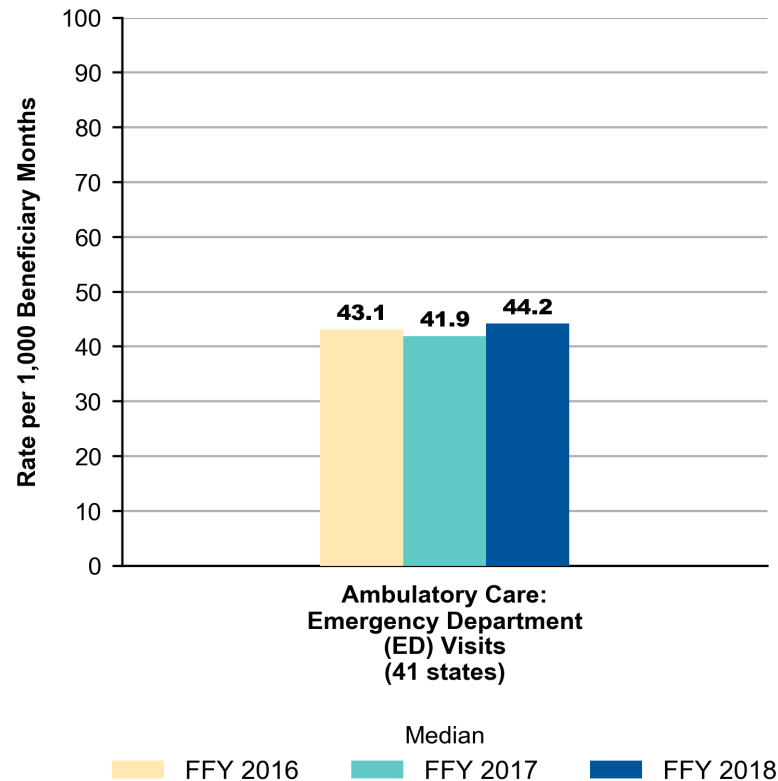


Source: Mathematica analysis of FFY 2016–2018 MACPro reports.

Notes: 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 2018 Chart Pack.

Trends in State Performance, FFY 2016–2018: Care of Acute and Chronic Conditions

The median rate for the Ambulatory Care: Emergency Department (ED) Visits measure was consistent from FFY 2016 to FFY 2018.

