

The State of Children's Health Care Quality in Medicaid and CHIP: Who Are the Higher-Performing States?

Introduction

The Centers for Medicare & Medicaid Services (CMS) and states are working together to ensure access to a high quality system of coverage and care for children enrolled in Medicaid and the Children's Health Insurance Program (CHIP). The Child Core Set of health care quality measures provides a national- and state-level snapshot of the quality of care provided to children enrolled in Medicaid and CHIP.

This analytic brief highlights state performance on the 15 Child Core Set measures reported by at least 25 states for FFY 2013.¹ It assesses state performance overall and in three domains: Perinatal and Infant Care, Well Child Care, and Adolescent Well Care.²

Table 1 summarizes state performance on the 15 frequently reported Child Core Set measures for FFY 2013, including the number of states reporting, median (50th percentile), and the 25th and 75th percentiles. It is important to note that state reporting on the measures is voluntary, and that reasons for not reporting vary across states and measures. Common reasons for not reporting are that data are not available or data are not collected in a way that is consistent with the measure specifications. More information about state performance on the Child Core Set is available in the *2014 Annual Report on the Quality of Care for Children in Medicaid and CHIP*.³

For the purpose of this analysis, states were designated as higher performing on a measure if they reported rates at

¹ State performance is based on data reported by August 4, 2014, as published in the 2014 Annual Report on the Quality of Care for Children in Medicaid and CHIP.

² The management of acute and chronic conditions and the dental domains will be assessed in a future brief.

³ See: <http://www.medicare.gov/medicaid-chip-program-information/by-topics/quality-of-care/downloads/2014-child-sec-rept.pdf>.

or above the top quartile (based on the 75th percentile). The top quartile does not necessarily represent optimal performance, but it was established as the threshold for higher performance for this analysis. The Technical Appendix summarizes the methods used in this brief.

Who are the Higher-Performing States for FFY 2013?

Six states were considered "higher performing" overall because they reported at least 10 of the 15 measures, reported data for at least Medicaid enrollees, and had rates in the top quartile for at least half (n = 8) of these measures: Connecticut, Maryland, Massachusetts, Michigan, New York, and Rhode Island (Table 2 and Figure 1).

Of the higher performing states, Rhode Island reported a rate in the top quartile for 13 of the 15 frequently reported measures; New York was in the top quartile for 9 measures; and the remaining 4 states (Connecticut, Maryland, Massachusetts, and Michigan) were in the top quartile for 8 measures. Rhode Island was the only state to achieve higher-performing status overall and in all three domains. States were defined as higher performing for a domain if they reported rates in the top quartile for at least three measures in a domain.

Perinatal and Infant Care

Measures in the Perinatal and Infant Care domain support CMS's goal to ensure that women and infants covered by Medicaid and CHIP receive timely and continuous care during pregnancy and infancy. This domain includes three measures:

- Timeliness of Prenatal Care (PPC);
- Frequency of Ongoing Prenatal Care (FPC); and
- Well-Child Visits in the First 15 Months of Life (W15).

As shown in Figure 2, 16 states reported rates in the top quartile for at least one measure in the domain. Indiana, Rhode Island, and West Virginia had rates in the top quartile for all three measures, and are considered higher performing in the Perinatal and Infant Care domain.

Well Child Care

Strong state performance on measures in the Well Child Care domain helps ensure that children enrolled in Medicaid and CHIP have access to a primary care practitioner (PCP), receive recommended vaccinations at age-appropriate intervals, and have preventive check-ups to prevent and manage health issues. This domain includes three measures:

- Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life (W34);
- Childhood Immunization Status (CIS); and
- Child and Adolescents' Access to Primary Care Practitioners (CAP) for children ages 12 to 24 months, 25 months to 6 years, and 7 to 11 years.

As shown in Figure 3, 22 states reported rates in the top quartile for at least one measure in the domain. Maryland, Massachusetts, and Rhode Island had rates in the top quartile for all three measures, and are considered higher-performing in the Well Child Care domain.

Adolescent Well Care

Measures in the Adolescent Well Care domain reflect state efforts to ensure that adolescents enrolled in Medicaid and CHIP gain access to health services that promote healthy behaviors, prevent risky ones, and detect conditions that can interfere with a teen's physical, social, and emotional development. This domain includes four measures:

- Adolescent Well Care Visit (AWC);
- Immunizations for Adolescents (IMA);
- Chlamydia Screening in Women (CHL); and
- CAP rate for adolescents ages 12 to 19 years.

