

The Department of Health and Human Services

2012 Annual Report on the  
Quality of Care for Children in Medicaid and CHIP



Health and Human Services Secretary

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## EXECUTIVE SUMMARY

Together, Medicaid and the Children's Health Insurance Program (CHIP) served more than 43.5 million children in federal fiscal year (FFY) 2011, representing about half of the beneficiaries currently enrolled in these programs. The number of children enrolled in Medicaid and CHIP grew by more than 1.5 million between FFY 2010 and FFY 2011. This increase in enrollment is evidence of the role Medicaid and CHIP play in ensuring that low-income children get the health care coverage they need, including 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 amended by section 401(c) of the Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA), summarizes state-specific and national information on the quality of health care furnished to children under Titles XIX (Medicaid) and XXI (CHIP) of the Act.

Under the Affordable Care Act of 2010, millions of uninsured Americans will gain access to coverage through Medicaid, CHIP, and the Affordable Insurance Exchanges. 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 well as for those with private insurance and other sources of coverage. 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' 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.<sup>1</sup>

Since the release of the Secretary's annual Report on the Quality of Care for Children in Medicaid and CHIP in 2011, CMS has continued to work collaboratively with states and other stakeholders to strengthen systems for measuring and collecting data on access and quality, including developing capacity through ten CHIPRA quality demonstration grantees in 18 multi-state collaborations, and working with the CMS Technical Advisory Groups (workgroups that focus on policy areas such as quality, oral health, mental health, managed care, and coverage).

The 2012 Secretary's Report presents information on key activities CMS undertook to update information on the quality of care children receive in Medicaid/CHIP, including reviewing findings on the initial set of core children's health care quality measures reported to CMS by the states and summarizing information on the quality measures and performance improvement projects reported in the External Quality Review Organization (EQRO) technical reports provided to CMS by states. This report offers the first nationwide review of improvement projects initiated by state managed care plans,<sup>2</sup> and supported by the 75 percent Federal matching rate available to states contracting with EQROs. Key findings from these information sources include:

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<sup>1</sup> <http://www.ahrq.gov/workingforquality/nqs/nqs2012annlrpt.pdf>.

<sup>2</sup> Either managed care organizations (MCOs) or Prepaid Inpatient Health Plans (PIHPs).

## Measurement and Reporting

- Forty-eight states and the District of Columbia (D.C.) voluntarily reported one or more of the initial core set of children’s health care quality measures for FFY 2011 for Medicaid and/or CHIP children (Exhibit 1). The median number of measures reported by states for FFY 2011 was 12, up from 7 for FFY 2010. Altogether, 27 states and D.C. reported at least half (12 of 24) of the children’s quality measures. One state, Oregon, reported data on all 24 measures for FFY 2011.
- Completeness of reporting on the children’s core measures improved for FFY 2011. The number of states reporting at least one measure for both Medicaid and CHIP enrollees increased from 23 states and D.C. for FFY 2010 to 33 states and D.C. for FFY 2011.
- The most frequently-reported measures assess children’s use of preventive services, primary care, and dental services (Exhibit 2).
- Of the 41 states (including D.C. and Puerto Rico) that contract with managed care plans to deliver services to Medicaid and CHIP enrollees, 37 submitted EQRO technical reports to CMS for the 2011-2012 reporting cycle. The most frequently-reported children’s performance measures in the EQRO reports are similar to those in the initial core set of children’s health care quality measures<sup>3</sup> (Exhibit 3).

## Quality and Access to Care

- In FFY 2011, as in FFY 2010, states had high performance rates on the children’s primary care access measure: a visit to a primary care practitioner (PCP). Most children, across all states, had at least one primary care visit during the reporting period, with the median rate ranging from a high of 97 percent among children ages 12-24 months to 88-90 percent for the other age groups (Exhibit 4).
- The proportion of children with a well-child visit varied by age group, but generally was below the recommended guidelines.<sup>4</sup> A median of 61 percent of children had 6 or more well-child visits in the first 15 months of life. The rate was slightly higher for children ages 3-6, with a median of 67 percent having a well-child visit during the reporting period. Adolescents (ages 12-21 years) had a considerably lower median well-child visit rate (46 percent) than the other age groups (Exhibit 4).
- An indication of the effectiveness of a well-child visit can be reflected by four of the children’s core measures reported by at least 25 states. The median childhood immunization rate for children turning age 2 was 71 percent, while the median adolescent immunization rate among 13 year olds was 52 percent. The Chlamydia screening rate among sexually active girls between the ages of 16 and 20 was 47

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<sup>3</sup> The most frequently-reported children’s performance measures were focused on immunization rates, well-child visits, adolescent well-care, and prenatal and perinatal care.

<sup>4</sup> The American Academy of Pediatrics and Bright Futures recommend 9 well-child visits in the first 15 months of life and annual well-child visits for children ages 3 and older.

percent and the rate for appropriate testing for children with pharyngitis was 63 percent (Exhibit 4).

- Children’s access to dental services in FFY 2010 was similar to patterns observed in FFY 2009.<sup>5</sup> A median of 43 percent of children ages 1 to 20 received at least one preventive dental service (e.g., dental cleanings, application of dental sealants) paid for by Medicaid. The percentage of children receiving at least one preventive dental service ranged across states from a low of 7 percent to a high of 58 percent (Exhibit 5).
- Although children covered by Medicaid/CHIP and by commercial plans differ demographically and socio-economically, their access to care and quality of care was fairly comparable on five of eight measures tracked by the National Committee for Quality Assurance (NCQA) for private plans and also reported by at least 25 states: a PCP visit in the past year; well-child visit rates for adolescents 12-21 years; childhood immunization status, adolescent immunization status; and Chlamydia screening rate (Exhibit 6).

#### Consumer Experiences with Health Care

- Data from the Child Medicaid Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Health Plan Survey from 25 states in 2010 provide information on consumer experiences with care, a dimension of quality of care. This survey indicates that:
  - Parents generally could get care for their child when needed for an illness or injury (state median of 76 percent responding “always”), but it was more difficult to get routine care (state median of 65 percent responding “always”) or specialty care (state median of 47 percent responding “always”) (Exhibit 7).
  - Most parents had a favorable assessment of their child’s doctor’s communication with the parent, but somewhat less favorable assessment of the doctor’s interactions with the child (Exhibit 8).

#### Improving the Quality of Care

- CMS is engaged in a number of efforts to improve the quality of care available to children in Medicaid and CHIP. Two major efforts underway – one on perinatal health and the other on oral health – are national in scope and use the core health care quality measures to guide improvement efforts and evaluate outcomes.

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<sup>5</sup> States are to submit the annual CMS-416 (EPSDT) report to CMS by April 1<sup>st</sup> of each year. At the time of this writing, CMS had not received enough data from states for FFY 2011 to make meaningful comparisons. As such, this Report includes data for FFY 2010.

- In 2012, CMS launched two initiatives to improve perinatal health outcomes: Strong Start for Mothers and Newborns (Strong Start)<sup>6</sup> and an Expert Panel for Improving Maternal and Infant Health Outcomes (Expert Panel).<sup>7</sup>
- CMS' Oral Health Initiative seeks to improve children's access to dental care, with an emphasis on early prevention. The initiative has two improvement goals,<sup>8</sup> and CMS is working with state partners and other stakeholder groups to achieve them.
- States, through their managed care plans, also are engaged in various performance improvement projects (PIPs) specific to children or pregnant women. The 268 PIPs, described in the EQRO technical reports, vary by state in number and focus and sometimes target only a subset of Medicaid/CHIP enrollees. For example, Florida had 14 PIPs focused on improving the quality of mental health care of institutionalized children, while Michigan and New York required all MCOs to implement PIPs to improve weight assessment and body mass index (BMI) counseling (Exhibit 9).
- Information on PIPs abstracted from the EQRO technical reports in four CMS priority areas – weight assessment and BMI counseling, dental care, prenatal care, and adolescent well-care – reveal the strengths and weaknesses of current approaches states and CMS use to improve care in MCOs. For example, while many of the PIPs commonly engaged in interventions that included member and provider outreach and education, the EQROs varied in the criteria they used to validate PIPs as well as the level of detail they included in technical reports about PIP progress and performance.

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<sup>6</sup> Strong Start, under the leadership of the CMS Center for Medicare and Medicaid Innovation, has two primary strategies to improve maternal and infant health outcomes. First, a public-private partnership is testing ways to encourage best practices for reducing early elective deliveries prior to 39 weeks (across all payer types) that lack medical indication. Second, through a funding opportunity made available to states and providers, it is testing whether three models of enhanced prenatal care can reduce the rate of preterm births among women covered by Medicaid and/or CHIP at high risk for poor pregnancy outcomes.

<sup>7</sup> The Expert Panel, initiated by the CMS Center for Medicaid and CHIP Services, is identifying specific opportunities and strategies to provide better care, while reducing the cost of care for mothers and infants covered by Medicaid/CHIP. Co-chaired by the Ohio Medicaid Medical Director and the immediate past president of the American Congress of Obstetricians and Gynecologists (ACOG), the Expert Panel consists of Medicaid medical directors, clinical experts, representatives of health plans, and advocacy stakeholder groups.

<sup>8</sup> The two oral health goals are to: (1) increase the proportion of Medicaid and CHIP children ages 1 to 20 who receive a preventive dental service by 10 percentage points; and (2) increase the proportion of Medicaid and CHIP children ages 6 to 9 who receive a sealant on a permanent molar by 10 percentage points.

The objective of this report is to show the progress HHS and states have made to systematically measure and report on the quality of care children receive in Medicaid/CHIP. While the ultimate goal is to improve children's health by driving improvements in the quality of care, measuring the care children receive is a critically important step in that process. Through mechanisms such as the Center for Medicaid and CHIP Services Quality Measures Technical Assistance and Analytic Support (TA/AS) Program<sup>9</sup> and the Annual CMS Medicaid/CHIP Quality Conference,<sup>10</sup> HHS and the states have built a solid foundation for measuring and improving children's quality of health care.

Evidence in this report suggests that access to care and quality of care were fairly comparable for children with public and private coverage for five of the eight measures tracked by NCQA and routinely reported by at least 25 states. Yet, this comparison is a cursory assessment of care given considerable evidence that low-income children have greater health care needs than children covered by commercial health plans. Nonetheless, the measurement and reporting tools now in place can guide HHS and states in the next phase of efforts to more thoroughly measure the care obtained by children covered by Medicaid/CHIP and use the measures to assess and improve the quality of care provided to children in their states.

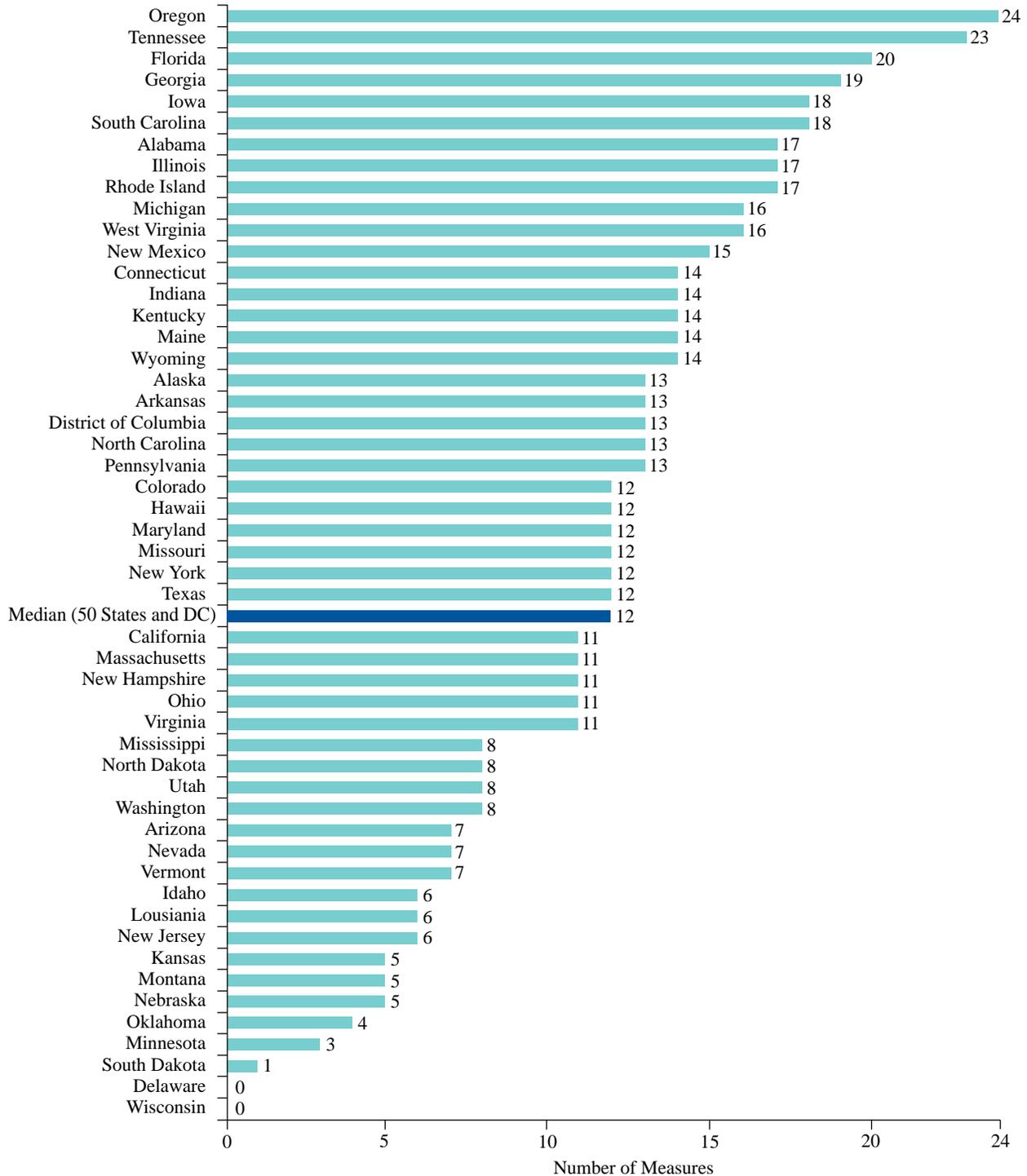
Moving forward, HHS seeks to build a stronger and more effective partnership between CMS, states, health care providers, and program enrollees on quality measurement as well as quality improvement. The two major quality-improvement efforts recently launched by CMS are helping to set the stage for the next generation of efforts designed to improve health care and health outcomes of children, and to help transform Medicaid/CHIP into a high quality system of coverage and care.

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<sup>9</sup> The TA/AS contract is led by Mathematica Policy Research and supported by subcontracts with the National Committee for Quality Assurance (NCQA), the Center for Health Care Strategies (CHCS), and the National Initiative for Children's Healthcare Quality (NICHQ). The TA/AS program supports state reporting of the initial core set measures by responding to individual state requests for TA with the initial core set measures, helping to plan and implement CMS's annual Medicaid/CHIP Quality Conferences, holding technical assistance webinars, and creating TA briefs and tool kits to provide states with information on specific topics.

<sup>10</sup> <http://www.medicaid.gov/State-Resource-Center/Events-and-Announcements/Annual-Medicaid-CHIP-Quality-Conference.html>

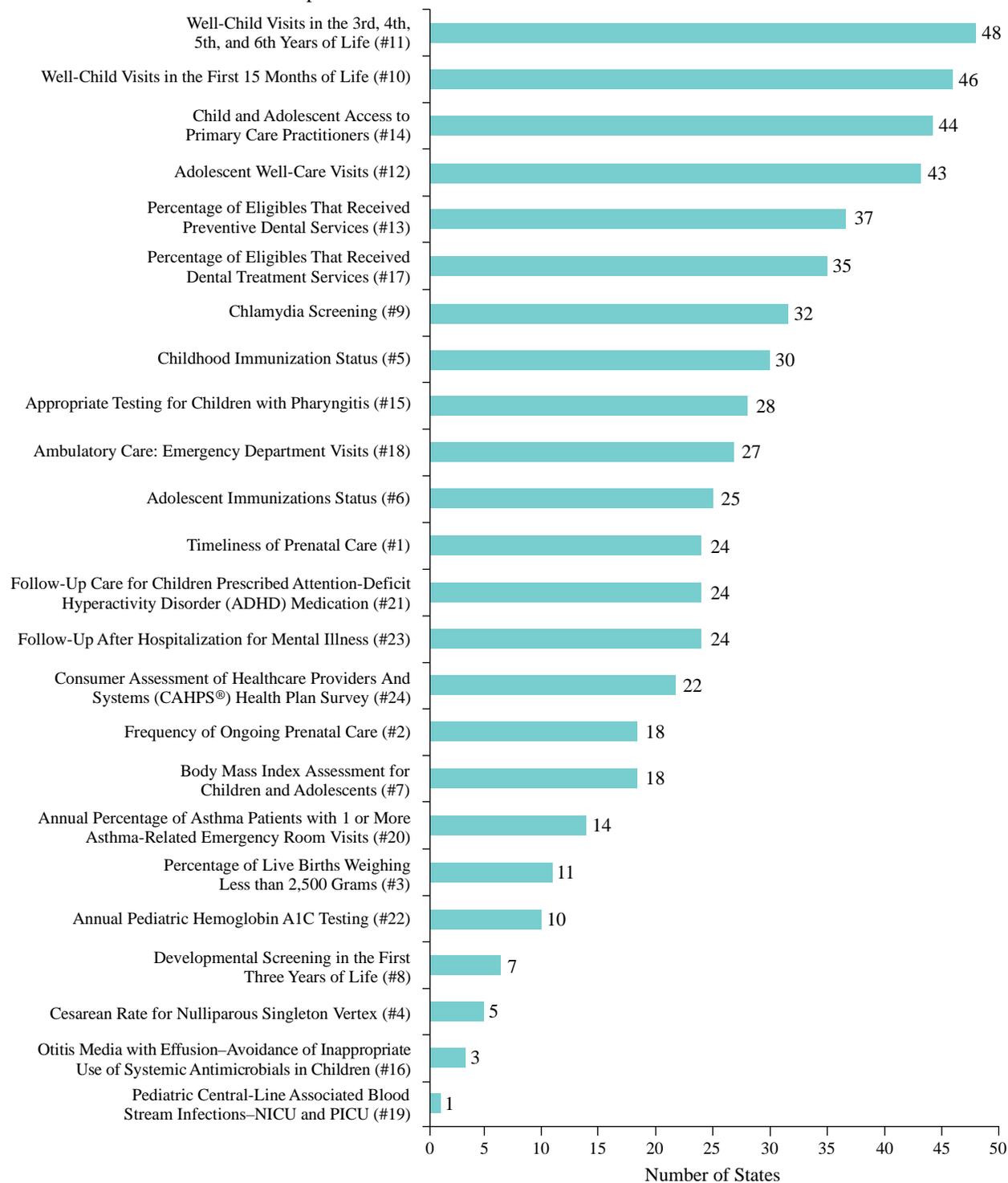
Exhibit 1. Number of Initial Core Set of Medicaid/CHIP Children’s Health Care Quality Measures Reported in FFY 2011 CARTS Reports, by State



Source: Mathematica analysis of FFY 2011 CARTS reports as of June 20, 2012.

Notes: Wisconsin did not submit a CARTS report for FFY 2011. Delaware submitted an FFY 2011 CARTS report, but did not submit data on any of the initial core set of children’s health care quality measures. For the eight states that submitted separate data for their Medicaid and CHIP programs (Colorado, Iowa, Kentucky, Michigan, New York, Pennsylvania, Tennessee, and West Virginia), the state was counted as reporting a measure if either report included data for that measure. The Medicaid/CHIP initial core set includes 24 measures.

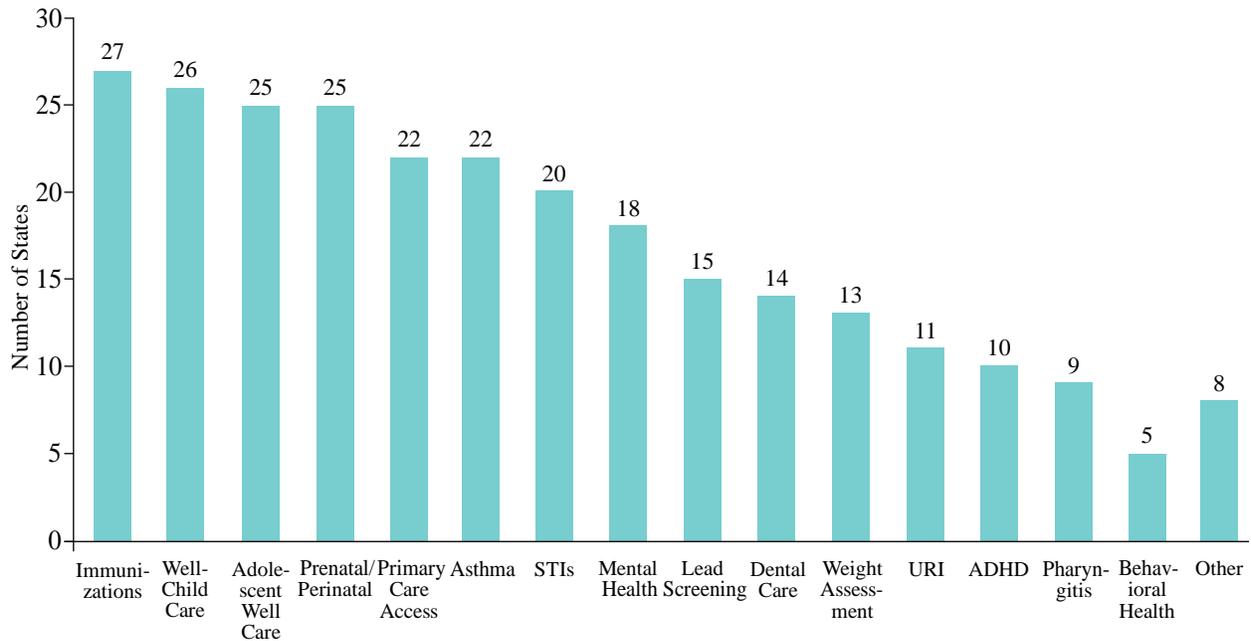
Exhibit 2. Number of States Reporting the Initial Core Set of Medicaid/CHIP Children’s Health Care Quality Measures in FFY 2011 CARTS Reports



Source: Mathematica analysis of FFY 2011 CARTS reports as of June 20, 2012.

Notes: Numbers in parentheses identify the measure number in the children’s initial core set. Wisconsin did not submit a CARTS report for FFY 2011. Delaware submitted an FFY 2011 CARTS report, but did not submit data on any of the initial core set of children’s health care quality measures. For the eight states that submitted separate data for their Medicaid and CHIP programs (Colorado, Iowa, Kentucky, Michigan, New York, Pennsylvania, Tennessee, and West Virginia), the state was counted as reporting a measure if either report included data for that measure.

Exhibit 3. Performance Measures Evaluating Children or Pregnant Women Included in External Quality Review Organization (EQRO) Technical Reports for the 2011-2012 Reporting Cycle for 37 States, by General Topic



Source: EQRO technical reports submitted to CMS for the 2011-2012 reporting cycle as of July 31, 2012.

Notes: Alabama, Alaska, Arkansas, Connecticut, Idaho, Maine, Montana, New Hampshire, Oklahoma, South Dakota, and Wyoming do not have MCOs or PIHPs that enroll children covered by Medicaid or CHIP. Louisiana, Mississippi, and North Dakota have newly applicable managed care requirements and were not required to submit EQRO technical reports for 2011. North Carolina submitted an EQRO technical report, but managed care in the state was limited to behavioral health programs that did not enroll children, so the state is excluded from the analysis.

Analysis excludes plans that provide only limited services, such as primary care case management. Analysis also excludes plans that do not serve children or pregnant women, such as long-term care plans or Medicare Advantage plans that cover dual eligibles.

ADHD = Attention Deficit Hyperactivity Disorder; Pharyngitis = Appropriate Testing for Children with Pharyngitis; STI = Sexually Transmitted Infection; URI = Upper Respiratory Infection.

Exhibit 4. Performance Rates on Frequently Reported Medicaid/CHIP Children’s Health Care Quality Measures in FFY 2011 CARTS Reports

Measure	Age Group	Number of States Reporting Using HEDIS Specifications	Mean	Median	25th Percentile	75th Percentile
Access to Primary Care Percent with a PCP Visit	12-24 Months	43	95.9	96.7	95.6	98.2
	25 Months - 6 Years	43	87.8	88.1	85.1	91.6
	7-11 Years	43	88.5	90.0	86.7	93.0
	12-19 Years	43	87.3	89.0	85.3	91.7
Well-Child Visits Percent with 6 or More Visits	First 15 Months	45 <sup>a</sup>	57.9	60.8	54.8	69.3
Percent with 1 or More Visits	3-6 Years	47	65.0	66.9	59.6	74.9
Percent with 1 or More Visits	12-21 Years	43	45.2	45.7	35.4	56.4
Childhood Immunization Status Percent Up to Date on Immunizations (Combo 3) <sup>b</sup>	2 Years	28	65.0	70.7	62.1	76.6
Immunizations for Adolescents Percent Up to Date on Immunizations (Combo 1) <sup>c</sup>	13 Years	22	48.4	51.9	32.8	59.5
Chlamydia Screening Percent Screened	16-20 Years	32	46.0	47.1	36.8	57.0
Appropriate Testing for Children with Pharyngitis Percent Tested	2-18 Years	28	62.2	63.1	52.2	75.2

Source: Mathematica analysis of FFY 2011 CARTS Reports as of June 20, 2012.

Note: Exhibit 4 includes states that used HEDIS specifications to report these measures. Exhibit excludes states that used other specifications and states that did not report these measures in FFY 2011 CARTS Reports. In the cases where a state reported rates for both their Medicaid and CHIP populations, the highest rate of the two populations was used. See Appendix Tables E.2 – E.9 for details.

<sup>a</sup> South Dakota did not report the percent of children in the first 15 months of life with 6 or more well-child visits but reported rates for other numbers of well-child visits.

<sup>b</sup> Combination 3 includes DTaP, IPV, MMR, HiB, HepB, VZV, and PCV.