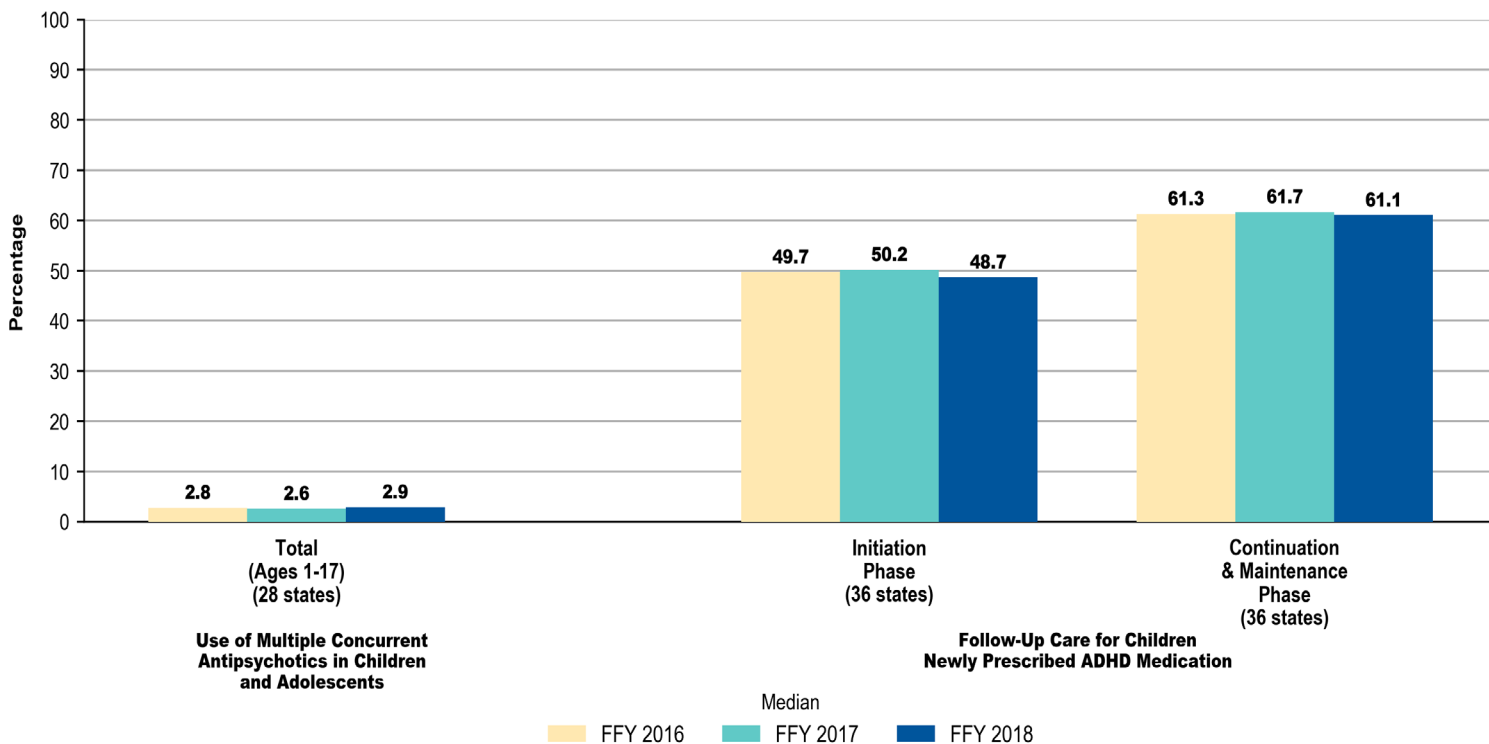


Source: Mathematica analysis of FFY 2016–2018 MACPro reports.

Notes: 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 2018 Chart Pack.

Trends in State Performance, FFY 2016–2018: Behavioral Health Care

Median state performance on the Use of Multiple Concurrent Antipsychotics in Children and Adolescents and Follow-Up Care for Children Newly Prescribed ADHD Medication measures did not change significantly between FFY 2016 and FFY 2018.



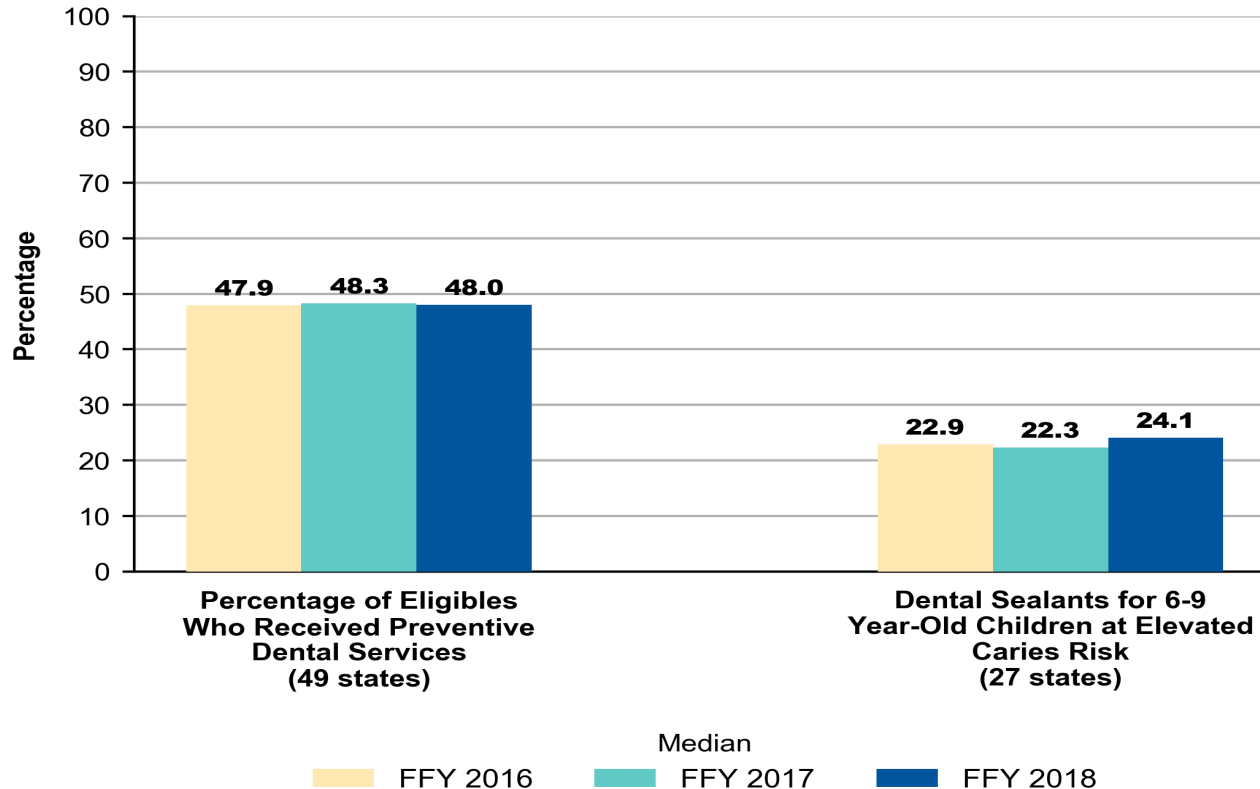
Source: Mathematica analysis of FFY 2016–2018 MACPro reports.