As shown in Figure 4, 15 states reported rates in the top quartile for at least one measure in the domain. Massachusetts, Michigan, New Jersey, New York, Pennsylvania, and Rhode Island had rates in the top quartile for at least three measures, and are considered higher-performing in the Adolescent Well Care domain.

Moving Forward

Together, Medicaid and CHIP covered more than 45 million children in FFY 2013, representing more than 1 in 3 children in the United States (U.S.). The quality measurement initiatives underway at CMS and in states are gaining momentum to accelerate improvements in children's health care and health outcomes and are helping the programs to pay for higher-value care.

The Department of Health and Human Services has made a commitment to enhance transparency about the quality of care provided in the U.S. This brief makes information already publicly reported available in a way that spotlights states that have been the most effective in getting Medicaid/CHIP providers to achieve greater value for their dollars. We see this as an important step in laying the groundwork for improved policy.

The next step is to interview state officials to get their views on how these results were achieved and to share best practices with other states. That information will be presented in a future brief and also used to identify opportunities for technical assistance and analytic support to Medicaid/CHIP programs.

With standardized measurement and reporting tools now in place for Medicaid/CHIP, CMS is working closely with its state partners to more accurately measure the care obtained by children and to use that information to improve their quality of care. Quality improvement initiatives implemented in the three domains highlighted in this brief as well as in oral health and behavioral health are detailed in a 2014 Report to Congress (<http://www.medicaid.gov/medicaid-chip-program-information/by-topics/quality-of-care/downloads/2014-childrens-report-to-congress.pdf>).

For Further Information

Additional information about state reporting of the Child Core Set measures for FFY 2013 is available in the 2014 Annual Report on the Quality of Care for Children in Medicaid and CHIP (<http://www.medicaid.gov/medicaid-chip-program-information/by-topics/quality-of-care/downloads/2014-child-sec-rept.pdf>). To obtain technical assistance with collecting, reporting, and using the Medicaid/CHIP core set measures, contact MACQualityTA@cms.hhs.gov.

Table 1. Overview of Performance on Frequently Reported Medicaid/CHIP Children's Health Care Quality Measures, Among States Reporting for FFY 2013

Measure Domain and Description	Number of States Reporting	Median	Percentile	
			25th	75th
Perinatal and Infant Care Measures				
Percentage of Deliveries with a Prenatal Visit in the First Trimester or within 42 Days of Medicaid/CHIP Enrollment (PPC)	33	83.1	68.6	87.2
Percentage of Deliveries with More than 80 Percent of Expected Prenatal Visits (FPC)	27	62.2	43.1	71.6
Percentage with 6 or More Well-Child Visits in the First 15 Months of Life (W15)	44	62.8	56.2	67.2
Well Child Care Measures				
Percentage with 1 or More Well-Child Visits in the Past Year: 3–6 Years (W34)	47	67.0	61.1	74.5
Percentage of 2 Year Olds Up-to-Date on Immunizations (Combination 3) (CIS) ^a	30	67.1	59.7	75.5
Percentage with a PCP Visit in the Past Year: 12–24 Months (CAP)	45	96.5	95.2	97.6
Percentage with a PCP Visit in the Past Year: 25 Months–6 Years (CAP)	45	88.3	85.2	91.4
Percentage with a PCP Visit in the Past Two Years: 7–11 Years (CAP)	45	91.3	86.8	93.4
Adolescent Well Care Measures				
Percentage with a PCP Visit in the Past Two Years: 12–19 Years (CAP)	45	89.6	86.3	91.4
Percentage with 1 or More Well Care Visits in the Past Year: 12–21 Years (AWC)	43	43.3	38.7	53.4
Percentage of 13 Year Olds Up-to-Date on Immunizations (Combination 1) (IMA) ^b	30	66.2	55.3	73.2
Percentage of Sexually Active Women Screened for Chlamydia: 16–20 Years (CHL)	37	49.6	42.2	58.4
Management of Acute and Chronic Condition Measures				
Percentage with a Body Mass Index Percentile Documented: 3–17 Years (WCC)	25	36.5	6.6	51.6
Percentage of Children with Pharyngitis who were Dispensed an Antibiotic and Received a Strep Test: 2–18 Years (CWP)	36	68.4	57.9	77.1
Percentage with a Follow-Up Visit Within 7 Days After Hospitalization for Mental Illness: 6–20 Years (FUH)	27	42.8	33.7	62.0
Percentage with a Follow-Up Visit Within 30 Days After Hospitalization for Mental Illness: 6–20 Years (FUH)	27	63.0	55.2	77.2
Percentage with 1 or More Follow-Up Visits During the Initiation Phase for Children Prescribed ADHD Medication: 6–12 Years (ADD)	31	45.8	37.2	55.7
Percentage with At Least 2 Follow-Up Visits During the Continuation and Maintenance Phase for Children Prescribed ADHD Medication: 6–12 Years (ADD)	30	50.4	45.2	63.9
Dental Measures				
Percentage with a Preventive Dental Service: 1–20 Years (PDENT)	49	47.5	40.9	51.5
Percentage with a Dental Treatment Service: 1–20 Years (TDENT)	49	22.8	20.0	27.0

