The Department of Health and Human Services

2015 Annual Report on the Quality of Care for Children in Medicaid and CHIP

Health and Human Services Secretary

Sylvia Mathews Burwell

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EXECUTIVE SUMMARY

Together, Medicaid and the Children's Health Insurance Program (CHIP) served more than 43 million children in federal fiscal year (FFY) 2014, representing more than 1 in 3 children in the United States.[1,2,3] Medicaid and CHIP play a key role in ensuring that low-income children get health care coverage, access to a comprehensive set of benefits, and other medically necessary services. This report, required by Section 1139A(c)(2) of the Social Security Act (the Act), as added by section 401(a) of the Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA), summarizes state-specific information on the quality of health care furnished to children covered by Medicaid and CHIP.

The Department of Health and Human Services (HHS) is working closely with states, health care providers, and program enrollees to ensure a high quality system of care for children in Medicaid/CHIP. As the HHS agency responsible for ensuring effective health care coverage for Medicare, Medicaid, and CHIP beneficiaries, the Centers for Medicare & Medicaid Services (CMS) plays a key role in promoting quality health care for children in Medicaid/CHIP. CMS's quality agenda is closely aligned with that of the HHS National Quality Strategy's three aims of achieving better care, a healthier population and community, and more affordable care.[4]

Over the past five years, CMS and states have continued to break new ground with reporting on CMS's core set of children's health care quality measures (referred to as the Child Core Set).[5] This report presents findings on the Child Core Set and summarizes information on managed care quality measurement and improvement efforts as reported in the external quality review (EQR) technical reports.[6] The 2014 Child Core Set includes a range of 23 children's quality measures encompassing physical, behavioral, and oral health.[7]

Data Limitations

The legislation that created the child health care quality measurement program established it as a voluntary reporting program, at the discretion of state Medicaid/CHIP agencies to participate.

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[1] In this report, "children" are defined as individuals age 21 and younger. The technical specifications for each measure specify the age of children to be included in each measure.

[2] http://medicaid.gov/chip/downloads/fy-2014-childrens-enrollment-report.pdf.

[3] U.S. Census Bureau. "Health Insurance Coverage Status and Type by Selected Characteristics for Children Under 18 (All Children): 2013." Table HI08, available at http://www.census.gov/hhes/www/cpstables/032014/health/hi08.xls.

[4] More information on the HHS National Quality Strategy is available at http://www.ahrq.gov/workingforquality/reports/annual-reports/nqs2014annlrpt.pdf.

[5] The 2014 Child Core Set is described in a Bulletin, available at http://medicaid.gov/Federal-Policy-Guidance/Downloads/CIB-12-19-13.pdf.

[6] Previous Secretary's Reports are available at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/CHIPRA-Initial-Core-Set-of-Childrens-Health-Care-Quality-Measures.html.

[7] For a list of the 2014 Child Core Set measures, see Supplemental Table CH-1 at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Overview-of-the-Child-Core-Set-Measures-FFY-2014.zip.

While 51 states[8] voluntarily reported at least one Child Core Set measure for FFY 2014, only 19 of the measures were reported by 25 or more states, limiting the ability to use the data to make national observations about the quality of care provided to children in Medicaid and CHIP. Additionally, states may not always adhere to the measure technical specifications when reporting, and may differ in the populations included in the measures (i.e., Medicaid versus CHIP), often making it difficult to compare results from state to state. The extent to which reported data have been validated is also unknown in all states, though CMS is seeking to more consistently obtain this information from states with future reporting.

To improve the quality and completeness of Core Set data, CMS implemented a systematic real-time data review and outreach process for FFY 2014 Core Set data. After reviewing the data, CMS contacted each state to follow up on any concerns about the accuracy or completeness of reported data (such as missing data, transposed values, and inconsistencies in data reported across measures or over time) and also to clarify any aspects of the state's reported populations or methodology that were unclear. As part of this process, CMS also offered states additional technical support with reporting Core Set measures through email and in telephone calls. As a result of this outreach, some states corrected and refined their Core Set data. The corrected data were used to publicly report the data seen in this report. In addition, CMS gained a better understanding of factors that may affect changes in rates reported across years.

With any new reporting program, it may take several years of reporting on the measures before data quality issues like the ones highlighted are resolved. CMS continues to work with states to help improve the accuracy and completeness of the reported data.

Quality Measurement Using the Child Core Set

- CMS has made substantial efforts to streamline reporting of Child Core Set data, reduce the burden on states, and improve consistency of the data. For FFY 2014, data on the Child Core Set measures were obtained through three sources: (1) the CMS CHIP Annual Reporting Template System (CARTS) web-based data submission tool, (2) Form CMS-416, and (3) the Centers for Disease Control and Prevention's (CDC's) National Healthcare Safety Network (NHSN).
- Forty-one states voluntarily reported at least 11 of the 22 Child Core Set measures to CMS for FFY 2014, and 51 states reported at least one of the measures (see Figure 1 and Table 1).[9] The median number of measures reported by states for FFY 2014 remained consistent with reporting for FFY 2013 (16 measures for each year), increasing from a median of 14 measures reported for FFY 2012. Two states, Georgia and South Carolina, reported all 22 Child Core Set measures for FFY 2014.
- The completeness of Child Core Set data reported by states improved for FFY 2014. More states reported measures for both Medicaid and CHIP enrollees (increasing from 38 states for FFY 2012 to 41 states for FFY 2013 and 44 states for FFY 2014).

[8] The term "states" includes the 50 states and the District of Columbia.

[9] The 2014 Child Core Set includes 23 measures. The base of 22 measures excludes the Central Line-Associated Blood Stream Infections (CLABSI) measure, which was obtained from the CDC's NHSN beginning in FFY 2012.

- The measures most frequently reported by states assess children's access to primary care, percentage with well-child visits, use of dental services, receipt of childhood immunizations, and satisfaction with care received (see Figure 2). This is the first year of public reporting of four measures: Human Papillomavirus (HPV) Vaccine for Female Adolescents, Low Birth Weight (LBW), Asthma Medication Management, and Emergency Department (ED) Visits. These measures were reported by 32, 29, 27, and 37 states, respectively.
- As in the previous years' reports, CMS conducted detailed analysis of state performance on Child Core Set measures (including percentiles, trends, and geographic variation) reported by at least 25 states. The number of measures analyzed increased from 16 measures for FFY 2013 to 19 measures for FFY 2014. This information is presented in five domain-specific reports: (1) primary care access and preventive care, (2) perinatal health, (3) care of acute and chronic conditions, (4) behavioral health care, and (5) dental and oral health services.[10] The domain-specific reports include state-specific findings (including percentiles, means, medians, trends, and geographic variation) on the frequently reported measures, reflecting a continuum of quality measures for children and pregnant women.

State Performance on the Child Core Set

1. Primary Care Access and Preventive Care

- In FFY 2014, as in FFY 2013, states continued to report relatively high rates (i.e., at or above 85 percent) of children's access to primary care. The vast majority of children, across all states, had at least one visit to a primary care practitioner (PCP) during the reporting period, with the median rate ranging from a high of 96 percent among children ages 12 to 24 months to 89 to 91 percent for the other age groups (see Table 2).
- Despite high rates of overall primary care access, the proportion of children with a well-child visit remained below the recommended guidelines,[11] ranging from a median of 44 percent for adolescents ages 12 to 21 to a median of 67 percent for children ages 3 to 6 (see Table 2).
- The content of a well-child visit can be indicated by several Child Core Set measures (see Table 2):
    - The median childhood immunization rate for children turning age 2 and the median adolescent immunization rate among 13-year-olds were both 67 percent (35 states reporting).
    - A median of 18 percent of female adolescents had received three doses of the HPV vaccine by their 13th birthday (32 states reporting).
    - The median Chlamydia screening rate among sexually active women between the ages of 16 and 20 was 48 percent (37 states reporting).

[10] The domain-specific reports are available at http://www.medicaid.gov/medicaid-chip-program-information/by-topics/quality-of-care/downloads/2015-SR-domain-specific-reports.zip. In last year's annual report, this information was presented in an appendix to the main body of the report.

[11] The American Academy of Pediatrics and Bright Futures recommend nine well-child visits in the first 15 months of life and annual well-child visits for children ages 3 and older.

- A median of 43 percent of children ages 3 to 17 with a primary care visit during the year had their body mass index (BMI) percentile documented in the medical record (33 states reporting).

2. Perinatal Health

- The health of a child is affected by a mother's health and the care she receives during pregnancy, as well as the care of the child after birth. In FFY 2014, data on four maternity and infant care measures in the Child Core Set indicate (see Table 2):
  - The vast majority of pregnant women had a prenatal care visit in the first trimester or within 42 days of enrollment in Medicaid/CHIP (the median rate among 34 states was 81 percent).
  - Two-thirds of women received at least 80 percent of the expected number of visits during their pregnancy (based on when they enrolled in Medicaid/CHIP and when they delivered) (the median rate among 27 states was 66 percent).
  - The median percentage of live births paid for by Medicaid or CHIP weighing less than 2,500 grams (5 pounds, 8 ounces) at birth was 9 percent (29 states reporting).
  - Among the 41 states with state-level rates for Central Line-Associated Blood Stream Infections (CLABSIs) in Neonatal Intensive Care Units (NICUs), 33 had a significant decrease in CLABSI infections in calendar year (CY) 2013 since the 2006–2008 baseline period, and 8 had no change in infections since the baseline period. No states had a significant increase in infections.[12]

3. Care of Acute and Chronic Conditions

- The care of acute and chronic conditions among children enrolled in Medicaid and CHIP can be indicated by two Child Core Set measures (see Table 2):
  - Among children ages 5 to 20 with persistent asthma, the median percentage who remained on an asthma controller medication for at least 75 percent of their treatment period was 31 percent (25 states reporting).
  - Among children ages 1 to 19, the median rate for ED visits was 46 visits per 1,000 enrollee months (37 states reporting).[13]

[12] This measure is obtained from data reported by hospitals to the CDC's NHSN. It includes all neonatal CLABSI incidents not just those for infants covered by Medicaid/CHIP. The statistic reported indicates whether the rate of infections increased, decreased, or did not change significantly relative to the baseline U.S. experience (calculated using data for 2006–2008). For further information on the methods used to assess state performance, see http://www.cdc.gov/HAI/pdfs/progress-report/hai-progress-report.pdf.

[13] Enrollee months are an enrollee's "contribution" to the total yearly enrollment. Enrollee months are calculated by summing the total number of months each enrollee is enrolled in the program during the measurement year.

4. Behavioral Health Care

- Two measures of care for children with a diagnosis of a behavioral health problem were available for analysis for FFY 2014 (see Table 2):
  - The median rate of a 30-day follow-up visit after hospitalization for mental illness among children ages 6 to 20 was 65 percent, while the median rate of a follow-up visit within 7 days of discharge was 44 percent (34 states reporting).
  - A median of 44 percent of children newly prescribed medication for attention-deficit/ hyperactivity disorder (ADHD) had a follow-up visit during the first 30 days (known as the Initiation Phase) (34 states reporting), and of the children with a visit during the Initiation Phase, a median of 57 percent had two visits during the next nine months (known as the Continuation and Maintenance [C&M] phase) (31 states reporting).

5. Dental and Oral Health Services

- Children's access to dental services in FFY 2014 was similar to patterns observed in previous years (see Table 2):
  - A median of 48 percent of children ages 1 to 20 received at least one preventive dental service (such as application of topical fluoride or dental sealants) in FFY 2014 (51 states reporting).
  - A median of 22 percent of children ages 1 to 20 received at least one dental treatment service (such as dental fillings) in FFY 2014 (51 states reporting).

Managed Care External Quality Review Findings

1. Overview: External Quality Review (EQR) Technical Reports

- Of the 41 states[14] that currently contract with managed care plans to deliver services to Medicaid and CHIP enrollees, 38 submitted EQR technical reports to CMS for the 2014–2015 reporting cycle.[15] The most frequently reported children's performance measures included in the EQR technical reports are the same as or similar to those most frequently reported in the Child Core Set (see Figure 4).

2. Performance Improvement Projects

- Through their managed care entities, states are engaged in various types of improvement projects specific to children. Behavioral health care was the most common performance improvement project (PIP) topic among states for the 2014–2015 reporting cycle (22 states and 161 PIPs).

[14] For purposes of EQR, the term "states" includes the 50 states, the District of Columbia, and the territories.

[15] The 2014–2015 reporting cycle includes reports that were submitted between May 1, 2014 and April 30, 2015. Of the three states that did not submit EQR technical reports in time for the 2014–2015 reporting cycle, two are on target to submit reports by the end of the year, and CMS is monitoring the status of reporting by the third state.

- Among the 28 states that submitted EQR technical reports during the current and previous two reporting cycles, PIP topics demonstrated a few notable shifts (see Figure 5). The number of states conducting improvement projects focused on ADHD or other behavioral health topics, ED visits, hospital readmissions, oral health, well-child care, asthma, and primary care access all increased in the 2014–2015 reporting cycle compared to the number of states reporting these projects in previous years. In addition, while the total number of *states* conducting improvement projects related to immunizations and lead screening declined from the 2012–2013reporting cycle, there was an increase in the total number of improvement *projects* in these categories for the 2014–2015 reporting cycle.
- PIP topics, target populations, and interventions and activities were generally specific to the managed care entities in a state, but 18 states mandated improvement projects on priority health care topics. For example, Georgia and Missouri required all MCOs to implement improvement projects related to dental care for children, while the District of Columbia, Florida, Georgia, Illinois, and New Hampshire required MCOs to implement improvement projects related to prenatal and postpartum care.
- CMS conducted detailed abstractions of EQR technical reporting on PIPs in four topic areas: (1) childhood obesity, (2) oral health, (3) prenatal and postpartum care, and (4) adolescent well care. Analysis of the PIPs indicates that states are using a diverse set of interventions to improve quality of care. A summary of these findings is available in the domain-specific reports referenced earlier.

Summary and Conclusion

This report shows the continued progress made by HHS and states in building a national, cross-state quality measurement and reporting system for children's health care in Medicaid and CHIP. CMS conducted detailed analysis of state performance on Child Core Set measures reported by at least 25 states. The increase in the number of measures reported by states allowed CMS to analyze 19 measures for FFY 2014, up from 16 measures for FFY 2013. The evolving quality measurement field offers data on performance as a new tool for states to use in driving improvements in care.[16] Through managed care entities that now are the main delivery system for children and their parents, states are engaged in various types of improvement projects specific to children. States had relatively high performance on the children's primary care access measure; however, this report highlights the need for improvement in areas such as the use of preventive services by young children and adolescents, dental and oral health care, coordination of care for children with behavioral health needs, and care of acute and chronic conditions. Quality measurement and improvement initiatives underway in the states and at CMS are gaining momentum to accelerate improvements in children's health care and health outcomes in Medicaid and CHIP.

[16] Berwick, D.M., B. James, and M.J. Coye. "Connections Between Quality Measurement and Improvement." Medical Care, vol. 41, no. 1 (Supplement), January 2003, pp. I30–38.

I. INTRODUCTION

Over the first five years of state reporting on the core set of children's health care quality measures (referred to as the Child Core Set), the Centers for Medicare & Medicaid Services (CMS) and states have made substantial progress in building the foundation for quality measurement. Working collaboratively with its many partners including states, health care providers, and program enrollees, CMS is now engaged in various efforts to use this information to drive improvements in care for children in Medicaid and the Children's Health Insurance Program (CHIP).