Notes: 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 2018 Chart Pack.



Trends in State Performance, FFY 2016–2018: Dental and Oral Health Services

Median state performance on the Percentage of Eligibles who Received Dental Services and Dental Sealants for 6-9 Year-Old Children at Elevated Caries Risk measures did not change significantly between FFY 2016 and FFY 2018.



Source: Mathematica analysis of FFY 2016-2018 MACPro reports and FFY 2016–2018 Form CMS-416 reports.

Notes: 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 2018 Chart Pack.

REFERENCE TABLES AND ADDITIONAL RESOURCES



Overview of State Reporting of the Child Core Set Measures, FFY 2018

	Number of Measures Reported	State Reported at Least One Measure for Both Medicaid and CHIP Populations	Screening for Depression and Follow-Up Plan: Ages 12 to 17	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	Immunizations for Adolescents	Developmental Screening in the First Three Years of Life	Chlamydia Screening in Women Ages 16 to 20	Body Mass Index Assessment for Children and Adolescents	Autiological Diagnosis No Later Than 3 Months of Age	Prenatal and Postpartum Care: Timeliness of Prenatal Care	Live Births Weighing Less Than 2,500 Grams	PC-02: Cesarean Birth	Contraceptive Care: Postpartum Women Ages 15 to 20	Contraceptive Care: All Women Ages 15 to 20	Asthma Medication Ratio: Ages 5 to 18	Ambulatory Care: Emergency Department (ED) Visits	Use of Multiple Concurrent Antipsychotics in Children and Adolescents	Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	Follow-Up After Hospitalization for Mental Illness	Follow-Up Care for Children Newly Prescribed ADHD Medication	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)								
Total	18 (Median)	45	3	45	47	48	47	43	44	25	44	38	3	39	28	16	31	26	32	45	39	28	45	40	51	33	39								
Alabama	24	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							
Alaska	17	X	--	X	X	X	X	--	--	X	X	X	--	--	X	--	X	X	X	X	--	--	X	X	X	X	X	X							
Arizona	15	--	--	X	X	X	X	X	X	X	X	--	--	--	--	--	X	--	--	X	X	X	X	--	X	X	--	--							
Arkansas	17	X	--	X	X	X	X	--	--	--	X	X	--	--	X	X	X	--	X	X	X	--	X	X	X	X	X	X							
California	16	X	--	X	--	--	--	X	X	--	X	--	--	X	--	--	X	X	X	X	X	X	X	X	X	X	X	--							
Colorado	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	X	X	--	--	--	--	--	--	X	--	--	--							
Connecticut	19	X	--	X	X	X	X	X	X	X	X	X	--	X	--	--	--	--	X	X	X	X	X	X	X	X	X	X	X						
Delaware	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						
Dist. of Col.	18	X	--	X	X	X	X	X	X	--	X	X	--	X	--	--	--	--	X	X	X	X	X	X	X	X	X	X	X	X					
Florida	21	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					
Georgia	9	X	--	--	X	X	X	X	X	--	--	X	--	--	--	--	--	--	--	--	--	--	--	X	X	X	--	--	--						
Hawaii	13	X	--	X	X	X	X	X	X	--	X	X	--	X	--	--	--	--	--	--	X	--	--	X	X	X	--	--	--	--					
Idaho	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--					
Illinois	20	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				
Indiana	23	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			
Iowa	23	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	X		
Kansas	17	X	--	X	X	X	X	X	X	--	X	X	--	X	--	--	--	--	X	X	X	X	X	X	X	X	--	--	--	--	--	--	--		
Kentucky	21	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	
Louisiana	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	X	X	X
Maine	15	X	--	X	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 2018 (continued)