Notes: State performance is based on data reported by August 4, 2014, as published in the 2014 Annual Report on the Quality of Care for Children in Medicaid and CHIP. More information about state reporting of the Child Core Set for FFY 2013 is available in the 2014 Annual Secretary's Report (<http://www.medicaid.gov/medicaid-chip-program-information/by-topics/quality-of-care/downloads/2014-child-sec-rept.pdf>).

^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); at least 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 2. State Performance on 15 Frequently Reported Medicaid/CHIP Child Core Set Measures, FFY 2013

State	Number of Frequently Reported Measures in Top Quartile	Number of Frequently Reported Measures	Percentage of Reported Measures in Top Quartile	PPC (87% to 94%)	FPC (75% to 85%)	W15 (67% to 84%)	W34 (75% to 84%)	CIS (75% to 83%)	CAP ¹	AWC (54% to 67%)	IMA (74% to 89%)	CHL (57% to 78%)	WCC (52% to 72%)	CWP (77% to 87%)	FUH ²	ADD ³	PDET (51% to 60%)	TDET (27% to 54%)
Rhode Island	13	15	87%	X	X	X	X	X	X	X	X	X	X	X	X	X		
New York	9	13	69%	X		X	X		X	X		X		X	X	X		
Connecticut	8	15	53%	X			X			X		X		X		X	X	X
Maryland	8	12	67%			X	X	X	X	X		X		X			X	
Massachusetts	8	15	53%				X	X	X	X		X		X			X	X
Michigan*	8	13	62%	X		X	X	X		X	X	X	X					
Pennsylvania	7	15	47%	X			X			X	X	X	X		X			
West Virginia	6	14	43%	X	X	X			X							X		X
Delaware	5	15	33%			X	X			X		X	X					
Indiana	5	15	33%	X	X	X					X				X			
New Jersey	5	15	33%			X	X		X	X	X							
Utah**	5	9	56%			X		X	X					X			X	
Vermont	5	9	56%			X			X					X		X	X	
California	4	12	33%			X	X	X					X					
DC	4	15	27%				X				X	X		X				
Kentucky	4	15	27%	X	X			X	X									
Maine	4	10	40%			X								X	X	X		
New Mexico	4	14	29%					X	X								X	X
Alabama**	3	14	21%						X					X			X	
Arizona**	3	5	60%				X		X	X								
Arkansas	3	10	30%									X				X		X
Colorado	3	13	23%										X				X	X
Hawaii	3	15	20%									X			X			X
Illinois	3	15	20%		X	X											X	
Nevada**	3	8	38%					X	X						X			
Idaho	2	8	25%														X	X
Iowa	2	15	13%	X											X			
North Carolina	2	15	13%		X									X				
North Dakota**	2	7	29%						X		X							
Oklahoma	2	15	13%						X							X		
South Carolina	2	15	13%						X								X	