Together, Medicaid and CHIP served more than 43 million children in FFY 2014, representing more than 1 in 3 children in the United States.[17,18] Children's enrollment increased nearly 2 percent between FFY 2013 and FFY 2014.[19] These data should be viewed in the context of 2013 data that show that in 23 states at least 90 percent of children eligible for Medicaid and CHIP are enrolled in these programs.[20] In contrast, in 2008, only five states had rates at or above 90 percent.[21] Medicaid and CHIP participation rates have increased as a result of outreach, enrollment simplification, and retention efforts, including regulations and program changes adopted as a result of the Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA) and the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010 (collectively referred to as the Affordable Care Act). Reductions in the percentage of children without health insurance reflect these gains; the uninsured rate for children under age 18 decreased from 9.8 percent in 2010 to 7.3 percent in 2013.[22] Given that Medicaid and CHIP are key sources of coverage for children, it is important to continue to build a strong foundation for children's health care quality measurement and improvement.

The majority (about 70 percent) of children covered by Medicaid and CHIP obtain care from managed care arrangements, although the rate of enrollment and range of services included in these plans vary across states.[23] For example, some states provide behavioral health and dental services through their managed care plans, while others provide these services using fee-for-service arrangements. Because of the varying arrangements, a diverse set of quality measurement and improvement efforts are under way across payment and service delivery settings.

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[17] http://medicaid.gov/chip/downloads/fy-2014-childrens-enrollment-report.pdf.

[18] http://kff.org/other/state-indicator/children-0-18/.

[19] http://medicaid.gov/chip/downloads/fy-2014-childrens-enrollment-report.pdf.

[20] http://www.insurekidsnow.gov/professionals/reports/index.html.

[21] http://www.urban.org/uploadedpdf/412901-%20Medicaid-CHIP-Participation-Rates-Among-Children-An-Update.pdf.

[22] U.S. Census Bureau. "Health Insurance Statistical Tables." Table HIB-3, available at http://www.census.gov/hhes/www/hlthins/data/historical/HIB_tables.html and Table 2. Type of Health Insurance Coverage by Age 2013, available at http://www.census.gov/hhes/www/hlthins/data/incpovhlth/2013/Table2.pdf.

[23] CMS analysis of FY 2014 Statistical Enrollment Data System (SEDS) data.

The objective of this report, as required by CHIPRA,[24] is to summarize state-specific information on the quality of health care furnished to children under Titles XIX (Medicaid) and XXI (CHIP) of the Social Security Act (the Act). Section 1139A(c)(1)(B) of the Act specifically requests information gathered from the external quality reviews (EQRs) of managed care organizations (MCOs)[25] and benchmark plans.[26] The Secretary of the Department of Health and Human Services (HHS) is required to make this information publicly available annually. The 2014 Child Core Set includes 23 children's health care quality measures developed through a multi-stakeholder process, encompassing physical, behavioral, and oral health.[27,28] This year's report provides a snapshot of states' performance on 19 of these measures for which at least 25 states voluntarily provided information to CMS.[29,30]

[24] Section 1139A(c)(2) of the Social Security Act, as added by section 401(a) of CHIPRA.

[25] Established under the authority of Section 1932 of the Social Security Act.

[26] Established under the authority of Sections 1937 and 2103 of the Social Security Act.

[27] For a list of the 2014 Child Core Set measures, see Supplemental Table CH-1 at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Overview-of-the-Child-Core-Set-Measures-FFY-2014.zip.

[28] Updates to the 2014 Child Core Set are described in a Center for Medicaid and CHIP Services (CMCS) Informational Bulletin, available at http://medicaid.gov/Federal-Policy-Guidance/Downloads/CIB-12-19-13.pdf.

[29] The CAHPS Health Plan Survey measure is not profiled in this report. For more information about state collection of the CAHPS Health Plan survey, see Table CAHPS-CH at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2014.zip.

[30] Previous Secretary's Reports are available at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/CHIPRA-Initial-Core-Set-of-Childrens-Health-Care-Quality-Measures.html.

II. STATE-SPECIFIC FINDINGS ON QUALITY AND ACCESS IN MEDICAID AND CHIP

A. Data Limitations

The legislation that created the child health care quality measurement program established it as a voluntary reporting program, at the discretion of state Medicaid/CHIP agencies to participate. While 51 states voluntarily reported at least one Child Core Set measure for FFY 2014, only 19 of the measures were reported by 25 or more states, limiting the ability to use the data to make national observations about the quality of care provided to children in Medicaid and CHIP. Additionally, states may not always adhere to the measure technical specifications when reporting, and may differ in the populations included in the measures (i.e., Medicaid versus CHIP), often making it difficult to compare results from state to state. The extent to which reported data have been validated is also unknown in all states, though CMS is seeking to more consistently obtain this information from states with future reporting.

To improve the quality and completeness of Core Set data, CMS implemented a systematic real-time data review and outreach process for FFY 2014 Core Set data. After reviewing the data, CMS contacted each state to follow up on any concerns about the accuracy or completeness of reported data (such as missing data, transposed values, and inconsistencies in data reported across measures or over time) and also to clarify any aspects of the state's reported populations or methodology that were unclear. As part of this process, CMS also offered states additional technical support with reporting Core Set measures through email and in telephone calls. As a result of this outreach, some states corrected and refined their Core Set data. The corrected data were used to publicly report the data seen in this report. In addition, CMS gained a better understanding of factors that may affect changes in rates reported across years.

With any new reporting program, it may take several years of reporting on the measures before data quality issues like the ones highlighted are resolved. CMS continues to work with states to help improve the accuracy and completeness of the data reported.

B. Quality Measurement Using the Core Set of Children's Health Care Quality Measures

For the past five years, CMS and its partner states have continued to break new ground with reporting on CMS's Child Core Set.[31] CMS continues to work with states, through its Quality Measures Technical Assistance and Analytic Support (TA/AS) Program,[32] to achieve the following internal goals for quality measurement and improvement:

[31] For a list of the 2014 Child Core Set measures, see Supplemental Table CH-1 at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Overview-of-the-Child-Core-Set-Measures-FFY-2014.zip.

[32] The TA/AS Program is led by Mathematica Policy Research in collaboration with National Committee for Quality Assurance (NCQA) and Center for Health Care Strategies (CHCS). More information about the TA/AS Program is available at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/CHIPRA-Initial-Core-Set-of-Childrens-Health-Care-Quality-Measures.html.

- Increase the number of states voluntarily reporting on the core measures;
- Maintain or increase the number of measures reported by each state;
- Improve the completeness of the data reported (that is, report on both Medicaid and CHIP enrollees);
- Improve the accuracy and consistency of data reported through an enhanced data quality outreach effort;
- Streamline data collection and reporting processes, to the extent possible;
- Assess states' managed care performance improvement projects (PIPs) related to the core measures; and
- Support states to drive improvements in health care quality using Child Core Set data.

Together, these activities are strengthening the federal-state partnership in quality measurement and improvement in Medicaid and CHIP.

Section 1139A(b)(5) provides that, beginning no later than January 1, 2013, and annually thereafter, the Secretary shall publish recommended changes to the Initial Child Core Set.[33] Part of the process of collecting, reporting, and using the Child Core Set measures is to establish a way to periodically identify new measures for possible inclusion in future Child Core Sets. This process serves several purposes: (1) build upon the original measure set by addressing gap areas; (2) improve upon existing Child Core Set measures; and (3) better align with national quality measurement activities. The intended result is a Child Core Set that is more robust and better able to support states' and CMS's quality measurement needs.[34] CMS currently partners with the National Quality Forum Measure Applications Partnership to strengthen its Child Core Set.[35,36] In December 2013, CMS issued an Informational Bulletin detailing updates to the 2014 Child Core Set.[37]

In addition to ensuring that the measures are relevant to current health care delivery approaches, reflect updates to clinical guidelines, and incorporate feedback from states, CMS is devoting the resources necessary to continue developing the pediatric measurement field. Through a partnership with the Agency for Healthcare Research and Quality (AHRQ), CMS has spent the past four years working with the seven Centers of Excellence (COEs) that comprise the AHRQ-

[33] The Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA) required HHS to identify and publish a core set of children's health care quality measures for voluntary use by State Medicaid and CHIP programs. In December 2009, the Secretary published an initial core set of 24 measures. More information is available at https://downloads.cms.gov/cmsgov/archived-downloads/SMDL/downloads/SHO11001.pdf.

[34] Background on the Initial Core Set can be found in a February 2011 State Health Official letter, available at http://www.cms.gov/smdl/downloads/SHO11001.pdf.

[35] http://www.qualityforum.org/setting_priorities/partnership/measure_applications_partnership.aspx.

[36] CMS issued a January 2013 State Health Official letter outlining updates to the Initial Child Core Set and the multi-stakeholder process used to inform the decision-making process available at http://www.medicaid.gov/Federal-Policy-Guidance/downloads/SHO-13-002.pdf.

[37] Updates to the 2014 Child Core Set are described in a Center for Medicaid and CHIP Services (CMCS) Informational Bulletin, available at http://medicaid.gov/Federal-Policy-Guidance/Downloads/CIB-12-19-13.pdf.

CMS Pediatric Quality Measures Program (PQMP).[38] Additionally, CMS continues to work with the Office of the National Coordinator for Health Information Technology (ONC) to develop pediatric measures in areas that address gaps in the Child Core Set and that can be collected through an electronic health record (EHR).[39,40]

As with the measures themselves, the data systems and sources used to collect information and monitor progress are also subject to periodic adjustments. In FFY 2012, CMS decided to abstract data from other sources on behalf of states for three Child Core Set measures: (1) preventive dental services, (2) dental treatment services, and (3) central line-associated blood stream infections (CLABSI) in neonatal intensive care units (NICUs).[41] CMS also has continued making progress toward a modernized and streamlined Medicaid and CHIP data infrastructure known as the Medicaid and CHIP Business Information Solutions (MACBIS) initiative. In the future, information collected as part of MACBIS will serve as the primary data source for the Center for Medicaid and CHIP Services' (CMCS's) quality reporting and performance measurement capacities.

For the 2015 Secretary's Report, CMS conducted the following activities to assess the status of quality measurement, reporting, and improvement efforts by states:

- Reviewed and analyzed findings on the Child Core Set measures reported to CMS by states for FFY 2014, including analyses of 19 measures reported by at least 25 states;[42]
- Conducted outreach by email and telephone to selected states about the completeness and accuracy of their Child Core Set data;[43]
- Analyzed dental services utilization data submitted by states on Form CMS-416;
- Reviewed and analyzed neonatal CLABSI data submitted to CDC's NHSN;
- Abstracted and summarized information on the quality measures and PIPs reported in the EQR technical reports from states that contract with managed care plans to deliver services to Medicaid and CHIP enrollees (see Chapter III); and
- Prepared detailed analyses of state performance on Child Core Set measures in five domains: (1) primary care access and preventive care, (2) perinatal health, (3) care of acute and chronic conditions, (4) behavioral health care, and (5) dental and oral health services.[44]

[38] http://www.ahrq.gov/policymakers/chipra/factsheets/index.html.

[39] https://healthit.ahrq.gov/health-it-tools-and-resources/childrens-electronic-health-record-ehr-format.

[40] http://www.ahrq.gov/policymakers/chipra/demoeval/childhealth/index.html.

[41] CMS calculates the two dental measures on behalf of states using data reported on Form CMS-416. CMS obtains state-level CLABSI data from the Centers for Disease Control and Prevention's (CDC) National Healthcare Safety Network (NHSN).

[42] The child CAHPS Health Plan Survey measure is not profiled in this report. To view state-specific information on which states reported collecting the child CAHPS Health Plan Survey, see Table CAHPS-CH at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2014.zip.

[43] Data reported in previous years' Secretary's Reports may have changed as a result of data quality outreach efforts conducted for the 2015 Secretary's Report.

[44] The domain-specific reports are available at http://www.medicaid.gov/medicaid-chip-program-information/by-topics/quality-of-care/downloads/2015-SR-domain-specific-reports.zip.

C. Changes in State Reporting of the Child Core Set for FFY 2014

Similar to last year, all 51 states reported at least one Child Core Set measure for FFY 2014 (Figure 1 and Table 1).[45] Altogether, 41 states reported at least 11 of the 22 measures to CMS for FFY 2014 (Figure 1 and Table 1).[46,47] Two states—Georgia and South Carolina—reported on all 22 of the measures for FFY 2014, and eight states reported on 21 of the 22 measures for FFY 2014 (Figure 1 and Table 1). The two states with the largest increases in the number of measures reported from FFY 2012 to FFY 2014 were Connecticut (+13 measures) and Louisiana (+11 measures).[48] Eight states reported fewer measures for FFY 2014 than in the previous year, generally due to a lack of data availability (data not shown).

One of CMS's quality measurement-related goals is to work with states to improve the completeness of data reported. CMS continues to encourage states to report data on the Child Core Set that include both Medicaid and CHIP populations. The number of states reporting at least one measure that combines data for both Medicaid and CHIP enrollees has increased consistently over the past three years, from 38 states for FFY 2012 to 41 states for FFY 2013 and 44 states for FFY 2014. In addition, the share of measures including data for Medicaid enrollees (as opposed to just including data for CHIP enrollees) increased steadily, from 64 percent for FFY 2012 to 78 percent for FFY 2013 and 80 percent for FFY 2014.

The fifth year of voluntary reporting also saw an overall increase in the number of measures reported by each state. The median number of measures reported by each state increased over the past three years, from 14 for FFY 2012 to 16 for FFY 2013 and FFY 2014. The most frequently reported measures for FFY 2014 were the two dental measures (51 states reporting), the well-child visit and access to primary care practitioner (PCP) measures (42 to 46 states reporting), and the childhood immunization status and Consumer Assessment of Healthcare Providers and Systems (CAHPS) measures (39 states reporting) (Figure 2). These frequently reported measures are either already in use by CMS reporting programs, or are part of the Healthcare Effectiveness Data and Information Set (HEDIS®), and are often included in managed care contracts for monitoring the quality of care provided to Medicaid/CHIP enrollees receiving care through managed care entities.[49] In addition, these measures, with the exception of the CAHPS survey, are calculated primarily using Medicaid administrative data and do not require medical record review.

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[45] The term "states" includes the 50 states and the District of Columbia.

[46] The 2014 Child Core Set includes 23 measures. The base of 22 measures excludes the CLABSI measure because data were obtained from the CDC's NHSN. Additionally, three measures—Annual Pediatric Hemoglobin (HbA1c) Testing, Appropriate Testing for Children with Pharyngitis, and Annual Percentage of Asthma Patients 2 Through 20 with One or More Asthma-Related Emergency Room Visits—were retired from the Child Core Set in 2014. Updates to the 2014 Child Core Set are described in a Center for Medicaid and CHIP Services (CMCS) Informational Bulletin, available at http://medicaid.gov/Federal-Policy-Guidance/Downloads/CIB-12-19-13.pdf.

[47] The 2014 Secretary's Report used a base of 25 measures and a threshold of 13 measures. The number of states reporting at least 13 measures increased from 33 states for FFY 2013 to 35 states for FFY 2014.

[48] For information on the change in the number of measures reported by each state, see Supplemental Table CH-2 at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Overview-of-the-Child-Core-Set-Measures-FFY-2014.zip.

[49] HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).