	Number of Measures Reported	State Reported at Least One Measure for Both Medicaid and CHIP Populations	Screening for Depression and Follow-Up Plan: Ages 12 to 17	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	Immunizations for Adolescents	Developmental Screening in the First Three Years of Life	Chlamydia Screening in Women Ages 16 to 20	Body Mass Index Assessment for Children and Adolescents	Audiological Diagnosis No Later Than 3 Months of Age	Prenatal and Postpartum Care: Timeliness of Prenatal Care	Live Births Weighing Less Than 2,500 Grams	PC-02: Cesarean Birth	Contraceptive Care: Postpartum Women Ages 15 to 20	Contraceptive Care: All Women Ages 15 to 20	Asthma Medication Ratio: Ages 5 to 18	Ambulatory Care: Emergency Department (ED) Visits	Use of Multiple Concurrent Antipsychotics in Children and Adolescents	Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	Follow-Up After Hospitalization for Mental Illness	Follow-Up Care for Children Newly Prescribed ADHD Medication	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	12	X	-	X	X	X	X	X	X	-	X	X	-	X	-	-	-	-	-	X	X	-	-	-	X	-	X
Massachusetts	22	X	-	X	X	X	X	X	X	X	X	X	-	X	-	X	-	-	X	X	X	-	-	X	X	-	-
Michigan	21	-	-	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	X	X	X	-	-	X	X	-	X
Minnesota	14	X	-	X	X	X	X	X	X	X	X	-	-	-	X	-	X	-	-	X	-	-	X	-	X	-	-
Mississippi	18	X	-	X	X	X	X	X	X	-	X	X	-	X	-	-	-	X	X	X	X	X	X	X	X	-	X
Missouri	15	X	-	-	X	X	X	X	X	-	X	-	-	X	-	-	X	X	-	X	X	-	X	-	X	X	X
Montana	11	X	-	X	X	X	X	X	X	-	X	-	-	-	-	-	-	-	-	X	-	-	X	-	X	-	X
Nebraska	15	X	-	X	X	X	X	X	X	-	X	X	-	-	X	-	-	-	-	X	X	-	X	-	X	X	X
Nevada	19	X	-	X	X	X	X	X	X	-	-	X	X	X	X	-	X	X	-	X	X	-	X	X	X	X	X
New Hampshire	24	-	X	X	X	X	X	X	X	X	X	X	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X
New Jersey	17	X	-	X	X	X	X	X	X	X	X	X	-	X	-	-	-	-	X	X	X	-	X	X	X	-	X
New Mexico	16	X	-	X	X	X	X	X	X	-	X	X	-	X	-	-	-	-	X	X	X	X	X	X	X	-	-
New York	22	X	-	X	X	X	X	X	X	-	X	X	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X
North Carolina	22	X	-	X	X	X	X	X	X	X	X	X	-	X	X	-	X	X	X	X	X	X	X	X	X	X	X
North Dakota	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio	16	X	-	X	X	X	X	-	-	-	X	X	-	X	X	-	-	-	X	X	X	X	X	X	X	-	X
Oklahoma	22	X	-	X	X	X	X	X	X	X	X	X	-	X	X	-	X	X	X	X	X	X	X	X	X	X	X
Oregon	15	X	-	X	X	X	X	X	X	X	X	-	-	X	-	-	-	-	-	X	-	-	X	X	X	X	X
Pennsylvania	23	X	-	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	18	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 2018 (continued)