<sup>c</sup> Combination 1 includes Meningococcal and Tdap.

PCP = Primary Care Practitioner.

Exhibit 5. Percentage and Number of Eligible Children Age 1-20, Enrolled for at Least 90 Continuous Days, Who Received Preventive Dental Services and Dental Treatment Services in FFY 2010

State	Total Number of Children Receiving Dental Service: Preventive	Percent of Children Receiving Dental Service: Preventive	Total Number of Children Receiving Dental Service: Treatment	Percent of Children Receiving Dental Service: Treatment
Alabama	244,112	50	105,432	21
Alaska	33,016	41	21,780	27
Arizona	333,511	46	189,986	26
Arkansas	166,106	46	91,528	25
California	1,451,686	37	870,922	22
Colorado	167,886	47	95,085	27
Connecticut	155,039	54	77,445	27
Delaware	36,357	41	18,763	21
D.C.	32,435	39	18,060	22
Florida	266,213	15	146,327	8
Georgia	471,278	46	231,232	22
Hawaii	53,413	41	32,479	25
Idaho	10,887	7	7,279	5
Illinois	703,305	47	282,818	19
Indiana	201,713	29	102,865	15
Iowa	103,098	40	49,098	19
Kansas	36,774	18	15,169	7
Kentucky	205,633	43	118,592	25
Louisiana	318,133	43	183,682	25
Maine	49,654	38	23,758	18
Maryland	252,729	48	132,667	25
Massachusetts	256,381	50	152,793	30
Michigan	395,241	35	173,502	15
Minnesota	162,552	40	81,715	20
Mississippi	160,053	43	83,026	22
Missouri	183,283	30	99,882	17
Montana	23,779	35	14,829	22
Nebraska	66,420	46	31,780	22
Nevada	69,767	36	45,064	24
New Hampshire	48,020	56	22,390	26
New Jersey	244,920	40	149,067	24
New Mexico	153,855	45	165,572	49
New York	712,872	37	368,940	19
North Carolina	430,929	44	231,775	24
North Dakota	12,780	30	6,607	16
Ohio	484,502	44	225,042	20
Oklahoma	236,163	47	142,334	28
Oregon	105,438	36	58,916	20
Pennsylvania	400,804	37	220,480	20
Rhode Island	39,542	41	18,613	19
South Carolina	277,137	53	135,827	26
South Dakota	30,099	39	12,026	16

Exhibit 5 (continued)

State	Total Number of Children Receiving Dental Service: Preventive	Percent of Children Receiving Dental Service: Preventive	Total Number of Children Receiving Dental Service: Treatment	Percent of Children Receiving Dental Service: Treatment
Tennessee	340,073	45	186,995	24
Texas	1,591,256	55	1,037,158	36
Utah	81,512	48	40,871	24
Vermont	33,403	58	14,003	24
Virginia	265,212	46	148,238	26
Washington	357,672	51	225,107	32
West Virginia	84,670	44	96,313	50
Wisconsin	114,869	23	57,367	12
Wyoming	22,366	43	12,277	24
U.S. Total	12,678,548	43 (Median) 41 (Mean)	7,073,476	22 (Median) 23 (Mean)

Source: FFY 2010 CMS-416 reports, Line 1b, Line 12b, Line 12c.

Exhibit 6. Comparison of Median Rates for State Medicaid/CHIP Programs and Commercial Health Plans for Frequently Reported Children’s Health Care Quality Measures, FFY 2011

Measure	Age Group	State Medicaid/CHIP Median	Health Plan Commercial Median
Access to Primary Care			
Percent with a PCP Visit	12-24 Months	96.7	98.2
	25 Months - 6 Years	88.1	91.8
	7-11 Years	90.0	92.4
	12-19 Years	89.0	89.6
Well-Child Visits			
Percent with 6 or More Visits	First 15 Months	60.8	78.1
Percent with 1 or More Visits	3-6 Years	66.9	73.1
Percent with 1 or More Visits	12-21 Years	45.7	41.8
Childhood Immunization Status			
Percent Up to Date on Immunizations (Combo 3) <sup>a</sup>	2 Years	70.7	75.8
Immunizations for Adolescents			
Percent Up to Date on Immunizations (Combo 1) <sup>b</sup>	13 Years	51.9	51.3
Chlamydia Screening			
Percent Screened	16-20 Years	47.1	39.6
Appropriate Testing for Children with Pharyngitis			
Percent Tested	2-18 Years	63.1	79.6

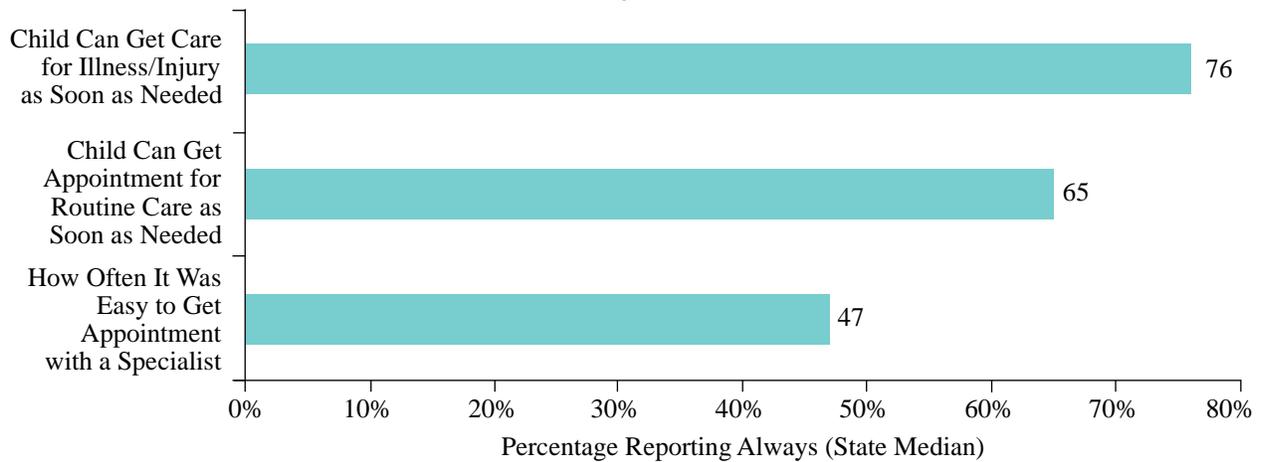
Sources: State Medicaid/CHIP medians from FFY 2011 CARTS reports; Commercial Health Plan medians from unpublished data provided by the National Committee for Quality Assurance (NCQA).

<sup>a</sup> Combination 3 includes DTaP, IPV, MMR, HiB, HepB, VZV, and PCV.

<sup>b</sup> Combination 1 includes Meningococcal and Tdap.

PCP = Primary Care Practitioner.

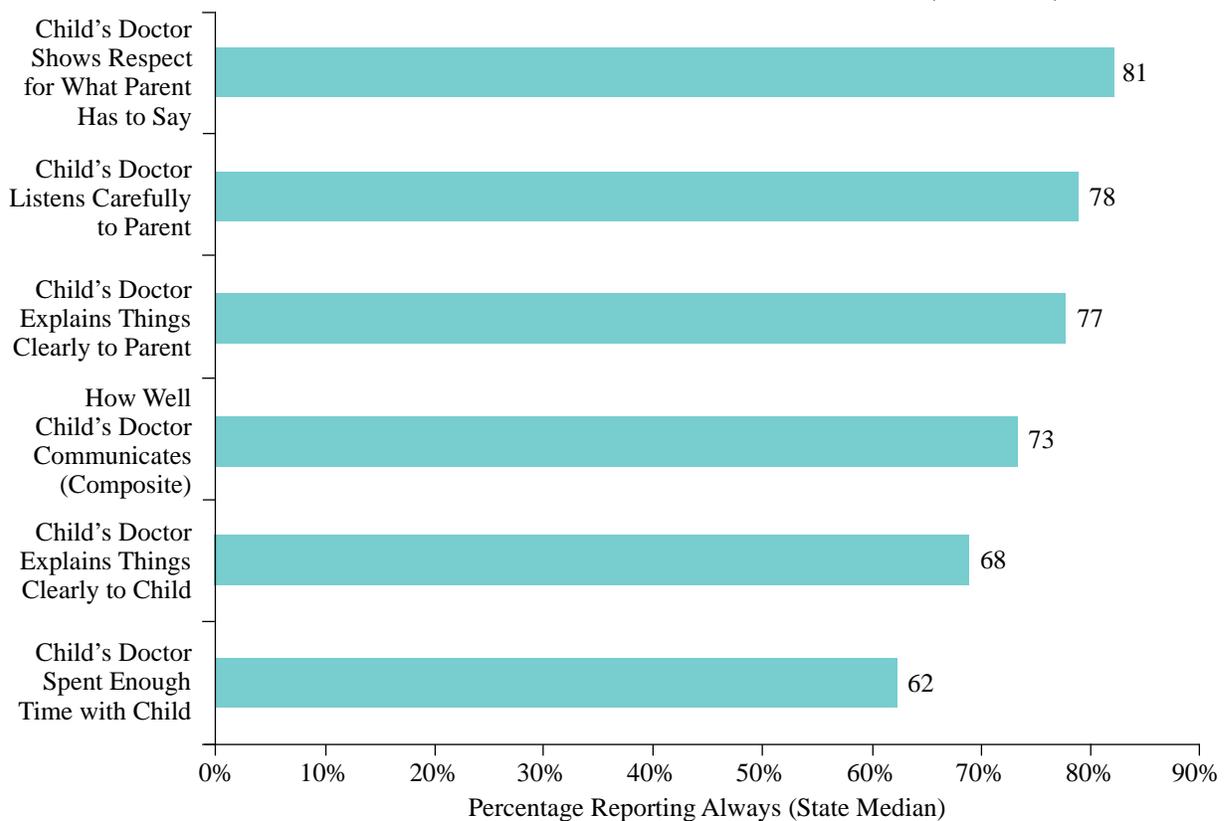
Exhibit 7. Parents' Assessment of the Ease of Getting Care for Their Child, 25 States, 2010



Source: Mathematica analysis of National CAHPS Benchmarking Database.

Note: Parents assessed the ease of getting care on a four-point scale (never, sometimes, usually, always). The percentages shown here are the median percentages reporting “always.”

Exhibit 8. Parents' Assessment of How Well Their Child's Doctor Communicates, 25 States, 2010



Source: Mathematica analysis of National CAHPS Benchmarking Database.

Note: Parents assessed doctor's communication on a four-point scale (never, sometimes, usually, always). The percentages shown here are the median percentages reporting “always.”

Exhibit 9. Performance Improvement Projects (PIPs) Targeting Children or Pregnant Women Included in External Quality Review Organization (EQRO) Technical Reports, 2011-2012 Reporting Cycle

State	Number of PIPs for Children or Pregnant Women	Years of Data	PIPs Validated by EQRO <sup>a</sup>	Number of PIPs by Topic Area											
				ADHD	Asthma	Behav Health	Childhood Immunization	Dental Care	Lead Screening	Mental Health	Prenatal Care	Primary Care Access	Weight / BMI	Well-Child Care	Other <sup>b</sup>
Total PIPs (37 States)	268			4	16	5	17	24	11	19	46	2	42	56	26
Total States (37 States)	30			4	7	1	9	7	6	4	16	1	9	11	9
Arizona	7	FFY 2006–2009	All		7*										
California	22	Jan–March 2012	All	1	1						12		5		3
Colorado	3	FFY 2010–2011	All							1				1	1
Delaware	4	Varies by PIP	All		1				1		2*				
D.C.	3	CY 2010	All								3*				
Florida	59	SFY 2011	All		2	5*		3	3	14*	2				30*
Georgia	9	Varies by PIP	All				3*		3*						3*
Hawaii	6	Varies by PIP	All									2	3	1	
Illinois	6	SFY 2009–2010	All								3*				3*
Indiana	3	CY 2010	All						1		1			1	
Iowa	0	CY 2009-2010	All												
Kansas	2	Varies by PIP	All												2
Kentucky	4	Varies by PIP	All					1			1		1		1
Maryland	0	NA	All												
Massachusetts	0	NA	NA												
Michigan	14	CY 2010	All										14*		
Minnesota	2	NR	All						1				1		
Missouri	11	CY 2010	All		2		1	6*			2				
Nebraska	5	CY 2010	All				1				1		2	1	
Nevada	4	CY 2011	All				2		2						
New Jersey	16	CY2009	All					6*			4*				6*
New Mexico	5	FY 2010	All		1		1	1			2				
New York	17	2009-2010	All								3*		14*		
Ohio	12	SFY 2010	All					4						1	7*
Oregon	12	2011–2012	Some <sup>c</sup>				1			2			1	1	7*
Pennsylvania	6	CY 2008–2010	All					3			3				
Puerto Rico	1	NR	All	1											
Rhode Island	2	Varies by PIP	All	1							1				
South Carolina	4	NR	All								3				1
Tennessee	4	CY 2010	Some	1							3				

State	Number of PIPs for Children or Pregnant Women	Years of Data	PIPs Validated by EQRO <sup>a</sup>	Number of PIPs by Topic Area											
				ADHD	Asthma	Behav Health	Childhood Immunization	Dental Care	Lead Screening	Mental Health	Prenatal Care	Primary Care Access	Weight / BMI	Well-Child Care	Other <sup>b</sup>
Texas	0	NA	NA												
Utah	0	2010	All												
Vermont	0	NA	NA												
Virginia	10	CY 2010	All				5*								5*
Washington	10	Varies by PIP	All				2			2					6*
West Virginia	5	CY 2010	All		2		1						1		1
Wisconsin <sup>d</sup>	0	NA	NA												

Source: EQRO technical reports submitted to CMS for the 2011-2012 reporting cycle as of July 31, 2012.

Notes: Alabama, Alaska, Arkansas, Connecticut, Idaho, Maine, Montana, New Hampshire, Oklahoma, South Dakota, and Wyoming do not have MCOs or PIHPs that enroll children covered by Medicaid or CHIP. Louisiana, Mississippi, and North Dakota have newly applicable managed care requirements and were not required to submit EQRO technical reports for the 2011-2012 reporting cycle. North Carolina submitted an EQRO technical report, but managed care in the state was limited to behavioral health programs that did not enroll children.

Analysis excludes plans that provide only limited services, such as primary care case management. Analysis also excludes plans that do not serve children or pregnant women, such as long-term care plans or Medicare Advantage plans that cover dual eligibles.

Analysis includes PIPs listed in the EQRO technical report for each state that specifically targeted children or pregnant women.

<sup>a</sup> Use of the term “validation” differed across EQRO technical reports. In Exhibit 9, validation indicates that the EQRO technical reported reviewing 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. Some PIPs that were reviewed in the validation process did not meet all of the review criteria.

<sup>b</sup> PIPs for children on “Other” topics include appropriate treatment for children with pharyngitis (South Carolina); assuring better child health and development (Oregon); emergency room diversion (Colorado, West Virginia); EPSDT participation rates (Illinois, Kentucky, Ohio); improving customer service rates: children (Kansas); improving rates of cervical cancer screening (California); reduction of out-of-home placement (California); school attendance rates (California); sexually transmitted infections (Kansas).

<sup>c</sup> EQRO did not review or validate the Assuring Better Child Health and Development (ABCD) Program PIP because a separate EQRO (the Oregon Pediatric Improvement Partnership) held the contract for PIP development and validation.

<sup>d</sup> Managed care plans in Wisconsin operate PIPs, but PIP topics and descriptions were not included in the 2011 EQRO technical report.

\*PIP topic was mandated by state; ADHD = Attention Deficit Hyperactivity Disorder; Behav = Behavioral; BMI = Body Mass Index; NA = Not Applicable, EQRO technical report did not include any PIPs for children or pregnant women; NR = Not Reported

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## I. INTRODUCTION

The Centers for Medicare & Medicaid Services (CMS), working collaboratively with its many partners, including states, health care providers, and families, is entering a new era of quality measurement and improvement in Medicaid and the Children's Health Insurance Program (CHIP). Since the release of the 2011 Secretary's Report on the Quality of Care for Children in Medicaid and CHIP,<sup>11</sup> CMS has made progress in encouraging states and providers to use a core set of health care quality measures to assess and improve care provided to children covered by Medicaid and CHIP.

Together, Medicaid and CHIP served more than 43.5 million children in federal fiscal year (FFY) 2011, representing one-half of beneficiaries currently enrolled in these programs. The number of children enrolled in Medicaid and CHIP grew by more than 1.5 million between FFY 2010 and FFY 2011. This increase in enrollment is evidence of the role Medicaid/CHIP play in ensuring that low-income children get the health care coverage they need, especially during economic downturns. It is anticipated that the number of children covered by Medicaid/CHIP will continue to increase due to population growth, loss of employer sponsored coverage by low-income families, and outreach efforts targeting children who are eligible but not enrolled in the programs.

The majority (63 percent) of children covered by Medicaid/CHIP obtain care from managed care plans (Table 1), though the range of services and the population groups included in these plans vary across states. For example, some states include mental health and dental services in their managed care plans and others provide these services using fee-for-service arrangements. Because of these varying arrangements, a diverse set of quality measurement and improvement efforts are underway across payment and delivery care settings (see Appendix A).

With the enactment of the Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA) and the Affordable Care Act of 2010, CMS has worked to foster a shared sense of accountability for ensuring that the care purchased and provided by Medicaid/CHIP is of the highest quality. These efforts are aligned with HHS' National Quality Strategy's three aims of better care, healthier people and communities, and more affordable care.<sup>12</sup>

The objective of this report, as required by CHIPRA,<sup>13</sup> is to summarize state-specific information on the quality of health care furnished to children under titles XIX (Medicaid) and XXI (CHIP). Section 1139A(c)(1)(B) of the Act specifically requests information gathered from the external quality reviews of managed care organizations (MCOs)<sup>14</sup> and benchmark plans.<sup>15</sup> The Secretary of HHS was required to make this information publicly available annually starting September 30, 2010.

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<sup>11</sup> The 2011 Secretary's Report is available at: [http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/2011\\_StateReporttoCongress.pdf](http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/2011_StateReporttoCongress.pdf)

<sup>12</sup> The National Quality Strategy is available at: <http://www.ahrq.gov/workingforquality/nqs/nqs2012annlrpt.pdf>

<sup>13</sup> Section 1139A(c)(2) of the Social Security Act, as amended by section 401(c) of CHIPRA.

<sup>14</sup> Established under the authority of Section 1932 of the Social Security Act.

<sup>15</sup> Established under the authority of Sections 1937 and 2103 of the Social Security Act.

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## II. STATE AND FEDERAL EFFORTS FOR QUALITY MEASUREMENT, REPORTING, AND IMPROVEMENT

The Affordable Care Act seeks to improve access, affordability, and the overall quality of health care for all Americans. HHS' efforts in achieving these goals are guided by The National Strategy for Quality Improvement in Health Care (National Quality Strategy)<sup>16</sup> that was required by the Affordable Care Act. The strategy identifies principles<sup>17</sup> and a strategic plan for improvements in areas important to children's quality of care. CMS also recognizes that the quality of care a child receives is closely interlinked with having a stable source of coverage<sup>18</sup> and a benefit package that can meet a child's needs. Thus, keeping eligible children enrolled in Medicaid/CHIP and ensuring access to the services covered through Medicaid's Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefits are top priorities that support CMS' quality agenda. CMS efforts related to implementation of the National Quality Strategy for children in Medicaid/CHIP are discussed in this chapter of the report.

### A. Measuring and Reporting on Quality of Care

With the release of the 2011 Secretary's Report, CMS released state-specific information from the first year of voluntary reporting on the initial core set of children's health care quality measures. It was an important milestone in CMS' efforts to uniformly measure and report on the quality of care obtained by children covered by Medicaid/CHIP and yet, it was the first of many steps that need to be taken to support states and providers in continuous quality improvement efforts.

In preparing for the 2012 Secretary's Report, CMS set several internal goals for improving quality measurement. These goals were to:

- Increase the number of states reporting on the core measures;
- 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); and
- Assess state managed care quality improvement efforts reported through external quality review performance improvement projects reporting.

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<sup>16</sup> Report to Congress: National Strategy for Quality Improvement in Health Care, April 2012. Available at: <http://www.ahrq.gov/workingforquality/nqs/nqs2012annlrpt.pdf>

<sup>17</sup> The principles are increasing person-centeredness and family engagement; eliminating disparities in care; making primary care a bigger focus; enhancing coordination of care; and integrating care delivery. For a full listing of the Strategy's underlying principles visit: <http://www.ahrq.gov/workingforquality/nqs/principles.htm#principles>

<sup>18</sup> When a child rotates in and out of the health system, it makes it difficult, if not impossible, for physicians and other caregivers to provide high quality care or to measure the care obtained.

States, with the assistance of CMS and its Quality Measures Technical Assistance and Analytic Support (TA/AS) Program contractor,<sup>19</sup> made progress on all of these goals for year two reporting.

Sustaining quality measurement and improvement depends on ensuring that the pediatric measurement field is robust and reflects the range of health care and psycho-social issues relevant to children's health care quality. Supplementing efforts in the measurement development field is the AHRQ-CMS Pediatric Quality Measures Program (PQMP), which consists of seven Centers of Excellence in Pediatric Quality Measures (see Chapter IV). Working in partnership with the Agency for Healthcare Research and Quality (AHRQ), AHRQ and CMS awarded grants of \$60 million over four years to these centers in March 2011.<sup>20</sup> CMS also is working with the Office of the National Coordinator for Health Information Technology (ONC) to develop pediatric measures that can be collected through an electronic health record and to assure that the initial core set measures are electronically-specified.

#### 1. The CMS Federal-State Data Systems for Quality Reporting

As the states and the Federal government undergo changes in preparation for the January 1, 2014 launch date of the new Affordable Insurance Exchanges and the expansion of Medicaid eligibility, so too do the information technology systems used to monitor these programs. In order to seamlessly and efficiently meet consumers' health care needs, improve quality, and lower costs, these programs will need to work together by using consistent standards and systems. Many systems are being developed to support these changes, and some are being improved, but both types of systems ultimately allow CMS to do a better job of ensuring that all Americans have access to a high quality system of coverage and care.

Previous Secretary's Reports have referenced efforts underway at CMS to develop a uniform information and reporting system that will include accurate data for information management and monitoring quality improvement. Since the last Secretary's Report, CMS has made substantial progress in moving toward an improved information technology system, by streamlining several current Medicaid and CHIP data-collection and reporting efforts through a unified data model. This model will also improve program oversight and facilitate quality of care reporting by states. The two primary components of this model are: (1) the Medicaid and CHIP Program (MACPro) system, which will serve as the single repository for states to submit key programmatic information and the system of record for all state Medicaid and CHIP actions; and (2) the Transformed Medicaid Statistical Information System (TMSIS), which is an expanded yet streamlined MSIS, the claims-based system that serves as the primary data source to manage Medicaid and CHIP programs. It is CMS' expectation that such efforts to streamline or create integrated data systems will strengthen reporting at CMS and help to ease potential burdens and redundancies imposed on states by various CMS reporting requirements. MACPro

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<sup>19</sup> This TA/AS contract is led by Mathematica Policy Research and supported by subcontracts with the National Committee for Quality Assurance (NCQA), the Center for Health Care Strategies (CHCS), and the National Initiative for Children's Healthcare Quality (NICHQ).

<sup>20</sup> For more information on the PQMP, refer to: <http://www.ahrq.gov/chipra/pqmpfact.htm>

and TMSIS will also serve as the primary data sources for the Center for Medicaid and CHIP Services (CMCS) quality reporting and performance measurement capacities for Medicaid and CHIP.

While preparing for the future, CMS also continues to work on maintaining and improving the systems currently used to manage programs and monitor the quality of care provided to children in Medicaid and CHIP. Learning from the experiences of the first two years of reporting the initial core set of children's health care quality measures, for example, CMS continues to make improvements to the CHIP Annual Reporting Template System (CARTS), the vehicle states use to report the children's quality measures to CMS. These changes aim to both facilitate more accurate and complete reporting by states, and also reduce potential burdens associated with this reporting.<sup>21</sup>

CMS has also made improvements to the Form CMS-416, the reporting tool used to assess the effectiveness of Medicaid's Early and Periodic Screening, Diagnostic and Treatment (EPSDT) benefit. In an effort to both improve future reporting on the Form CMS-416 and impart greater confidence in the accuracy of the information submitted, CMS developed a set of criteria used to flag data that raise concerns about the accuracy of information submitted on the Form CMS-416. Using these criteria, CMS recently completed a state-by-state review of data submitted on the Form CMS-416 report for FFY 2010, and have continued these reviews to also analyze data submitted on the FFY 2011 Form CMS-416 report. States that were identified as having data concerns received a communication from CMS which explained, in detail, the specific issues of concern noted in the Form CMS-416 data submission. They were given an opportunity to correct and resubmit this information. Feedback from states regarding these reviews will lead to improvements in the Form CMS-416 instructions prior to the next reporting cycle. The audit will be made a permanent part of the Form CMS-416 data-submission process.

CMS expects that efforts to streamline, improve, or develop new information systems will help ensure that information is more accurate, complete, and uniform, having the potential to strengthen quality reporting for children, reduce health care costs associated with inefficiencies in the health care delivery system, and ultimately facilitate better health outcomes for children.

## 2. Tracking Results

CMS undertook several activities to assess the status of quality measurement, reporting, and improvement efforts by states for the 2012 Secretary's Report, including:

- Reviewing findings on the initial set of core measures reported to CMS by states for FFY 2011;
- Analyzing data reported to CMS by states on the annual EPSDT report;

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<sup>21</sup> See Chapter III for a more detailed discussion of the changes that occurred in CARTS.

- Abstracting and summarizing information on the quality measures and performance improvement projects reported in the External Quality Review Organization (EQRO) technical reports from states using MCOs in Medicaid/CHIP; and
- Analyzing information from the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) to assess the experiences of children in Medicaid/CHIP.

## B. Improving Quality of Care

Since the 2011 Report, HHS and states have been engaged in a number of efforts to improve the quality of health care provided to children enrolled in Medicaid and CHIP. Appendix B highlights examples of public-private partnerships to improve the quality of care in Medicaid/CHIP.