The majority of Child Core Set measures saw an increase in the number of states reporting data for FFY 2014 (Figure 3). The measures with the largest increases in reporting from FFY 2013 to FFY 2014 were:

- Human Papillomavirus (HPV) Vaccine for Female Adolescents (increased from 23 to 32 states reporting);
- Body Mass Index Assessment (BMI) for Children and Adolescents (increased from 25 to 33 state reporting);
- Live Births Weighing Less than 2,500 Grams (increased from 21 to 29 states reporting);
- Follow-Up After Hospitalization for Mental Illness (increased from 28 to 34 states reporting); and
- Immunization Status for Adolescents (increased from 31 to 37 states reporting).

The increase in the number of measures reported by states allowed CMS to conduct deeper analysis on 19 Child Core Set measures reported by 25 or more states for FFY 2014.[50] State performance on four measures—Ambulatory Care: Emergency Department Visits, HPV Vaccine for Female Adolescents, Live Births Weighing Less Than 2,500 Grams, and Medication Management for People with Asthma—is profiled for the first time for FFY 2014.

The least frequently reported measures in the 2014 Child Core Set—Developmental Screening in the First Three Years of Life (20 states reporting), Cesarean Section for Nulliparous Singleton Vertex (16 states reporting), and Behavioral Health Risk Assessment (For Pregnant Women) (4 states reporting)—require states to conduct medical record reviews or to link with other data sources such as birth records to collect the necessary data, which is a resource-intensive process for states. Reasons for not reporting vary by state, but data availability and data access are among the most frequently cited reasons for not reporting. Through the Quality Measures Technical Assistance and Analytic Support (TA/AS) Program,[51] CMS will continue to work with states to support their capacity for reporting.

D. Summary of Key Findings on Performance

This section summarizes CMS's analysis of performance on 19 measures for FFY 2014 reported by at least 25 states (Table 2). State-specific findings (including percentiles, means, medians, trends, and geographic variation) on these frequently reported measures are presented in the five domain-specific reports described above, reflecting a continuum of quality measures for children

[50] The child CAHPS Health Plan Survey measure is not profiled in this report. To view state-specific information on the number of states collecting the child CAHPS Health Plan Survey, see Table CAHPS-CH at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2014.zip.

[51] The TA/AS Program is led by Mathematica Policy Research in collaboration with National Committee for Quality Assurance (NCQA) and Center for Health Care Strategies (CHCS), and supports reporting of CMCS Medicaid/CHIP quality measures, including the Adult, Child, and Health Homes Core Sets, and Maternal and Infant Health Initiative measures. More information about the TA/AS Program is available at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/CHIPRA-Initial-Core-Set-of-Childrens-Health-Care-Quality-Measures.html.

and pregnant women: (1) primary care access and preventive care; (2) perinatal health; (3) care of acute and chronic conditions; (4) behavioral health care; and (5) dental and oral health services.[52]

1. Primary Care Access and Preventive Care

Nine measures of primary care access and preventive care were available for analysis for FFY 2014:

1. Child and Adolescents' Access to Primary Care Practitioners;
2. Well-Child Visits in the First 15 Months of Life;
3. Well-Child Visits in the Third, Fourth, Fifth and Sixth Years of Life;
4. Adolescent Well-Care Visits;
5. Childhood Immunization Status;
6. Immunization Status for Adolescents;
7. Human Papillomavirus (HPV) Vaccine for Female Adolescents;
8. Chlamydia Screening in Women Ages 16 to 20; and
9. Body Mass Index Assessment for Children and Adolescents.

States continued to have relatively high performance rates on the children's primary care access measure, as reflected by the median rate among the 43 states reporting the measure for FFY 2014 (Table 2). The median percentage of children with a visit to a primary care practitioner (PCP) in the past year was highest for children ages 12 to 24 months (96 percent), and slightly lower for children ages 25 months to 6 years (89 percent had at least one PCP visit in the past year). Among older children, most had a PCP visit in the past two years (the median was 91 percent for children ages 7 to 11 and 90 percent for children ages 12 to 19). Among the 41 states that reported the measure for the last three years, the median rates did not change substantially across any of the four age groups.[53]

Despite high rates of overall PCP access, children received fewer well-child visits than what is recommended by the American Academy of Pediatrics and Bright Futures.[54] For example, nine well-child visits are recommended during the first 15 months of life. As shown in Table 2, about

[52] Domain-specific reports are available on state performance related to primary care access and preventive care, perinatal health, care of acute and chronic conditions, behavioral health, and dental and oral health services. The reports contain detailed analyses of 19 measures reported by at least 25 states for FFY 2014. Trends were calculated for 14 measures for which at least 20 states reported data for FFY 2012–2014. See Supplemental Table CH-3 for a comparison of performance rates for these measures, available at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Overview-of-the-Child-Core-Set-Measures-FFY-2014.zip.

[53] See Supplemental Table CH-3 at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Overview-of-the-Child-Core-Set-Measures-FFY-2014.zip.

[54] American Academy of Pediatrics. "Recommendations for Preventive Pediatric Health Care." Practice Management Online at http://www.aap.org/en-us/professional-resources/practice-support/Periodicity/Periodicity%20Schedule_FINAL.pdf.

three out of five infants received six or more visits during the first 15 months of life for FFY 2014 (the median rate among 40 states was 62 percent). More than two-thirds of children ages 3 to 6 received at least one well-child visit in the last year (the median rate among 46 states was 67 percent). Adolescents ages 12 to 21 had the lowest well-care visit rate of all age groups. The median for the adolescent well visit rate was 44 percent for FFY 2014 (44 states reporting).

The clinical quality of primary care is reflected in the Child Core Set by two measures: documentation of BMI percentiles in the medical record, and annual screening for Chlamydia (Table 2). For children ages 3 to 17 who saw a PCP, more than two out of five had their BMI percentiles documented in medical records (the median rate among 33 states reporting was 43 percent). Nearly half of sexually active women ages 16 to 20 were screened for Chlamydia (the median rate among 37 states reporting was 48 percent).

A key indicator of the continuity of primary care is whether children are up to date on their immunizations. Two out of three children who turned two-years-old received Combination 3 immunizations (the median rate among 35 states reporting was 67 percent).[55] Similarly, two-thirds of adolescents were up-to-date on recommended immunizations (Combination 1)[56] by their 13th birthday (the median rate among 35 states reporting was 67 percent). Among the 28 states reporting the Immunization Status for Adolescents measure for the last three years, the median Combination 1 rate increased by more than 10 percentage points, from 59 percent for FFY 2012 to 69 percent for FFY 2014.[57] The Combination 3 rate for the Childhood Immunization Status measure did not change substantially during the same time period among the 28 states that have reported the measure over the last three years.

The HPV vaccine is recommended for children ages 11 or 12 to help prevent the most common types of HPV and thus, protect against cancers caused by HPV infection. Among the 32 states reporting the measure for FFY 2014, a median of 18 percent of female adolescents had received three doses of the HPV vaccine by their 13th birthday. This is the first year that the HPV Vaccine for Female Adolescents measure was publicly reported.

For more information on the Primary Care Access and Preventive Care measures, see the Primary Care Access and Preventive Care domain-specific report at http://www.medicaid.gov/medicaid-chip-program-information/by-topics/quality-of-care/downloads/2015-SR-domain-specific-reports.zip.

[55] The Childhood Immunization Status measure includes 10 rates for the individual vaccines and 9 combination rates. The most common combination rate reported by states is "Combination 3," which includes all of the vaccines except Hepatitis A, Rotavirus, and flu.

[56] The Immunization Status for Adolescents measure includes two rates for individual vaccines (meningococcal vaccine and tetanus, diphtheria toxoids and acellular pertussis vaccine [Tdap] or tetanus, diphtheria toxoids vaccine [Td]) and one combination rate. The combination rate is a measure of children compliant for the recommended dosages of both the meningococcal vaccine (at least one dose between the child's 11th and 13th birthday) and Tdap/Td (at one dose of either vaccine between the child's 10th and 13th birthday).

[57] See Supplemental Table CH-3 at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Overview-of-the-Child-Core-Set-Measures-FFY-2014.zip.

2. Perinatal Health

Four measures of perinatal health were available for analysis for FFY 2014: (1) Timeliness of Prenatal Care; (2) Frequency of Ongoing Prenatal Care; (3) Live Births Weighing Less Than 2,500 Grams; and (4) Neonatal Central Line-Associated Blood Stream Infections (CLABSIs).

The timeliness and frequency of prenatal care can reduce pregnancy complications and improve infant health outcomes. The vast majority of pregnant women had a prenatal care visit in the first trimester or within 42 days of enrolling in Medicaid/CHIP (the median rate among 24 states reporting was 81 percent) (Table 2). In addition, more than two-thirds of women received at least 80 percent of the expected number of prenatal visits during their pregnancy (based on when they enrolled in Medicaid/CHIP and when they delivered) (the median rate among 27 states reporting was 66 percent). Among the 22 states reporting this measure for the past three years, the median rate increased by more than 8 percentage points (from 59 percent in FFY 2012 to 67 percent in FFY 2014).[58]

Two measures indicate state performance on adverse birth outcomes: low birth weight (LBW) and CLABSIs. For both measures, lower rates are better. Twenty-nine states reported the percentage of live births paid for by Medicaid or CHIP that weighed less than 2,500 grams at birth; the median rate among 29 states reporting for FFY 2014 was 9 percent (Table 2).[59] Among the 41 states with state-level rates for CLABSIs in neonatal intensive care units (NICUs), 33 had a significant decrease in CLABSIs in CY 2013 since the 2006–2008 baseline period, and 8 had no change in infections since the baseline period.[60] No states had a significant increase in infections. The Standardized Infection Ratio (SIR) in NICUs was 0.499 in CY 2013, achieving slightly below the national goal of 0.51 by the end of 2013.[61]

For more information on the Perinatal Health measures, as well as the CMS initiatives underway to improve perinatal care, see the Perinatal Care domain-specific report at http://www.medicaid.gov/medicaid-chip-program-information/by-topics/quality-of-care/downloads/2015-SR-domain-specific-reports.zip.

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[58] See Supplemental Table CH-3 at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Overview-of-the-Child-Core-Set-Measures-FFY-2014.zip.

[59] The U.S. rate for 2013 was 8 percent, ranging from 7 percent for non-Hispanic white and Hispanic infants to 13 percent for non-Hispanic black infants. More information on the characteristics of U.S. births is available at http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_01.pdf.

[60] See Table CLABSI-CH at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2014.zip.

[61] The SIR is the summary measure used to track CLABSIs over time. It compares the number of infections reported in a given year to the number that would be predicted based on national, historical baseline data that adjust for the type of facility and patient population. The SIR indicates whether the rate of infections increased, decreased, or did not change significantly relative to the baseline (calculated using data for 2006–2008). The SIR is evaluated based on the 95 percent confidence interval, standardized to a baseline of 1. This measure is obtained from data reported by hospitals to the CDC's NHSN. It includes all neonatal CLABSI incidents not just those for infants covered by Medicaid/CHIP. For further information on the methods used to assess state performance, see the CDC 2012 National and State Healthcare-Associated Infections Standardized Infection Ratio Report, available at http://www.cdc.gov/HAI/pdfs/progress-report/hai-progress-report.pdf.

3. Care of Acute and Chronic Conditions

Two measures of care of acute and chronic conditions were available for analysis for FFY 2014: (1) Ambulatory Care: Emergency Department (ED) Visits; and (2) Medication Management for People with Asthma. This is the first year that these measures are publicly reported.

Asthma is the most common chronic condition in childhood. Among children ages 5 to 20 with persistent asthma, the median percentage who remained on an asthma controller medication for at least 75 percent of their treatment period was 31 percent (25 states reporting) (Table 2). The median rate was highest for adolescents ages 19 to 20 (33 percent remained on medication [16 states reporting]), and lowest for adolescents ages 12 to 18 (28 percent remained on medication [25 states reporting]). These findings suggest substantial room for improvement among states.

High rates of ED use may signify a lack of continuity or availability of primary care to manage acute or chronic conditions.[62] Among children ages 1 to 19, the median rate for ED visits was 46 visits per 1,000 enrollee months (37 states reporting) (Table 2).[63] The rate was lowest for adolescents ages 10 to 19 (the median rate was 38 visits per 1,000 enrollees) and highest for infants under age 1 (the median rate was 89 visits per 1,000 enrollees).

For more information on the Care of Acute and Chronic Condition measures, see the Care of Acute and Chronic Conditions domain-specific report at http://www.medicaid.gov/medicaid-chip-program-information/by-topics/quality-of-care/downloads/2015-SR-domain-specific-reports.zip.

4. Behavioral Health Care

Two behavioral health measures were available for analysis for FFY 2014: (1) Follow-Up After Hospitalization for Mental Illness and (2) Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder (ADHD) Medication.

Timely follow-up after inpatient hospitalization for mental illness is key to facilitating a child's transition to home and school and preventing readmissions. Among children ages 6 to 20 hospitalized for treatment of selected mental health disorders, the median percentage of children who had a follow-up visit within 7 days of discharge was 44 percent (34 states reporting) (Table 2). The median rate for follow-up within 30 days of discharge was 65 percent (34 states reporting).

Among children newly prescribed attention-deficit/hyperactivity disorder (ADHD) medications, the median percentage for a follow-up visit during the first 30 days (known as the Initiation Phase) was 44 percent (34 states reporting) (Table 2). Among children with a visit during the Initiation Phase, more than half (the median rate was 57 percent) had at least two visits during the next nine months (known as the Continuation and Maintenance [C&M] Phase) (31 states reporting). Performance improved among the 26 states that reported this measure for the past

[62] Lower rates are better for this measure.

[63] Enrollee months are an enrollee's "contribution" to the total yearly enrollment. Enrollee months are calculated by summing the total number of months each enrollee is enrolled in the program during the measurement year.

three years; between FFY 2012 and FFY 2014, the median Initiation Phase rate increased by 5 percentage points and the median C&M Phase rate increased by 8 percentage points.[64]

For more information on the Behavioral Health measures, see the Behavioral Health Care domain-specific report at http://www.medicaid.gov/medicaid-chip-program-information/by-topics/quality-of-care/downloads/2015-SR-domain-specific-reports.zip.

5. Dental and Oral Health Services

All children enrolled in Medicaid and CHIP have coverage for dental and oral health services. Children's access to oral health care is a primary focus of improvement efforts in Medicaid and CHIP.[65] Two oral health measures were available for analysis for FFY 2014: (1) Percentage of Eligibles Who Received Preventive Dental Services and (2) Percentage of Eligibles Who Received Dental Treatment Services.

Children's access to dental services in FFY 2014 was similar to patterns observed in previous years. Among children ages 1 to 20 enrolled in Medicaid and CHIP Medicaid Expansion programs (those eligible for Early and Periodic Screening, Diagnostic, and Treatment [EPSDT] benefits), a median of 48 percent received a preventive dental service in FFY 2014, an increase of 2 percentage points from FFY 2013 (47 states and 49 states reporting, respectively). A median of 22 percent of children received a dental treatment service in FFY 2014, compared to a median of 25 percent in FFY 2013 (Table 2).[66]

For more information on the Dental and Oral Health measures, as well as the CMS initiatives underway to improve children's access to dental and oral health services, see the Dental and Oral Health Services domain-specific report at http://www.medicaid.gov/medicaid-chip-program-information/by-topics/quality-of-care/downloads/2015-SR-domain-specific-reports.zip.

[64] See Supplemental Table CH-3 at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Overview-of-the-Child-Core-Set-Measures-FFY-2014.zip.

[65] More information about the Oral Health Initiative is available at http://www.medicaid.gov/medicaid-chip-program-information/by-topics/benefits/dental-care.html.

[66] The two Child Core Set dental measures are obtained from data reported by states in the Form CMS-416 reports. States are to submit the CMS-416 report to CMS by April 1 of each year.