	Number of Measures Reported	State Reported at Least One Measure for Both Medicaid and CHIP Populations	Screening for Depression and Follow-Up Plan: Ages 12 to 17	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	Immunizations for Adolescents	Developmental Screening in the First Three Years of Life	Chlamydia Screening in Women Ages 16 to 20	Body Mass Index Assessment for Children and Adolescents	Audiological Diagnosis No Later Than 3 Months of Age	Prenatal and Postpartum Care: Timeliness of Prenatal Care	Live Births Weighing Less Than 2,500 Grams	PC-02: Cesarean Birth	Contraceptive Care: Postpartum Women Ages 15 to 20	Contraceptive Care: All Women Ages 15 to 20	Asthma Medication Ratio: Ages 5 to 18	Ambulatory Care: Emergency Department (ED) Visits	Use of Multiple Concurrent Antipsychotics in Children and Adolescents	Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	Follow-Up After Hospitalization for Mental Illness	Follow-Up Care for Children Newly Prescribed ADHD Medication	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	24	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
South Dakota	11	X	--	--	X	X	X	X	--	X	--	--	--	X	X	--	X	--	X	--	X	--	X	--	X	X	X	X
Tennessee	23	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
Texas	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
Utah	16	X	--	X	X	X	X	X	X	--	X	X	--	X	--	--	--	--	X	X	X	--	X	X	X	--	X	X
Vermont	21	X	X	X	X	X	X	X	X	X	X	--	--	--	X	--	X	X	X	X	X	X	X	X	X	X	X	X
Virginia	17	X	--	X	X	X	X	X	X	--	X	X	--	X	--	--	--	--	X	X	X	X	X	X	X	--	--	X
Washington	18	X	--	X	X	X	X	X	X	--	X	X	--	X	X	X	X	X	X	X	X	--	--	X	X	X	--	--
West Virginia	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
Wisconsin	8	X	--	X	X	X	X	X	X	--	--	--	--	X	--	--	--	--	--	--	--	--	--	--	X	--	--	--
Wyoming	18	X	--	X	X	X	X	X	X	X	X	X	--	--	--	--	X	X	--	X	X	--	X	X	X	X	X	X

Sources: Mathematica analysis of MACPro reports and Form CMS-416 reports for the FFY 2018 reporting cycle.

Notes: The term "states" includes the 50 states and the District of Columbia. The 2018 Child Core Set includes 26 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 2018

Measure Name	Rate Definition	Number of States Reporting Using 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 to 24 Months	45	95.2	95.7	94.6	96.7
Children and Adolescents' Access to Primary Care Practitioners	Percentage with a PCP Visit in the Past Year: Ages 25 Months to 6 Years	45	87.7	87.7	86.0	90.1
Children and Adolescents' Access to Primary Care Practitioners	Percentage with a PCP Visit in the Past Two Years: Ages 7 to 11 Years	45	90.4	91.1	89.2	93.8
Children and Adolescents' Access to Primary Care Practitioners	Percentage with a PCP Visit in the Past Two Years: Ages 12 to 19 Years	45	89.6	90.6	87.7	92.7
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	47	62.6	63.2	57.3	69.5
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	Percentage who had 1 or More Well-Child Visits with a PCP: Ages 3 to 6	48	68.6	69.3	62.1	76.6
Adolescent Well-Care Visits	Percentage with at Least 1 Well-Care Visit with a PCP or an OB/GYN Practitioner: Ages 12 to 21	47	49.2	48.9	40.0	57.0
Childhood Immunization Status	Percentage Up-to-Date on Immunizations (Combination 3) by their Second Birthday	43	63.2	69.5	64.0	73.4
Immunizations for Adolescents	Percentage Completing the Human Papillomavirus (HPV) Vaccine Series by Their 13th Birthday	44	32.3	32.3	23.8	40.3
Immunizations for Adolescents	Percentage Receiving Meningococcal Conjugate and Tdap Vaccines (Combination 1) by their 13th Birthday	43	71.7	77.3	64.3	84.4
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 to 3	25	41.0	42.2	26.2	55.2
Chlamydia Screening in Women Ages 16 to 20	Percentage of Sexually Active Women Screened for Chlamydia: Ages 16 to 20	44	50.9	50.1	44.6	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 to 17	37	57.3	69.7	39.7	77.2