Two major efforts underway – one on perinatal health and the other on oral health – reflect a major shift in the approach used previously by Medicaid/CHIP. These initiatives are national in scope rather than state-based, and use CMS quality of care performance measures to guide quality improvement efforts and evaluate outcomes.

- **Improving Perinatal Health.** Medicaid currently finances between 40 and 50 percent of all births in the United States. Despite improvements in access to coverage and care, low-income women enrolled in Medicaid have a rate of preterm births that is higher than the rate for all other women (11.9 percent vs. 8.7 percent).<sup>22</sup> CMS launched two initiatives in 2012 to improve perinatal health outcomes. One initiative, Strong Start for Mothers and Newborns, which is led by the CMS Innovation Center (CMMI) working in partnership with the Center for Medicaid and CHIP Services (CMCS), includes two primary strategies: (1) testing ways to encourage best practices for reducing the number of early elective deliveries that lack medical indication (across all payer types); and (2) testing three models of enhanced prenatal care<sup>23</sup> for reducing preterm births among women covered by Medicaid/CHIP. The other national activity, CMCS's Expert Panel for Improving Maternal and Infant Health Outcomes<sup>24</sup> (the Expert Panel) is identifying specific opportunities and strategies to provide better care, while reducing the cost of care for mothers and infants covered by Medicaid/CHIP. By fall of 2013, the Expert Panel is expected to recommend a set of opportunities for improvement and action steps for Medicaid/CHIP. To support both of these maternity-focused efforts, CMS identified a Medicaid maternity core set

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<sup>22</sup> CDC, PRAMS 2008. Infants born preterm (i.e., at less than 37 weeks of gestation) are at higher risk of developmental problems and health problems than infants born at full term. There are also substantial medical and societal costs associated with preterm births.

<sup>23</sup> The three models of enhanced prenatal care are centering/group care; birthing centers; or medical homes. For additional information see: <http://innovations.cms.gov/initiatives/Strong-Start/>

<sup>24</sup> The Expert Panel, co-chaired by the Ohio Medicaid Medical Director and the immediate past president of the American Congress of Obstetricians and Gynecologists (ACOG), consists of Medicaid medical directors, clinical experts, representatives of health plans, and advocacy stakeholder groups.

of quality measures for voluntary reporting by states. This core set, which consists of 5 of the children's initial core set of measures and 3 of the adult core set of measures,<sup>25</sup> will be used by CMS to measure progress towards improvement and evaluate efforts.

- **Improving Oral Health.** The Oral Health Initiative was developed to address the significant need for low-income children's improved access to oral health care, given evidence that children in America's poorest families were twice as likely to have untreated dental disease as children in non-poor families.<sup>26</sup> On average, 40 percent of publicly-insured children ages 2-17 received any dental service in 2007, as compared with 60 percent of children with private insurance.<sup>27</sup> Working with Federal and state partners, the dental and medical provider communities, children's advocates and other stakeholders, CMS seeks to improve children's access to dental care, with an emphasis on early prevention. The national CMS Oral Health Strategy,<sup>28</sup> has set two improvement goals through the Initiative: (1) to increase by ten percentage points the proportion of Medicaid and CHIP children ages 1 to 20 who receive a preventive dental service; and (2) to increase by ten percentage points the proportion of Medicaid and CHIP children ages 6 to 9 who receive a sealant on a permanent molar. For the first goal, baselines will be set using FFY 2011 data<sup>29</sup> and the goal year is FFY 2015. The second goal will be phased in over time. In addition to national baselines and goals, each state will have its own baselines and goals. Two of the twenty-four measures in the initial core set of children's quality measures focus on oral health: preventive dental services and dental treatment services. These measures parallel the reporting in the annual EPSDT report (Form CMS-416) and, along with data collected through other sources, will be used to monitor the effectiveness of this initiative. In calendar year 2012, CMCS began working with states to develop oral health action plans and will be providing ongoing technical assistance to states to assist them in implementing access-improvement strategies.

### C. Private Sector Efforts Supporting State Medicaid Quality Measurement and Improvement

Accreditation by a third party that reviews a health plan's adherence to quality standards is increasingly being encouraged by states and utilized by Medicaid agencies. Three private sector organizations accredit Medicaid MCOs (Appendix C): the National Committee for Quality Assurance (NCQA), URAC, and the Accreditation Association for Ambulatory Health Care (AAAHC). States may elect to require or recognize one or all three of the accrediting bodies for

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<sup>25</sup> <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/AdultCoreMeasures.pdf>

<sup>26</sup> <http://www.nidcr.nih.gov/datastatistics/surgeongeneral/sgr/chap4.htm>

<sup>27</sup> <http://www.ahrq.gov/qual/nhqrdr09/nhqrdrchild09.htm>

<sup>28</sup> <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/CMS-Oral-Health-Strategy.pdf>

<sup>29</sup> Baselines for separate CHIP programs will be set using FFY 2013 CARTS data.

participating MCOs. States may choose to use accreditation results as proof of compliance with some of the quality standards required under 42 CFR Part 438, subpart D. In those cases, 42 CFR §438.360(b) (4) requires the state to set forth in its quality strategy the standards for which the EQR will use information from the accrediting agency to determine compliance. The quality strategy must also include an explanation of the rationale for why the standards are duplicative.

NCQA's Medicaid Managed Care Toolkit,<sup>30</sup> developed in collaboration with CMS in 2006, includes information to support public reporting of quality measures and provides a crosswalk of NCQA accreditation standards with the Federal quality standards under 42 CFR Part 438, subpart D. As of March 2012, 29 Medicaid programs recognize or require NCQA accreditation (Appendix C). Of the 29 programs, eleven states (Indiana, Kansas, Kentucky, Massachusetts, Missouri, New Mexico, Ohio, Rhode Island, South Carolina, Tennessee, and Virginia) and the District of Columbia require NCQA accreditation by managed care plans participating in Medicaid.

Other nationally-recognized organizations dedicated to improving quality of care in the United States have provided significant support to states' efforts to evaluate and implement quality improvement initiatives in Medicaid and CHIP programs (Appendix D). These organizations have established peer-to-peer and regional learning collaboratives on targeted clinical quality improvement initiatives, directed technical assistance to states on quality improvement methodologies, and created opportunities to share lessons learned and promising practices in utilizing evidenced-based clinical improvement projects.

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<sup>30</sup> The Medicaid managed care toolkit is available online at: <http://www.ncqa.org/tabid/134/Default.aspx>

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

#### A. Quality Measurement Using the Initial Core Set of Children's Health Care Quality Measures

As noted in Chapter II, states gained substantial momentum during the second year of voluntary reporting of the initial core set of children's health care quality measures. Table 2 provides a list of the core quality measures. Several indicators highlight states' increased reporting of the initial core set of measures for FFY 2011 compared to FFY 2010:

- The number of states reporting at least one measure for Medicaid and/or CHIP children increased from 42 states and the District of Columbia (D.C.) for FFY 2010 to 48 states and D.C. for FFY 2011.
- The median number of measures reported by states increased from 7 measures in FFY 2010 to 12 measures for FFY 2011.
- The number of states reporting at least one measure for both their Medicaid and CHIP populations increased from 23 states and D.C. for FFY 2010 to 33 states and D.C. for FFY 2011.

This marked progress in the level of state reporting was accompanied by evidence of room for improvement in state performance related to the quality of care for children covered by Medicaid/CHIP:

- Between FFY 2010 and 2011, the state medians for the percentage of children with six or more well-child visits during the first 15 months increased by 5 percentage points (from 56 to 61 percent) and the percentage with one or more well-child visits at 3-6 years of age increased by 4 percentage points (from 65 to 69 percent) for the states reporting in both years. Nevertheless, the rates of well-child visits still fell well below clinical recommendations,<sup>31</sup> reflecting the continued need for significant improvement.
- On average, the performance rates for the adolescent preventive care measures were lower than the performance rates for younger children. The median rate of well-child visits among adolescents ages 12 to 21 was 46 percent. Moreover, adolescents at age 13 were much less likely than children at age 2 to be up to date with recommended immunizations; the median adolescent immunization rate was nearly 20 percentage points lower than the median rate for younger children. Finally, the median rate of Chlamydia screening was 47 percent. Taken together, these data suggest that only about half of adolescents, on average, are receiving recommended well-child care, immunizations, and Chlamydia screening. The lower rates among the adolescent

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<sup>31</sup> American Academy of Pediatrics. Recommendations for Preventive Pediatric Health Care. Practice Management Online at: <http://practice.aap.org>. 2010. The AAP and Bright Futures recommend well-child visits for newborns, 3-5 days, 1 month, 2 months, 4 months, 6 months, 9 months, 12 months, and 15 months.

health quality measures reflect the challenges of reaching and engaging adolescents in preventive and primary health care, and barriers to serving this population within pediatric practices.

Much work remains to be done to standardize reporting of the children's health care quality measures across states and to understand underlying differences in state performance. Moreover, although recent evidence on state performance is encouraging, children covered by Medicaid and CHIP continue to receive less care than recommended by clinical guidelines (as do children covered by commercial health plans), signifying the need for effective quality improvement initiatives.

This chapter of the 2012 Secretary's Report summarizes state reporting of the initial core set of children's health care quality measures for FFY 2011 and highlights progress between FFY 2010 and 2011. In addition, state Medicaid/CHIP program performance is benchmarked against commercial health plan performance to provide a context for state reporting.

## 1. Overview of State Reporting of the Initial Core Set Quality Measures in FFY 2011

The CHIP Annual Reporting Template System (CARTS) serves as the standardized reporting vehicle for the initial core set of children's health care quality measures. To facilitate completeness and comparability of state reporting for FFY 2011, CARTS was enhanced by CMS to allow states to identify deviations from the measure specifications and by aligning the performance measure fields more closely with the technical specifications. In addition, technical assistance was provided to states through a TA mailbox, webinar, and updated resource manual.<sup>32,33</sup>

States demonstrated strong commitment to reporting the initial core set measures for FFY 2011: 48 states and the District of Columbia submitted at least one measure to CARTS for FFY 2011. As shown in Table 3 and Figure 1, the most frequently-reported measures for FFY 2011 were the three child health measures that states have been reporting through CARTS since FFY 2003. These measures assess children's use of primary care and preventive services and were each reported by 44 to 48 states for FFY 2011. The higher rate of reporting for these three measures reflects states' experience reporting on these measures for the past 9 years. See Appendix Table E.1, for state-by-state detail on the frequency of reporting of the 24 children's health care quality measures for FFY 2011.

Fifteen measures were reported by 20 or more states for FFY 2011; of these, 13 are based on Healthcare Effectiveness Data and Information Set (HEDIS®) specifications, and two are based

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<sup>32</sup> Technical assistance resources for the initial core set of children's health care quality measures 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>

<sup>33</sup> Centers for Medicare & Medicaid Services, Center for Medicaid and CHIP Services. "Initial Core Set of Children's Health Care Quality Measures: Technical Specifications and Resource Manual for Federal Fiscal Year 2011 Reporting." Baltimore, MD: CMS, December 2011. Available at: <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/InitialCoreSetResouceManual.pdf>

on the EPSDT (Form CMS-416) report. These specifications are familiar to state Medicaid/CHIP programs, and as a result, many states were able to report these measures voluntarily. The three measures reported by five or fewer states for FFY 2011 involve coding schemes (such as CPT-category II codes) or data sources (such as vital records or hospital records) that few states were able to incorporate into their FFY 2011 reports.<sup>34</sup>

The number of child health care quality measures reported by states for FFY 2011 ranged from zero in two states (Delaware and Wisconsin) to 24 measures in one state (Oregon) (Figure 2). The median number of quality measures reported for FFY 2011 was 12. (The median indicates that half the states reported 12 or more measures and half the states reported fewer than 12 measures). Altogether, 27 states and D.C. reported at least half of the children's core quality measures for FFY 2011, while 6 states reported 1 to 5 measures.<sup>35</sup> As shown in Table 3, the most common reason for not reporting a measure was that data were not available, although many states did not specify a reason or reported an "other" reason.

To provide more transparency in how the measures were calculated across states, CARTS was enhanced for FFY 2011 to allow states to specify whether they deviated from the specifications. Examples of deviations include using an earlier year of data due to data lags; excluding children not served by managed care plans due to lack of data in the fee-for-service delivery system; or reporting age groups that differ from the specifications (Table 4).

## 2. Changes in State Reporting of the Initial Core Set Quality Measures from FFY 2010 to FFY 2011

Between FFY 2010 and 2011, increases were observed in both the number of measures reported by each state and the number of states reporting each measure. Across the initial core set of measures, each of the 24 measures was reported by more states for FFY 2011 than for FFY 2010 (Table 5 and Figure 3). This increase may be due in part to CMS' efforts to provide guidance to states through the TA mailbox, revisions to the technical specifications, enhancements in CARTS, webinar trainings, and a TA brief providing guidance on reporting of dental measures released to states in early 2012.<sup>36</sup> Also of note, the pediatric Central-Line Associated Bloodstream Infections (CLABSI) measure was reported by one State (Oregon) for FFY 2011, whereas no states reported this measure for FFY 2010. CMS convened a work group in 2012 to

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<sup>34</sup> Two of these measures, Otitis Media with Effusion (measure 16) and Pediatric Central-Line Associated Bloodstream Infections (CLABSI) (measure 19), were "on hold" for FFY 2011 pending updated specifications from the measure stewards. In preparation for submission of the FFY 2012 reports, which are due by December 31, 2012, CMS is focusing special attention on refining the specifications and providing technical assistance to states for the measures that few states were able to report.

<sup>35</sup> The 6 states reporting five or fewer measures reported primarily the HEDIS well-care or access-to-primary-care measures or the EPSDT oral health quality measures. Reasons cited for not reporting additional measures included lack of sufficient staff time or estimates had been determined using small sample sizes that limited accuracy.

<sup>36</sup> CMS, Center for Medicaid and CHIP Services. "Improving Access to Oral Health Services in Medicaid and CHIP: How States Can Report the Dental Measures in the Initial Core Set of Children's Health Care Quality Measures." Baltimore, MD: CMS, February 2012. Available at: <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/TA1-Dental.pdf>.

assess the feasibility and challenges of state reporting of the pediatric CLABSI measure and plans to provide additional guidance on state-level reporting of this measure for FFY 2012.

The median number of measures reported by states increased from 7 for FFY 2010 to 12 for FFY 2011.<sup>37</sup> Compared to FFY 2010, 35 states reported more measures for FFY 2011, 10 reported the same number of measures, and 6 reported fewer measures (Table 6). Among the 35 states reporting more measures for FFY 2011 than for FFY 2010, the increase ranged from 1 to 24 measures, with 19 states reporting at least 5 more measures, and 8 states reporting at least 10 more measures. Of the eight states that did not report any measures for FFY 2010, all but one (Delaware) reported for FFY 2011, including Arkansas (13 measures for FFY 2011), Hawaii (12), Idaho (6), Kansas (5), Massachusetts (11), Oregon (24), and Texas (12). (See Section E of this Chapter for a profile of Arkansas' quality measurement system.)

Another indicator of the completeness of reporting is the number of states reporting measures for both their Medicaid and CHIP populations, rather than for CHIP only or Medicaid only. As shown in Table 6, 33 states and D.C. reported data for both Medicaid and CHIP populations for at least one measure for FFY 2011, an increase from 23 states and D.C. reporting Medicaid and CHIP data for at least one measure for FFY 2010. Moreover, the median number of measures reported by states for both Medicaid and CHIP increased from 0 to 6. This level of progress reflects CMS' efforts to encourage state reporting of the initial core set measures for all or most publicly insured children in each state.

### 3. Analysis of Eight Frequently Reported Initial Core Set Quality Measures in FFY 2011

Since the first annual Secretary's Report in FFY 2010, CMS has been working with states to improve the collection and reporting of data on the quality of health care for children covered by Medicaid and CHIP. Specifically, CMS has focused on improving states' adherence to the measure specifications and providing more transparency about variations in state reporting. This enables a more in-depth look at state performance related to eight frequently reported measures (defined as measures reported by 25 or more states).<sup>38</sup> The eight measures are:

- Children's and adolescents' access to primary care practitioners (PCPs) (measure 14)
- Well-child visits in the first 15 months of life (measure 10)
- Well-child visits in the 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> years of life (measure 11)
- Adolescent well-child visits (measure 12)
- Childhood immunization status (measure 5)

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<sup>37</sup> The initial core set includes 15 HEDIS and 9 non-HEDIS measures. The median number of HEDIS measures reported by states increased from 6 in FFY 2010 to 10 in FFY 2011, while the median number of non-HEDIS measures reported by states increased from 1 to 2.

<sup>38</sup> The 2011 Secretary's Report highlighted five measures. The additional measures highlighted in the 2012 Secretary's Report are: immunizations for adolescents, appropriate testing for children with pharyngitis, and Chlamydia screening.

- Immunizations for adolescents (measure 6)
- Chlamydia screening (measure 9)
- Appropriate testing for children with pharyngitis (measure 15)

These measures reflect a range of services— access to primary care, use of preventive care use, and appropriateness of acute care—and include all age groups—infants, preschool, school-age, and adolescents. (Measures related to dental services were also frequently reported in FFY 2011 and are discussed elsewhere in this report.) Appendix Tables E.2 through E.9 provide state-by-state detail on reporting of the eight selected measures for FFY 2011. These measures are useful in assessing the adequacy of children’s and adolescents’ access to and use of care. They provide insights into the current status of health care quality provided to publicly-insured children and areas for improvement.

As shown in Table 7, performance was considerably higher on the primary care access measure than on the other frequently-reported measures for FFY 2011. This is consistent with findings reported in the 2011 Secretary’s Report. The vast majority of children had at least one primary care visit during the reporting period, although the median rate ranged from a high of 97 percent among children ages 12-24 months to 88-90 percent for the other age groups. The rates across states tended to cluster around the median, with a range of 2.6 to 6.5 percentage points between the 25th and 75th percentiles for all age groups.

In contrast to the primary care access measure, fewer children received the recommended number of well-child visits for FFY 2011. The American Academy of Pediatrics (AAP) and Bright Futures recommend 9 well-child visits in the first 15 months of life and annual well-child visits for children ages 3 and older.<sup>39</sup> As shown in Table 7, the rate of well-child visits was substantially lower than these recommendations. Across states, a median of 61 percent of infants had 6 or more well-child visits in the first 15 months of life. The rate was slightly higher for children ages 3-6, with a median of 67 percent of children having a well-child visit during the reporting period. However, adolescents (ages 12-21 years) had a considerably lower median well-child visit rate (46 percent) than the other age groups.

The effectiveness of well-child care can be reflected by four measures related to childhood and adolescent immunization rates, Chlamydia screening rate, and appropriate pharyngitis testing rate. The median childhood immunization rate for children turning age 2 was 71 percent, with a

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<sup>39</sup> American Academy of Pediatrics. Recommendations for Preventive Pediatric Health Care. Practice Management Online at: <http://practice.aap.org>. 2010. The AAP and Bright Futures recommend well-child visits for newborns, 3-5 days, 1 month, 2 months, 4 months, 6 months, 9 months, 12 months, and 15 months.

15 percentage point spread between the 25<sup>th</sup> and 75<sup>th</sup> percentiles.<sup>40,41</sup> The median adolescent immunization rate among 13-year-olds was 52 percent, with an even wider spread of 27 percentage points between the 25<sup>th</sup> and 75<sup>th</sup> percentiles.<sup>42</sup> The Chlamydia screening rate among sexually active girls between the ages of 16 and 20 was 47 percent.

The effectiveness of primary care is also reflected by the appropriateness of testing for pharyngitis (specifically, the administration of a strep test among those dispensed an antibiotic for pharyngitis). The median rate of children and adolescents receiving appropriate testing for pharyngitis was 63 percent, although this measure varied widely across states, with a 23 percentage point difference between the 25<sup>th</sup> and 75<sup>th</sup> percentiles. Four states reported a rate under 40 percent, while two states reported a rate over 80 percent.

#### 4. Changes in Primary Care Access and Well-Child Visit Rates Between FFY 2010 and 2011

One of the goals of state reporting of the initial core set of children's health care quality measures is to drive improvements in quality both within individual states and nationally. With only two years of initial core set reporting experience, data are not yet available to assess trends across the full range of measures. Nevertheless, state median performance related to access to primary care and well-child visits can be tracked over two points in time, subject to the caveat that states are continuing to improve the quality of their data and their adherence to the technical specifications.

As shown in Table 8 and Figure 4, median primary care access rates changed minimally from FFY 2010 to FFY 2011 among the states that reported this measure using HEDIS specifications during both years. The rate of primary care access was high in both years across all age groups. The rates of well-child visits were substantially lower; evidence suggests, however, that the median rates may be increasing slightly in the younger age groups. For example, the median percentage with 6 or more visits at 15 months of age increased from 56 percent to 61 percent in the 37 states reporting in both years. Similarly, the percentage of children ages 3 to 6 with a well-child visit increased from 65 percent to 69 percent across 38 states. The rate of adolescent well-child visits held steady at 47 percent, on average, across 29 states.

Table 9 provides more in-depth analysis of changes between FFY 2010 and 2011 in well-child visit rates across states for children ages 3-6. Although the state median increased from 65 to 69 percent over the two-year period, calculations varied within and across States. As reported in the 2011 Secretary's Report, the rate on this measure ranged from a low of 26 percent in North

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<sup>40</sup> The childhood immunization rate is based on "Combo 3," which was the most frequently reported immunization measure across states. Combo 3 includes 4 diphtheria, tetanus, and pertussis (DTaP); 3 polio (IPV); 1 measles, mumps, rubella (MMR); 2 influenza (HiB); 2 hepatitis B (HepB); 1 chicken pox vaccine (VZV), and 4 pneumococcal conjugate (PCV).

<sup>41</sup> One factor that may influence the wide range in rates across states is the variation in the use of hybrid versus administrative data only. For example, among states that used administrative data only, the median rate was 53 percent, while among states that used hybrid methods, the median was 74 percent.

<sup>42</sup> The adolescent immunization rate is based on "Combo 1," which includes Tetanus, Diphtheria, Pertussis (Tdap) and Meningococcal.

Carolina's CHIP program to a high of 82 percent in Maryland's Medicaid/CHIP program for FFY 2010. In FFY 2011, North Carolina reported a rate of 71 percent, although this rate was for the Medicaid program, whereas the FFY 2010 rate was for 6-year-olds in the CHIP program. Maryland's rate fluctuated slightly but remained above 80 percent. For FFY 2011, the rate ranged from 29 percent in North Dakota's CHIP program to 85 percent in Massachusetts' Medicaid/CHIP program. Variations in the population included in the measure (Medicaid only, CHIP only, or Medicaid and CHIP), type of data used to calculate the measure (administrative only or hybrid), and other factors (such as year of data or definition of denominator) may affect the comparability of data across states and over time.

## 5. Quality of Care in Medicaid/CHIP Programs and Commercial Health Plans

One of the measures of success of CMS efforts is to track the quality of care for children enrolled in Medicaid/CHIP programs with that of commercially insured children. Table 10 shows the state medians for the eight measures reported in CARTS for FFY 2011 by at least 25 states. These medians are compared to the health plan medians for commercially-insured populations, as provided by the National Committee for Quality Assurance (NCQA). Although the populations covered by Medicaid/CHIP and private insurance may differ on socioeconomic and other demographic characteristics, this comparison provides context for assessing performance reported by state Medicaid/CHIP programs.

In general, the percentages of children with a primary care visit during the year are quite high and comparable between the two groups. Well-child visit rates are lower among publicly-insured children during the first 15 months and ages 3 to 6, but higher among adolescents.<sup>43</sup> Immunization rates at age 2 are lower among publicly-insured children, but similar at age 13. Appropriate testing for pharyngitis was substantially higher among children in commercial health plans, while Chlamydia screening among sexually active teens was substantially higher among those in public programs.

These results suggest that adolescents in public programs may fare at least as well or better than those in commercial health plans as evidenced by similar rates of primary care access and immunization rates and slightly higher rates of adolescent well-care visits and Chlamydia screening rates. Improvement in adolescent health care quality remains a high priority for CMS in the coming year. Similarly, improvements in receipt of recommended well-child care for younger children in Medicaid/CHIP continues to be a priority.

## 6. Sources of Variation in Children's Health Care Quality Measures

As noted earlier, ongoing technical assistance is focusing on increasing the standardization of state reporting of the initial core set measures, as well as encouraging transparency in state reporting of methods used to calculate the measures. One source of variation in state reporting is the population included in the measure: Medicaid (Title XIX) only, CHIP (Title XXI) only, or

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<sup>43</sup> The American Academy of Pediatrics (AAP) and Bright Futures recommend well-child visits for newborns, 3-5 days, 1 month, 2 months, 4 months, 6 months, 9 months, 12 months, and 15 months. AAP Recommendations for Preventive Pediatric Health Care. Practice Management Online at: <http://practice.aap.org>. 2010.

both Medicaid and CHIP. As shown in Figure 5, the majority of states included both Medicaid and CHIP populations in their rates for the eight frequently reported measures for FFY 2011, although not surprisingly, the pattern varied by the type of CHIP program. Specifically, states with Medicaid-expansion or combination CHIP programs more frequently included Medicaid (Title XIX) children than states with separate CHIP programs only. This pattern is illustrated by the 47 states that reported the percentage of children ages 3 to 6 who received one or more well-child visits (Appendix Table E.4).<sup>44</sup> CMS' ultimate goal is for states to report quality measures for all publicly insured children, regardless of whether they are covered under CHIP (Title XXI) or Medicaid (Title XIX).

States that include both Medicaid and CHIP populations provide a more complete picture of the quality of care provided to publicly-insured children in the state. Moreover, including Medicaid children increases the denominator for measures related to less frequent events (such as follow-up after mental hospitalization or follow-up care for children prescribed ADHD medication) and related to populations that are more likely to be covered under Medicaid than CHIP (such as infants).