III. MONITORING AND IMPROVING CARE FOR CHILDREN ENROLLED IN MANAGED CARE

In FFY 2014, about 70 percent of children enrolled in Medicaid and CHIP obtained their care through managed care plans, with the rate of managed care enrollment in states using a managed care delivery system varying widely across these programs.[67] Regardless of the enrollment rate, states using a managed care delivery system must comply with certain federal requirements, including standards to assess and monitor the quality of care provided by contracted managed care plans. This chapter summarizes state activities related to monitoring and improving care for children and pregnant women in managed care.[68]

A. Overview

The Balanced Budget Act of 1997 created system-wide quality standards for states that elect to use managed care for the delivery of health care in Medicaid; these were expanded to CHIP in 2009.[69] Federal regulations implemented in 2003 require states to perform an annual external quality review (EQR) for each contracted managed care organization (MCO), prepaid inpatient health plan (PIHP), and health insuring organization (HIO).[70,71] These annual EQRs analyze and evaluate information on the quality, timeliness, and access to the health care services that an MCO or PIHP, and their contractors, furnish to Medicaid beneficiaries. Section 1139A(c) of the Social Security Act requires the HHS Secretary to include in this annual report information that states collect through EQRs.[72]

Federal managed care regulations at 42 CFR 438.310 et seq. lay out the parameters for conducting an EQR, including state responsibilities, qualifications of an external quality review organization (EQRO), federal financial participation, and state deliverable requirements. Per regulation, the state, its agent (that is not an MCO or PIHP), or an EQRO must perform three

[67] CMS analysis of FFY 2014 Statistical Enrollment Data System (SEDS) data.

[68] Information about the EQR process is available at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Quality-of-Care-External-Quality-Review.html.

[69] Codified at Section 1932(c) of the Social Security Act. Extended to CHIP Managed Care by Section 2103(f)(3) of the Social Security Act.

[70] See 42 CFR 438.2 for full definitions of MCO, PIHP, and HIO. HIOs are treated as MCOs for purposes of this analysis.

[71] The EQR requirement applies to Medicaid programs and CHIP Medicaid expansion programs. For separate CHIP programs, the EQR requirement became law with the enactment of CHIPRA. Specifically, Section 403 of CHIPRA requires all states that operate a CHIP managed care program to comply with the requirements of Section 1932 of the Social Security Act.

[72] Section 1139A(c) of the Social Security Act also requires the reporting of state-specific information on the quality of health care furnished to children in benchmark plans under Sections 1937 and 2103 of the Act. There are currently no separate state reporting requirements for benchmark plans other than the EQR reporting process required for states contracting with MCOs and PIHPs. In other words, state EQR technical reports must include information related to benchmark plans that deliver care through MCOs or PIHPs; however, because this information is reported in the aggregate, which is allowable under EQR requirements, detailed data are not available for benchmark plans.

EQR-related activities: (1) validation[73] of performance measures; [74] (2) validation of performance improvement projects (PIPs);[75] and (3) a review, at least every three years, to determine the managed care plan's compliance with state standards for access to care, structure and operations, and quality measurement and improvement.[76] The state also may choose to perform additional EQR-related activities.[77]

The state must contract with a qualified EQRO to produce an annual technical report that uses information from the EQR-related activities to assess the quality, timeliness, and access to care provided by each MCO and PIHP. Per regulation, the EQR technical report is a public document, available upon request to all interested parties.[78]

B. External Quality Review Technical Reports Submitted to CMS, 2014–2015 Reporting Cycle

Of the 41 states[79] that contracted with MCOs or PIHPs during the 2014–2015 reporting cycle,[80] 38 states submitted EQR technical reports to CMS.[81] These states contracted with 15 different EQROs to conduct the annual EQR, and five EQROs conducted reviews for multiple states during the 2014–2015 reporting cycle.[82] The majority of EQR technical reports focused on

[73] 42 CFR 438.320 defines validation as the review of information, data, and procedures to determine the extent to which they are accurate, reliable, free from bias, and in accord with standards for data collection and analysis.

[74] In accordance with 42 CFR 438.240(c), managed care states must require each MCO and PIHP to annually measure and report to the state its performance using standard measures required by the state. States are then required to annually ensure that performance measures reported by the MCO or PIHP during the preceding 12 months are validated.

[75] In accordance with 42 CFR 438.240(d), managed care states must require each MCO and PIHP to have an ongoing program of performance improvement projects that focus on clinical and nonclinical areas. States are then required to annually ensure that any MCO or PIHP performance improvement projects underway during the preceding 12 months are validated.

[76] 42 CFR §438.358(b)(3).

[77] Refer to 42 CFR 438.358(c) for a comprehensive list of optional EQR-related activities.

[78] See 42 C.F.R. § 438.364.

[79] For purposes of EQR technical reports, the term "states" includes the 50 states, the District of Columbia, and the territories.

[80] The 2014–2015 reporting cycle includes reports that were submitted between May 1, 2014 and April 30, 2015.

[81] Of the 41 states that contracted with MCOs or PIHPs, three (Indiana, Puerto Rico, and Texas) did not submit an EQR technical report before April 30, 2015 for inclusion in this analysis, and one (Delaware) submitted readiness reviews only. North Dakota's managed care program was limited to the Children's Health Insurance Program (CHIP) population during the 2014–2015 reporting cycle. Alabama, Alaska, Arkansas, Connecticut, Guam, Idaho, Maine, Montana, Oklahoma, South Dakota, the Virgin Islands, and Wyoming do not have MCOs or PIHPs that enroll children covered by Medicaid or CHIP. While Vermont is required to conduct an EQR under the terms of its Section 1115 demonstration, its managed care entity is neither an MCO nor a PIHP and therefore is excluded from this analysis.

[82] For a list of EQROs with current state Medicaid contracts in 2014, see EQR Table CH-1 at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Child-Findings-from-EQR-Technical-Reports-2014-2015.zip.

physical health services, but some included information on other types of managed care services, such as dental or behavioral health.

As in previous years, the 2014–2015 EQR technical reports provide insight into the strategies and efforts that states use to improve the quality of care for managed care enrollees. This chapter profiles quality measurement and improvement efforts underway related to children and pregnant women enrolled in Medicaid and CHIP managed care entities. The EQR technical reports indicate that states and managed care entities engage in a variety of different quality measurement and improvement efforts based on factors such as the population groups enrolled, stakeholder and beneficiary feedback, and clinical areas in need of improvement.

Overall, the level of detail presented in the EQR technical reports has become more comprehensive over the past few years. However, the structure, level of detail, and focus on quality, access, and timeliness of care still varied considerably depending on the EQR technical report. For example, some EQR technical reports did not explicitly discuss quality, access, and timeliness at all, while others provided substantial detail related to the performance measure and PIP validation process, PIP interventions, and performance outcomes. This lack of uniformity across reports is due to differences in state interpretation of regulatory language. While regulations require states to validate performance measures and PIPs annually, they do not specifically require the inclusion of details on outcomes or interventions in the EQR technical reports.

C. Performance Measures, 2014–2015 Reporting Cycle

In the 2014–2015 reporting cycle, the most frequently reported performance measures for children and pregnant women focused on well-child care (28 states), primary care access (28 states), prenatal/postpartum care (26 states), childhood immunization rates (25 states), behavioral health (25 states), and adolescent well-care (25 states).[83] The reported performance measures showed considerable overlap with both the CMS Child Core Set and the HEDIS 2014 measures, though the use of these measure sets is not required by CMS.[84] Additionally:

- Of the 38 states that submitted EQR technical reports in time for this analysis, 36 identified the types of performance measures reported by MCOs and PIHPs, and 35 identified the specific performance measures validated by the EQRO.
- 32 states included the performance rates achieved by each MCO or PIHP.[85] Of these:

[83] See EQR Figure CH-1 for information about the number of states reporting performance measures in each topic area. More detailed information related to state reported performance measures for children and pregnant women can be found on EQR Table CH-3 at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Child-Findings-from-EQR-Technical-Reports-2014-2015.zip.

[84] See EQR Table CH-5 at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Child-Findings-from-EQR-Technical-Reports-2014-2015.zip.

[85] See EQR Table CH-4 at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Child-Findings-from-EQR-Technical-Reports-2014-2015.zip.

- 28 states compared MCO and PIHP performance to national HEDIS Medicaid rates.
- 25 states compared performance in the 2014–2015 reporting cycle to performance in previous years.
- 23 states compared individual MCO and PIHP performance rates to statewide managed care averages.
- 17 included comparisons to state target rates.
- 14 states reported performance rates for specific subpopulations within the state. For example, Arizona and Nevada separately reported performance results for children enrolled in Medicaid versus children enrolled in CHIP. Arizona, Florida, and New York included performance rates by geographic region, while Georgia reported results by delivery system (managed care versus fee-for-service).

D. Performance Improvement Projects, 2014–2015 Reporting Cycle

Of the 38 states that submitted EQR technical reports for the 2014–2015 reporting cycle, 36 included at least one PIP that targeted children or pregnant women and all of those states provided information on validation as required by regulation (Table 3).[86] States often deferred to the MCO or PIHP to propose and implement topics and interventions; however, 18 states mandated a specific PIP topic or required participation in a collaborative project.[87]

The topical focus and number of PIPs varied considerably among the 36 states that included at least one PIP that targeted children or pregnant women (Table 3):

- Seven states reported four or fewer PIPs targeting children or pregnant women, while Florida conducted a total of 131 PIPs, of which 31 focused on improving well-child care visit rates and another 31 focused on improving the quality of behavioral health care for children or pregnant women.[88]
- Behavioral health care was the most common PIP topic for the 2014–2015 reporting cycle (22 states and 161 PIPs). Five states accounted for the majority of these PIPs (Florida, Oregon, Pennsylvania, Washington, and Wisconsin).
- Other recurrent PIP topics included prenatal and postpartum care (16 states), well-child care (16 states), ED visits (15 states), asthma (14 states), weight/BMI assessment and counseling (13 states), and hospital readmissions (12 states).

Among the 28 states that submitted EQR technical reports during the current and previous two reporting cycles, PIP topics demonstrated a few notable shifts (Figure 5).

[86] Oregon's EQRO did not validate any PIPs for this reporting cycle because the state's Coordinated Care Organizations (CCOs) were in their first year of operation; however, the technical report provided information on the PIPs in development and outlined a protocol for validating PIPs in the next reporting cycle.

[87] States that mandated PIP topics for MCOs or PIHPs include AZ, DC, FL, GA, IL, LA, MD, MA, MN, MO, NV, NH, OH, PA, RI, VA, WA, and WV.

[88] Florida included validation scores for all PIPs within their EQR technical report; however, data was limited to validation scores alone on many of the PIPs, with no mention of outcomes or interventions.

- The number of states conducting PIPs focused on ADHD and other behavioral health topics, ED visits, hospital readmissions, and oral health increased from previous years.
- The number of states conducting PIPs in immunizations, well-child care, asthma, lead screening, and primary care access decreased from the 2012–2013 reporting cycle to the 2013–2014 reporting cycle, but the number of states with PIPs in these categories increased in the 2014–2015 reporting cycle.

These shifts in topical focus may reflect changing health care priorities within the states or may indicate that the PIPs either achieved their intended health care improvements or consistently failed to show demonstrable improvements.

E. Review of Performance Improvement Projects

The following section presents findings from detailed abstractions of EQRO reporting on PIPs in four health topic areas: (1) childhood obesity, (2) oral health, (3) prenatal and postpartum care, and (4) adolescent well care.[89] An example of a state improvement project is highlighted for each topic area. Criteria for selecting states to highlight included geographic diversity across reporting years and across PIP topics, the EQR validation rating,[90] and the amount of information related to interventions and outcomes included in the EQR technical reports.

1. Childhood Obesity

Thirteen states reported a combined total of 26 PIPs that targeted childhood obesity during this reporting cycle (Table 3). While the interventions of each PIP varied across states and MCOs, common aims included improving BMI percentile documentation, nutrition counseling, and physical activity counseling.

Since 2008, all three MCOs in Georgia have operated improvement projects focused on reducing childhood obesity. The projects aim to improve performance on the HEDIS weight assessment and counseling measure, including increasing BMI percentile documentation, nutrition counseling, and physical activity counseling for members ages 3 to 17. To achieve these goals, the MCOs focused primarily on raising provider awareness of conducting and documenting weight assessment and counseling activities. All three MCOs implemented face-to-face visits between health promotion coordinators and providers to improve provider documentation of

[89] Additional information on "Findings from EQR Technical Reports, 2014–2015" is available at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Child-Findings-from-EQR-Technical-Reports-2014-2015.zip.

[90] Use of the term "validation" differed across EQR reports. The state examples all based the validation rating on the *EQR Protocol 3: Validating Performance Improvement Projects (PIPS): A Mandatory Protocol for External Quality Review (EQR), Version 2.0, September 2012*. The protocol details the following 10 activities: (1) select the study topic; (2) define the study question(s); (3) select the study indicators; (4) use a representative and generalizable study population; (5) use sound sampling techniques (if sampling was used); (6) reliably collect data; (7) analyze and interpret study results; (8) implement intervention and improvement strategies; (9) assess for real improvement; and (10) assess for sustained improvement. Each EQRO calculated the percentage score of evaluation elements met by each MCO to determine a status of met, partially met, or not met.

these services, including reviews of the provider's performance on the indicators and distribution of a billing guide, which provides correct coding for these indicators.

During this reporting cycle, all three MCOs in Georgia exceeded state target rates for each indicator: BMI percentile documentation, nutrition counseling, and physical activity counseling. In addition, two of the three MCOs demonstrated statistically significant improvement on the indicators compared to the previous measurement period. Notably, one MCO demonstrated substantial improvement from last year to this year, with an increase of 10.4 percentage points for BMI percentile documentation, 5.6 percentage points for nutrition counseling, and 9.8 percentage points for physical activity counseling. Although only one MCO met the requirements of the PIP validation process, the two other MCOs met over 90 percent of the PIP validation elements.

2. Oral Health

Eight states reported a combined total of 32 PIPs aimed at improving oral health care (Table 3). Two of the eight states, Georgia and Missouri, mandated this topic (these states also mandated PIPs on this topic for the 2011–2012, 2012–2013, and 2013–2014 reporting cycles).

Missouri required its three MCOs to implement an improvement project aimed at increasing the number of children ages 2 to 20 who had an annual dental visit. (Each of the three MCOs subcontracts with the same dental contractor to provide dental services to children enrolled in their MCO.) The state set annual performance improvement targets for the MCOs to increase the state's aggregate annual dental visit rate by 3 percentage points each year and by 10 percentage points by the end of 2016. One MCO took a leadership role in the development and implementation of the statewide PIP. The MCO conducted a variety of activities to improve performance, including establishing a PIP team to work with the dental subcontractor to ensure that all interventions and improvement strategies were implemented. The MCO also conducted targeted outreach to members, including contacting parents whose children have not seen a dental provider and referring members who sought emergency oral health care to community oral health providers. The MCO has taken several steps to expand access to oral health care, including contracting with a mobile dental provider to provide care in the community; contracting with dentists who rotate through rural areas; coordinating with schools to provide care; and working with dentists to provide after-hours and weekend appointments. The MCO increased the percentage of children with a dental visit in the past year from 35 percent in 2009 (the year the PIP was implemented) to 51 percent in 2013.