Performance Rates on Frequently Reported Child Core Set Measures, FFY 2018 (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 Enrollment in Medicaid or CHIP	39	76.3	80.6	71.3	86.3
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	9.1	10.5	8.3
Contraceptive Care: Postpartum Women Ages 15 to 20	Percentage of Postpartum Women Provided a Most Effective or Moderately Effective Method of Contraception Within 3 Days of Delivery: Ages 15 to 20	31	4.4	3.4	1.6	6.2
Contraceptive Care: Postpartum Women Ages 15 to 20	Percentage of Postpartum Women Provided a Most Effective or Moderately Effective Method of Contraception Within 60 Days of Delivery: Ages 15 to 20	31	37.4	40.8	30.8	46.1
Contraceptive Care: Postpartum Women Ages 15 to 20	Percentage of Postpartum Women Provided a Long-Acting Reversible Method of Contraception Within 3 Days of Delivery: Ages 15 to 20	31	2.4	1.4	0.5	2.7
Contraceptive Care: Postpartum Women Ages 15 to 20	Percentage of Postpartum Women Provided a Long-Acting Reversible Method of Contraception Within 60 Days of Delivery: Ages 15 to 20	31	15.8	16.3	10.7	21.4
Contraceptive Care: All Women Ages 15 to 20	Percentage of Women at Risk for Unintended Pregnancy Provided a Most Effective or Moderately Effective Method of Contraception: Ages 15 to 20	26	27.1	28.1	22.5	33.3
Contraceptive Care: All Women Ages 15 to 20	Percentage of Women at Risk for Unintended Pregnancy Provided a Long-Acting Reversible Method of Contraception: Ages 15 to 20	25	5.5	5.4	4.2	7.2

Performance Rates on Frequently Reported Child Core Set Measures, FFY 2018 (continued)

Measure Name	Rate Definition	Number of States Reporting Using Core Set Specifications	Mean	Median	Bottom Quartile	Top Quartile
Care of Acute and Chronic Conditions						
Asthma Medication Ratio: Ages 5 to 18	Percentage with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater: Ages 5 to 11	32	71.3	73.0	66.6	76.9
Asthma Medication Ratio: Ages 5 to 18	Percentage with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater: Ages 12 to 18	32	63.2	63.8	59.7	67.7
Asthma Medication Ratio: Ages 5 to 18	Percentage with Persistent Asthma who had a Ratio of Controller Medications to Total Asthma Medications of 0.50 or Greater: Ages 5 to 18	31	67.7	69.6	64.0	72.6
Ambulatory Care: Emergency Department Visits	Emergency Department Visits per 1,000 Beneficiary Months: Ages 10 to 19 [Lower rates are better]	44	44.9	44.5	50.0	37.5
Behavioral Health Care						
Use of Multiple Concurrent Antipsychotics in Children and Adolescents	Percentage on Two or More Concurrent Antipsychotic Medications: Ages 1 to 17 [Lower rates are better]	39	2.7	2.9	3.6	1.9
Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	Percentage who had a New Prescription for an Antipsychotic Medication and had Documentation of Psychosocial Care as First-Line Treatment: Ages 1 to 17	28	62.2	63.5	57.0	69.0
Follow-Up After Hospitalization for Mental Illness Ages 6 to 20	Percentage of Hospitalizations for Mental Illness with a Follow-Up Visit Within 7 Days After Discharge: Ages 6 to 20	45	44.7	44.7	35.1	55.4
Follow-Up After Hospitalization for Mental Illness Ages 6 to 20	Percentage of Hospitalizations for Mental Illness with a Follow-Up Visit Within 30 Days After Discharge: Ages 6 to 20	44	65.0	67.1	56.6	76.2

Performance Rates on Frequently Reported Child Core Set Measures, FFY 2018 (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 Attention-Deficit/Hyperactivity Disorder (ADHD) Medication	Percentage Newly Prescribed ADHD Medication with 1 Follow-Up Visit During the 30-Day Initiation Phase: Ages 6 to 12	40	48.6	48.7	43.0	56.3
Follow-Up Care for Children Newly Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication	Percentage Newly Prescribed ADHD Medication with at Least 2 Follow-Up Visits in the 9 Months Following the Initiation Phase: Ages 6 to 12	40	59.1	61.1	53.1	66.2
Dental and Oral Health Services						
Percentage of Eligibles Who Received Preventive Dental Services	Percentage with at Least 1 Preventive Dental Service: Ages 1 to 20	51	47.2	48.0	44.4	52.5
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 to 9	32	23.6	24.1	20.9	26.3

Sources: Mathematica analysis of MACPro reports and Form CMS-416 reports for the FFY 2018 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 2018 and that met CMS standards for data 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 2018. Additionally, states were excluded if they reported a denominator of less than 30. 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 <https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-and-child-health-care-quality-measures/child-core-set/index.html>.