Another source of variation is the method used to develop the measures. As shown in Figure 6, most states used administrative (claims/encounter) data to measure performance, except for the immunization measures where more states relied on a hybrid method using both administrative and medical record data to report performance. Although hybrid methods are more resource-intensive than measures using administrative data alone, rates produced using hybrid methods tend to be substantially higher than administrative-data-only rates for certain measures. One study, for example, found that childhood immunization rates were 43 percentage points higher, on average, when hybrid methods were used.<sup>45</sup> Of the 15 measures examined in the study, only three—well-child visits in the first 15 months, well-child visits for ages 15 to 34 months, and adolescent well care—were not significantly different across the two methods. Thus, the method states used to calculate the measure may be an important source of variation among states, especially for immunization rates.

As states are preparing for the third year of voluntary reporting of the initial core set of children's health care quality measures, ongoing technical assistance will focus on addressing methodological challenges and reducing barriers encountered by states in calculating, reporting, and using the initial core set measures. Increased emphasis will be placed on supporting states to use the measures to drive improvements in the quality of care for children enrolled in Medicaid and CHIP.

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<sup>44</sup> Six of the 7 states with Medicaid-expansion CHIP programs included both Medicaid and CHIP children, while 8 of the 18 reporting states with separate CHIP programs included both Medicaid and CHIP children. Among states with combination programs (that is, states with both Medicaid expansion and separate CHIP components), 17 of 22 included both Medicaid and CHIP children in their rates.

<sup>45</sup> Pawlson, G., Sarah Hudson Scholle, and Anne Powers. "Comparison of Administrative-Only Versus Administrative Plus Chart Review Data for Reporting HEDIS Hybrid Measures." *American Journal of Managed Care*, vol. 13, no. 10, October 2007, pp. 91-96. Available online at: [http://www.ncqa.org/Portals/0/PublicComment/HEDIS2010Update/AJMC\\_Oct07.pdf](http://www.ncqa.org/Portals/0/PublicComment/HEDIS2010Update/AJMC_Oct07.pdf).

## B. External Quality Reviews of Managed Care Organizations

In FFY 2011 approximately 63 percent of publicly insured children obtained their care through full-risk managed care plans (Table 1). The rate of managed care enrollment varies widely across state Medicaid and CHIP programs, ranging from 5 percent of children in Alabama to 97 percent of children in Maryland. States contract with two types of managed care plans that are required by federal regulations to conduct an annual external review of the quality of care: (1) comprehensive managed care organizations (MCOs), which typically provide all of the acute care health services covered by Medicaid or CHIP; and (2) prepaid inpatient health plans (PIHPs). Managed care plans typically carve out services such as behavioral and mental health services or dental services.<sup>46</sup>

### 1. External Quality Reviews

The Balanced Budget Act of 1997 created new system-wide quality standards for states opting to use managed care for the delivery of health care in Medicaid or CHIP. Since January 2003, federal regulations require that states arrange for an external review of the quality of care provided by MCOs and PIHPs.<sup>47</sup> These annual external quality reviews assess the quality outcomes, timeliness of, and access to, the items and services that each managed care organization is responsible for providing. Section 1139A(c) of the Social Security Act, as amended by section 401 of CHIPRA, requires the Secretary of HHS to include in this annual report the information that states collect through external quality reviews of MCOs and PIHPs participating in Medicaid or CHIP.

Managed care regulations at 42 CFR 438.300 et seq. lay out the parameters of conducting an external quality review, including state responsibilities, qualifications of an external quality review organization (EQRO), federal financial participation, and state deliverable requirements. Per the regulations, each external quality review must include three mandatory activities:

- Validation of performance measures;<sup>48</sup>
- Validation of PIPs; and

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<sup>46</sup> See 42 CFR 438.2 for full definition of a PIHP.

<sup>47</sup> Section 1932(c) of the Social Security Act and 42 CFR 438.66. This requirement applied to Medicaid programs and Medicaid-expansion CHIP programs. For separate CHIP programs, this requirement became law with the enactment of CHIPRA. 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.

<sup>48</sup> In accordance with 42 CFR 438.240, states that use Medicaid managed care systems must require each MCO and PIHP to annually measure and report to the state its performance using standard measures specified by the state or MCO. States are then required to validate any performance measures reported by the MCO or PIHP during the preceding 12 months. 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.

- A review, at least every 3 years, to determine the managed care plan's compliance with state standards for access to care, structure and operations, and quality measurement and improvement.

To assist states in meeting the regulatory requirements for external quality reviews, CMS released revised protocols that provide guidance on how to complete the mandatory and optional external quality review activities.<sup>49</sup> Upon completion of the external quality review, the EQRO must produce for the state a detailed technical report that assesses the quality, timeliness, and access to care provided by each managed care plan as well as provides recommendations for improving the quality of health care provided by managed care plans. Per 42 CFR 438.364(b), the EQRO technical report is a public document, available upon request to all interested parties.

## 2. External Quality Review Reports Submitted to CMS for the 2011-2012 Reporting Cycle

Thirty-five states, the District of Columbia, and the territory of Puerto Rico submitted EQRO technical reports for 2011-2012 reporting cycle, for a total of 37 EQRO technical reports (Table 11).<sup>50</sup> These states contracted with 18 EQROs to conduct their external quality reviews and five EQROs conducted quality reviews for multiple states in 2011-2012 (Appendix F). The 2011-2012 EQRO technical reports revealed that states engage in a variety of different quality improvement efforts, based on each state's priorities and other factors such as clinical areas that need improvement. As will be discussed in this analysis, the 37 EQRO technical reports varied substantially in the organization, level of detail, and focus of the discussion on quality, access, and timeliness of care.

## 3. Reporting of Performance Measures in 2011-2012 EQRO Technical Reports

In the 37 EQRO technical reports submitted for 2011-2012 reporting cycle, every state except South Carolina listed the performance measures reported by MCOs and PIHPs (Table 12). Of the EQRO technical reports that listed performance measures, Iowa was the only state without performance measures that specifically evaluated children or pregnant women.<sup>51</sup> Two states

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<sup>49</sup> Protocols also cover evaluation of the five optional EQR activities: encounter data validation, quality of care surveys, calculation of performance measures, conduct of PIPs, and focused quality of care studies. <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Quality-of-Care-External-Quality-Review.html>

<sup>50</sup> Of the remaining 15 states, 11 states (Alabama, Alaska, Arkansas, Connecticut, Idaho, Maine, Montana, New Hampshire, Oklahoma, South Dakota, and Wyoming) did not use MCOs or PIHPs to deliver Medicaid or CHIP services in 2011, and thus, have no EQR reporting. Two states (Louisiana and Mississippi) only recently implemented Medicaid managed care and will report EQR data to CMS in FFY 2012 at the earliest. One state (North Dakota) does not use a managed care delivery system for the Medicaid program, but uses managed care for the CHIP population, and will report EQR data to CMS in FFY 2012 at the earliest. Finally, North Carolina submitted an EQR report for the 2011-2012 reporting cycle, but managed care in the state was limited to behavioral health programs that did not enroll children.

<sup>51</sup> Managed care coverage for children in Iowa is limited to a PIHP that provides mental health and substance abuse services.

(Delaware and Indiana) that did not include any performance measures specific to children in 2010, began reporting performance measures for children in 2011.

The most frequently-reported performance measures focus on childhood immunization rates, well-child visits, adolescent well-care visits, and prenatal and perinatal care (Figure 7). Most of the performance measures reported in the EQRO technical reports are HEDIS measures, and many of the commonly-reported performance measures are similar to those included in the initial core set of children's health care quality measure (Appendix Table G.1).

All 37 of the 2011-2012 EQRO technical reports included the results of performance measure validation. EQRO technical reports for five states (Illinois, Indiana, New Mexico, Tennessee, and Virginia), however, indicated that the EQRO validated only some of the performance measures in 2011-2012 (Table 13).

The amount of detail provided about performance on these measures varied across EQRO technical reports. This is in part because federal regulations only require EQROs to validate the performance measures. Thirty-one of the 37 EQRO technical reports included the performance rates that were achieved by each MCO or PIHP for all performance measures evaluating children or pregnant women (Table 13).<sup>52</sup> Some states simply listed each measure and the performance rate achieved by the MCO or PIHP, other states included context for the performance rates achieved by the MCO or PIHP as well as suggestions for improving future performance. Ten states reported performance for subpopulations within the state. For example, Colorado, Kentucky, Minnesota, and Ohio separately reported performance for different groups of Medicaid enrollees, including children and families. California, New York, Pennsylvania, Puerto Rico, and Texas included performance rates for different geographic regions within the state. In addition, 29 states compared performance in the 2011-2012 EQRO technical report to performance in previous years, 27 states compared performance by MCOs and PIHPs to national HEDIS Medicaid rates, and 22 states included statewide managed care performance rates. This contextual information helps assess performance rates for publicly insured children within and across states.

Twenty-nine states submitted EQRO technical reports that included performance measures in both 2010 and 2011-2012.<sup>53</sup> Among these states, childhood immunization measures were the most commonly reported performance measures in both years. As Figure 8 shows, more states reported performance measures for asthma, dental care, sexually transmitted infections, weight assessment/BMI, adolescent well-care, and Attention Deficit Hyperactivity Disorder (ADHD) in the 2011-2012 reports than in the 2010 reports. Conversely, fewer states reported performance measures for well-child care and appropriate treatment of upper respiratory infections (URI) in 2011-2012, but these declines were caused by fewer reported measures in EQRO technical

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<sup>52</sup> EQRO technical reports for two states (New Mexico and Washington) included performance rates for some measures, while three states (Indiana, South Carolina, Wisconsin) did not include performance rates for any of the measures.

<sup>53</sup> 30 states submitted EQRO technical reports for 2010 and 2011-2012. The 2010 report for South Carolina, however, did not include performance measures and the state is excluded from this analysis.

reports in just two states (Massachusetts and Tennessee). Other states that reported these measures in 2010 continued to report them in 2011-2012.

#### 4. Performance Improvement Projects (PIPs) in 2011-2012 EQRO Technical Reports

Thirty of the 37 EQRO technical reports for the 2011-2012 reporting cycle included PIPs specific to children or pregnant women. Among the states with these PIPs, the number of PIPs for children or pregnant women varied (Table 14). For example, Puerto Rico had one applicable PIP, while Florida had 30 PIPs focused on improving well-child care visit rates and 14 PIPs focused on improving the quality of mental health care for institutionalized children. PIP topics, target populations, and interventions and activities were generally specific to each MCO or PIHP in a state, but 14 states mandated PIP topics or required MCOs or PIHPs to engage in collaborative PIPs on priority health care topics.<sup>54</sup> For example, Michigan and New York required all MCOs to implement PIPs to improve weight assessment and body mass index (BMI) counseling. Florida required all 14 mental health PIHPs for institutionalized children under age 18 to engage in a collaborative PIP on reducing the use of seclusion and restraints during institutional stays.

As in previous years, many states had PIPs targeting well-care visits for children and adolescents (Figure 9). In the 2011-2012 reporting cycle, states also frequently reported PIPs on improving prenatal and perinatal care, childhood immunization rates, and weight assessment and BMI counseling. All 37 EQRO technical reports indicated that the EQR included validation of PIPs, as required by 42 CFR 438.358.

There were some shifts in PIP topics between 2010 and 2011-2012 among the 30 states that submitted reports for both years (Figure 10). Most notably, the number of states conducting weight assessment/BMI PIPs increased from two states in 2010 to nine states in 2011-2012. Conversely, fewer states reported well-child care and primary care access PIPs in the 2011-2012 reporting cycle. Some PIP topics implemented by similar numbers of states in 2010 and 2011-2012 had shifts in which states carried out these PIPs. For example, although eight states had PIPs to improve childhood immunization rates in both 2010 and 2011-2012, only five of these states had an immunization PIP in both years.<sup>55</sup> A pattern of frequent changes in PIP topics may reflect changing health care needs and priorities in these states. Annual PIP changes, however, may limit the potential for longer-term assessments of the effectiveness of PIP interventions within these states.

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<sup>54</sup> States that mandated PIP topics for MCOs or PIHPs include Arizona, Colorado, Delaware, District of Columbia, Florida, Georgia, Michigan, Minnesota, New Jersey, Ohio, Pennsylvania, Virginia, Washington, and West Virginia.

<sup>55</sup> The five states with an immunization PIP in both years were Georgia, Nebraska, Nevada, New Mexico, and Washington. The three states with an immunization PIP in 2010 (but not 2011) were Florida, Rhode Island, and Wisconsin. The three states with an immunization PIP in 2011 (but not 2010) were Missouri, Virginia, and West Virginia.

## 5. Summary of EQRO Reporting for Selected PIP Topics

CMS conducted detailed abstractions of EQRO reporting on PIPs in four priority health topics: weight assessment and BMI counseling, dental care, prenatal care, and adolescent well-care (Appendix Tables G.2-5). Discussions of the EQRO findings on the performance, progress, and limitations of each PIP differed greatly across reports. For example, EQROs assigned different summary validation ratings, with different underlying scoring criteria, to PIPs. The inconsistency of these rating scales limited comparisons of PIP performance across states.

Despite the variation in EQRO reporting on PIPs, some key patterns appeared across the four selected PIP topics in the EQRO technical reports submitted during the 2011-2012 reporting cycle:

- PIPs in each of the four selected topic areas assessed progress using measures similar to the initial core set measures. PIPs for prenatal care often assessed the frequency and timeliness of prenatal and postpartum care. Many weight assessment and BMI PIPs used HEDIS weight documentation and counseling measures. Adolescent well-care PIPs assessed progress on primary care access and rates of well-care visits. Finally, dental PIPs assessed annual dental visit rates, which is similar to initial core set measures on preventive and treatment dental visits.
- PIPs commonly engaged in interventions focused on member, community, and provider outreach and education. These efforts varied greatly, but generally focused on encouraging member adherence to recommended health behaviors and completion of medical appointments and on encouraging providers to follow recommended care guidelines. To a lesser extent, PIPs involved changes to care delivery, such as implementing new programs targeted to improve specific aspects of care (for example, new care management programs for high-risk pregnant women or new fluoride varnish programs for children), expanding provider availability (for example, by hiring new providers or working with existing providers to expand office hours or implement mobile service units), and system-level changes (such as reviewing medical record data to ensure that dental visits were being appropriately captured).
- The EQRO technical reports included some common recommendations for improving PIPs. One was that MCOs should conduct additional analyses to identify specific barriers to improvement in the target population. EQROs also frequently recommended that MCOs more directly align PIP interventions to address barriers and conduct targeted assessments to determine the effectiveness of each intervention separately.
- Descriptions of PIPs in the EQRO technical reports frequently lacked key details. Some EQRO technical reports contained little information about the PIPs and their progress. For EQRO summaries of PIPs to be most useful to states and CMS, the reports should include the target population, performance measures, baseline and post-intervention performance rates, descriptions of PIP interventions and activities, assessments of the link between PIP activities and performance rate changes, and recommendations and feedback for improving the PIP. The EQRO technical reports that contained this level of detail were the most effective in conveying the relative strengths and weaknesses of PIPs.

- Summaries of PIP validation ratings in EQRO technical reports often focus on compliance with review criteria rather than assessing PIP achievements and linking them to interventions. As a result, some PIPs received high validation ratings from EQROs even though they did not achieve performance improvements. Compliance with review criteria is an important factor for validation, but alone it is not a sufficient criterion for high ratings. To improve, EQRO validation ratings should emphasize successful improvements in performance on priority health goals as well as compliance with protocols. EQRO assessments should encourage MCOs and PIHPs to improve performance rates and health outcomes and link improvements to PIP interventions.

To support continued improvement of EQRO technical reports, CMS revised external quality review protocols in December 2011, and just received Office of Management and Budget (OMB) approval for their use through September 30, 2015.<sup>56</sup> The revised protocols aim to standardize and strengthen the level of detail in EQRO technical reports and the EQRO role in improving the effectiveness of quality improvement activities in Medicaid and CHIP. The protocols reflect updated standards and practices for quality review, emphasize alignment with the initial core set measures, encourage alignment of performance measures and PIPs with state quality program goals, and encourage EQROs to include information on health outcomes and trends in performance measure and PIP data in the annual EQRO technical reports. Future reports will continue to assess the progress of external quality review reporting and evidence of improving the quality of health care for children in Medicaid and CHIP.

## 6. Benchmark Benefit Plans

Benchmark benefit plans give states flexibility in offering some Medicaid-eligible individuals a benefits package that is not necessarily comparable to the benefits available statewide through Medicaid. Sections 1937 and 2103(b) of the Act identify types of health benefit packages that qualify as benchmark benefit packages. There are no separate state reporting requirements for benchmark plans other than the EQRO reporting process used for MCOs and PIHPs.

Currently, nine states, D.C., and 1 territory operate Medicaid benchmark plans (CT, DC, ID, KY, KS, MN, VA, WA, WI, WV and GU). Four of the states (DC, MN, WI and WV) deliver care through MCOs or PIHPs and thus require an external quality review.<sup>57</sup> The external quality review reports for these four states do not separate out information related to the quality of benchmark plans. Because this information is reported in the aggregate, which is allowable under external quality review requirements, specific data are not available on the performance of the benchmark plans in these states.

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<sup>56</sup> Revised EQR protocols are available for download at: <https://www.cms.gov/Regulations-and-Guidance/Legislation/PaperworkReductionActof1995/PRA-Listing-Items/CMS-R-305.html>

<sup>57</sup> Since the 2010 Secretary's Report, three of these eleven states began contracting with Medicaid benchmark plans (CT, DC, and MN).

As of December 2011, 19 states provided CHIP coverage through benchmark or benchmark equivalent plans. Of those, 16 now deliver care through MCOs or PIHPs and thus require an external quality review (CA, CO, DE, IA, IL, IN, KS, KY, MA, ND, NE, NJ, NY, PA, UT, and WV). North Dakota uses managed care only for CHIP and is in the beginning stages of reporting. The remaining states currently submit external quality review reports to CMS, but do not separate out information related to the quality of CHIP benchmark plans. Because this information is also reported in the aggregate, specific data are not available on the performance of the CHIP benchmark plans in these states.

### C. Consumer Experiences with Health Care

Consumer assessment of experiences with health care is another dimension of the quality of care, reflecting an aspect of person-and family-centeredness of care. Section 402 of CHIPRA directs state CHIP programs (Title XXI) to provide data regarding access to primary and specialty services, access to networks of care, and care coordination provided under the state child health plan, using quality and consumer satisfaction measures included in the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Health Plan Survey.

Because state-level CAHPS data were not systematically reported in CARTS in FFY 2011,<sup>58</sup> CMS obtained state-level CAHPS data from AHRQ's National CAHPS Benchmarking Database. Data from the CAHPS Child Medicaid Questionnaire were available for 2010 for 25 states, covering 88,694 respondents across 133 plans. The analysis spans several domains covered by the Child Medicaid CAHPS survey, including parents' global rating of their child's health care (1 item), experience getting needed care for their child (1 item), experience getting care quickly (2 items), and how well the child's doctor communicates (5 items and composite). Table 15 presents state-level data for the 10 CAHPS Child Medicaid Questionnaire items included in the analysis.

As shown in Figure 11, the percentage of parents rating their child's overall health care a 9 or 10 (on a scale of 0 to 10) ranged from 54 percent in three states (Connecticut, Texas, and Washington) to 68 percent in Delaware. As discussed in the 2011 Secretary's Report, the overall rating of health care for children covered by Medicaid was considerably higher than that for Medicaid and commercially insured adults (state medians of 60 percent, 46 percent, and 49 percent, respectively). Nevertheless, these data suggest the need to better understand and address those factors influencing parents' ratings of their child's health care in all states, but most importantly, those below the median.

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<sup>58</sup> The CAHPS survey is one of the 24 initial core set measures and states were encouraged to report CAHPS data into CARTS in FFY 2011. Overall, 22 states reported CAHPS data in FFY 2011, including 13 states that reported they submitted a summary report to CMS and 9 states that reported they submitted raw data to the Agency for Healthcare Research and Quality (AHRQ). More than half of these states (12) reported they included both Medicaid and CHIP populations in their CAHPS measure, while 6 reported they included CHIP only, and the remaining 4 reported they included Medicaid only. Based on information provided by states in CARTS, of the 29 states not reporting the measure in FFY 2011, 14 indicated they are in the process of planning for data collection in 2012 or 2013. Thus, the number of states reporting CAHPS data as part of the initial core set of children's health care quality measures is expected to increase in FFY 2012 and FFY 2013.

Figure 12 shows parents' assessments of the ease of getting care for their child. The figure shows medians across the 25 states for the percentage reporting "always" for each of the three items. Parents were far more likely to indicate their child could always get care as soon as needed for an illness or injury than for routine care (state medians are 76 percent and 65 percent, respectively). Fewer than half of parents, on average, indicated that it was always easy to get an appointment with a specialist (state median is 47 percent). Of the 10 measures included in this analysis, parents' assessment of the ease of getting a specialist appointment was by far the lowest rated. As shown in Table 15, the state-level percentages ranged from 40 percent (California) to 61 percent (South Carolina), with the 25th and 75th percentiles at 45 percent and 55 percent, respectively. These data suggest that ensuring access to specialty care is an area for ongoing quality improvement by Medicaid and CHIP programs.

Most parents had favorable assessments of their child's doctor's communication with them as a parent, but somewhat less favorable assessments of the doctor's interactions with the child. As shown in Figure 13, on average, 81 percent of parents said the child's doctor always showed respect for what the parent had to say, 78 percent said the doctor listened carefully to them as a parent, and 77 percent said the child's doctor explained things clearly to them as a parent. Parents were less likely to indicate that the child's doctor always explained things clearly to the child (state median is 68 percent) or that the doctor spent enough time with the child (62 percent). Of the five items in the communications composite, the two with the largest gaps across states related to parents' experience with the amount of time the doctor spent with the child and parents' perception that the child's doctor explained things clearly; in both cases, there was a 22 percentage point disparity between the lowest and highest states, with Texas at the low end on both measures, and West Virginia and South Carolina at the high end on both measures.

This analysis of state-level CAHPS data highlights the opportunities for improving the quality of children's health care across all states and dimensions. Three states (Delaware, South Carolina, and West Virginia) were consistently in the top quartile across 9 or 10 measures, while three states (California, New Jersey, and Texas) were consistently in the bottom quartile across 9 or 10 measures. Factors driving these differences across states are unknown at this time, but may be related to variations in the Medicaid/CHIP delivery systems, provider participation in public programs, or other program attributes.

In summary, most parents reported they could get care for their child when they needed it for an illness or injury but less often for routine care or specialty care. Most parents also provided favorable assessments of the doctor's communication with the parent, but assessments of the doctor's interactions with the child were less favorable. Although the parents' global assessment of their child's overall health care was higher than similar ratings for Medicaid and commercial adults, the rate is still relatively low—60 percent, on average, gave a rating of 9 or 10—suggesting substantial room for improvement, particularly in the states below the median. As the Medicaid and CHIP programs strive to provide high-quality care, these results illustrate areas for attention, particularly access to specialty care, timely routine care, and more "person-centered" care that encourages doctors to explain things clearly to the child and to spend more time with the child.

#### D. Use of Dental Services in Medicaid and CHIP

Because tooth decay remains the most common chronic childhood disease, children's oral health continues to be a primary focus of improvement efforts in both Medicaid and CHIP, through which all enrolled children have dental coverage. And because children eligible for Medicaid and CHIP have been shown to have an elevated risk for dental disease,<sup>59</sup> the potential for positive impact increases as program enrollment continues its upward trend.

In the context of CMS' Oral Health Initiative, announced in 2010, CMS is working with Federal and state partners, the dental and medical provider communities, children's advocates and other stakeholders to improve children's access to dental care, with an emphasis on early prevention.<sup>60</sup> CMS has set two improvement goals through the Initiative: (1) to increase by ten percentage points the proportion of Medicaid and CHIP children ages 1 and older, enrolled continuously for at least 90 days, who receive a preventive dental service; and (2) to increase by ten percentage points the proportion of Medicaid and CHIP children ages 6 to 9, enrolled continuously for at least 90 days, who receive a sealant on a permanent molar. For the first goal, baselines will be set using FY 2011 data<sup>61</sup> and the goal year is FY 2015. The second goal will be phased in over time as CMS and states gain experience in collecting data to track progress on the goal. In addition to national baselines and goals, each state will have its own baselines and goals.

To improve the completeness and accuracy of the data being used to set baselines and to track progress, CMS has initiated a data quality improvement process for the annual EPSDT report. The FFY 2010 Form CMS-416 data were manually checked against a set of audit criteria intended to identify possible reporting and arithmetic errors. Seventeen states were flagged on one or more audit criteria on the "dental" lines of the form. States were notified of the results and invited to submit corrected data. The audit process was repeated on the FFY 2011 Form CMS-416 data using a new automated review process, and states were asked to resubmit corrected data. The audit will be made a permanent part of the Form CMS-416 data submission process.

State performance related to children's access to dental care is also evaluated through the initial core set of children's quality measures. Two of the 24 measures in the initial core set focus on oral health: total eligibles who received a preventive dental service (ages 1-20); and total eligibles who received a dental treatment service (ages 1-20). These measures parallel the reporting in lines 12b and 12c of the Form CMS-416 and the reporting required of separate CHIP programs in Section G of CARTS.

Table 16 presents national and state level data on utilization of preventive dental services and dental treatment services during FFY 2010 among children ages 1 to 20 enrolled in Medicaid and

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<sup>59</sup> <http://www.nidcr.nih.gov/datastatistics/surgeongeneral/sgr/chap4.htm>

<sup>60</sup> The CMS Oral Health Strategy is available online at: <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/CMS-Oral-Health-Strategy.pdf>

<sup>61</sup> Baselines for separate CHIP programs will be set using FFY 2013 CARTS data.

Medicaid expansion programs.<sup>62</sup> The data are drawn from the Form CMS-416. Data are reported for children who are eligible for EPSDT services and enrolled for at least 90 continuous days, and for 50 states and the District of Columbia

## Findings

- Nationwide, about 12.7 million children (41 percent of all children who met the reporting criteria) received a preventive dental service paid by Medicaid in FFY 2010. Preventive dental services include dental cleanings and application of dental sealants. The percentage of children who received a preventive dental service ranged from a low of 7 percent in Idaho to a high of 58 percent in Vermont.
- Nationwide, more than 7 million children (23 percent of all children who met the reporting criteria) received a dental treatment service paid by Medicaid in FFY 2010. Dental treatment services include treatments to correct a problem, such as filling a cavity in a tooth. The percentage of children who received a dental treatment service ranged from a low of 5 percent in Idaho to a high of 50 percent in West Virginia.