State	Number of Frequently Reported Measures in Top Quartile	Number of Frequently Reported Measures	Percentage of Reported Measures in Top Quartile	PPC (87% to 94%)	FPC (75% to 85%)	W15 (67% to 84%)	W34 (75% to 84%)	CIS (75% to 83%)	CAP ¹	AWC (54% to 67%)	IMA (74% to 89%)	CHL (57% to 78%)	WCC (52% to 72%)	CWP (77% to 87%)	FUH ²	ADD ³	PDEnt (51% to 60%)	TDEnt (27% to 54%)
Tennessee	2	15	13%						X									X
Texas	2	14	14%														X	X
Virginia	2	7	29%			X												X
Washington	2	11	18%														X	X
Alaska	1	10	10%													X		
Minnesota	1	5	20%						X									
Mississippi**	1	7	14%						X									
Montana	1	6	17%															X
Nebraska	1	2	50%														X	
New Hampshire	1	2	50%														X	
Oregon	1	15	7%													X		
Wyoming**	1	7	14%						X									
Florida	0	13	0%															
Georgia	0	15	0%															
Kansas	0	6	0%															
Louisiana	0	6	0%															
Missouri	0	8	0%															
Ohio	0	9	0%															
South Dakota	0	3	0%															
Wisconsin	0	2	0%															

Notes: State performance is based on data reported by August 4, 2014, as published in the 2014 Annual Report on the Quality of Care for Children in Medicaid and CHIP. Percentage range shown for each measure is the top quartile. For measures with multiple rates (CAP, FUH, and ADD), states were counted as reporting a rate in the top quartile if at least one rate was in the top quartile. Two measures were excluded due to lack of state-level rates for Medicaid and CHIP: (1) Pediatric Central Line-Associated Blood Stream Infections (CLABSI), and (2) Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey 5.0H – Child Version Including Medicaid and with Children with Chronic Conditions Supplemental Items. Shaded rows represent overall higher-performing states: Connecticut, Maryland, Massachusetts, Michigan, New York, and Rhode Island.

X = state reported a rate in the top quartile of the measure.

* State reported Child Core Set measures for Medicaid population only.

** State reported Child Core Set measures for CHIP population only.

PPC = Timeliness of Prenatal Care; FPC = Frequency of Ongoing Prenatal Care; 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; CIS = Childhood Immunization Status; CAP = Child and Adolescents' Access to Primary Care Practitioners; AWC = Adolescent Well-Care Visit; IMA = Immunizations for Adolescents; CHL = Chlamydia Screening in Women; WCC = Body Mass Index Assessment for Children/Adolescents; CWP = Appropriate Testing for Children with Pharyngitis; FUH = Follow-Up After Hospitalization for Mental Illness; ADD = Follow-Up Care for Children Prescribed ADHD Medication; PDEnt = Percentage of Eligibles That Received Preventive Dental Services; TDEnt = Percentage of Eligibles That Received Dental Treatment Services.

¹ The top quartiles for the four rates on the CAP measure are: 12 to 24 months (98% to 100%); (2) 25 months to 6 years (92% to 95%); 7 to 11 years (94% to 98%); 12 to 19 years (92% to 96%).

² The top quartiles for the two rates on the FUH measure are: 7-day follow-up (59% to 80%); 30-day follow-up (76% to 92%).

³ The top quartiles for the two rates on the ADD measure are: Initiation (54% to 68%); Continuation and Maintenance (63% to 91%).

Figure 1. Geographic Variation in State Performance on 15 Frequently Reported Medicaid/CHIP Child Core Set Measures, FFY 2013