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.

^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.

^b Combination 1 includes one dose of meningococcal vaccine and Tdap vaccine.

Trends in Performance Rates on Frequently Reported Child Core Set Measures, FFY 2016–2018

Measure Name	Rate Definition	Number of States Reporting Using Core Set Specifications FFY 2016-2018	FFY 2016 Median	FFY 2017 Median	FFY 2018 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 to 24 Months	44	95.5	95.4	95.7
Children and Adolescents' Access to Primary Care Practitioners	Percentage with a PCP Visit in the Past Year: Ages 25 Months to 6 Years	44	87.9	87.5	87.8
Children and Adolescents' Access to Primary Care Practitioners	Percentage with a PCP Visit in the Past Two Years: Ages 7 to 11 Years	44	91.1	91.1	91.2
Children and Adolescents' Access to Primary Care Practitioners	Percentage with a PCP Visit in the Past Two Years: Ages 12 to 19 Years	44	89.7	90.5	90.7
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	61.4	59.8	63.5
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 to 6	46	68.4	68.3	69.8
Adolescent Well-Care Visit	Percentage with at Least 1 Well-Care Visit with a PCP or an OB/GYN Practitioner: Ages 12 to 21	45	45.1	44.7	49.4
Childhood Immunization Status	Percentage Up-to-Date on Immunizations (Combination 3) by their Second Birthday	37	69.1	68.7	68.4
Immunizations for Adolescents	Percentage Receiving Meningococcal Conjugate and Tdap Vaccines (Combination 1) by their 13th Birthday	39	71.9	74.5	77.4
Developmental Screening in the First Three Years of Life	Percentage of Children Screened for Risk of Developmental, Behavioral, and Social Delays Using a Standardized Screening Tool: Ages 0 to 3	22	36.0	38.1	43.3
Chlamydia Screening in Women Ages 16 to 20	Percentage of Sexually Active Women Screened for Chlamydia: Ages 16 to 20	42	49.2	49.8	50.2
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 to 17	34	62.0	66.2	70.6

Trends in Performance Rates on Frequently Reported Child Core Set Measures, FFY 2016–2018 (continued)

Measure Name	Rate Definition	Number of States Reporting Using Core Set Specifications FFY 2016-2018	FFY 2016 Median	FFY 2017 Median	FFY 2018 Median
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 Enrollment in Medicaid or CHIP	37	79.4	81.6	80.6
Care of Acute and Chronic Conditions					
Ambulatory Care: Emergency Department Visits	Emergency Department Visits per 1,000 Beneficiary Months: Ages 0 to 19 [Lower rates are better]	41	43.1	41.9	44.2
Behavioral Health Care					
Use of Multiple Concurrent Antipsychotics in Children and Adolescents	Percentage on Two or More Concurrent Antipsychotic Medications: Ages 1 to 17 [Lower rates are better]	28	2.8	2.6	2.9
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 to 12	36	49.7	50.2	48.7
Follow-Up Care for Children Newly Prescribed ADHD Medication	Percentage Newly Prescribed ADHD Medication with at Least 2 Follow-Up Visits in the 9 Months Following the Initiation Phase: Ages 6 to 12	36	61.3	61.7	61.1
Dental and Oral Health Services					
Percentage of Eligibles Who Received Preventive Dental Services	Percentage with at Least 1 Preventive Dental Service: Ages 1 to 20	49	47.9	48.3	48.0
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 to 9	27	22.9	22.3	24.1

Sources: Mathematica analysis of FFY 2016–2018 MACPro reports, and FFY 2016–2018 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 2016–2018). 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. Data from previous years may be updated based on new information received after publication of the 2018 Chart Pack.

Measure-specific tables are available at <https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-and-child-health-care-quality-measures/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
LARC	Long-acting reversible contraception
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 <https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult-and-child-health-care-quality-measures/child-core-set/index.html>.

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.