While there are some concerns about the quality of the data,<sup>63</sup> there is sufficient confidence in the data to say that vast differences persist between states in the utilization of dental care by children enrolled in Medicaid (see Figures 14 and 15). One goal of the CMS Oral Health Initiative is to share the lessons learned in the higher performing states with the lower performing States in an effort to significantly improve utilization in the lower performing states.

A brief note is in order about any comparison between the FFY 2009 Form CMS-416 dental data (as shown in the 2011 Secretary's Report) and similar data from the FFY 2010 Form CMS-416 (as shown in this report). Because of several changes in the reporting methodology between FFY 2009 and FFY 2010, the data are not directly comparable.

- Beginning in FFY 2010, CMS added four requests for dental information to the Form CMS-416. One of the requests (line 12f – total eligibles receiving oral health services provided by a non-dentist provider) asks states to report services performed by a licensed practitioner who is not a dentist or who is not working under the supervision of a dentist. For example, oral health risk assessments and application of fluoride varnish, when performed by a physician or other medical provider, would be reported on this line. Prior to FFY 2010, some states may have reported these same services on line 12b, preventive dental services. The new reporting methodology could result in a decline in the number of services reported on line 12b, but would not represent an actual decline in the preventive services being provided to Medicaid children. However, lines 12b and 12f cannot simply be aggregated because the same children

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<sup>62</sup> Data for separate CHIP programs will be reported in the 2013 Secretary's report.

<sup>63</sup> For example, the data for Idaho showed a decrease of more than 80 percent from FFY 2009 to FFY 2010; the data for Kansas showed a decrease of more than 50 percent, and the data for Oregon showed a more than a 70 percent decrease.

may be included in both categories and thus, would result in a duplicated count of children receiving preventive services.<sup>64</sup>

- Also in FFY 2010, CMS asked states to report the number of children enrolled for at least 90 continuous days on line 1b. This number is being used as the denominator in the calculation of percentages in this report, instead of the number of children enrolled for any period as was used in the 2011 Secretary's report.<sup>65</sup> This change could result in a small upward shift in the percentage of children receiving services.
- Though states continue to report utilization figures for all children from birth to age 20 on the Form CMS-416, CMS has limited the age range in this year's Report to children ages 1 to 20, which coincides with the goal set in the CMS Oral Health Initiative and is consistent with expectations of dental practice for children. This change could result in a small upward shift in the percentage of children receiving services.

#### E. State Spotlight: Arkansas

Arkansas reported 13 of the 24 children's health care quality measures for FFY 2011, all of which are part of the HEDIS measurement set (Appendix Table E.1). The state has calculated HEDIS measures for more than 10 years and has established a claims data warehouse to support quality measurement. The Medicaid/CHIP HEDIS results are publicly reported each year and compared to rates from previous years as well as to national Medicaid HEDIS benchmarks.<sup>66</sup> The state contracts with an EQRO to calculate the rates and produce the report.

The state noted that several of its initial core set measures are underreported in CARTS. For example, its immunization rate (Combo 3) is underreported because it is calculated based only on claims data; the hybrid method produces a substantially higher rate.<sup>67</sup> Similarly, the BMI assessment rate of 1.2 percent is substantially underreported in CARTS because school records are not included. The state has a school-based obesity initiative in which each child's BMI is assessed by school nurses, tracked, and reported to parents.

Arkansas takes a "system-wide approach" to quality improvement (QI) in its Medicaid/CHIP program. Children enrolled in Medicaid and CHIP are served through a Primary Care Case Management (PCCM) program, and the state views the PCCM program as a health plan. All children who enroll in ARKids First are required to choose a primary care provider (PCP) and a dental provider. The ConnectCare program, operated by the Arkansas Department of Health

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<sup>64</sup> <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/TA1-Dental.pdf>

<sup>65</sup> This change was recommended by the CMS Oral Health Technical Advisory Group (OTAG).

<sup>66</sup> [https://ardhs.sharepoint.com/sites/DMS%20Public/DMS%20Reports/HEDIS%20Measures/HSAG\\_HEDIS\\_2010.pdf](https://ardhs.sharepoint.com/sites/DMS%20Public/DMS%20Reports/HEDIS%20Measures/HSAG_HEDIS_2010.pdf)

<sup>67</sup> The childhood immunization rate (Combo 3) reported in CARTS for FFY 2011 was 32.8 percent for the Medicaid/CHIP population combined. The state fiscal year 2009 rates reported in the state's annual HEDIS report were substantially higher--63.4 percent for ARKids First A (Medicaid) and 71.8 percent for ARKids First B (CHIP)--because the state used the hybrid method to calculate the rates.

under contract with the Arkansas Medicaid program, helps families choose a PCP and dental provider for their children. To assess the performance of its health plan and providers, the state conducts the CAHPS Health Plan Survey annually.

The state recognizes the importance of engaging providers in QI efforts and is working with medical directors of large practices and federally-qualified health centers to identify ways each site can improve quality. The state is using a data-driven approach with site-level report cards to motivate provider participation in QI initiatives. One initiative is to ensure that practices provide 24/7 live-voice access to reduce emergency department use and improve continuity of care.

The state pursues a multi-pronged approach to increase well-child visit and immunization rates. Because the state knows the medical home for each child, it notifies providers of patients that are due for check-ups and immunizations. It also educates families on the schedule for well-child care and immunizations. In addition, it offers immunizations at health fairs, schools, and clinics, and offers incentives to providers and patients for completion of recommended care. The state actively uses quality measures to drive these QI efforts and monitor their progress.

#### IV. STRENGTHENING QUALITY OF CARE THROUGH DEMONSTRATION GRANTS AND PARTNERSHIPS

CMS continues to build a framework for measuring and improving the quality of care for children in Medicaid/CHIP through the CHIPRA Quality Demonstration Grants, the AHRQ-CMS Pediatric Quality Measures Program, and its work with Federal partners who are also working to improve children's health care quality and measurement.

##### A. CHIPRA Quality Demonstration

On February 22, 2010, CMS awarded CHIPRA Quality Demonstration Grants to 10 states: Colorado, Florida, Maine, Maryland, Massachusetts, North Carolina, Oregon, Pennsylvania, South Carolina, and Utah. Including both single-state projects and multi-state collaborations, 18 states participate in this grant program. These projects, totaling grant awards of \$100 million, are now in their third funding year. Although each Grantee designed projects that covered a broad range of quality improvement activities, section 1139A(d) of the Act outlines a specific set of activities to be implemented by the demonstrations grants with the ultimate goal of evaluating promising ideas for improving the quality of children's health care under Medicaid or CHIP<sup>68</sup> (Table 17).

##### 1. Overview of Demonstration Grant Activities

As part of these multi-dimensional demonstrations, Grantees are testing and implementing quality improvement activities aimed at supporting CMS' focus on enhancing children's health care quality in the areas of EPSDT benefits, behavioral health, oral health, obesity prevention, and care coordination.

- EPSDT: Half of the 18 participating states designed grant projects to specifically target improvements on EPSDT rates. Most commonly, states listed improving EPSDT data collection as a priority and are implementing ways of better collecting and reporting the data by using a more automated or streamlined process. Other states have incorporated EPSDT program requirements and reporting procedures into learning collaboratives as a way to educate providers.
  - For example, the Maine/Vermont Demonstration implemented a learning initiative focused on improving children's preventive health care by raising rates for: childhood immunizations, lead screening, healthy weight, and oral health. As part of the project, Maine provides outreach, education, monthly data collection, and quality improvement support to

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<sup>68</sup> The four specific set of activities were: (1) experiment with, and evaluate the use of new measures for quality of Medicaid/CHIP children's health care; (2) promote the use of Health Information Technology (HIT) for the delivery of care for children covered by Medicaid/CHIP; (3) evaluate provider-based models which improve the delivery of Medicaid/CHIP children's health care services; or (4) demonstrate the impact of the model Electronic Health Record (EHR) format for children (developed and disseminated under section 1139A(f) of the Act on improving pediatric health, and pediatric health care quality, as well as reducing health care costs).

primary care practices to improve rates of screening and other medically necessary services available through the EPSDT benefit. Additionally, the state coordinates with health systems and Federally Qualified Health Centers to determine interface specifications in order to participate in the automation and exchange of EPSDT data.

- Behavioral Health: A majority of the 18 state grant participants have committed, through their grant activities, to improving access to and the quality of behavioral health services for children. Grant activities underway include identification of behavioral health measures, integration of physical services and behavioral health services, implementation of screening tools to identify children in need of behavioral health care, integration of tele-psychiatry services, and implementation of wraparound behavioral health services.
  - South Carolina is focused on improving Attention Deficit Hyperactivity Disorder (ADHD) outcomes, and has developed training and educational materials including presentation packets, evidence-based discussion points, and clinical training on ADHD. The State has also completed on-site visits to all 18 participating pediatric offices, which involved individual educational meetings about ADHD with a total of 129 practitioners. Follow-up visits were also completed with 82 practitioners reinforcing information provided during initial visits.
  - Wyoming, as part of a tri-state grant project with Maryland and Georgia, is using a care management entity (CME) service delivery model to improve psychotropic prescribing practices for youth and ensuring appropriate psychotropic prescribing practices for 100 percent of youth served by the CME. The state is using telehealth services to support behavior/mental health assessments and screenings in order to ensure adherence to state psychotropic medications prescribing patterns.
- Oral Health: Improving oral health is a critical clinical area across the Demonstrations, with 11 of the 18 states focused on this area. Through their grants, states have placed emphasis on measurement of oral health, developed oral health toolkits and screening tools, partnered dental homes with medical homes, and provided educational opportunities through learning collaboratives.
  - North Carolina has implemented several promising oral health initiatives over the past year including the Priority Oral Health Risk Assessment and Referral Tool (PORRT) which is being piloted in the CHIPRA Connect practices. The state also established an Oral Health workgroup through which members from the group provide training to primary care providers on how to use PORRT, how to assess for oral health risk factors, and when to make referrals.
  - South Carolina is using learning collaboratives to improve oral health care for children and is focused on the following four activities: performing and documenting an oral health risk assessment between 12 and 36 months; referring the patient to a dental home; applying fluoride varnish to high risk patients between 12 and 36 months of age; and

discussing fluoride in the family's drinking water source. Practices have implemented changes including distributing infant tooth brushes, providing oral health goody bags containing toothbrushes and education materials; and using fluoride oral health-risk computer templates. The Grantee has succeeded in almost doubling fluoride varnish administration across the state.

- **Obesity:** Many of the Grantees are dedicated to improving obesity prevention practices in primary care settings. Most commonly, states have focused on collecting obesity-related (e.g., body-mass index) measures and developing quality improvement plans based on these measures, including programs supporting obesity screening and healthy weight promotion, a top priority. Two states are engaging school based health centers in quality improvement projects focused on reducing obesity.
  - West Virginia is in the process of designing an obesity project that will use care coordinators to ensure that students screened in school-based health centers and found to have a BMI at or above the 85<sup>th</sup> percentile make and keep appointments with their primary care physician within the coordinator's practice.
- **Care Coordination:** Nearly all (14) of the states participating in the Demonstrations have incorporated some aspect of care coordination into their grant activities—much of this work is focused on improving care coordination for children with special health care needs. The types of activities range from implementation of health IT solutions; employment of coordinators within primary care and subspecialty practices, implementation of pre-visit questionnaires to target individuals in need of additional services; evaluation of the impact of care coordination on structure, process and outcomes; and the administration of surveys and focus groups in order to solicit information from families about care currently received.
  - Illinois is focused on improving the referral process for early intervention (EI) services by using health information technology to support transferring information from the EI provider to the medical home, and referral to and feedback from other community services for children not eligible for EI services.
  - Pennsylvania is using information technology to support care coordination and referrals by identifying children with developmental delays, autism, ADHD/disruptive behavior, depression/suicide risk in adolescents, and mothers with maternal depression. The Grantee is using a pre-visit screening tool which is made available to parents prior to the office visit to help detect children requiring additional special needs referrals and treatment. Children identified by the screening tool are electronically referred to specialists and, in the case of developmental delay and autism, linked to the state's early intervention network.

## 2. National Evaluation of the CHIPRA Quality Demonstrations

With funding from CMS, AHRQ is working with a national evaluation team comprised of Mathematica, AcademyHealth, and the Urban Institute to evaluate the CHIPRA Quality Demonstration. The goals of the national evaluation are to determine the demonstration's effectiveness in improving the quality of health care provided to children in Medicaid and CHIP and to assess if and how the demonstration increases transparency and consumer choice. With the states transitioning from the planning stage to actual implementation of the projects, current evaluation efforts are focused on gathering information about early implementation experiences, lessons learned to date, and challenges encountered. By the end of August 2012, the national evaluation team will have completed site visits to each of the 18 states participating in the demonstration program.

A few observations stand out from initial site visits. First, the scope and intent of the states' demonstration projects vary even more widely than states' final operational plans suggested they would. For example, some states are implementing pilot projects to promote patient-centered medical homes for children with the intention of eventually broadening their efforts statewide. Others are expanding on previous efforts to build a statewide data infrastructure that improves coordination of care by helping doctors and other health care providers share information more effectively. Site visits have also indicated that certain factors have had important implications for early implementation. For example, multi-state partnerships are providing important opportunities for learning and collaboration. Some states reported that leadership changes and budget or hiring constraints have been obstacles to program implementation.

In the coming year, the national evaluation team will begin producing reports and issue briefs on findings from the initial site visits and other data sources. In addition, the team is finalizing plans for gathering survey data directly from child-serving physicians and parents about their perceptions of quality initiatives in selected demonstration states. More information about the progress of the national evaluation, as well as findings from both the national and grantee-specific evaluation efforts, can be found on the following webpage: <http://www.ahrq.gov/chipra/demoeval>.

## 3. Model Children's Electronic Health Record Format

As part of the Quality Demonstrations, two Grantees (North Carolina and Pennsylvania) were selected to demonstrate the impact of the model Electronic Health Record (EHR) format for children. The development and dissemination of the model EHR format (the Format) is required under section 1139A(f) of the Act. In 2010, AHRQ, working in collaboration with CMS, awarded a \$5 million contract to Westat to develop a model children's electronic health record format. Two Grantees, North Carolina and Pennsylvania, will put the model format into practice and evaluate the impact of the model EHR format over the next two years.

The overall goals of the Format, as required by section 1139A(f) of the Act, are to improve pediatric health, enhance pediatric health care quality, and reduce health care costs. The legislation specified that the model children's EHR format should be: (1) accessible to caregivers for school and leisure compliance; (2) designed to allow interoperable exchanges; (3) compatible with other EHR standards; and (4) usable by caregivers to assure care appropriateness and quality. The Format will take into account a variety of topics including growth data, medication

management, birth information, and EPSDT requirements. CMS and a variety of other stakeholders including other federal agencies, physician informaticians, non-physician clinicians, children's advocacy organizations, and vendors have provided guidance and served as resources for this project.

The first phase of the work on the Format was completed in Spring 2012. This work resulted in a Format that is comprised of a set of requirements containing child-specific items (or items of special importance for children) that identify the incremental functionality (beyond what is needed for adults) that an EHR should have to meet the particular needs of children. The Format expands upon the hierarchy created by HL7®<sup>69</sup> for the EHR-S Functional Model and incorporates the HL7 Child Health Functional Profile. Work on the Format will continue over the next several years with the goal of creating a Format that can be valuable to various audiences, including developers of EHR software who want to ensure their systems optimally address the needs of children; purchasers of software to enable them to assess the degree to which EHR systems support the care of children; child health advocates who want to influence the future development of products for children; and standards and certification organizations that could leverage selected requirements to specify best practices or certification criteria.

## B. AHRQ-CMS Pediatric Quality Measures Program

In addition to the Quality Demonstrations, CHIPRA also called for the development of a Pediatric Quality Measures Program (PQMP) to address the need for improved core measures and for the development of new measures. The PQMP, required by section 1139A(b)(1) of the Act, is designed to “(A) improve and strengthen the initial core child health quality measures established by the Secretary...; (B) expand on existing pediatric quality measures used by public and private health care purchasers and advance the development of such new and emerging quality measures; and (C) increase the portfolio of evidence-based, consensus pediatric quality measures available to public and private purchasers of children's health care services, providers, and consumers.”

The PQMP was launched in early 2011. As part of the PQMP, AHRQ and CMS are working with seven Centers of Excellence to develop new measures and refine the core measures as necessary. The Centers of Excellence are a cohort of entities with expertise in health care quality measurement specific to the needs of children and their health care delivery system and include collaborations of academic institutions, children's hospitals, and measurement experts (Table 18).<sup>70</sup> In addition, two of the Quality Demonstration Grantees that are developing new measures related to children's health care quality (Illinois and Massachusetts) participate in the activities of the PQMP. In the past year, the Centers of Excellence have participated in a collaborative learning environment through the use of work groups addressing varying types of measurement-related topics including: results aggregation; race/ethnicity/socio-economic status; and informatics.

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<sup>69</sup> Information on Health Level Seven International (HL7) can be found at: <http://www.hl7.org/about/index.cfm?ref=common>

<sup>70</sup> Information on the Centers of Excellence can be found at: <http://www.ahrq.gov/chipra/pqmpfact.htm>

### C. Coordination with HHS Quality Partners

CMS collaborates with and leverages the ongoing work of other HHS agencies focused on improving the quality of child health, including the Administration on Children and Families (ACF), the Centers for Disease Control and Prevention (CDC), the Health Resources and Services Administration (HRSA), the Office of the National Coordinator for Health Information Technology (ONC), and AHRQ.

CMS is continuing its work with HRSA and the CDC in a number of areas. HRSA's Maternal and Child Health (MCH) Bureau and the Office of Strategic Priorities are key CMS partners on oral health. The CDC has helped CMS explore possible ways to improve the accuracy of data reflecting dental care provided to children enrolled in Medicaid and CHIP. CMS has also begun to identify synergistic efforts with the Indian Health Service, which has an early childhood caries initiative. HRSA's MCH Bureau and CDC are key partners for CMS efforts to improve maternal and infant health outcomes.

In addition, CMS works with CDC and other partners on other initiatives including obesity, immunizations, and lead screening. In the area of childhood obesity, CMS provides technical assistance and participates on the departmental Steering Committee that CDC established to support the CHIPRA-required childhood obesity demonstration grants. CMS continues to work closely with CDC on the Vaccines for Children program, and serves as an ex officio member of the Advisory Committee on Immunization Practices. Further, CMS participated in the department's 2011/12 Flu Campaign and is part of the 2012 Adult Immunization Steering Committee. Both activities are directed by the Office of the Assistant Secretary for Health. In the area of lead screening, CMS continues to work closely with CDC and ACF, as well as serves as an ex officio member of the Advisory Committee on Childhood Lead Poisoning Prevention.

CMS' partnership with AHRQ on the initial and improved core measure set for children, the Pediatric Quality Measures Program, and the model Electronic Health Record format for children's care were noted earlier. CMS also partners with ONC to develop children's health care quality measures and to electronically specify the initial core set of children's health care quality measures.

Last Spring, the Obama Administration launched the Partnership for Patients, a new public-private partnership designed to improve the quality and safety of health care for all Americans.<sup>71</sup> CMS is working to engage with State Medicaid/CHIP agencies in Partnership activities as well as in implementing non-payment policies for provider preventable conditions and collecting the children's core quality measure related to patient safety.

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<sup>71</sup> <http://www.healthcare.gov/center/programs/partnership>

## V. SUMMARY AND CONCLUSION

The 2012 Secretary's Report on the Quality of Care for Children in Medicaid and CHIP documents the substantial progress made by HHS and states in building a solid foundation for quality measurement and improvement in Medicaid/CHIP. Nearly all states (48 states and D.C.) reported one or more of the core set of children's health care quality measures for FFY 2011, and more than half of these states reported data on twelve or more measures. Both the number of states reporting and the number of measures reported by states reflect progress over last year. Although there remains some variation in the populations included, 32 states and D.C. provided data on both Medicaid and CHIP enrollees for FFY 2011, up from 22 states and D.C. for FFY 2010. Additionally, CMS' detailed review of improvement projects summarized in the EQRO technical reports from the 2011 reporting cycle identified the many state-initiated efforts underway to improve the quality of care for children enrolled in Medicaid managed care organizations.

This report provides evidence that, across all states, Medicaid and CHIP provide an important source of access to primary care and other services for children. Particularly encouraging were findings about patient experiences with the health care system; most parents had a favorable assessment of their ability to get care when their child was ill or injured, even though they were somewhat less confident about their ability to get routine or specialty care. The report also highlights opportunities to improve care for children, including their use of preventive dental services and receipt of well-child visits, and the need to do a better job on the content of the clinical care provided (as measured by immunization rates, Chlamydia screening rates, and appropriate testing for pharyngitis).

To assist states in further improving the completeness and consistency of their reporting and their performance, CMS has undertaken several efforts including: (1) continuing the Quality Measures Technical Assistance and Analytic Support Program; (2) convening states and other stakeholders for a two-day conference in June 2012 to highlight CMS priority initiatives and provide technical assistance and resources for Medicaid and CHIP quality measurement; (3) providing better oversight and monitoring of data submitted on the annual EPSDT report; (4) better aligning quality measurement and reporting efforts across Medicaid/CHIP-related activities (i.e., children's core measure set, EPSDT, EQROs, and TMSIS); and (5) launching two nationwide improvement initiatives – one on perinatal health and the other on oral health. With access to data on a comprehensive set of performance measures and efforts underway to improve the stability of coverage for children in Medicaid/CHIP, HHS now has a greater capacity to work toward its goal of achieving a first-class system of coverage and care for all children enrolled in Medicaid/CHIP.

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Table 1. Number and Percent of Children Enrolled in Medicaid or CHIP by State and Service Delivery Type, FFY 2011

State	Managed Care		Fee-for-Service		Primary Care Case Management		Total
Alabama	48,284	5%	109,255	11%	817,810	84%	975,349
Alaska	0	0%	92,073	100%	0	0%	92,073
Arizona	870,220	90%	96,800	10%	0	0%	967,020
Arkansas	0	0%	514,295	100%	0	0%	514,295
California	4,734,916	75%	1,593,931	25%	0	0%	6,328,847
Colorado	145,583	26%	401,191	72%	12,200	2%	558,974
Connecticut	303,063	94%	18,554	6%	0	0%	321,617
Delaware	99,098	91%	5,680	5%	4,168	4%	108,946
District of Columbia	103,993	90%	11,182	10%	0	0%	115,175
Florida	1,410,206	58%	385,328	16%	655,258	27%	2,450,792
Georgia	1,214,145	86%	200,567	14%	2,162	0%	1,416,874
Hawaii	150,440	88%	20,294	12%	0	0%	170,734
Idaho	0	0%	167	0%	220,686	100%	220,853
Illinois	159,473	6%	871,452	35%	1,484,910	59%	2,515,835
Indiana	752,019	88%	104,493	12%	9	0%	856,521
Iowa	54,114	14%	127,174	33%	200,003	52%	381,291
Kansas	225,980	82%	40,316	15%	9,838	4%	276,134
Kentucky	143,986	26%	99,985	18%	319,250	57%	563,221
Louisiana	0	0%	144,101	17%	679,954	83%	824,055
Maine <sup>a</sup>	0	0%	45,101	26%	130,824	74%	175,925
Maryland	568,302	97%	17,013	3%	0	0%	585,315
Massachusetts	311,723	48%	183,179	28%	150,399	23%	645,301
Michigan	1,230,329	95%	58,124	5%	0	0%	1,288,453
Minnesota	376,455	75%	123,515	25%	0	0%	499,970
Mississippi	120,772	22%	438,881	78%	0	0%	559,653
Missouri	396,701	60%	263,326	40%	0	0%	660,027
Montana	0	0%	24,389	24%	76,490	76%	100,879
Nebraska	110,306	50%	108,823	50%	0	0%	219,129
Nevada	201,990	76%	64,130	24%	0	0%	266,120
New Hampshire	10,217	10%	97,209	90%	0	0%	107,426
New Jersey	777,898	93%	60,149	7%	0	0%	838,047
New Mexico	315,558	81%	74,450	19%	0	0%	390,008

Table 1 (continued)

State	Managed Care		Fee-for-Service		Primary Care Case Management		Total
New York	2,310,024	86%	366,366	14%	0	0%	2,676,390
North Carolina	0	0%	287,079	20%	1,162,380	80%	1,449,459
North Dakota	0	0%	9,970	18%	45,628	82%	55,598
Ohio	1,232,187	82%	262,750	18%	0	0%	1,494,937
Oklahoma	551,867	88%	76,012	12%	0	0%	627,879
Oregon	420,434	85%	75,028	15%	1,834	0%	497,296
Pennsylvania	1,233,786	78%	83,831	5%	254,917	16%	1,572,534
Rhode Island	125,395	93%	9,628	7%	0	0%	135,023
South Carolina	314,389	55%	157,725	28%	100,995	18%	573,109
South Dakota	0	0%	14,319	22%	49,773	78%	64,092
Tennessee	822,544	93%	0	0%	65,786	7%	888,330
Texas	3,128,586	70%	303,738	7%	1,011,701	23%	4,444,025
Utah	233,339	76%	52,660	17%	20,997	7%	306,996
Vermont	0	0%	14,244	18%	65,636	82%	79,880
Virginia	610,826	76%	149,082	18%	47,658	6%	807,566
Washington	636,652	79%	166,486	21%	4,888	1%	808,026
West Virginia	199,758	70%	77,984	27%	9,092	3%	286,834
Wisconsin	591,912	83%	117,632	17%	0	0%	709,544
Wyoming	8,586	13%	59,142	87%	0	0%	67,728
National Totals	27,256,056	63%	8,678,803	20%	7,605,246	17%	43,540,105

Source: CMS analysis of CHIP Statistical Enrollment Data System (SEDS) as of July 10, 2012.