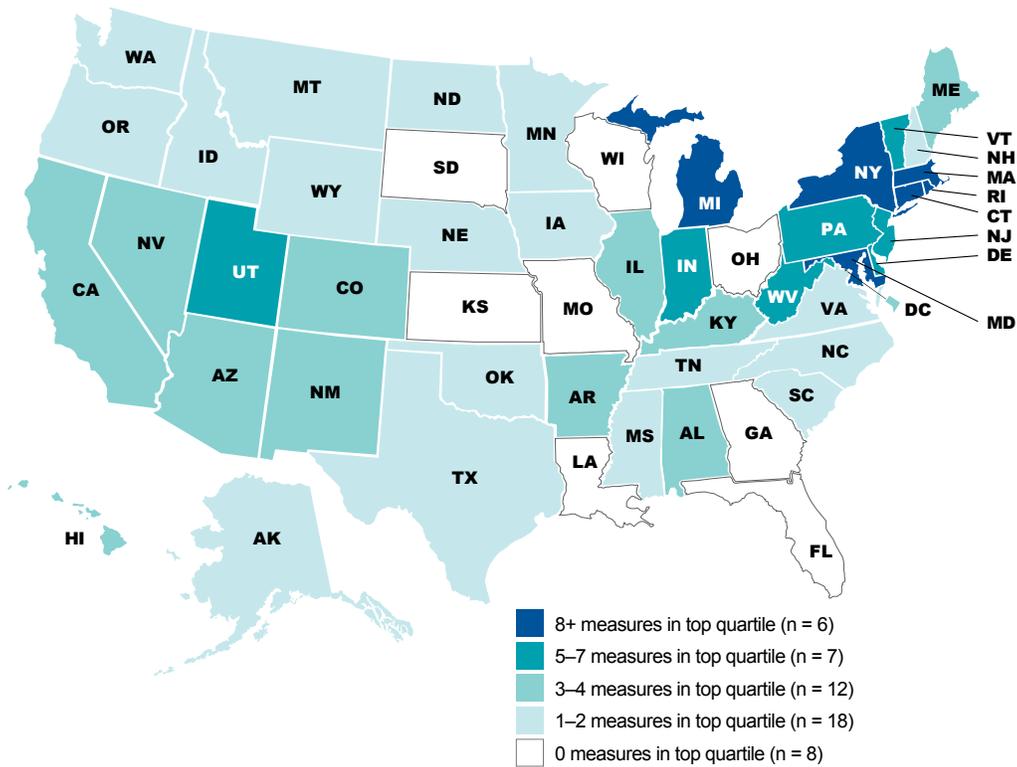


Figure 2. Geographic Variation in State Performance on Three Frequently Reported Perinatal and Infant Care Measures, FFY 2013

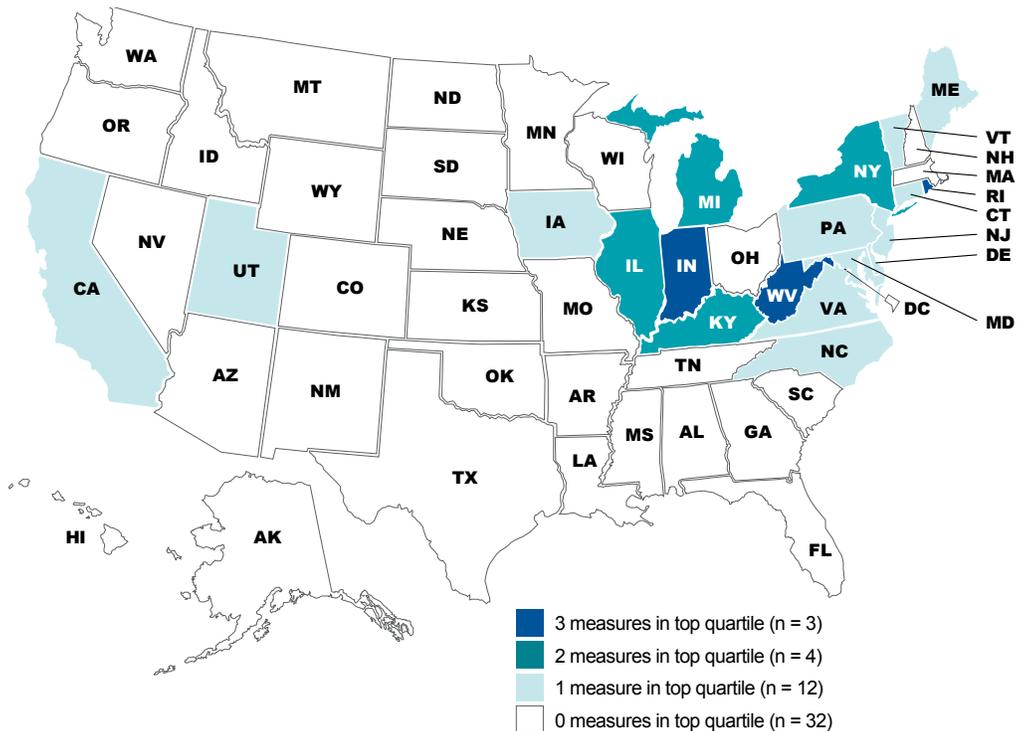


Figure 3. Geographic Variation in State Performance on Three Frequently Reported Well Child Care Measures, FFY 2013