The two other participating MCOs in Missouri conducted member, community, and provider outreach activities, and they both contracted with dental vans to improve access to care. Both MCOs demonstrated improvement on the rate of annual dental visits, and one met the statewide annual goal of a 3 percentage-point improvement in 2013. The EQRO noted that although the two MCOs did not meet the requirements of the PIP validation process, the interventions and barrier analyses conducted by one of the MCOs indicated a commitment to the statewide PIP project goals. The EQRO plans to provide feedback to the other MCO in order to improve the quality of reporting.

3. Prenatal and Postpartum Care

Sixteen states reported a combined total of 62 improvement projects targeting prenatal or postpartum care during the current reporting cycle (Table 3), of which 5 mandated the topic (District of Columbia, Florida, Georgia, Illinois, and New Hampshire). Fifteen states completed PIPs on this topic during the 2013–2014 reporting cycle, and 11 states conducted PIPs in both reporting cycles. While the interventions of each PIP varied, common improvement aims focused on timeliness and frequency of prenatal and/or postpartum care, low birth weight, and postpartum depression screening.

Illinois' quality strategy identified improving birth outcomes as one of its health care priorities. The state required its three MCOs to implement a collaborative improvement project focused on prenatal and postpartum care (the state has mandated PIPs on this topic since the 2011–2012 reporting cycle). The primary aim of the PIP was to improve performance on the timeliness of prenatal and postpartum care HEDIS measures. A secondary purpose of the PIP was to improve the rate of depression screening and appropriate depression treatment for women during the prenatal and/or postpartum period. All three MCOs identified member outreach as an area for improvement. To address this, two MCOs implemented reviews of Medicaid claims/encounter data to identify pregnant women and manage their care. Another MCO conducted hospital discharge follow-up calls to assist women with scheduling a postpartum visit and arrange transportation.

The MCOs in Illinois also implemented incentive programs to increase prenatal and postpartum visits, such as gift cards, coupons for a free baby photo, and a rewards program (stroller, portable play yard, or diapers) for members who had the recommended prenatal and postpartum visits. Two MCOs implemented provider-level interventions including a provider incentive program that paid providers for notifying the MCO of pregnant members, and a provider education program involving one-on-one meetings with providers to discuss their performance on study indicators, provide them with lists of members who had not received recommended visits, guidance on billing codes, and education on the importance of screening members for depression. Overall, 60 percent of the 45 reported study indicators across all three MCOs showed improvement compared to the 2013–2014 reporting cycle, and 93 percent of the indicators showed sustained improvement compared to the baseline period.

4. Adolescent Well Care

Seven states reported a combined total of 20 projects aimed at improving rates of adolescent well-care (Table 3). Three of these states also reported PIPs on this topic during both the 2011–2012 and 2013–2014 reporting cycles. During this reporting cycle, Georgia, Maryland, and Virginia mandated that all MCOs in the state conduct PIPs to improve adolescent well-care visit rates.

Starting in 2012, Maryland required all six of its MCOs to implement a collaborative improvement project aimed at increasing the percentage of adolescents ages 12 to 21 who received a comprehensive well-care visit with a PCP or obstetrical/gynecological (OB/GYN) practitioner. The state focused on this topic after internal analyses determined that adolescents ages 12 to 20 had the lowest rates of EPSDT visits and that underutilization of adolescent well-

care visits yielded missed opportunities for prevention, early detection, and treatment. As a result, the state targeted routine adolescent utilization as an area for improved performance. The state also chose the Adolescent Well Care HEDIS performance measure as one of its value-based purchasing measures for 2013, which rewards MCOs for better performance on priority health indicators.

Maryland's MCOs implemented interventions to increase participation by members, such as home visits for members receiving Supplemental Security Income and adolescents who had not seen a provider in the past two years, member incentives, birthday card reminders, wellness letters, and automated telephone call reminders. Additional efforts sought to reach members by using Facebook; collaborating with school-based clinics; and conducting health fairs with entertainment, games, food, and gifts at pediatric offices. MCOs also implemented provider interventions including sharing lists of members who had not received well-care visits and offering provider incentives for increased visit rates. MCOs also made efforts to increase the completeness of data, including conducting medical record reviews to confirm whether well-care visits occurred.

The EQR technical report included results for the second year of this PIP. Baseline rates for the six Maryland MCOs ranged from 60 percent to 77 percent of adolescents receiving a comprehensive well-care visit, with four of the six MCOs performing above the HEDIS Medicaid 90th percentile at baseline. The two lowest-performing MCOs at baseline demonstrated improvement in adolescent well-care visit rates, with increases of 1.1 and 8.5 percentage points, respectively. The EQRO review included suggestions to the MCOs on achieving greater improvements in future years. The EQRO recommended that the MCOs complete an annual barrier analysis to direct where limited resources can be used most effectively to drive improvement. The EQRO also recommended that the MCOs improve PIP interventions, develop system-level interventions—including educational efforts, changes in policy, targeting of additional resources, or other organization-wide initiatives—and noted that face-to-face contact is usually most effective.

IV. SUMMARY AND CONCLUSION

This report shows the continued progress made by HHS and states in building a national, cross-state quality measurement and reporting system for children's health care in Medicaid and CHIP. CMS conducted detailed analysis of state performance on Child Core Set measures reported by at least 25 states. The increase in the number of measures reported by states allowed CMS to analyze 19 measures for FFY 2014, up from 16 measures for FFY 2013. Improved state reporting on four measures—Ambulatory Care: ED Visits, HPV Vaccine for Female Adolescents, Low Birth Weight, and Medication Management for People with Asthma—allowed CMS to conduct detailed analysis on new measures for this 2015 report. More states also reported measures for both Medicaid and CHIP enrollees (increasing from 38 states for FFY 2012 to 41 states for FFY 2013 and 44 states for FFY 2014).

The evolving quality measurement field offers new tools for states to use in improvement projects. CMS's detailed review of performance measures and improvement projects summarized in the EQR technical reports identified state-initiated efforts underway to assess and improve the quality of care in managed care. Through managed care entities that now are the main delivery system for children and their parents, states are engaged in various types of improvement projects specific to children. Behavioral health care was the most common improvement project topic among state managed care plans for the 2014–2015 EQR reporting cycle.

As noted in previous years, states had high performance on the children's primary care access measure (i.e., percent with a visit to a PCP); however, this report highlights the need for improvement in areas such as the use of preventive services by young children and adolescents (e.g., well-child visits for infants and for adolescents), dental and oral health care, coordination of care for children with behavioral health needs (e.g., follow-up after hospitalization for mental illness or for children newly prescribed ADHD medication), and care of acute and chronic conditions (e.g., rate of ED visits or compliance with asthma controller medications).

Despite considerable opportunities for improving the quality of care for children enrolled in Medicaid and CHIP, studies show that care for children covered by Medicaid is comparable to that for privately insured low-income children and better than care for the uninsured.[91] For example, one study found that children enrolled in Medicaid and CHIP were more likely to have a usual source of care than were uninsured children and their access was comparable to that of privately-insured children.[92] In another assessment of quality and access, children enrolled in Medicaid experienced similar quality of care as privately insured children on three out of four measures examined but did not fare as well on measures of access.[93] However, parents of children enrolled in Medicaid or CHIP were more likely than low-income parents of children

[91] See CHIPRA Mandated Evaluation of the Children's Health Insurance Program: Final Findings, available at http://www.mathematica-mpr.com/~/media/publications/pdfs/health/rpt_chipevaluation.pdf.

[92] http://kff.org/health-reform/issue-brief/childrens-health-coverage-medicaid-chip-and-the-aca/.

[93] Agency for Healthcare Research and Quality. Health care coverage analyses of the National Healthcare Quality and Disparities Reports: 2000–2008 trends. Baltimore, MD: U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services; March 2014. Available at http://www.medicaid.gov/medicaid-chip-program-information/by-topics/quality-of-care/downloads/health-coverage-analyses-of-nhqr-2000-2008-trends.pdf.

with job-based coverage to say they were very satisfied with the quality of care, the scope of benefits, and affordability.[94]

To support state efforts to further improve the completeness and consistency of reporting on performance, CMS is continuing several efforts, including: (1) the Quality Measures TA/AS Program, (2) enhancing oversight of Form CMS-416 data reported by states, and (3) aligning quality measurement and improvement efforts across Medicaid and CHIP and other CMS initiatives. Together, CMS, states, and their quality partners are working toward the goal of achieving a high quality system of coverage and care for all children enrolled in Medicaid and CHIP.

[94] http://kff.org/medicaid/issue-brief/the-impact-of-the-childrens-health-insurance-program-chip-what-does-the-research-tell-us/.

TABLES

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Table 1. Overview of State Reporting of the Core Set of Medicaid/CHIP Children's Health Care Quality Measures, FFY 2014

	Number of Measures Reported	State Reported at Least One Measure for Both Medicaid and CHIP Populations	Child and Adolescent 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	Human Papillomavirus Vaccine for Female Adolescents	Chlamydia Screening	BMI Assessment for Children and Adolescents	Timeliness of Prenatal Care	Frequency of Ongoing Prenatal Care	Percentage of Live Births Weighing Less than 2,500g	Cesarean Rate for Nulliparous Singleton Vertex	Behavioral Health Risk Assessment For Pregnant Women	Follow-Up After Hospitalization for Mental Illness	Follow-Up Care for Children Prescribed ADHD Medication	Developmental Screening in the First Three Years of Life	Ambulatory Care: ED Visits	Medication Management for People with Asthma	Preventive Dental Services	Dental Treatment Services	CAHPS® Health Plan Survey
U.S. Total	16 (Median)	44	43	42	46	44	39	37	32	37	33	36	28	29	16	4	34	34	20	37	27	51	51	39
Alabama	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	--	X	X	X	X	X	X	X	X
Alaska	13	X	X	X	X	X	--	--	X	X	--	--	--	X	--	--	X	X	X	X	--	X	X	--
Arizona	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	X	X	X
Arkansas	14	X	X	X	X	X	--	--	X	X	--	--	--	X	X	--	X	X	--	X	X	X	X	--
California	12	X	X	--	X	--	X	X	--	--	X	X	--	--	--	--	X	--	--	X	X	X	X	X
Colorado	15	X	X	X	X	X	X	X	--	X	X	X	--	X	--	--	--	X	--	X	--	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
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
Dist. of Col.	17	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
Georgia	22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Hawaii	18	X	X	X	X	X	X	X	X	X	X	X	X	--	--	--	X	X	--	X	X	X	X	X
Idaho	13	X	X	X	X	X	X	X	X	X	--	--	--	--	--	--	--	--	--	X	X	X	X	X
Illinois	20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	--	X	X	X	X	X	X	X	--
Indiana	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	--	X	X	X	X	X	X	X	X
Iowa	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	--	X	X	X	X	X	X	X	X
Kansas	8	X	--	--	X	X	--	--	--	--	--	X	X	--	--	--	X	--	--	--	--	X	X	X
Kentucky	19	X	X	X	X	X	X	X	X	X	X	X	X	X	--	--	X	X	--	X	X	X	X	X
Louisiana	18	X	X	X	X	X	X	X	--	X	X	X	X	X	X	--	X	X	--	X	--	X	X	X
Maine	12	X	X	X	X	X	--	--	--	X	--	--	--	--	--	--	X	X	X	X	--	X	X	X
Maryland	14	X	X	X	X	X	X	X	--	X	X	X	X	--	--	--	--	--	--	X	--	X	X	X
Massachusetts	20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	--	X	X	X	X	X	X	X	--
Michigan	17	--	X	X	X	X	X	X	X	X	X	X	--	X	X	--	--	X	--	X	--	X	X	X
Minnesota	5	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

Table 1 (continued)

	Number of Measures Reported	State Reported at Least One Measure for Both Medicaid and CHIP Populations	Child and Adolescent 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	Human Papillomavirus Vaccine for Female Adolescents	Chlamydia Screening	BMI Assessment for Children and Adolescents	Timeliness of Prenatal Care	Frequency of Ongoing Prenatal Care	Percentage of Live Births Weighing Less than 2,500g	Cesarean Rate for Nulliparous Singleton Vertex	Behavioral Health Risk Assessment For Pregnant Women	Follow-Up After Hospitalization for Mental Illness	Follow-Up Care for Children Prescribed ADHD Medication	Developmental Screening in the First Three Years of Life	Ambulatory Care: ED Visits	Medication Management for People with Asthma	Preventive Dental Services	Dental Treatment Services	CAHPS® Health Plan Survey
Missouri	12	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
Nebraska	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	X	X	--
Nevada	10	X	X	X	X	X	X	--	--	--	--	--	--	X	--	--	X	--	--	--	--	X	X	X
New Hampshire	3	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	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	--	X	X	X	X	X
North Carolina	14	X	X	--	X	X	X	X	X	X	X	--	--	X	--	--	--	--	X	X	--	X	X	X
North Dakota	8	--	X	--	X	X	--	X	--	--	--	--	--	--	--	--	X	X	--	--	--	X	X	--
Ohio	11	X	X	X	X	X	--	--	--	--	--	X	X	X	--	--	--	X	--	--	--	X	X	X
Oklahoma	20	X	X	X	X	X	X	X	X	X	X	X	X	X	--	--	X	X	X	X	X	X	X	X
Oregon	17	X	X	X	X	X	X	X	--	X	X	X	--	X	--	--	X	X	X	X	--	X	X	X
Pennsylvania	18	X	X	X	X	X	X	X	X	X	X	X	X	--	--	--	X	X	--	X	X	X	X	X
Rhode Island	19	X	X	X	X	X	X	X	X	X	X	X	X	X	--	--	X	X	--	X	X	X	X	X
South 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
South Dakota	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	X	X	--
Tennessee	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	--	X	X	X	X	X	X	X	X
Texas	20	X	X	X	X	X	X	X	X	X	X	X	X	X	--	--	X	X	X	X	X	X	X	X
Utah	15	X	X	X	X	X	X	X	X	X	X	--	--	--	--	--	X	X	--	--	X	X	X	X
Vermont	13	X	X	X	X	X	--	--	--	--	--	X	--	X	--	--	X	X	--	X	X	X	X	X
Virginia	10	X	--	X	X	X	X	--	--	--	--	X	--	X	--	--	--	--	X	--	--	X	X	X
Washington	16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	--	--	--	--	X	--	X	X	--
West Virginia	21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	--	X	X	X	X	X	X	X	X
Wisconsin	4	X	--	--	--	--	X	--	--	--	--	X	--	--	--	--	--	--	--	--	--	X	X	--
Wyoming	13	--	X	X	X	X	X	X	X	X	X	--	--	--	--	--	--	--	X	X	--	X	X	--

Sources: Mathematica analysis of FFY 2014 CARTS reports and Form CMS-416 reports.

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

The 2014 Child Core Set includes 23 measures. This table excludes the Central Line-Associated Bloodstream Infection (CLABSI) measure. Beginning in FFY 2012, data for the CLABSI measure were obtained from the CDC’s National Healthcare Safety Network.