Note: Managed care is defined in this context as a system in which the state contracts with health maintenance organizations (HMOs) to provide a comprehensive set of services on a prepaid capitated risk basis. Enrollees choose a plan and a primary care provider (PCP), who will be responsible for managing their care. A child is counted in the managed care category if managed care was the last system in which he or she was covered for basic services during the quarter.

<sup>a</sup> FFY 2011 data for Maine are unavailable; FFY 2010 data were used in this table.

Table 2. Initial Core Set of Children’s Health Care Quality Measures for Medicaid and CHIP

Category	Measure	Measure Steward	Description	Data Source
Prevention and Health Promotion	1. Timeliness of Prenatal Care	National Center for Quality Assurance (NCQA)/Healthcare Effectiveness Data and Information Set (HEDIS)	Percentage of deliveries of live births between November 6 of the year prior to the measurement year and November 5 of the measurement year that received a prenatal care visit in the first trimester or within 42 days of enrollment	Administrative or hybrid
	2. Frequency of Ongoing Prenatal Care	NCQA/HEDIS	Percentage of deliveries between November 6 of the year prior to the measurement year and November 5 of the measurement year that received the following number of expected prenatal visits: < 21 percent of expected visits 21 percent – 40 percent of expected visits 41 percent – 60 percent of expected visits 61 percent – 80 percent of expected visits ≥ 81 percent of expected visits	Administrative or hybrid
	3. Percentage of Live Births Weighing Less Than 2,500 Grams	Centers for Disease Control and Prevention (CDC)	Percentage of live births that weighed less than 2,500 grams in the state during the reporting period	State vital records
	4. Cesarean Rate for Nulliparous Singleton Vertex	California Maternal Quality Care Collaborative	Percentage of women that had a cesarean section among women with first live singleton births (also known as nulliparous term singleton vertex [NTSV] births) at 37 weeks of gestation or later	State vital records alone or merged with discharge diagnosis data
	5. Childhood Immunization Status	NCQA/HEDIS	Percentage of children that turned 2 years old during the measurement year and had specific vaccines by their second birthday	Administrative or hybrid
	6. Adolescent Immunization Status	NCQA/HEDIS	Percentage of adolescents that turned 13 years old during the measurement year and had specific vaccines by their 13th birthday	Administrative or hybrid
	7. Body Mass Index Assessment for Children/Adolescents	NCQA/HEDIS	Percentage of children ages 3 to 17 that had an outpatient visit with a PCP or OB/GYN and whose weight is classified based on body mass index percentile for age and gender	Administrative or hybrid
	8. Developmental Screening In the First Three Years of Life	Child and Adolescent Health Measurement Initiative (CAHMI) and NCQA	Percentage of children screened for risk of developmental, behavioral, and social delays using a standardized screening tool in the 12 months preceding their first, second, or third birthday	Administrative or hybrid
	9. Chlamydia Screening	NCQA/HEDIS	Percentage of women ages 16 to 20 that were identified as sexually active and had at least one test for Chlamydia during the measurement year	Administrative
	10. Well-Child Visits in the First 15 Months of Life	NCQA/HEDIS	Percentage of children that turned 15 months old during the measurement year and had zero, one, two, three, four, five, or six or more well-child visits with a primary care practitioner (PCP) during their first 15 months of life	Administrative or hybrid

Table 2 (continued)

Category	Measure	Measure Steward	Description	Data Source
	11. Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life	NCQA/HEDIS	Percentage of children ages 3 to 6 that had one or more well-child visits with a primary care practitioner during the measurement year	Administrative or hybrid
	12. Adolescent Well-Care Visits	NCQA/HEDIS	Percentage of adolescents ages 12 to 21 that had at least one comprehensive well-care visit with a primary care practitioner or an obstetrical/gynecological (OB/GYN) practitioner during the measurement year	Administrative or hybrid
	13. Percentage of Eligibles That Received Preventive Dental Services	Centers for Medicare & Medicaid Services (CMS)	Percentage of individuals ages 1 to 20 eligible for Medicaid or CHIP Medicaid Expansion programs (that is, individuals eligible for EPSDT services) that received preventive dental services	Administrative
Availability	14. Child and Adolescent Access to Primary Care Practitioners	NCQA/HEDIS	Percentage of children and adolescents ages 12 months to 19 years that had a visit with a primary care practitioner (PCP), including four separate percentages: <ul style="list-style-type: none"> <li>• Children ages 12 to 24 months and 25 months to 6 years who had a visit with a PCP during the measurement year</li> <li>• Children ages 7 to 11 years and adolescents ages 12 to 19 years who had a visit with a PCP during the measurement year or the year prior to the measurement year</li> </ul>	Administrative
Management of Acute Conditions	15. Appropriate Testing for Children with Pharyngitis	NCQA/HEDIS	Percentage of children ages 2 to 18 that were diagnosed with pharyngitis, dispensed an antibiotic, and received a group A streptococcus test for the episode	Administrative
	16. Otitis Media with Effusion (OME) – Avoidance of Inappropriate Use of Systemic Antimicrobials in Children	American Medical Association/ Physician Consortium for Performance Improvement (PCPI)	Percentage of children ages 2 months to 12 years with a diagnosis of otitis media with effusion (OME) that were not prescribed systemic antimicrobials	Administrative or electronic health record (EHR)
	17. Percentage of Eligibles that Received Dental Treatment Services	CMS	Percentage of individuals ages 1 to 20 eligible for Medicaid or CHIP Medicaid Expansion programs (that is, individuals eligible for EPSDT services) that received dental treatment services	Administrative
	18. Ambulatory Care – Emergency Department (ED) Visits	NCQA/HEDIS	Rate of ED visits per 1,000 member months among children up to age 19	Administrative

Table 2 (continued)

Category	Measure	Measure Steward	Description	Data Source
	19. Pediatric Central Line-Associated Blood Stream Infections – Neonatal Intensive Care Unit and Pediatric Intensive Care Unit	CDC	Rate of central line-associated blood stream infections (CLABSI) in the pediatric and neonatal intensive care units during periods selected for surveillance	National Healthcare Safety Network (NHSN)
Management of Chronic Conditions	20. Annual Percentage of Asthma Patients with One or More Asthma-Related Emergency Room Visits	Alabama Medicaid	Percentage of children ages 2 to 20 diagnosed with asthma during the measurement year with one or more asthma-related emergency room (ER) visits	Administrative
	21. Follow-Up Care for Children Prescribed Attention Deficit Hyperactivity Disorder (ADHD) Medication	NCQA/HEDIS	Percentage of children newly prescribed ADHD medication that had at least three follow-up care visits within a 10-month period, one of which was within 30 days from the time the first ADHD medication was dispensed, including two rates: one for the initiation phase and one for the continuation and maintenance phase	Administrative
	22. Annual Pediatric Hemoglobin A1C Testing	NCQA	Percentage of children ages 5 to 17 with diabetes (type 1 and type 2) that had a Hemoglobin A1c (HbA1c) test during the measurement year	Administrative or hybrid
	23. Follow-Up After Hospitalization for Mental Illness	NCQA/HEDIS	Percentage of discharges for children ages 6 to 20 that were hospitalized for treatment of selected mental health disorders and who had an outpatient visit, an intensive outpatient encounter, or partial hospitalization with a mental health practitioner within 7 days of discharge and within 30 days of discharge	Administrative
Family Experiences of Care	24. Consumer Assessment of Healthcare Providers and Systems® (CAHPS)	NCQA/HEDIS	Survey on parents' experiences with their children's care	Survey

Note: The measure steward is the organization responsible for maintaining a particular measure or measure set. Responsibilities of the measure steward include updating the codes that are tied to technical specifications and adjusting measures as the clinical evidence changes. Starting in FFY 2012, data for the CLABSI measure will be obtained from the National Healthcare Safety Network.

Table 3. Frequency of State Reporting of the Initial Core Set of Medicaid/CHIP Children’s Health Care Quality Measures and Reasons for Not Reporting, FFY 2011

Measure	Number of States Reporting	Number of States Not Reporting	Reasons for Not Reporting				
			Data Not Available	Population Not Covered	Sample Size Too Small	Other	Not Specified
Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life (#11)	48	3	0	0	0	0	3
Well-Child Visits in the First 15 Months of Life (#10)	46	5	0	0	2	1	2
Child and Adolescent Access to Primary Care Practitioners (#14)	44	7	2	0	0	2	3
Adolescent Well-Care Visits (#12)	43	8	2	1	0	2	3
Percentage of Eligibles That Received Preventive Dental Services (#13)	37	14	6	1	0	4	3
Percentage of Eligibles That Received Dental Treatment Services (#17)	35	16	2	2	0	4	3
Chlamydia Screening (#9)	32	19	12	0	0	5	2
Childhood Immunization Status (#5)	30	21	10	0	1	8	2
Appropriate Testing for Children with Pharyngitis (#15)	28	23	13	0	0	8	3
Ambulatory Care: Emergency Department Visits (#18)	27	24	11	0	0	10	3
Adolescent Immunization Status (#6)	25	26	15	0	0	9	2
Timeliness of Prenatal Care (#1)	24	27	13	3	4	6	2
Follow-Up Care for Children Prescribed Attention-Deficit Hyperactivity Disorder (ADHD) Medication (#21)	24	27	18	1	1	4	3
Follow-Up After Hospitalization for Mental Illness (#23)	24	27	15	1	1	7	3
Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Health Plan Survey (#24)	22	29	16	2	0	8	3
Frequency of Ongoing Prenatal Care (#2)	18	33	18	3	3	8	2
Body Mass Index Assessment for Children and Adolescents (#7)	18	33	19	1	2	9	2
Annual Percentage of Asthma Patients with 1 or More Asthma-Related Emergency Room Visits (#20)	14	37	21	1	0	12	3
Percentage of Live Births Weighing Less than 2,500 Grams (#3)	11	40	23	4	2	9	2
Annual Pediatric Hemoglobin A1C Testing (#22)	10	41	21	3	1	14	3
Developmental Screening in the First Three Years of Life (#8)	7	44	28	0	1	13	2
Cesarean Rate for Nulliparous Singleton Vertex (#4)	5	46	22	4	2	16	2
Otitis Media with Effusion – Avoidance of Inappropriate Use of Systemic Antimicrobials in Children (#16)	3	48	30	1	1	16	3
Pediatric Central-Line Associated Blood Stream Infections – NICU and PICU (#19)	1	50	31	2	1	13	3

Table 3 (continued)

Source: Mathematica analysis of FFY 2011 CARTS reports as of June 20, 2012.

Note: Wisconsin did not submit a CARTS report for FFY 2011. Delaware submitted an FFY 2011 CARTS report but did not submit data on any of the initial core set of children's health care quality measures. For the eight states that submitted separate data for their Medicaid and CHIP programs (Colorado, Iowa, Kentucky, Michigan, New York, Pennsylvania, Tennessee, and West Virginia), the state was counted as reporting a measure if either report included data for that measure.

Table 4. Number of States Reporting Deviations from the Measure Specifications in Their Calculation of the Initial Core Set of Medicaid/CHIP Children’s Health Care Quality Measures, FFY 2011

Measure <sup>a</sup>	Number of States Reporting Measure	Number of States Reporting Deviations from Measure Specifications <sup>b</sup>	Deviations from Measure Specifications				
			Year of Data	Data Source	Numerator	Denominator	Other
Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life (#11)	48	5	2	1	0	1	1
Well-Child Visits in the First 15 Months of Life (#10)	46	6	3	1	0	1	2
Child and Adolescent Access to Primary Care Practitioners (#14)	44	4	2	0	0	1	1
Adolescent Well-Care Visits (#12)	43	7	2	1	0	2	2
Percentage of Eligibles That Received Preventive Dental Services (#13)	37	4	2	1	0	1	0
Percentage of Eligibles That Received Dental Treatment Services (#17)	35	3	2	0	0	1	0
Chlamydia Screening (#9)	32	5	1	1	0	1	2
Childhood Immunization Status (#5)	30	4	1	2	2	0	0
Appropriate Testing for Children with Pharyngitis (#15)	28	1	0	0	1	0	0
Ambulatory Care: Emergency Department Visits (#18)	27	2	1	1	0	0	0
Adolescent Immunization Status (#6)	25	0	0	0	0	0	0
Timeliness of Prenatal Care (#1)	24	2	0	0	1	0	1
Follow-Up Care for Children Prescribed Attention-Deficit Hyperactivity Disorder (ADHD) Medication (#21)	24	1	0	1	0	0	0
Follow-Up After Hospitalization for Mental Illness (#23)	24	1	0	1	0	0	0
Frequency of Ongoing Prenatal Care (#2)	18	4	1	2	2	2	1
Body Mass Index Assessment for Children and Adolescents (#7)	18	0	0	0	0	0	0
Annual Percentage of Asthma Patients with 1 or More Asthma-Related Emergency Room Visits (#20)	14	1	0	0	0	0	1
Percentage of Live Births Weighing Less than 2,500 Grams (#3)	11	2	0	2	0	0	0
Annual Pediatric Hemoglobin A1C Testing (#22)	10	2	1	0	1	1	0
Developmental Screening in the First Three Years of Life (#8)	7	2	0	0	1	1	0
Cesarean Rate for Nulliparous Singleton Vertex (#4)	5	1	0	1	0	0	0
Otitis Media with Effusion – Avoidance of Inappropriate Use of Systemic Antimicrobials in Children (#16)	3	0	0	0	0	0	0
Pediatric Central-Line Associated Blood Stream Infections – NICU and PICU (#19)	1	0	0	0	0	0	0

Table 4 (continued)

Source: Mathematica analysis of FFY 2011 CARTS reports as of June 20, 2012.

Note: Wisconsin did not submit a CARTS report for FFY 2011. Delaware submitted an FFY 2011 CARTS report but did not submit data on any of the initial core set of children's health care quality measures. For the eight states that submitted separate data for their Medicaid and CHIP programs (Colorado, Iowa, Kentucky, Michigan, New York, Pennsylvania, Tennessee, and West Virginia), the state was counted as reporting a measure if either report included data for that measure.

<sup>a</sup> Because states were not asked to report deviations from measure specifications for the CAHPS measure in their FFY 2011 CAHPS report, this measure is excluded from the table.

<sup>b</sup> States may have reported more than one deviation from the measure specification for a measure; therefore the number of deviations may sum to more than the number of states reporting a deviation.

Table 5. Change in the Number of States Reporting the Initial Core Set of Medicaid/CHIP Children’s Health Care Quality Measures, FFY 2010–2011

Measure	Number of States Reporting in FFY 2010	Number of States Reporting in FFY 2011	Change in Number of States Reporting FFY 2010–2011
Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life (#11)	42	48	6
Well-Child Visits in the First 15 Months of Life (#10)	40	46	6
Child and Adolescent Access to Primary Care Practitioners (#14)	40	44	4
Adolescent Well-Care Visits (#12)	29	43	14
Percentage of Eligibles That Received Preventive Dental Services (#13)	22	37	15
Percentage of Eligibles That Received Dental Treatment Services (#17)	19	35	16
Chlamydia Screening (#9)	21	32	11
Childhood Immunization Status (#5)	20	30	10
Appropriate Testing for Children with Pharyngitis (#15)	20	28	8
Ambulatory Care: Emergency Department Visits (#18)	15	27	12
Adolescent Immunization Status (#6)	12	25	13
Timeliness of Prenatal Care (#1)	15	24	9
Follow-Up Care for Children Prescribed Attention-Deficit Hyperactivity Disorder (ADHD) Medication (#21)	15	24	9
Follow-Up After Hospitalization for Mental Illness (#23)	11	24	13
Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Health Plan Survey (#24)	1	22	21
Frequency of Ongoing Prenatal Care (#2)	12	18	6
Body Mass Index Assessment for Children and Adolescents (#7)	10	18	8
Annual Percentage of Asthma Patients with 1 or More Asthma-Related Emergency Room Visits (#20)	5	14	9
Percentage of Live Births Weighing Less than 2,500 Grams (#3)	3	11	8
Annual Pediatric Hemoglobin A1C Testing (#22)	8	10	2
Developmental Screening in the First Three Years of Life (#8)	2	7	5
Cesarean Rate for Nulliparous Singleton Vertex (#4)	2	5	3
Otitis Media with Effusion – Avoidance of Inappropriate Use of Systemic Antimicrobials in Children (#16)	1	3	2
Pediatric Central-Line Associated Blood Stream Infections – NICU and PICU (#19)	0	1	1
Median Number of Measures Reported by States	7	12	-

Source: State data for FFY 2010 obtained from 2011 Secretary’s report. State data for FFY 2011 obtained from Mathematica analysis of FFY 2011 CARTS reports as of June 20, 2012.

Note: Wisconsin did not submit a CARTS report for FFY 2011. Delaware submitted an FFY 2011 CARTS report but did not submit data on any of the initial core set of children’s health care quality measures. For the eight states that submitted separate data for their Medicaid and CHIP programs (Colorado, Iowa, Kentucky, Michigan, New York, Pennsylvania, Tennessee, and West Virginia), the state was counted as reporting a measure if either report included data for that measure.

Table 6. Changes in State Reporting of the Initial Core Set of Medicaid/CHIP Children’s Health Care Quality Measures, FFY 2010–2011

State	Number of Measures Reported		Change in Number of Measures Reported FFY 2010–2011	Number of Measures Reported for Both Medicaid and CHIP		Change in Number of Measures Reported for Both Medicaid and CHIP FFY 2010–2011
	2010	2011		2010	2011	
Alabama	13	17	4	0	0	0
Alaska	14	13	-1	14	13	-1
Arizona	8	7	-1	0	0	0
Arkansas	0	13	13	0	12	12
California	9	11	2	0	0	0
Colorado	5	12	7	0	9	9
Connecticut	10	14	4	10	12	2
Delaware	0	0	0	0	0	0
District of Columbia	12	13	1	12	13	1
Florida	12	20	8	0	16	16
Georgia	18	19	1	16	19	3
Hawaii	0	12	12	0	11	11
Idaho	0	6	6	0	6	6
Illinois	7	17	10	7	17	10
Indiana	14	14	0	13	14	1
Iowa	3	18	15	0	4	4
Kansas	0	5	5	0	4	4
Kentucky	13	14	1	9	11	2
Louisiana	5	6	1	0	5	5
Maine	11	14	3	9	13	4
Maryland	12	12	0	9	12	3
Massachusetts	0	11	11	0	11	11
Michigan	12	16	4	0	6	6
Minnesota	3	3	0	3	3	0
Mississippi	8	8	0	0	0	0
Missouri	12	12	0	11	11	0
Montana	7	5	-2	0	0	0
Nebraska	5	5	0	2	2	0
Nevada	3	7	4	0	0	0
New Hampshire	5	11	6	1	0	-1

Table 6 (continued)

State	Number of Measures Reported		Change in Number of Measures Reported FFY 2010–2011	Number of Measures Reported for Both Medicaid and CHIP		Change in Number of Measures Reported for Both Medicaid and CHIP FFY 2010–2011
	2010	2011		2010	2011	
New Jersey	6	6	0	6	6	0
New Mexico	15	15	0	13	15	2
New York	9	12	3	0	8	8
North Carolina	2	13	11	0	0	0
North Dakota	2	8	6	0	0	0
Ohio	3	11	8	2	10	8
Oklahoma	4	4	0	4	4	0
Oregon	0	24	24	0	21	21
Pennsylvania	9	13	4	0	0	0
Rhode Island	15	17	2	14	17	3
South Carolina	9	18	9	0	0	0
South Dakota	4	1	-3	1	0	-1
Tennessee	15	23	8	0	18	18
Texas	0	12	12	0	0	0
Utah	3	8	5	0	0	0
Vermont	9	7	-2	5	5	0
Virginia	3	11	8	3	10	7
Washington	6	8	2	4	6	2
West Virginia	15	16	1	0	0	0
Wisconsin	2	0	-2	2	0	-2
Wyoming	13	14	1	0	0	0
Median	7	12	-	0	6	-

Source: State data for FFY 2010 obtained from 2011 Secretary’s report. State data for FFY 2011 obtained from Mathematica analysis of FFY 2011 CARTS reports as of June 20, 2012.

Note: Wisconsin did not submit a CARTS report for FFY 2011. Delaware submitted an FFY 2011 CARTS report but did not submit data on any of the initial core set of children’s health care quality measures. For the eight states that submitted separate data for their Medicaid and CHIP programs (Colorado, Iowa, Kentucky, Michigan, New York, Pennsylvania, Tennessee, and West Virginia), the state was counted as reporting a measure if either report included data for that measure.

Table 7. Performance Rates on Frequently Reported Medicaid/CHIP Children’s Health Care Quality Measures in FFY 2011 CARTS Reports

Measure	Age Group	Number of States Reporting Using HEDIS Specifications	Mean	Median	25th Percentile	75th Percentile	
Access to Primary Care Percent with a PCP Visit	12-24 Months	43	95.9	96.7	95.6	98.2	
	25 Months - 6 Years	43	87.8	88.1	85.1	91.6	
	7-11 Years	43	88.5	90.0	86.7	93.0	
	12-19 Years	43	87.3	89.0	85.3	91.7	
Well-Child Visits	Percent with 6 or More Visits	First 15 Months	45 <sup>a</sup>	57.9	60.8	54.8	69.3
		3-6 Years	47	65.0	66.9	59.6	74.9
	Percent with 1 or More Visits	12-21 Years	43	45.2	45.7	35.4	56.4
Childhood Immunization Status	Percent Up-to-Date on Immunizations (Combo 3) <sup>b</sup>	2 Years	28	65.0	70.7	62.1	76.6
		Immunizations for Adolescents	Percent Up-to-Date on Immunizations (Combo 1) <sup>c</sup>	13 Years	22	48.4	51.9
Chlamydia Screening	Percent Screened	16-20 Years	32	46.0	47.1	36.8	57.0
Appropriate Testing for Children with Pharyngitis	Percent Tested	2-18 Years	28	62.2	63.1	52.2	75.2

Source: Mathematica analysis of FFY 2011 CARTS reports as of June 20, 2012.

Note: Table includes states that used HEDIS specifications to report these measures. Table excludes states that used other specifications and states that did not report these measures in FFY 2011 CARTS reports. In the cases where a state reported rates for both their Medicaid and CHIP populations, the highest rate of the two populations was used. See Appendix Tables E.2–E.9 for details.

<sup>a</sup> South Dakota did not report the percent of children in the first 15 months of life with six or more well-child visits but reported rates for other numbers of well-child visits.

<sup>b</sup> Combination 3 includes DTaP, IPV, MMR, HiB, HepB, VZV, and PCV.

<sup>c</sup> Combination 1 includes Meningococcal and Tdap.

Table 8. Changes in Performance Rates on Frequently Reported Medicaid/CHIP Children’s Health Care Quality Measures as Reported by States in Their FFY 2010 and FFY 2011 CARTS Reports

Measure	Age Group	Number of States Reporting in FFY 2010 and FFY 2011 Using HEDIS Specifications	FFY 2010				FFY 2011			
			Mean	Median	25th Percentile	75th Percentile	Mean	Median	25th Percentile	75th Percentile
<b>Access to Primary Care</b>										
Percent with a PCP Visit	12-24 Months	35	95.4	96.2	95.5	98.0	96.1	96.9	95.7	98.2
	25 Months - 6 Years	37	88.0	89.9	85.8	92.2	88.3	88.4	85.3	91.6
	7-11 Years	37	89.7	91.2	87.3	93.3	89.2	90.6	87.3	93.1
	12-19 Years	37	88.2	88.8	85.8	91.4	88.1	89.3	85.1	91.8
<b>Well-Child Visits</b>										
Percent with 6 or More Visits	First 15 Months	36	53.9	56.5	51.7	65.8	60.3	61.3	56.8	69.6
Percent with 1 or More Visits	3-6 Years	38	64.1	65.2	59.1	75.2	66.5	69.3	61.6	74.9
Percent with 1 or More Visits	12-21 Years	29	47.0	47.0	37.4	56.7	47.4	47.3	38.4	58.6

Source: State data for FFY 2010 obtained from 2011 Secretary’s report. State data for FFY 2011 obtained from Mathematica analysis of FFY 2011 CARTS reports as of June 20, 2012.

Note: For each measure, analysis includes states that used HEDIS specifications to report rates in both the FFY 2010 and FFY 2011 CARTS reports. In the cases where a state reported separate rates for Medicaid and CHIP populations, this analysis includes the higher rate of the two populations.