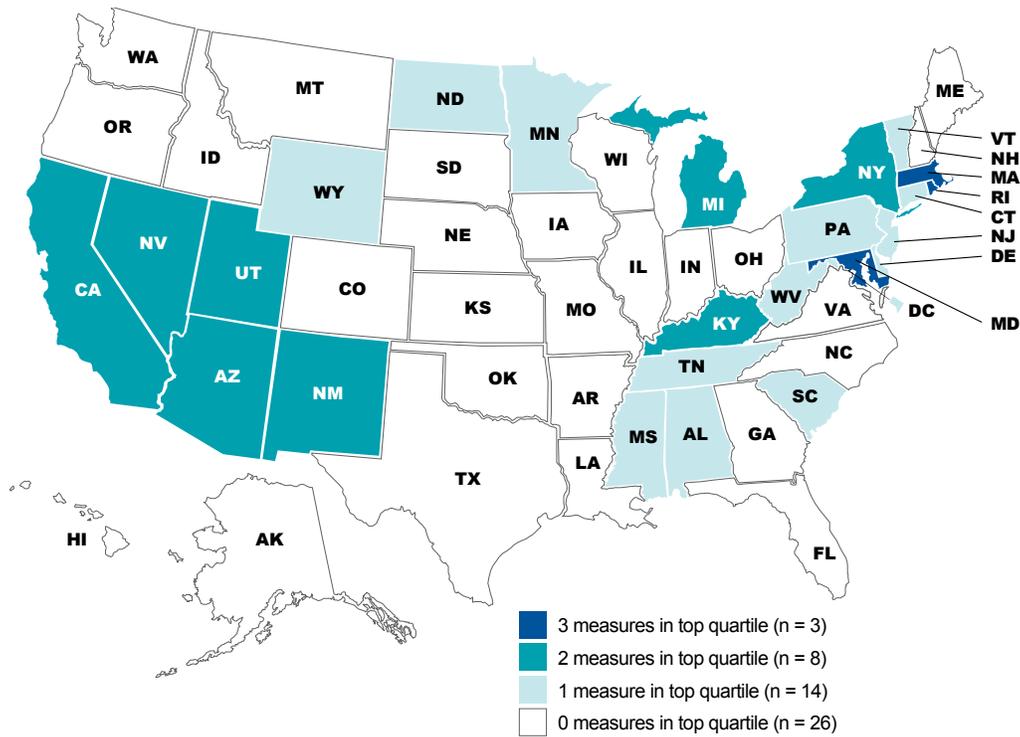
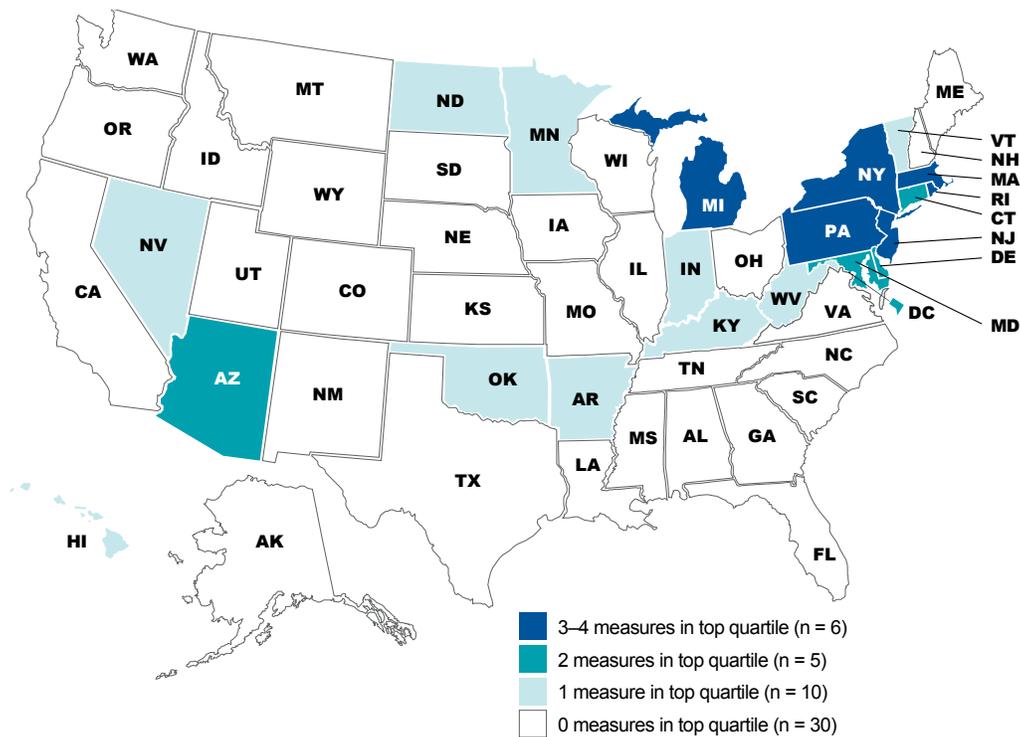