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

Table 2. Performance Rates on Frequently Reported Medicaid/CHIP Children's Health Care Quality Measures, FFY 2014

Measure	Measure Description	Number of States Reporting Using Core Set Specifications	Mean	Median	25th Percentile	75th Percentile
Primary Care Access and Preventive Care						
Access to Primary Care: 12–24 Months	Percentage with a PCP Visit in the Past Year	41	95.8	96.4	94.3	97.3
Access to Primary Care: 25 Months–6 Years	Percentage with a PCP Visit in the Past Year	43	87.1	88.6	84.3	91.6
Access to Primary Care: 7–11 Years	Percentage with a PCP Visit in the Past Two Years	42	88.9	91.2	86.1	94.0
Access to Primary Care: 12–19 Years	Percentage with a PCP Visit in the Past Two Years	42	88.0	90.6	85.7	92.1
Well-Child Visits: First 15 Months	Percentage with 6 or More Visits	40	61.7	62.1	56.2	68.7
Well-Child Visits: 3–6 Years	Percentage with 1 or More Visits	46	67.1	67.4	60.6	75.9
Well Care Visits: 12–21 Years	Percentage with 1 or More Visits	44	45.5	43.5	38.0	56.2
Childhood Immunization Status: 2 Years	Percentage Up-to-Date on Immunizations (Combination 3)[a]	35	62.1	66.9	56.7	75.1
Immunization Status for Adolescents: 13 Years	Percentage Up-to-Date on Immunizations (Combination 1)[b]	35	64.9	67.1	52.6	79.7
Human Papillomavirus Vaccine for Female Adolescents	Percentage Receiving Three Vaccine Doses Before Age 13	32	17.2	17.6	12.9	22.9
Chlamydia Screening: 16–20 Years	Percentage of Sexually Active Women Screened	37	48.8	48.3	43.5	56.4
Body Mass Index Assessment: 3–17 Years	Percentage with a BMI Percentile Documented	33	41.3	42.6	12.3	63.4
Maternal and Perinatal Health						
Timeliness of Prenatal Care	Percentage with a Prenatal Visit in the First Trimester (or within 42 Days of Medicaid/CHIP Enrollment)	34	77.1	81.4	69.7	86.4
Frequency of Ongoing Prenatal Care	Percentage with More than 80 Percent of Expected Prenatal Visits	27	56.6	65.8	43.1	72.8
Live Births Weighing Less than 2,500 Grams	Percentage of Live Births Weighing Less Than 2,500 Grams	29	9.0	9.0	7.8	10.1
Care of Acute and Chronic Conditions						
Emergency Department Visits: 0–19 Years	Emergency Department Visits per 1,000 Enrollee-Months	37	55.1	45.7	40.1	52.2
Medication Management for People with Asthma: 5–11 Years	Percentage Dispensed Appropriate Medication And Remained on Medication for at Least 75 Percent of Treatment Period	26	32.6	30.3	23.4	39.0
Medication Management for People with Asthma: 12–18 Years	Percentage Dispensed Appropriate Medication And Remained on Medication for at Least 75 Percent of Treatment Period	25	29.7	28.2	23.3	37.9

Table 2 (continued)

Measure	Measure Description	Number of States Reporting Using Core Set Specifications	Mean	Median	25th Percentile	75th Percentile
Medication Management for People with Asthma: 19–20 Years	Percentage Dispensed Appropriate Medication And Remained on Medication for at Least 75 Percent of Treatment Period	16	33.7	33.2	25.2	41.2
Medication Management for People with Asthma: 5–20 Years	Percentage Dispensed Appropriate Medication And Remained on Medication for at Least 75 Percent of Treatment Period	25	32.7	31.2	24.5	38.9
Behavioral Health						
Follow-Up After Hospitalization for Mental Illness: 6–20 Years	Percentage of Discharges with a Follow-Up Visit within 7 Days	34	44.8	43.9	32.0	62.9
Follow-Up After Hospitalization for Mental Illness: 6–20 Years	Percentage of Discharges with a Follow-Up Visit within 30 Days	34	64.2	65.2	51.9	78.3
Follow-Up Care for Children Prescribed ADHD Medication: 6–12 Years	Percentage with 1 Follow-Up Visit during the Initiation Phase	34	44.2	44.1	35.3	53.3
Follow-Up Care for Children Prescribed ADHD Medication: 6–12 Years	Percentage with at least 2 Follow-Up Visits during the Continuation and Maintenance Phase	31	53.9	56.5	45.3	63.1
Dental and Oral Health Services						
Preventive Dental Services: 1–20 Years	Percentage with At Least One Preventive Dental Service	51	45.6	47.6	42.5	50.6
Dental Treatment Services: 1–20 Years	Percentage with At Least One Dental Treatment Service	51	23.5	22.3	20.2	25.2

Sources: Mathematica analysis of FFY 2014 Child CARTS reports and Form CMS-416 reports.

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

This table includes data for states that used Child Core Set specifications to report the measures and excludes states that used other specifications and states that did not report the measures for FFY 2014. Additionally, rates were excluded if a state 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 http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Performance-on-the-Child-Core-Set-Measures-FFY-2014.zip.

The Central Line-Associated Blood Stream Infections (CLABSI) and the CAHPS Health Plan Survey measures were excluded from this table because the measures use a summary statistic different from those in this table.

[a] Combination 3 includes four doses of diphtheria, tetanus, and acellular pertussis (DTaP); three doses of polio (IPV); one dose of measles, mumps, and rubella (MMR); two doses of H influenza type B (HiB); three doses of hepatitis B (HepB), one dose of chicken pox (VZV); and four doses of pneumococcal conjugate (PCV).

[b] Combination 1 includes one dose of meningococcal vaccine and one tetanus, diphtheria toxoids, and acellular pertussis vaccine (Tdap) or one tetanus, diphtheria toxoids vaccine (Td) vaccine.

Table 3. Performance Improvement Projects (PIPs) Targeting Children and Pregnant Women Included in External Quality Review (EQR) Technical Reports, by Topic Area, 2014–2015 Reporting Cycle

State	Years of Data	PIPs Validated[a]	PIP Population[b]	Number of PIPs	ADHD	Asthma	Behav. Health[c]	Childhood Immunizations	ED Visits	Hospital Readmissions	Lead Screening	Oral Health	Prenatal and Postpartum Care	Primary Care Access[d]	EPSDT	Weight/ BMI	Well-Child Care[e]	Other[f]
Total PIPs				573	10	26	161	28	43	56	10	32	62	5	28	26	68	85
Total States				36	5	14	22	11	15	12	4	8	16	3	10	13	16	15
Arizona	Varies by PIP	All	C	10	--	--	--	--	--	9*	--	--	--	--	--	--	--	1
			U	14	--	--	1*	--	--	13*	--	--	--	--	--	--	--	--
California	2013	All	C	16	1	--	1	3	--	--	--	--	7	2	--	1	--	1
			A/C	1	--	1	--	--	--	--	--	--	--	--	--	--	--	--
			U	2	--	--	--	--	1	--	--	--	--	--	--	--	--	1
Colorado	FY2013–2014	All	C	6	--	2	1	--	2	--	--	--	--	--	--	2	1	--
			U	3	--	--	3	--	--	1	--	--	--	--	--	--	--	--
Dist. of Col.	2014	All	C	8	--	4*	--	--	4*	--	--	--	4*	--	--	--	--	--
Florida	Varies by PIP	Some	C	73	--	1	12*	--	--	1	1	17	15*	--	--	--	31*	11
			A/C	17	--	2	13*	--	--	2	--	--	--	--	--	--	--	--
			U	41	--	--	6	1	2	2	--	--	--	--	--	1	--	29
Georgia	2013	All	C	21	3*	--	--	3*	3*	--	--	3*	3*	--	--	3*	3*	--
			U	6	--	--	--	--	--	--	--	--	--	--	--	--	--	6*
Hawaii	Varies by PIP	All[g]	A/C	2	--	--	2	--	--	--	--	--	--	--	--	2	--	--
Illinois	2012–2013	All[g]	C	6	--	--	3*	--	--	--	--	--	3*	--	3*	--	3*	--
			U	2	--	--	--	--	--	2*	--	--	--	--	--	--	--	--
Iowa	2013	All	C	2	--	--	1	--	--	--	1	--	2	--	1	--	--	--
			A/C	1	--	1	--	--	--	--	--	--	--	--	--	--	--	--
Kansas	Varies by PIP	All[g]	C	1	--	--	--	--	--	--	--	--	--	--	--	--	1	--
			A/C	2	--	--	2	--	--	--	--	--	--	--	--	--	--	--
Kentucky	2013	All	C	4	2	--	--	--	--	--	--	1	--	--	--	--	--	1
			A/C	6	--	1	2	--	3	--	--	--	--	--	--	--	--	--
			U	1	--	--	--	--	--	1	--	--	--	--	--	--	--	--
Louisiana	2013–2014	All[g]	C	2	--	--	--	1	--	--	--	--	1	--	--	--	--	--
			A/C	4	--	--	--	--	4*	--	--	--	--	--	--	--	--	--
Maryland	2013	All	C	6	--	--	--	--	--	--	--	--	--	--	--	--	6*	--
Massachusetts	Varies by PIP	All[g]	C	3	--	--	--	--	--	--	--	--	3	--	--	--	--	--
			U	5	--	--	5*	--	--	5*	--	--	--	--	--	--	--	--
Michigan	2013–2014	All	C	9	--	--	--	1	--	--	--	--	3	--	1	--	3	--

Table 3 (continued)

State	Years of Data	PIPs Validated[a]	PIP Population[b]	Number of PIPs	ADHD	Asthma	Behav. Health[c]	Childhood Immunizations	ED Visits	Hospital Readmissions	Lead Screening	Oral Health	Prenatal and Postpartum Care	Primary Care Access[d]	EPSDT	Weight/ BMI	Well-Child Care[e]	Other[f]
Minnesota	Varies by PIP	All	C	4	--	--	--	--	4	--	--	--	--	--	3	--	--	--
			A/C	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--
			U	17	--	2	9*	4	1	1	--	1	--	--	--	--	--	1
Mississippi	2013	All	A/C	4	--	2	--	--	--	--	--	--	--	--	--	2	--	--
Missouri	2013	All[g]	C	4	--	--	--	--	--	--	--	3*	1	--	--	--	--	--
			A/C	1	--	--	1	--	--	--	--	--	--	--	--	--	--	--
			U	1	--	1	--	--	--	--	--	--	--	--	--	--	--	--
Nebraska	Varies by PIP	All	C	6	--	--	4	1	--	--	--	--	--	--	--	1	--	--
			A/C	4	--	--	1	--	3	--	--	--	--	--	--	--	--	--
			U	1	--	--	1	--	--	--	--	--	--	--	--	--	--	--
Nevada	2013–2014	All	C	1	--	--	--	--	--	--	--	--	--	1*	--	--	--	--
			A/C	2	--	--	--	--	2*	--	--	--	--	--	--	--	--	--
New Hampshire	2013–2014	All	C	7	--	--	--	--	--	--	--	--	2*	--	--	1	2	2*
			A/C	3	--	--	2*	--	--	--	--	--	--	--	1	--	--	--
			U	3	--	--	--	--	--	1	--	--	--	--	--	--	--	2*
New Jersey	2013	All	C	16	--	--	--	--	--	--	4	5	4	--	--	2	2	--
			U	1	--	--	--	--	--	--	--	--	--	--	--	1	--	--
New Mexico	2012–2013	All[g]	C	6	--	1	--	1	--	--	--	1	2	--	--	--	--	1
			A/C	1	--	1	--	--	--	--	--	--	--	--	--	--	--	--
North Carolina	Varies by PIP	Some	C	1	--	--	1	--	--	--	--	--	--	--	--	--	--	--
			A/C	1	--	--	--	--	--	--	--	--	--	--	--	--	--	1
			U	12	--	--	6	--	1	--	--	--	--	--	--	--	--	5
North Dakota	2013	All[g]	C	3	--	--	--	1	--	--	--	1	--	--	--	--	1	--
Ohio	2013	All[g]	C	7	--	--	--	--	--	--	--	--	--	--	7*	--	--	--
Oregon	Varies by PIP	Some	C	14	--	--	7	--	--	--	--	--	10	1	1	--	1	--
			U	12	--	--	6	--	1	4	--	--	--	1	1	--	--	2
Pennsylvania	Varies by PIP	Some	C	7	--	--	--	--	--	--	--	--	--	--	--	7*	--	--
			A/C	5	--	--	5*	--	--	--	--	--	--	--	--	--	--	--
			U	20	--	--	11*	--	8*	12*	--	--	--	--	--	--	--	--
Rhode Island	2013	All	C	2	2*	--	--	--	--	--	--	--	--	--	--	--	--	--
			A/C	4	--	--	--	--	--	--	--	--	--	--		--	--	4*
South Carolina	2013	All[g]	C	2	--	1	--	--	--	--	--	--	--	--	--	--	1	--
			U	2	--	--	--	--	--	--	--	--	--	--	--	--	--	2

Table 3 (continued)

State	Years of Data	PIPs Validated[a]	PIP Population[b]	Number of PIPs	ADHD	Asthma	Behav. Health[c]	Childhood Immunizations	ED Visits	Hospital Readmissions	Lead Screening	Oral Health	Prenatal and Postpartum Care	Primary Care Access[d]	EPSDT	Weight/ BMI	Well-Child Care[e]	Other[f]
Tennessee	2013–2014	All	C	9	2	--	--	--	--	--	--	--	1	--	5	1	--	--
			A/C	3	--	--	3	--	--	--	--	--	--	--	--	--	--	--
			U	14	--	--	--	--	--	--	--	--	--	--	--	--	--	14
Utah	2012	All	C	3	--	--	--	--	--	--	--	--	--	--	--	--	3	--
			A/C	1	--	--	1	--	--	--	--	--	--	--	--	--	--	--
			U	9	--	--	9	--	--	--	--	--	--	--	--	--	--	--
Virginia	2013	All	C	7	--	--	--	--	--	--	--	--	--	--	--	--	7*	--
			A/C	7	--	--	7*	--	--	--	--	--	--	--	--	--	--	--
Washington	2014	All	C	14	--	--	12	--	--	1	--	--	--	--	--	--	2	--
			A/C	1	--	1	--	--	--	--	--	--	--	--	--	--	--	--
			U	15	--	--	8	--	--	5*	--	--	--	--	--	1	--	2
West Virginia	2013	All[g]	C	3	--	--	--	1	--	--	--	--	--	--	--	1	1	--
			A/C	3	--	3*	--	--	3*	--	--	--	--	--	--	--	--	--
Wisconsin	FY2013–2014	Some	C	16	--	--	--	11	--	--	4	--	1	--	--	--	--	--
			A/C	7	--	--	7	--	--	--	--	--	--	--	--	--	--	--
			U	13	--	2	8	--	1	1	--	--	--	--	--	--	--	1

Source: EQR technical reports submitted to CMS for the 2014–2015 reporting cycle, as of April 30, 2015.

Notes: During the 2014–2015 reporting cycle, the following states and territories did not contract with any MCOs or PIHPs: AL, AK, AR, CT, GU, ME, MT, OK, VI, and WY. ND only had CHIP managed care. ID recently implemented an MCO for its dual eligible population; it has not yet produced an EQR report. In addition, IN, PR, and TX did not submit an EQR technical report before April 30, 2015 for inclusion in this analysis. While VT is required to conduct an EQR under the terms of its section 1115 demonstration, its managed care entity is neither an MCO nor PIHP and therefore is excluded from this analysis.

DE submitted readiness reviews, which did not include information about PIPs. NY submitted a summary report, which did not include information about PIPs.

This table focuses on PIPs that target children and pregnant women, and may include some PIPs that also target adults. For example, certain behavioral health PIPs, such as those that focus on the Follow-Up After Hospitalization for Mental Illness measure, may target both adults and children. PIPs that target adults are available at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Adult-Findings-from-EQR-Technical-Reports-2014-2015.zip.

PIPs focused on multiple topic areas are counted in all of the relevant topics. Each PIP is included only once in the number of PIPs for each state, so the number of PIPs across the topic areas may not sum to the total count in some states.