Table 9. Percentage of Children Receiving Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life as Reported by States in Their FFY 2010 and FFY 2011 CARTS Reports

State	Year of Data		Population Included in the Measure				Data Source Used for the Measure				Percentage of Children Receiving 1+ Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life			
	FFY 2010	FFY 2011	FFY 2010		FFY 2011		FFY 2010		FFY 2011					
			Medicaid	CHIP	Medicaid	CHIP	Administrative	Hybrid	Administrative	Hybrid	FFY 2010	FFY 2011	Change	
Alabama	2010	Jan-10 - Dec-10		X		X	X			X		46.4	44.9	-1.5
Alaska	2009	Jan-10 - Dec-10		X	X	X	X			X		51.0	47.6	-3.4
Arizona	2009	Oct-09 - Sep-10		X		X	X			X		74.1	75.9	1.8
Arkansas	NR	Oct-09 - Sep-10	NR	NR	X	X	NR	NR		X		NR	62.5	N/A
California	2009	Jan-10 - Dec-10		X		X	X	X		X	X	76.8	74.0	-2.8
Colorado														
Medicaid	NR	Jan-10 - Dec-10	NR	NR	X		NR	NR			X	NR	66.9	N/A
CHIP	2010	Jan-10 - Dec-10		X		X	X			X		61.1	63.1	2.0
Connecticut	NR	Jan-10 - Dec-10		X	X	X		X			X	77.0	61.7	-15.3
D.C.	2009	Jan-10 - Dec-10	X	X	X	X	X			X		73.6	79.5	5.9
Florida	2010	Jan-10 - Dec-10		X	X	X	X				X	63.3	70.5	7.2
Georgia	2009	Jan-10 - Dec-10		X	X	X	X			X		53.4	57.7	4.3
Hawaii	NR	Jan-10 - Dec-10	NR	NR	X	X	NR	NR			X	NR	66.2	N/A
Idaho	NR	Oct-10 - Sep-11	NR	NR	X	X	NR	NR		X		NR	49.3	N/A
Illinois	2010	Jan-10 - Dec-10	X	X	X	X	X			X		61.1	69.6	8.5
Indiana	2009	Jan-10 - Dec-10		X	X	X		X			X	69.1	69.7	0.6
Iowa	2009	Jan-10 - Dec-10		X	X		X			X		58.8	62.4	3.6
Kansas	NR	Jan-11 - Dec-11	NR	NR	X	X	NR	NR			X	NR	48.7	N/A
Kentucky	2009	Jan-10 - Dec-10	X	X	X	X	X			X		76.7	75.3	-1.4
Louisiana	2010	Jul-10 - Jun-11		X	X	X	X			X		65.5	64.0	-1.5
Maine	2010	Oct-10 - Sep-11		X	X	X	X			X		58.9	62.8	3.9
Maryland	2009	Jan-10 - Dec-10	X	X	X	X		X			X	81.8	80.7	-1.1
Massachusetts	NR	Jan-09 - Dec-09	NR	NR	X	X	NR	NR			X	NR	85.5	N/A
Michigan														
Medicaid	2009	Jan-10 - Dec-10	X		X			X			X	75.9	74.9	-1.0
CHIP	NR	Jan-10 - Dec-10	NR	NR		X	NR	NR		X		NR	67.6	N/A
Minnesota	2009	Jan-10 - Dec-10		X	X	X	X			X		65.6	67.3	1.7
Mississippi	2009	Jan-10 - Dec-10		X		X	X			X		33.6	35.9	2.3
Missouri	2009	Jan-10 - Dec-10		X	X	X	X			X	X	60.2	59.4	-0.8

Table 9 (continued)

State	Year of Data		Population Included in the Measure				Data Source Used for the Measure				Percentage of Children Receiving 1+ Well-Child Visits in the 3rd, 4th, 5th, and 6th Years of Life		
	FFY 2010	FFY 2011	FFY 2010		FFY 2011		FFY 2010		FFY 2011		FFY 2010	FFY 2011	Change
			Medicaid	CHIP	Medicaid	CHIP	Administrative	Hybrid	Administrative	Hybrid			
Montana	2009	Jan-10 - Dec-10		X		X	X		X		44.4	44.5	0.1
Nevada	2009	Jul-10 - Jun-11		X		X		X		X	70.7	77.9	7.2
New Hampshire	2009	Jul-09 - Jun-10		X		X	X		X		80.4	79.0	-1.4
New Jersey	2009	Jan-10 - Dec-10		X	X	X		X		X	77.4	81.3	3.9
New Mexico	2009	Jan-10 - Dec-10	X	X	X	X	X			X	60.9	62.6	1.7
New York	2009	Jan-10 - Dec-10		X	X	X	X		X		81.0	80.6	-0.4
North Carolina	2009	Jan-10 - Dec-10		X	X		X		X		26.3	71.3	45.0
North Dakota	NR	Jan-10 - Dec-10	NR	NR		X	NR	NR	X		NR	28.6	N/A
Ohio	2009	Jan-10 - Dec-10		NR	X	X	X		X		61.2	62.4	1.2
Oklahoma	2009	Jan-10 - Dec-10	X	X	X	X	X		X		64.9	59.8	-5.1
Oregon	NR	Jan-10 - Dec-10	NR	NR	X	X	NR	NR	X		NR	55.4	N/A
Pennsylvania	2009	Jan-10 - Dec-10		X		X	X	X		X	75.5	74.9	-0.6
Rhode Island	2009	Jan-10 - Dec-10		X	X	X	X		X		76.5	77.2	0.7
South Carolina	NR	Oct-10 - Sep-11	NR	NR		X	NR	NR	X		NR	63.5	N/A
South Dakota	2009	NR		X	NR	NR	X		NR	NR	46.6	NR	N/A
Tennessee Medicaid	NR	Jan-10 - Dec-10	NR	NR	X		NR	NR	X	X	NR	71.8	N/A
Tennessee CHIP	2009	Jan-10 - Dec-10		X		X	X		X		59.5	64.4	4.9
Texas	NR	Sep-09 - Aug-10	NR	NR		X	NR	NR	X		NR	68.1	N/A
Utah	2009	Jul-10 - Jun-11		X		X	X		X		50.0	56.5	6.5
Vermont	2009	Jan-10 - Dec-10	X	X	X	X	X		X		70.6	69.0	-1.6
Virginia	2009	Jan-10 - Dec-10		X	X	X		X		X	72.7	74.9	2.2
Washington	2009	Jan-09 - Dec-10		X	X	X		X		X	62.1	61.5	-0.6
West Virginia	2009	Jan-10 - Dec-10		X		X	X		X		73.5	73.3	-0.2
Wisconsin	2009	NR	X	X	NR	NR	X		NR	NR	63.1	NR	N/A
Wyoming	2010	Oct-10 - Sep-11		X		X	X		X		45.6	48.5	2.9

Source: State data for FFY 2010 obtained from 2011 Secretary's report. State data for FFY 2011 obtained from Mathematica analysis of FFY 2011 CARTS reports as of June 20, 2012.

Note: Delaware did not submit a CARTS report for FFY 2010 or FFY 2011. This table excludes Nebraska in both FFY 2010 and FFY 2011 and North Dakota in FFY 2010 as these states reported using other specifications.

NR = not reported; NA = not applicable

Table 10. Comparison of Median Rates for State Medicaid/CHIP Programs and Commercial Health Plans for Frequently Reported Children’s Health Care Quality Measures, FFY 2011

Measure	Age Group	State Medicaid/ CHIP Median	Health Plan Commercial Median
<b>Access to Primary Care</b>			
Percent with a PCP Visit	12-24 Months	96.7	98.2
	25 Months - 6 Years	88.1	91.8
	7-11 Years	90.0	92.4
	12-19 Years	89.0	89.6
<b>Well-Child Visits</b>			
Percent with 6 or More Visits	First 15 Months	60.8	78.1
Percent with 1 or More Visits	3-6 Years	66.9	73.1
Percent with 1 or More Visits	12-21 Years	45.7	41.8
<b>Childhood Immunization Status</b>			
Percent Up-to-Date on Immunizations (Combo 3) <sup>a</sup>	2 Years	70.7	75.8
<b>Adolescent Immunization Status</b>			
Percent Up-to-Date on Immunizations (Combo 1) <sup>b</sup>	13 Years	51.9	51.3
<b>Chlamydia Screening</b>			
Percent Screened	16-20 Years	47.1	39.6
<b>Appropriate Testing for Children with Pharyngitis</b>			
Percent Tested	2-18 Years	63.1	79.6

Source: State Medicaid/CHIP medians from FFY 2011 CARTS reports; Commercial Health Plan medians from unpublished data provided by the National Committee for Quality Assurance (NCQA).

<sup>a</sup> Combination 3 includes DTaP, IPV, MMR, HiB, HepB, VZV, and PCV.

<sup>b</sup> Combination 1 includes Meningococcal and Tdap.

Table 11. Managed Care Plans Covering Children or Pregnant Women Included in External Quality Review Organization (EQRO) Technical Reports, 2011-2012 Reporting Cycle

State	EQRO	Number of Plans	Plan Type (Number of Plans)		Population Enrolled in Managed Care (Number of Plans)				CHIP Program Type
			MCO (HMO)	PIHP	Medicaid and CHIP Combined	Medicaid Only	CHIP Only	Unknown Population	
Total (37 States)		321	232	89	78	5	0	238	
Arizona	HSAG	9	9	0	0	0	0	9	Separate
California	HSAG	22	20	2	0	0	0	22	Combination
Colorado	HSAG	7	1	6	0	0	0	7	Separate
Delaware	Mercer	2	2	0	2	0	0	0	Combination
D.C.	Delmarva	3	2	1	3	0	0	0	Medicaid Expansion
Florida	HSAG	51	25	26	3	0	0	48	Combination
Georgia	HSAG	3	3	0	0	0	0	3	Separate
Hawaii	HSAG	3	3	0	0	0	0	3	Medicaid Expansion
Illinois	HSAG	3	3	0	3	0	0	0	Combination
Indiana	Burns & Associates	3	3	0	0	0	0	3	Combination
Iowa	Telligen	1	0	1	0	0	0	1	Combination
Kansas	KFMC	2	2	0	0	0	0	2	Separate
Kentucky	IPRO	1	1	0	1	0	0	0	Combination
Maryland	Delmarva	7	7	0	7	0	0	0	Medicaid Expansion
Massachusetts	APS Healthcare	2	0	2	0	0	0	2	Combination
Michigan	HSAG	32	14	18	0	0	0	32	Combination
Minnesota	MPRO	8	5	3	0	0	0	8	Combination
Missouri	BHC	6	6	0	0	0	0	6	Combination
Nebraska	IPRO	2	2	0	0	0	0	2	Medicaid Expansion
Nevada	HSAG	2	2	0	0	0	0	2	Separate
New Jersey	MPRO	6	6	0	6	0	0	0	Combination
New Mexico	NMMRA	5	4	1	0	0	0	5	Medicaid Expansion
New York	IPRO	18	18	0	18	0	0	0	Separate
Ohio	HSAG	7	7	0	7	0	0	0	Medicaid Expansion
Oregon	Acumentra	25	25	0	0	0	0	25	Separate

Table 11 (continued)

State	EQRO	Number of Plans	Plan Type (Number of Plans)		Population Enrolled in Managed Care (Number of Plans)				CHIP Program Type
			MCO (HMO)	PIHP	Medicaid and CHIP Combined	Medicaid Only	CHIP Only	Unknown Population	
Pennsylvania	I PRO	12	7	5	0	0	0	12	Separate
Puerto Rico	I PRO	5	4	1	0	0	0	5	NA
Rhode Island	I PRO	3	3	0	3	0	0	0	Combination
South Carolina	CCME	4	4	0	0	0	0	4	Medicaid Expansion
Tennessee	QSource	7	7	0	0	0	0	7	Combination
Texas	I CHP	5	5	0	0	5	0	0	Separate
Utah	QQ	11	1	10	0	0	0	11	Separate
Vermont	HSAG	1	1	0	0	0	0	1	Separate
Virginia	Delmarva	5	5	0	5	0	0	0	Combination
Washington	Acumentra	20	7	13	20	0	0	0	Separate
West Virginia	Delmarva	3	3	0	0	0	0	3	Separate
Wisconsin	Meta Star	15	15	0	0	0	0	15	Combination

Source: EQRO technical reports submitted to CMS for the 2011-2012 reporting cycle, as of July 31, 2012.

Note: Alabama, Alaska, Arkansas, Connecticut, Idaho, Maine, Montana, New Hampshire, Oklahoma, South Dakota, and Wyoming do not have MCOs or PIHPs that enroll children covered by Medicaid or CHIP. Louisiana, Mississippi, and North Dakota have newly applicable managed care requirements and were not required to submit EQRO technical reports for the 2011-2012 reporting cycle. North Carolina submitted an EQRO technical report, but managed care in the State was limited to behavioral health programs that did not enroll children.

South Carolina ended its Separate CHIP program effective October 1, 2010. At that time, the state transitioned all CHIP enrollees to a Medicaid Expansion CHIP.

BHC = Behavioral Health Concepts; CCME = Carolinas Center for Medical Excellence; HSAG = Health Services Advisory Group; ICHP = Institute for Child Health Policy at the University of Florida; KFMC = Kansas Foundation for Medical Care; MPRO = Michigan Peer Review Organization; NMMRA = New Mexico Medical Review Association; QQ = HCE Quality Quest.

Table 12. Types of Performance Measures Evaluating Children or Pregnant Women Included in External Quality Review Organization (EQRO) Technical Reports, 2011-2012 Reporting Cycle

State	States with Performance Measures Evaluating Children or Pregnant Women															
	ADHD	Asthma	Behav Health	Childhood Immunization	Dental Care	Lead Screening	Mental Health	Pharyngitis	Prenatal Care	Primary Care Access	STIs	URI Treatment	Weight / BMI	Well-Child Care: Children	Well-Child Care: Adolescent	Other <sup>a</sup>
Total (37 States)	10	22	5	27	14	15	18	8	25	22	19	11	13	26	25	8
Arizona					X				X	X	X			X	X	X
California				X			X	X	X	X	X	X	X	X	X	X
Colorado			X	X			X		X	X	X		X	X	X	
Delaware				X									X			
D.C.	X	X		X	X	X	X	X	X	X	X	X	X	X	X	
Florida	X	X		X	X	X	X		X					X	X	
Georgia	X	X		X	X	X	X		X	X		X	X	X	X	
Hawaii				X							X					
Illinois		X		X		X	X		X	X	X			X	X	
Indiana			X													
Iowa																
Kansas		X		X		X			X	X <sup>b</sup>				X		
Kentucky		X		X	X	X			X	X	X		X	X	X	X
Maryland		X	X	X				X	X	X	X	X		X	X	
Massachusetts				X			X				X	X				
Michigan		X		X		X	X	X	X	X	X	X	X	X	X	X
Minnesota		X		X					X	X	X			X	X	
Missouri					X		X								X	
Nebraska				X					X	X			X	X	X	
Nevada		X		X	X	X	X		X	X				X	X	
New Jersey		X		X		X			X					X	X	
New Mexico		X		X	X		X		X	X				X		
New York	X	X			X		X		X	X	X		X		X	
Ohio		X		X	X	X			X	X				X	X	
Oregon																X
Pennsylvania	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X
Puerto Rico	X	X	X	X	X		X		X	X	X	X	X	X	X	
Rhode Island	X	X		X		X	X		X	X	X		X	X	X	
South Carolina <sup>c</sup>																
Tennessee	X															

Table 12 (continued)

States with Performance Measures Evaluating Children or Pregnant Women																
State	ADHD	Asthma	Behav Health	Childhood Immunization	Dental Care	Lead Screening	Mental Health	Pharyngitis	Prenatal Care	Primary Care Access	STIs	URI Treatment	Weight / BMI	Well-Child Care: Children	Well-Child Care: Adolescent	Other <sup>a</sup>
Texas	X	X					X	X	X	X	X	X		X	X	X
Utah		X		X				X	X	X	X	X		X	X	
Vermont		X			X					X				X	X	
Virginia		X		X		X	X		X					X	X	
Washington				X			X		X					X	X	
West Virginia				X		X			X	X	X		X	X	X	
Wisconsin	X	X	X	X	X	X		X			X	X				

Source: EQRO technical reports submitted to CMS for the 2011-2012 reporting cycle, as of July 31, 2012.

Note: Alabama, Alaska, Arkansas, Connecticut, Idaho, Maine, Montana, New Hampshire, Oklahoma, South Dakota, and Wyoming do not have MCOs or PIHPs that enroll children covered by Medicaid or CHIP. Louisiana, Mississippi, and North Dakota have newly applicable managed care requirements and were not required to submit EQRO technical reports for the 2011-2012 reporting cycle. North Carolina submitted an EQRO technical report, but managed care in the state was limited to behavioral health programs that did not enroll children.

Analysis excludes plans that provide only limited services, such as primary care case management. Analysis also excludes plans that do not serve children or pregnant women, such as long-term care plans or Medicare Advantage plans that cover dual eligibles.

Analysis includes performance measures listed in the EQRO technical report for each state that specifically evaluate children or pregnant women.

<sup>a</sup>Appendix Table G.1 includes information about the “Other” performance measures for children and pregnant women reported by states.

<sup>b</sup>The Kansas EQRO technical report included primary care access for adolescents, but did not report rates of primary care access for children ages 12 months to 11 years.

<sup>c</sup>The South Carolina EQRO technical report did not list performance measures for managed care plans.

BMI = Body Mass Index; Behav = Behavioral; STI = Sexually Transmitted Infection; URI = Upper Respiratory Infection.

Table 13. Reporting of Performance Rates for Measures Included in External Quality Review Organization (EQRO) Technical Reports, 2011-2012 Reporting Cycle

State	Year of Data	Performance Measures Validated by EQRO <sup>a</sup>	MCO / PIHP Rates for Performance Measures Reported in EQRO Report	Rates Reported for Subgroups within State	Comparisons for Performance Rates <sup>b</sup>				
					To Previous Year(s) Rates	To Statewide Managed Care Rate	To National HEDIS Medicaid Rates (HEDIS year)	To State Target Performance Rates	Other Comparisons
Total (37 States)				10	29	22	27	10	5
Arizona	FFY 2009	All	All		X	X		X	
California	CY 2010	All	All	X <sup>c,d</sup>	X	X	X (2011)	X	X <sup>e,f</sup>
Colorado	CY 2010	All	All	X <sup>g</sup>	X	X	X (2010)		
Delaware	CY 2010	All	All						
D.C.	CY 2010	All	All		X	X	X (2011)		
Florida	CY 2009	All	All		X	X	X (2009)	X	
Georgia	CY 2009	All	All		X	X	X (2010)	X	X <sup>h</sup>
Hawaii	CY 2010	All	All		X		X (2010)	X	
Illinois	CY 2009	Some	All		X		X (2005–2010)		
Indiana	CY 2009	Some	None						
Iowa	SFY 2010	All	All		X				
Kansas	CY 2009	All	All		X				
Kentucky	CY 2009	All	All	X <sup>g</sup>	X		X (2008–2010)		
Maryland	CY 2010	All	All		X	X	X (2010)		
Massachusetts	CY 2009	All	All		X		X (2010)		
Michigan	CY 2010	All	All		X	X	X (2010)	X	
Minnesota	2010	All	All	X <sup>g</sup>		X	X (NR)		X <sup>e</sup>
Missouri	CY 2009	All	All		X	X	X (2006–2009)		X <sup>e</sup>
Nebraska	CY 2010	All	All		X				
Nevada	CY 2010	All	All		X	X	X (2010)		
New Jersey	CY 2009	All	All		X	X	X (2008–2009)		
New Mexico	CY 2009	Some	Some	X	X		X (2010)	X	
New York	CY 2009–2010	All	All	X <sup>i</sup>	X	X			
Ohio	CY 2009	All	All	X <sup>g</sup>	X	X	X (2010)		
Oregon	CY 2010	All	None						
Pennsylvania	CY 2010	All	All	X <sup>c</sup>	X	X	X (2010)		
Puerto Rico	CY 2009	All	All	X <sup>c</sup>			X (2010)		
Rhode Island	CY 2009	All	All		X	X	X (2010)	X	
South Carolina	CY 2010	All	None						
Tennessee	CY 2010	Some	All		X	X	X (2010)		

Table 13 (continued)

State	Year of Data	Performance Measures Validated by EQRO <sup>a</sup>	MCO / PIHP Rates for Performance Measures Reported in EQRO Report	Rates Reported for Subgroups within State	Comparisons for Performance Rates <sup>b</sup>				
					To Previous Year(s) Rates	To Statewide Managed Care Rate	To National HEDIS Medicaid Rates (HEDIS year)	To State Target Performance Rates	Other Comparisons
Texas	9/2009 – 8/2010	All	All	X <sup>c</sup>	X	X	X (2010)	X	X <sup>j</sup>
Utah	CY 2010	All	All			X	X (2011)		
Vermont	CY 2010	All	All		X		X (2010)		
Virginia	CY 2010	Some	All		X	X	X (2010–2011)		
Washington	CY 2010	All	Some		X	X	X (2011)		
West Virginia	CY 2010	All	All		X	X	X (2010)	X	
Wisconsin	CY 2009	All	None						

Source: EQRO technical reports submitted to CMS for the 2011-2012 reporting cycle, as of July 31, 2012.

Notes: Alabama, Alaska, Arkansas, Connecticut, Idaho, Maine, Montana, New Hampshire, Oklahoma, South Dakota, and Wyoming do not have MCOs or PIHPs that enroll children covered by Medicaid or CHIP. Louisiana, Mississippi, and North Dakota have newly applicable managed care requirements and were not required to submit EQRO technical reports for the 2011-2012 reporting cycle. North Carolina submitted an EQRO technical report, but managed care in the state was limited to behavioral health programs that did not enroll children.

Analysis excludes plans that provide only limited services, such as primary care case management. Analysis also excludes plans that do not serve children or pregnant women, such as long-term care plans or Medicare Advantage plans that cover dual eligibles.

<sup>a</sup> Use of the term “validation” differed across EQRO technical reports. In Table 13, 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 accord with standards for data collection and analysis. Some measures that were reviewed in the validation process did not meet all of the review criteria.

<sup>b</sup> Comparisons may apply to only some performance measures reported by the EQRO.

<sup>c</sup> Reported performance rates for geographic regions within state or territory.

<sup>d</sup> Reported performance separately by type of managed care model in state (county-operated health system, geographic managed care, and two-plan model).

<sup>e</sup> Comparisons to National HEDIS Commercial Averages.

<sup>f</sup> Comparisons to Healthy People 2010.

<sup>g</sup> Reported performance separately for Medicaid eligibility categories, including children and families, adults without dependent children, aged, and disabled populations.

<sup>h</sup> Comparisons to statewide FFS Medicaid rates.

<sup>i</sup> Compared rates for enrollees in New York City with the rest of the state.

<sup>j</sup> Rates for AHRQ Pediatric Quality Indicators are compared with AHRQ national estimates for 2008, based on area-level indicators that include commercial and Medicaid populations.

NR = not reported.

Table 14. Performance Improvement Projects (PIPs) Targeting Children or Pregnant Women Included in External Quality Review Organization (EQRO) Technical Reports, 2011-2012 Reporting Cycle

State	Number of PIPs for Children or Pregnant Women	Years of Data	PIPs Validated by EQRO <sup>a</sup>	Number of PIPs by Topic Area											
				ADHD	Asthma	Behav Health	Childhood Immunization	Dental Care	Lead Screening	Mental Health	Prenatal Care	Primary Care Access	Weight/BMI	Well-Child Care	Other <sup>b</sup>
Total PIPs (37 States)	268			4	16	5	17	24	11	19	46	2	42	56	26
Total States (37 States)	30			4	7	1	9	7	6	4	16	1	9	11	9
Arizona	7	FFY 2006–2009	All		7*										
California	22	Jan–March 2012	All	1	1						12		5		3
Colorado	3	FFY 2010–2011	All							1				1	1
Delaware	4	Varies by PIP	All		1				1			2*			
D.C.	3	CY 2010	All									3*			
Florida	59	SFY 2011	All		2	5*		3	3	14*	2			30*	
Georgia	9	Varies by PIP	All				3*		3*					3*	
Hawaii	6	Varies by PIP	All									2	3	1	
Illinois	6	SFY 2009–2010	All										3*		3*
Indiana	3	CY 2010	All						1		1			1	
Iowa	0	CY 2009–2010	All												
Kansas	2	Varies by PIP	All												2
Kentucky	4	Varies by PIP	All					1			1		1		1
Maryland	0	NA	All												
Massachusetts	0	NA	NA												
Michigan	14	CY 2010	All										14*		
Minnesota	2	NR	All						1				1		
Missouri	11	CY 2010	All		2		1	6*			2				
Nebraska	5	CY 2010	All				1				1		2	1	
Nevada	4	CY 2011	All				2		2						
New Jersey	16	CY2009	All					6*			4*				6*
New Mexico	5	FY 2010	All		1		1	1			2				
New York	17	2009–2010	All								3*		14*		
Ohio	12	SFY 2010	All					4						1	7*
Oregon	12	2011–2012	Some <sup>c</sup>				1			2			1	1	7*
Pennsylvania	6	CY 2008–2010	All					3			3				
Puerto Rico	1	NR	All	1											
Rhode Island	2	Varies by PIP	All	1							1				

Table 14 (continued)

State	Number of PIPs for Children or Pregnant Women	Years of Data	PIPs Validated by EQRO <sup>a</sup>	Number of PIPs by Topic Area											Other <sup>b</sup>		
				ADHD	Asthma	Behav Health	Childhood Immunization	Dental Care	Lead Screening	Mental Health	Prenatal Care	Primary Care Access	Weight/BMI	Well-Child Care			
South Carolina	4	NR	All									3					1
Tennessee	4	CY 2010	Some	1								3					
Texas	0	NA	NA														
Utah	0	2010	All														
Vermont	0	NA	NA														
Virginia	10	CY 2010	All				5*										5*
Washington	10	Varies by PIP	All				2			2							6*
West Virginia	5	CY 2010	All		2		1								1		1
Wisconsin <sup>d</sup>	0	NA	NA														

Source: EQRO technical reports submitted to CMS for the 2011-2012 reporting cycle, as of July 31, 2012.

Note: Alabama, Alaska, Arkansas, Connecticut, Idaho, Maine, Montana, New Hampshire, Oklahoma, South Dakota, and Wyoming do not have MCOs or PIHPs that enroll children covered by Medicaid or CHIP. Louisiana, Mississippi, and North Dakota have newly applicable managed care requirements and were not required to submit EQRO technical reports for the 2011-2012 reporting cycle. North Carolina submitted an EQRO technical report, but managed care in the state was limited to behavioral health programs that did not enroll children.

Analysis excludes plans that provide only limited services, such as primary care case management. Analysis also excludes plans that do not serve children or pregnant women, such as long-term care plans or Medicare Advantage plans that cover dual eligibles.

Analysis includes PIPs listed in the EQRO technical report for each state that specifically evaluated children or pregnant women.

<sup>a</sup> Use of the term “validation” differed across EQRO technical reports. In Table 14, validation indicates that the EQRO technical reported reviewing 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. Some PIPs that were reviewed in the validation process did not meet all of the review criteria.

<sup>b</sup> PIPs for children on “Other” topics include appropriate treatment for children with pharyngitis (South Carolina); assuring better child health and development (Oregon); emergency room diversion (Colorado, West Virginia); EPSDT participation rates (Illinois, Kentucky, Ohio); improving customer service rates: children (Kansas); improving rates of cervical cancer screening (California); reduction of out-of-home placement (California); school attendance rates (California); sexually transmitted infections (Kansas).

<sup>c</sup> EQRO did not review or validate the Assuring Better Child Health and Development (ABCD) Program PIP because a separate EQRO (the Oregon Pediatric Improvement Partnership) held the contract for PIP development and validation.