Figure 4. Geographic Variation in State Performance on Four Frequently Reported Adolescent Well Care Measures, FFY 2013



Technical Appendix

Methods Used to Identify Higher-Performing States

This technical appendix describes the methods used to identify higher-performing states overall and within three selected domains (perinatal and infant care, well child care, and adolescent well care). The analysis focused on the 15 Child Core Set measures reported by at least 25 states.⁴ The threshold for “higher performance” was based on the number of rates a state reported in the top quartile overall and within each domain.

The quartiles were determined based on an analysis of reported rates for all states that submitted Child Core Set data to CMS for FFY 2013.⁵ Table 1 shows the 25th, 50th (median), and 75th percentiles for the frequently reported measures. The top quartile was based on the 75th percentile, rounded to account for the distribution of state-reported rates. For measures with multiple rates, which included Follow-Up Care for Children Prescribed Attention-Deficit/Hyperactivity Disorder Medication (ADD), Child and Adolescents’ Access to Primary Care Practitioners (CAP), and Follow-Up After Hospitalization for Mental Illness (FUH), we considered states to have reported the measure if they reported at least one of the rates; similarly, they were considered higher-performing on the measure if at least one of the rates was in the top quartile.

To be considered an overall higher-performing state on the 15 frequently reported measures, states needed to meet three criteria: (1) report at least 10 of the 15 measures for FFY 2013, (2) report data for at least Medicaid enrollees (a state’s largest and lowest-income population), and (3) rank in the top quartile on more than half of the 15 measures (that is, 8 or more). Based on these criteria, 20 states did not qualify for consideration as an overall higher-performer because they did not meet one or more of these criteria.

⁴ State performance is based on data reported by August 4, 2014, as published in the 2014 Annual Report on the Quality of Care for Children in Medicaid and CHIP. Two measures were excluded from this analysis due to lack of state-level rates for Medicaid and CHIP: (1) Pediatric Central Line-Associated Blood Stream Infections (CLABSI), and (2) Consumer Assessment of Healthcare Providers and Systems (CAHPS) Health Plan Survey 5.0H – Child Version Including Medicaid and with Children with Chronic Conditions Supplemental Items.

⁵ When a state reported separate rates for its Medicaid and CHIP populations, the mean and median rates for FFY 2013 were calculated using the rate for the larger measure-eligible population.

To determine higher performance within a domain, we counted the total number of measures a state reported in the top quartile:

- **Perinatal and Infant Care:** This domain includes Timeliness of Prenatal Care (PPC), Frequency of Ongoing Prenatal Care (FPC), and Well-Child Visits in the First 15 Months of Life (W15). States were considered higher-performing if they reported rates in the top quartile for all three measures.
- **Well Child Care:** This domain includes Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life (W34), Childhood Immunization Status (CIS), and Child and Adolescents’ Access to Primary Care Practitioners (CAP). States were considered higher-performing if they reported rates in the top quartile for all three measures.⁶
- **Adolescent Well Care:** This domain includes Adolescent Well-Care Visit (AWC), Immunizations for Adolescents (IMA), Chlamydia Screening in Women (CHL), and the CAP rate for adolescents ages 12 to 19 years. States were considered higher-performing if they reported rates in the top quartile for at least three measures.

Additional information on state-level performance on the frequently reported Child Core Set measures is available at <http://www.medicaid.gov/medicaid-chip-program-information/by-topics/quality-of-care/downloads/performance-on-the-child-core-set-measures-ffy-2013.zip>.

⁶ States were counted in the top quartile of the CAP measure if they reported a rate in the top quartile for at least one of three CAP rates (12 to 24 months, 25 months to 6 years, or 7 to 11 years).