* PIP topic was mandated by the state. In some states, these PIPs operated as a single, collaborative PIP in which all MCOs participated. In other states, each MCO or PIHP separately implemented a PIP on the mandated topic.

[a] Use of the term "validation" differed across EQR reports. In this analysis, validation indicates that the EQRO reported reviewing information, data, and procedures to determine the extent to which they are accurate, reliable, free from bias, and in accordance with standards for data collection and analysis. Some PIPs that were reviewed in the validation process did not meet all of the review criteria.

[b] PIPs are categorized based on the target population as described in the EQR technical reports. C = Children only; A/C = Adults and Children; U = Unspecified ages. PIPs that target adults exclusively are not included in this table.

[c] The Behavioral Health category includes measures that focus on mental health, substance use disorders, and other behavioral conditions. PIPs focused on ADHD are counted separately.

[d] The Primary Care Access category includes measures that focus on access to primary care physicians or primary care medical homes.

[e] During the 2014–2015 reporting cycle, the following states had PIPs that focused on adolescent well-care: Georgia (3 state-mandated PIPs), Maryland (1 collaborative PIP across 6 MCOs), Michigan (1 PIP), South Carolina (1 PIP), Tennessee (1 PIP), Virginia (1 collaborative PIP across 7 MCOs), and West Virginia (1 MCO).

[f] Other PIP topic areas include member satisfaction (FL, GA, SC), parent satisfaction (NH, SC), provider satisfaction (GA, FL, SC), access to primary care physicians (CA, NV), number of recipients with clinical lab data in an electronic health record (AZ), rate of school attendance (CA), patient experience (CA), medication review (FL), call center timeliness (FL), balance billing (FL), getting needed care (FL), biannual submission of child functional assessment (FL), satisfaction with health plan (FL), improving access to culturally and linguistically appropriate services (FL), reducing disparities in cultural competence among practicing physicians (FL), first call resolution (FL), telephone answer speed (FL), using an organization assessment to implement trauma-informed care (FL), improved satisfaction with cultural and language services with people living with

Table 3 (continued)

HIV/AIDS (FL), timeliness of services for long-term care services (FL), electronic health records with meaningful use (FL), number of health risk assessments (FL), number of community health workers (FL), inappropriately prescribed antibiotics in children with pharyngitis and upper respiratory tract infections (KY), medication reconciliation (MN), utilizing synagis in improving health and reducing hospitalizations in vulnerable infants and children (NM), call rollover (NC), stakeholder access to information (NC), community outreach program for members who are super-utilizers (OR), number of patient-centered primary care medical home users (OR), maternal medical home (OR), initial health screens for special enrollment populations (RI), chlamydia screening (RI), timely recredentialing of providers (TN), cultural assessment and cultural integration survey (TN), Multicultural Community Service (MCS) accountable and collaborative care (WA), and reducing volume of MCS member grievance calls (WA).

[g] This state's EQRO validated all of the PIPs mentioned in the technical report; it was unclear whether any additional PIPs were conducted, but not validated or mentioned in the technical report.

A/C = Adult and Child; ADHD = Attention-deficit/hyperactivity disorder; Behav. = Behavioral; BMI = body mass index; C = Child only; CHIP = Children's Health Insurance Program; ED = emergency department; EPSDT = Early and Periodic Screening, Diagnostic and Treatment; EQRO = External Quality Review Organization; FY = fiscal year; MCO = managed care organization; PIHP = prepaid inpatient health plan; U = Unspecified Age.

FIGURES

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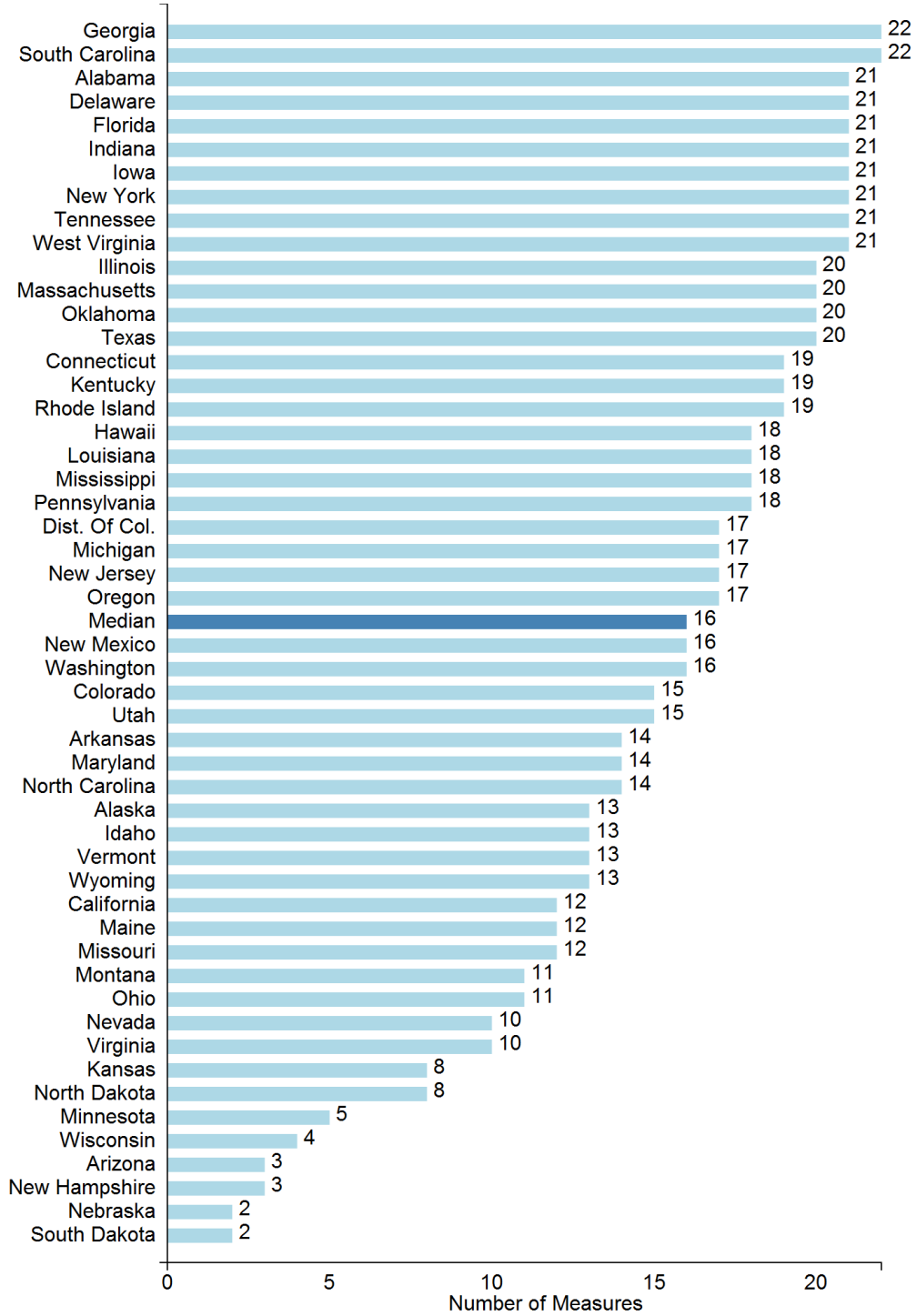
Figure 1. Number of Medicaid/CHIP Children's Health Care Quality Measures Reported by States, FFY 2014

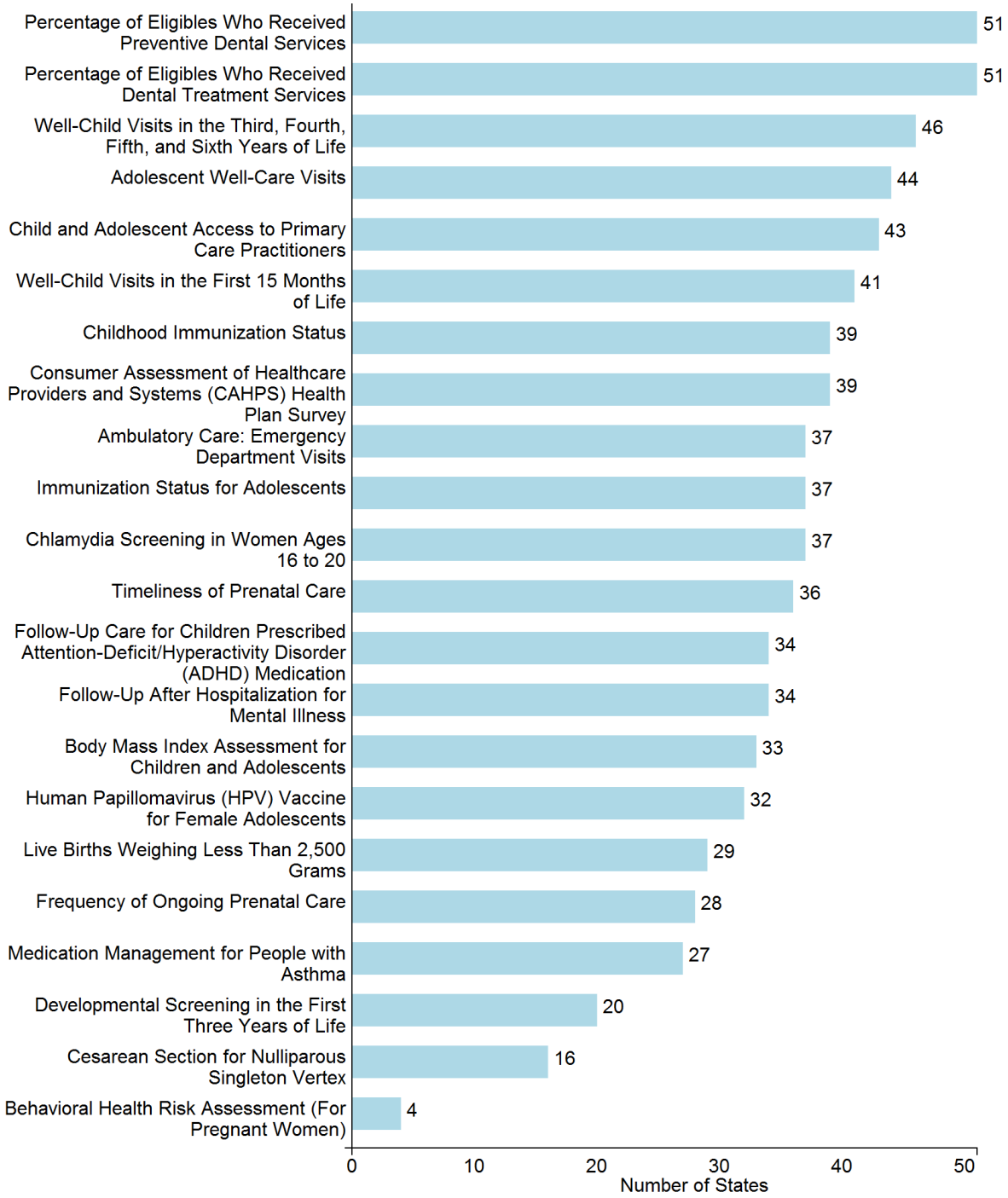


Sources: Mathematica analysis of FFY 2014 Child CARTS reports and Form CMS-416 reports.

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

The 2014 Child Core Set includes 23 measures. This figure is based on state reporting of 22 Child Core Set measures for FFY 2014. This figure excludes the Central Line-Associated Bloodstream Infection (CLABSI) measure. Beginning in FFY 2012, data for the CLABSI measure were obtained from the CDC's National Healthcare Safety Network.

Figure 2. Number of States Reporting the Core Set of Medicaid/CHIP Children's Health Care Quality Measures, FFY 2014

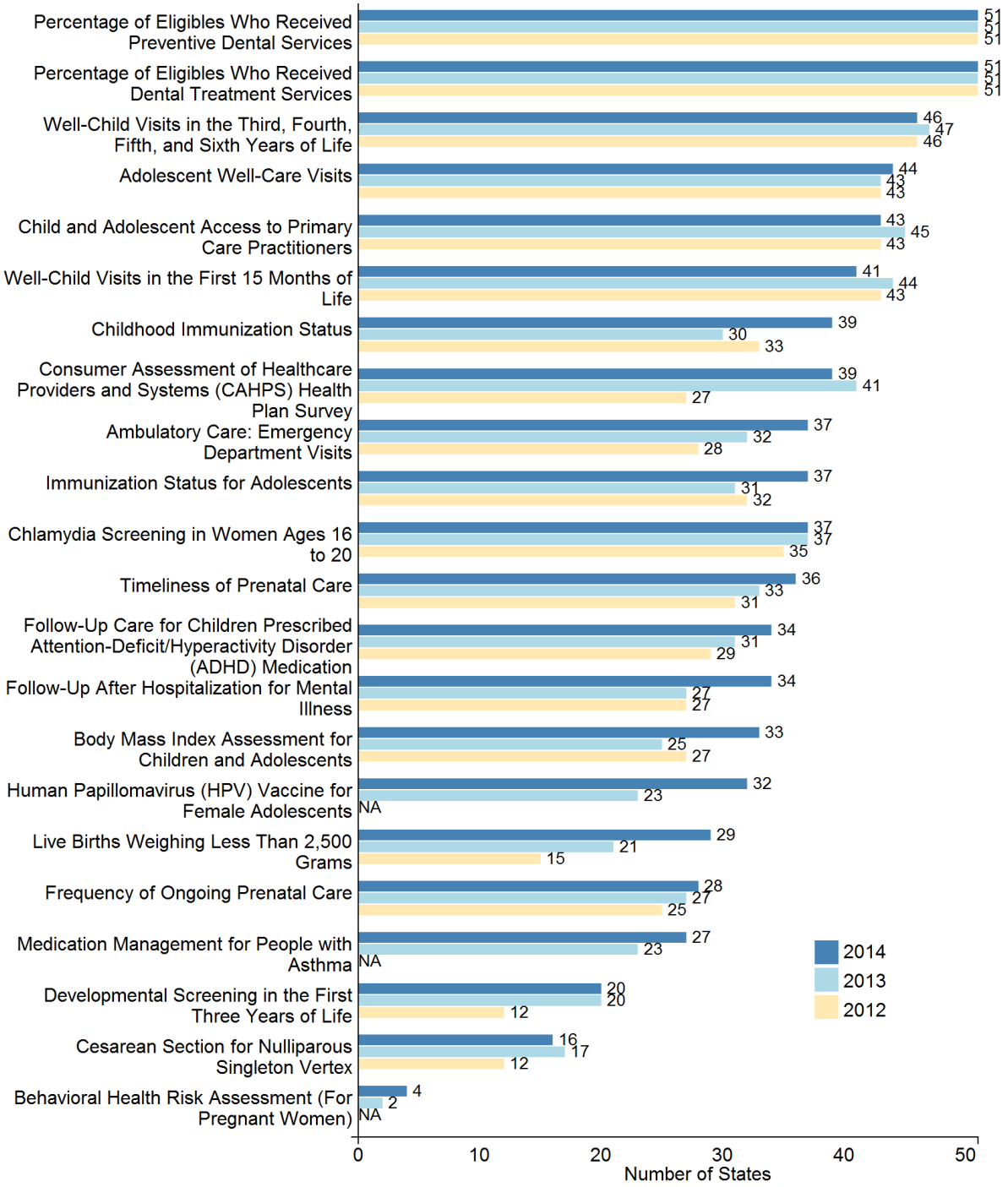


Sources: Mathematica analysis of FFY 2014 Child CARTS reports and Form CMS-416 reports.

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

The 2014 Child Core Set includes 23 measures. This figure is based on state reporting of 22 Child Core Set measures for FFY 2014. This figure excludes the Central Line-Associated Bloodstream Infection (CLABSI) measure. Beginning in FFY 2012, data for the CLABSI measure were obtained from the CDC's National Healthcare Safety Network.

Figure 3. Changes in the Number of States Reporting the Medicaid/CHIP Children's Health Care Quality Measures, FFY 2012–2014



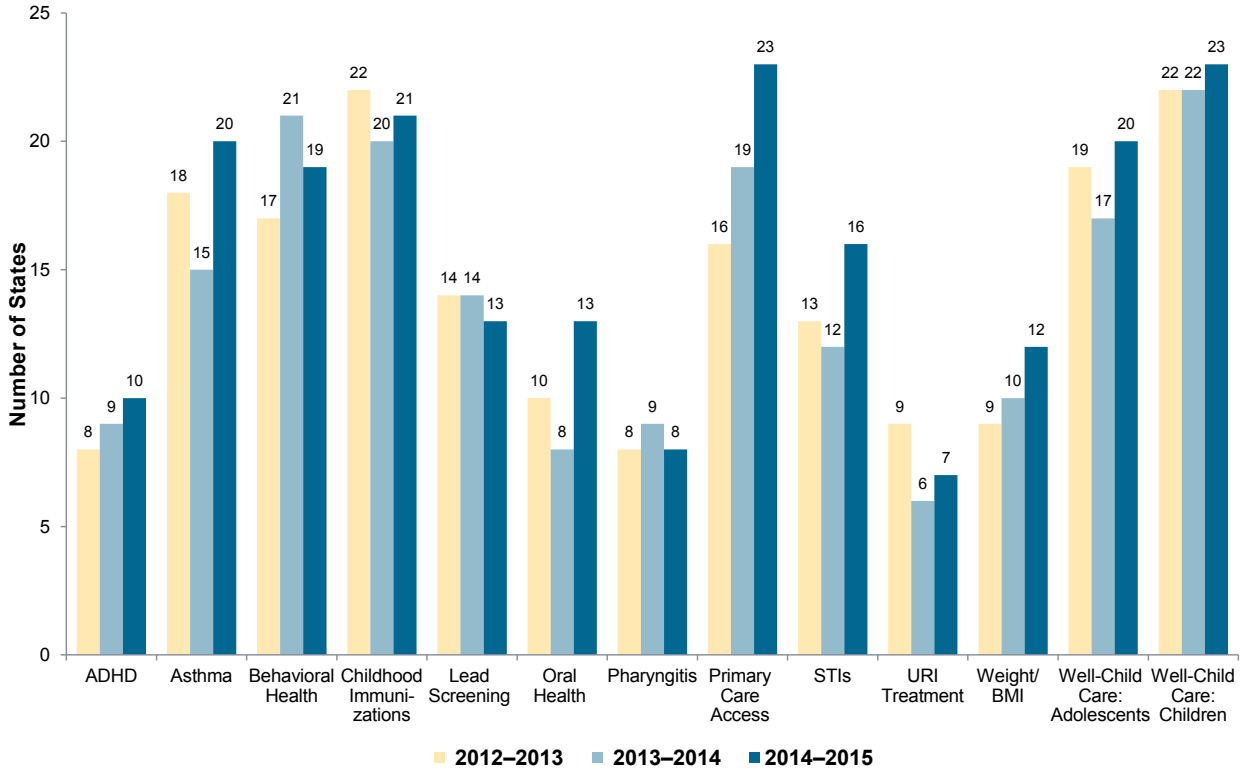
Sources: Mathematica analysis of FFY 2012–2014 Child CARTS reports and FFY 2012–2014 Form CMS-416 reports.

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

This figure excludes the Central Line-Associated Bloodstream Infection (CLABSI) measure. Beginning in FFY 2012, data for the CLABSI measure were obtained from the CDC's National Healthcare Safety Network.

NA = measures were not collected for FFY 2012.

Figure 4. Comparison of Performance Measures Evaluating Children's Health Care Quality That Were Reported in External Quality Review (EQR) Technical Reports for the 2012–2013, 2013–2014, and 2014–2015 Reporting Cycles for 29 States, by General Topic



Sources: Performance measures for 2012–2013 and 2013–2014 were obtained from the 2014 Secretary's Report on the Quality of Care for Children in Medicaid and CHIP. Performance measures for 2014–2015 are based on Mathematica Policy Research analysis of the 2014–2015 EQR technical reports.

Notes: During the 2014–2015 reporting cycle, the following states and territories did not contract with any MCOs or PIHPs: AL, AK, AR, CT, GU, ME, MT, OK, VI, and WY. ND has managed care for its CHIP population but not for adults. ID recently implemented an MCO for its dual eligible population; it has not yet produced an EQR report. In addition, IN, PR, and TX, did not submit an EQR technical report before April 30, 2015 for inclusion in this analysis. While VT is required to conduct an EQR under the terms of its section 1115 demonstration, its managed care entity is neither an MCO nor PIHP and therefore is excluded from this analysis.

States include: AZ, CA, CO, DC, FL, GA, HI, IL, IA, KS, MD, MA, MI, MN, MO, NE, NV, NJ, NM, NY, OR, PA, RI, SC, TN, VA, WA, WV, and WI. These are states that reported performance measures in all three comparison years.

This figure focuses on measures that target children and pregnant women, and may include some PIPs that also target adults. For example, certain behavioral health PIPs, such as those that focus on the Follow-Up After Hospitalization for Mental Illness measure, may target both adults and children. PIPs that target adults are available at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Adult-Findings-from-EQR-Technical-Reports-2014-2015.zip.

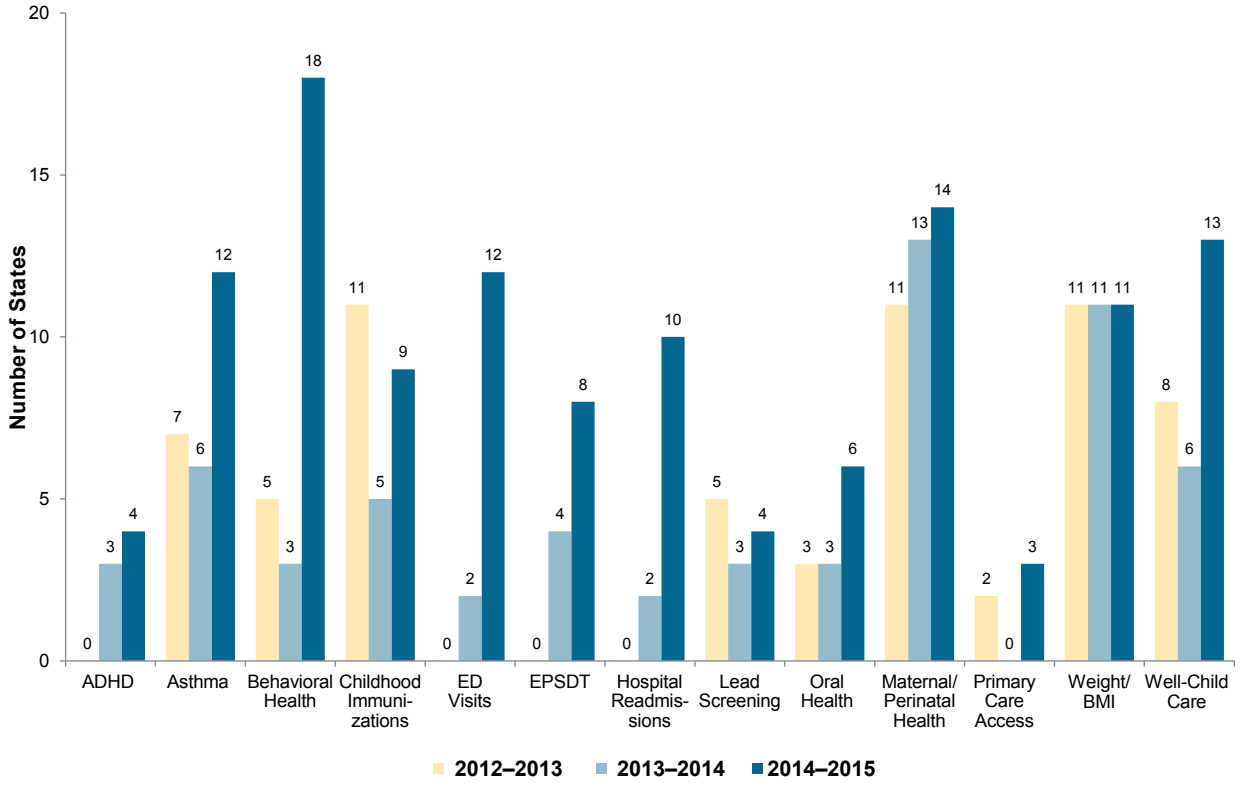
The Behavioral Health category includes measures that focus on mental health, substance use disorders, and other behavioral conditions. Measures focused on ADHD are counted separately.

The Primary Care Access category includes measures that focus on access to primary care physicians or primary care medical homes.

Information about the EQR process is available at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Quality-of-Care-External-Quality-Review.html.

ADHD = Attention-Deficit/Hyperactivity Disorder; CHIP = Children's Health Insurance Program; Pharyngitis = Appropriate testing or treatment for children with pharyngitis; STI = Sexually Transmitted Infection; URI = Upper Respiratory Infection.

Figure 5. Comparison of Performance Improvement Projects (PIPs) Targeting Children and Pregnant Women That Were Reported in External Quality Review (EQR) Technical Reports for the 2012–2013, 2013–2014, and 2014–2015 Reporting Cycle for 28 States, Selected Topics



Sources: PIPs for 2012–2013, and 2013–2014 were obtained from the 2014 Secretary's Report on the Quality of Care for Children in Medicaid and CHIP. PIPs for 2014–2015 are from Mathematica Policy Research analysis of 2014–2015 EQR technical reports.

Notes: During the 2014–2015 reporting cycle, the following states and territories did not contract with any MCOs or PIHPs: AL, AK, AR, CT, GU, ME, MT, OK, VI, and WY. ND has managed care for its CHIP population but not for adults. ID recently implemented an MCO for its dual eligible population; it has not yet produced an EQR report. In addition, IN, PR, and TX, did not submit an EQR technical report before April 30, 2015 for inclusion in this analysis. While VT is required to conduct an EQR under the terms of its section 1115 demonstration, its managed care entity is neither an MCO nor PIHP and therefore is excluded from this analysis.

States include AZ, CA, CO, DC, FL, GA, HI, IL, IA, KS, MD, MA, MI, MN, MO, NE, NV, NJ, NM, OR, PA, RI, SC, TN, VA, WA, WV, and WI. These are the states that reported PIPs in all three comparison years.

This figure focuses on PIPs that target children and pregnant women, and may include some PIPs that also target adults. For example, certain behavioral health PIPs, such as those that focus on the Follow-Up After Hospitalization for Mental Illness measure, may target both adults and children. PIPs that target adults are available at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Adult-Findings-from-EQR-Technical-Reports-2014-2015.zip.

The Behavioral Health category includes PIPs that focus on mental health, substance use disorders, and other behavioral conditions. PIPs focused on ADHD are counted separately.

The Primary Care Access category includes PIPs that focus on access to primary care physicians or primary care medical homes.

Information about the EQR process is available at http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Quality-of-Care-External-Quality-Review.html.

ADHD = Attention-Deficit/Hyperactivity Disorder; BMI = body mass index; CHIP = Children's Health Insurance Program.

GLOSSARY

ADD	Follow-Up Care for Children Prescribed ADHD Medication
ADHD	Attention-Deficit/Hyperactivity Disorder
AHRQ	Agency for Healthcare Research and Quality
AMA	American Medical Association
AMB	Ambulatory Care: Emergency Department Visits
AWC	Adolescent Well-Care Visits
BHRA	Behavioral Health Risk Assessment for Pregnant Women
BMI	Body Mass Index
C&M	Continuation and Maintenance
CAHPS	Consumer Assessment of Healthcare Providers and Systems
CAP	Child and Adolescent Access to Primary Care Practitioners
CARTS	CHIP Annual Reporting Template System
CCC	Children with Chronic Conditions
CCO	Coordinated Care Organization
CDC	Centers for Disease Control and Prevention
CFR	Code of Federal Regulations
CHCS	Center for Health Care Strategies
CHIP	Children's Health Insurance Program
CHIPRA	Children's Health Insurance Program Reauthorization Act of 2009
CHL	Chlamydia Screening in Women
CIS	Childhood Immunization Status
CLABSI	Central Line-Associated Blood Stream Infection
CMCS	Center for Medicaid and CHIP Services
CMS	Centers for Medicare & Medicaid Services
COE	Center of Excellence
CSEC	Cesarean Rate for Nulliparous Singleton Vertex
CY	Calendar Year
DEV	Developmental Screening in the First Three Years of Life
DTaP	Diphtheria, Tetanus, and Acellular Pertussis Vaccine
ED	Emergency Department
EHR	Electronic Health Record
EPSDT	Early and Periodic Screening, Diagnostic, and Treatment
EQR	External Quality Review
EQRO	External Quality Review Organization
FFY	Federal Fiscal Year
FPC	Frequency of Ongoing Prenatal Care
FUH	Follow-Up After Hospitalization for Mental Illness
FY	Fiscal Year

HAI	Healthcare-Associated Infection
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems
HEDIS®	Healthcare Effectiveness Data and Information Set
HepA	Hepatitis A
HepB	Hepatitis B
HHS	U.S. Department of Health and Human Services
HiB	H Influenza Type B
HIO	Health Insuring Organization
HIV	Human Immunodeficiency Virus
HPV	Human Papillomavirus Vaccine for Female Adolescents
IMA	Immunization Status for Adolescents
IPV	Inactivated Polio Vaccine
LBW	Live Births Weighing Less than 2,500 Grams
MACBIS	Medicaid and CHIP Business Information Solutions
MCO	Managed Care Organization
MCS	Multicultural Community Service
MMA	Medication Management for People with Asthma
MMR	Measles, Mumps, and Rubella
NA	Not Available
NCQA	National Committee for Quality Assurance
NHSN	National Healthcare Safety Network
NICU	Neonatal Intensive Care Unit
NQF	National Quality Forum
NSV	Nulliparous Singleton Vertex
OB/GYN	Obstetrical/Gynecological
OME	Otitis Media with Effusion
ONC	Office of the National Coordinator for Health Information Technology
PCP	Primary Care Practitioner
PCPI	Physician Consortium for Performance Improvement
PCV	Pneumococcal Conjugate Vaccine
PDENT	Preventive Dental Services
PIHP	Prepaid Inpatient Health Plan
PIP	Performance Improvement Project
PPC	Timeliness of Prenatal Care
PQMP	Pediatric Quality Measures Program
RV	Rotavirus
SIR	Standardized Infection Ratio
STI	Sexually Transmitted Infection
SUD	Substance Use Disorder
TA/AS	Technical Assistance and Analytic Support

Td	Tetanus and Diphtheria Toxoids Vaccine
Tdap	Tetanus, Diphtheria Toxoids, and Acellular Pertussis Vaccine
TDENT	Dental Treatment Services
The Act	Social Security Act
URI	Upper Respiratory Infection
VZV	Varicella Zoster Virus (Chicken Pox)
W15	Well-Child Visits in the First 15 Months of Life
W34	Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life
WCC	Weight Assessment and Counseling for Nutrition and Physical Activity for Children/Adolescents – Body Mass Index Assessment for Children and Adolescents