<sup>d</sup> Managed care plans in Wisconsin operate PIPs, but PIP topics and descriptions were not included in the EQRO technical report.

\*PIP topic was mandated by state; ADHD = Attention Deficit Hyperactivity Disorder; Behav = Behavioral; BMI = Body Mass Index; NA = Not Applicable, EQRO technical report did not include any PIPs for children or pregnant women; NR = Not Reported.

Table 15. Overview of State-Level Reporting on Selected Child Medicaid CAHPS Measures, 25 States, 2010

CAHPS Measure	Median	Mean	25th percentile	75th percentile	Low-High
<b>Parent's Global Assessment of Health Care<sup>a</sup></b>					
Overall Rating of Health Care	60%	60%	58%	64%	54% - 68%
<b>Parent's Assessment of Ease of Getting Care for Child<sup>b</sup></b>					
Child Can Get Care for Illness/Injury as Soon as Needed	76%	75%	74%	78%	65% - 85%
Child Can Get Appointment for Routine Care as Soon as Needed	65%	65%	61%	68%	52% - 77%
How Often It Was Easy to Get Appointment with a Specialist	47%	50%	45%	55%	40% - 61%
<b>Parent's Assessment of How Well Child's Doctor Communicates<sup>c</sup></b>					
Child's Doctor Shows Respect for What Parent Has to Say	81%	81%	79%	83%	75% - 89%
Child's Doctor Listens Carefully to Parent	78%	77%	75%	80%	69% - 86%
Child's Doctor Explains Things Clearly to Parent	77%	76%	74%	78%	63% - 85%
Child's Doctor Explains Things Clearly to Child	68%	68%	66%	70%	61% - 76%
Child's Doctor Spent Enough Time with Child	62%	62%	61%	65%	49% - 71%
How Well Child's Doctor Communicates (Composite)	73%	73%	70%	76%	65% - 80%

Source: Mathematica analysis of National CAHPS Benchmarking Database.

<sup>a</sup> Parents assessed overall rating of health care on a scale of 0 to 10, where 0 is “worst possible” and 10 is “best possible.” This table shows the percentage reporting a rating of 9 or 10.

<sup>b</sup> Parents assessed the ease of getting care on a four-point scale (never, sometimes, usually, always), and the percentages shown here are the percentages reporting “always.”

<sup>c</sup> Parents assessed doctors' communication on a four-point scale (never, sometimes, usually, always) and the percentages shown here are the percentages reporting “always.”

Table 16. Percentage and Number of Eligible Children Age 1-20, Enrolled for at Least 90 Continuous Days, Who Received Preventive Dental Services and Dental Treatment Services in FFY 2010

State	Total Number of Children Receiving Dental Service: Preventive	Percent of Children Receiving Dental Service: Preventive	Total Number of Children Receiving Dental Service: Treatment	Percent of Children Receiving Dental Service: Treatment
Alabama	244,112	50	105,432	21
Alaska	33,016	41	21,780	27
Arizona	333,511	46	189,986	26
Arkansas	166,106	46	91,528	25
California	1,451,686	37	870,922	22
Colorado	167,886	47	95,085	27
Connecticut	155,039	54	77,445	27
Delaware	36,357	41	18,763	21
D.C.	32,435	39	18,060	22
Florida	266,213	15	146,327	8
Georgia	471,278	46	231,232	22
Hawaii	53,413	41	32,479	25
Idaho	10,887	7	7,279	5
Illinois	703,305	47	282,818	19
Indiana	201,713	29	102,865	15
Iowa	103,098	40	49,098	19
Kansas	36,774	18	15,169	7
Kentucky	205,633	43	118,592	25
Louisiana	318,133	43	183,682	25
Maine	49,654	38	23,758	18
Maryland	252,729	48	132,667	25
Massachusetts	256,381	50	152,793	30
Michigan	395,241	35	173,502	15
Minnesota	162,552	40	81,715	20
Mississippi	160,053	43	83,026	22
Missouri	183,283	30	99,882	17
Montana	23,779	35	14,829	22
Nebraska	66,420	46	31,780	22
Nevada	69,767	36	45,064	24
New Hampshire	48,020	56	22,390	26

Table 16 (continued)

State	Total Number of Children Receiving Dental Service: Preventive	Percent of Children Receiving Dental Service: Preventive	Total Number of Children Receiving Dental Service: Treatment	Percent of Children Receiving Dental Service: Treatment
New Jersey	244,920	40	149,067	24
New Mexico	153,855	45	165,572	49
New York	712,872	37	368,940	19
North Carolina	430,929	44	231,775	24
North Dakota	12,780	30	6,607	16
Ohio	484,502	44	225,042	20
Oklahoma	236,163	47	142,334	28
Oregon	105,438	36	58,916	20
Pennsylvania	400,804	37	220,480	20
Rhode Island	39,542	41	18,613	19
South Carolina	277,137	53	135,827	26
South Dakota	30,099	39	12,026	16
Tennessee	340,073	45	186,995	24
Texas	1,591,256	55	1,037,158	36
Utah	81,512	48	40,871	24
Vermont	33,403	58	14,003	24
Virginia	265,212	46	148,238	26
Washington	357,672	51	225,107	32
West Virginia	84,670	44	96,313	50
Wisconsin	114,869	23	57,367	12
Wyoming	22,366	43	12,277	24
U.S. Total	12,678,548	43 (Median) 41 (Mean)	7,073,476	22 (Median) 23 (Mean)

Source: FFY 2010 CMS-416 reports, Line 1b, Line 12b, Line 12c.

Table 17. Summary of CHIPRA Quality Demonstrations

Grant	States	Initial Core Quality Measures Testing	HIT Initiative	Provider Delivery Model	EHR Format Testing	State Initiative	Grantee Highlights
1	Maine	X	X	X			Developing pediatric quality measures to support patient-centered medical home. Enhancing HIT infrastructure by automating EPSDT and other clinical data. Implementing an electronic comprehensive health assessment for children in foster care.
	Vermont		X	X		X	
2	Florida	X	X	X		X	Developing state specific measures. Partnering with American Academy of Pediatrics to design a pediatric medical home. Focusing on improving birth outcomes. Identifying opportunities to reduce elective pre-term delivery (Florida).
	Illinois	X	X	X		X	
3	Massachusetts	X		X		X	Implementing care coordinators in the patient centered medical home project to support improved care at the practice level. Using learning collaboratives as a tool to drive transformation.
4	Pennsylvania	X	X		X		Implementing a pre-visit screening tool to help identify potential conditions needing special attention – such as developmental delays, autism, and maternal depression. Creating linkages with two of four health systems across the state to the Pennsylvania Department of Health’s Statewide Immunization Information System.
5	Utah		X	X		X	Implementing a medical home model using an administrative service model with medical home coordinators embedded in primary and sub-specialty care practices. Using learning collaborative to establish support and foster quality improvement in care in areas such as mental health and asthma.
	Idaho		X	X		X	
6	Colorado			X		X	Integrating school-based health centers and mental health services with medical home model. Created an Electronic Student Health Questionnaire, a risk assessment screening tool to identify patients at risk for depression and anxiety.
	New Mexico			X		X	

Table 17 (continued)

Grant	States	Initial Core Quality Measures Testing	HIT Initiative	Provider Delivery Model	EHR Format Testing	State Initiative	Grantee Highlights
7	North Carolina	X		X	X		Using public-private partnership of professional/community organizations to test quality measures with provider-led community-based provider models. Using learning collaborative model to support the medical home with a focus on children with special health care needs. Piloting an oral health screening tool.
8	Oregon	X	X	X			Collecting and reporting core measures. Testing the patient centered medical home model and using health information technology to support their efforts. Implementing learning collaboratives used in each state to support the patient centered medical home.
	Alaska	X	X	X			
	West Virginia	X	X	X			
9	South Carolina	X	X	X			Using the medical home model in pediatric practices focused on coordinating and integrating physical and mental health services. Improving preventive oral health by training and certifying pediatric staff to provide fluoride varnish.
10	Maryland			X			Improving clinical, functional, and social outcomes for children with serious behavioral health needs through a Care Management Entity (CME) provider model, which incorporates wrap-around services, peer supports, and intensive care coordination.
	Georgia Wyoming		X	X X			

HIT = Healthcare Information Technology; EHR = Electronic health records; EPSDT = Early Periodic Screening, Diagnosis, and Treatment.

Table 18. Examples of Measurement Topics being Addressed by the Centers of Excellence (COE)

COE Acronym	Site	Principal Investigator	Sample Measure Topic
Q-Metric	University of Michigan	Gary Freed, MD, MPH	Sickle cell disease treatment
CAPQuaM	Mount Sinai School of Medicine, NY	Lawrence Kleinman, MD, MPH	Availability of services for high-risk OB patients
COE4CCN	University of Washington, Seattle	Rita Mangione-Smith, MD, MPH	Care coordination for children with special health care conditions
PMCoE	University of Wisconsin, Milwaukee	Ramesh Sachdeva, PhD, JD	Dental treatment
NCINQ	National Committee for Quality Assurance, Washington, DC	Sarah Hudson Scholle, DrPH	Adolescent depression screening and follow-up
CEPQM	Children's Hospital, Boston	Mark Schuster, MD, PhD	Readmissions
CHOP	Children's Hospital of Philadelphia	Jeffrey H. Silber, MD, PhD	Duration of enrollment

Note: A comprehensive list of measure topics assigned to the COEs is available at: <http://ahrq.gov/chipra/pqmpmeasures>

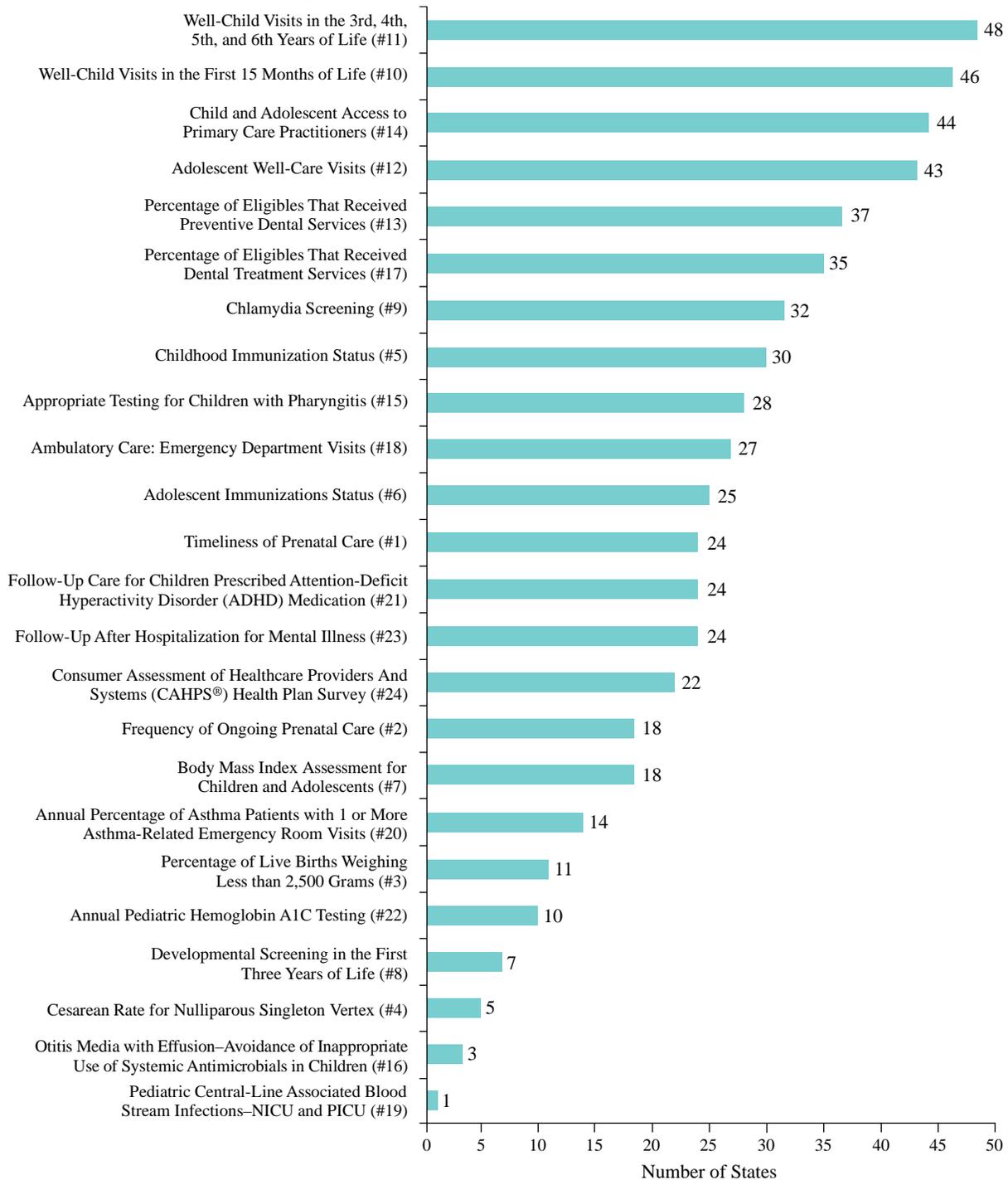
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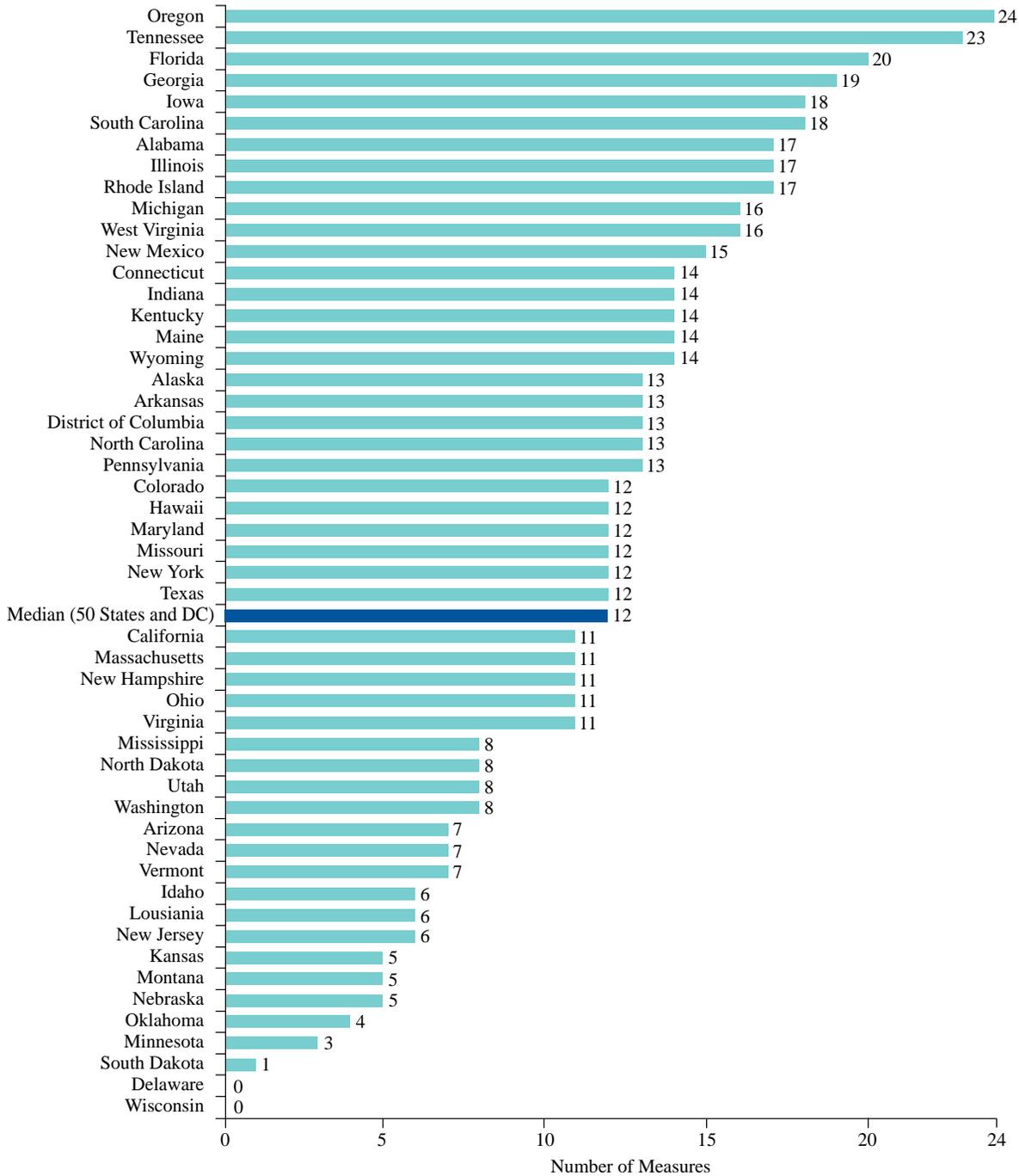
Figure 1. Number of States Reporting the Initial Core Set of Medicaid/CHIP Children’s Health Care Quality Measures in FFY 2011 CARTS Reports



Source: Mathematica analysis of FFY 2011 CARTS reports as of June 20, 2012.

Notes: Numbers in parentheses identify the measure number in the children’s initial core set. Wisconsin did not submit a CARTS report for FFY 2011. Delaware submitted an FFY 2011 CARTS report, but did not submit data on any of the initial core set of children’s health care quality measures. For the eight states that submitted separate data for their Medicaid and CHIP programs (Colorado, Iowa, Kentucky, Michigan, New York, Pennsylvania, Tennessee, and West Virginia), the state was counted as reporting a measure if either report included data for that measure.

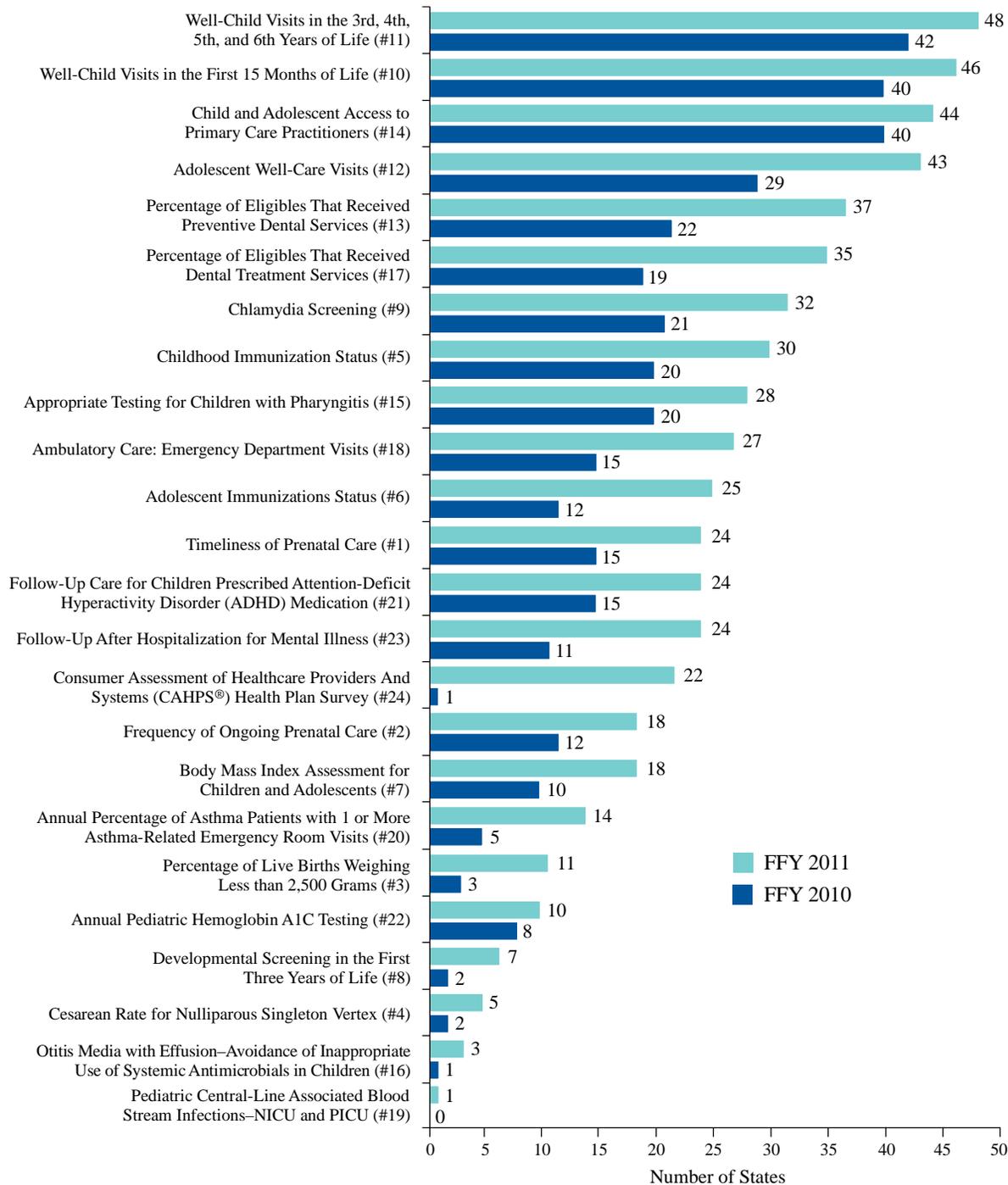
Figure 2. Number of Initial Core Set of Medicaid/CHIP Children’s Health Care Quality Measures Reported in FFY 2011 CARTS Reports, by State



Source: Mathematica analysis of FFY 2011 CARTS reports as of June 20, 2012.

Notes: Wisconsin did not submit a CARTS report for FFY 2011. Delaware submitted an FFY 2011 CARTS report, but did not submit data on any of the initial core set of children’s health care quality measures. For the eight states that submitted separate data for their Medicaid and CHIP programs (Colorado, Iowa, Kentucky, Michigan, New York, Pennsylvania, Tennessee, and West Virginia), the state was counted as reporting a measure if either report included data for that measure. The Medicaid/CHIP initial core set includes 24 measures.

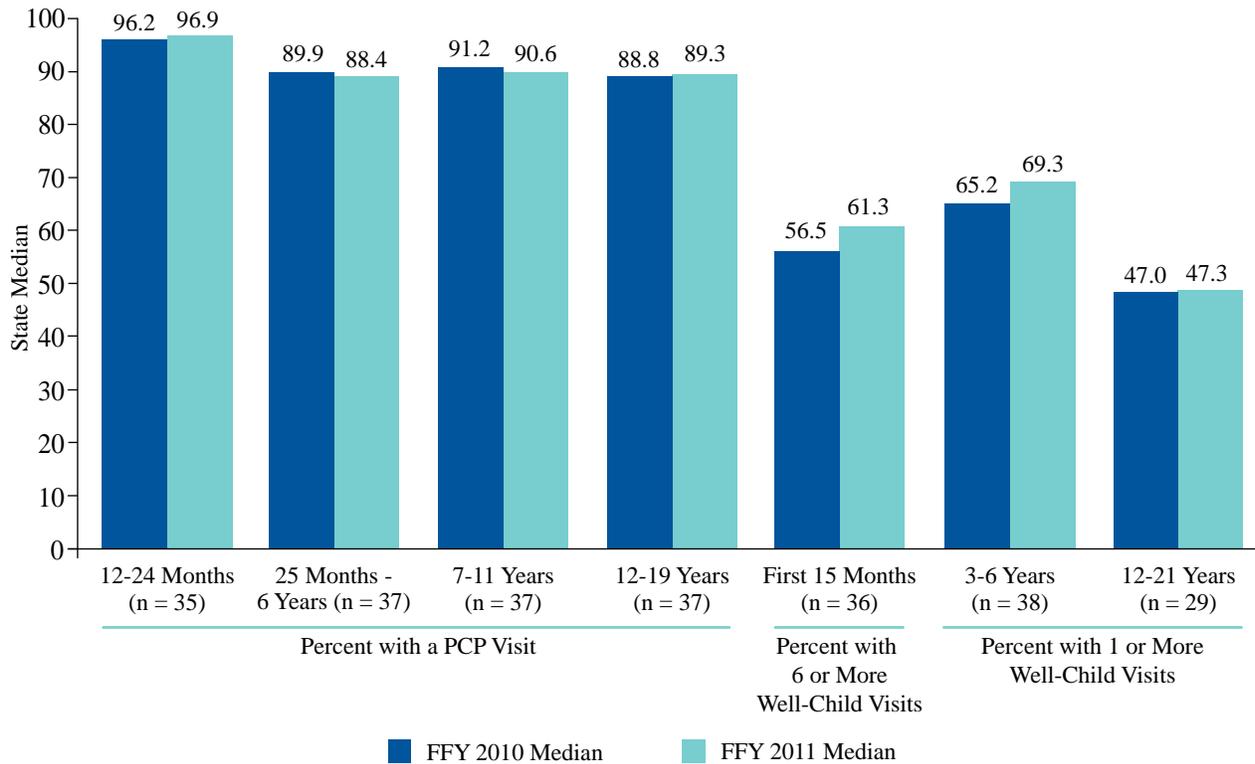
Figure 3. Changes in the Number of States Reporting the Initial Core Set of Medicaid/CHIP Children’s Health Care Quality Measures, FFY 2010 and FFY 2011



Source: State data for FFY 2010 obtained from 2011 Secretary’s Report. State data for FFY 2011 from Mathematica analysis of CARTS reports as of June 20, 2012.

Notes: Numbers in parentheses identify the measure number in the children’s initial core set. Wisconsin did not submit a CARTS report for FFY 2011. Delaware submitted an FFY 2011 CARTS report, but did not submit data on any of the initial core set of children’s health care quality measures. For the eight states that submitted separate data for their Medicaid and CHIP programs (Colorado, Iowa, Kentucky, Michigan, New York, Pennsylvania, Tennessee, and West Virginia), the state was counted as reporting a measure if either report included data for that measure.

Figure 4. Changes in Medians of Frequently Reported Medicaid/CHIP Children’s Health Care Quality Measures, FFY 2010 to FFY 2011



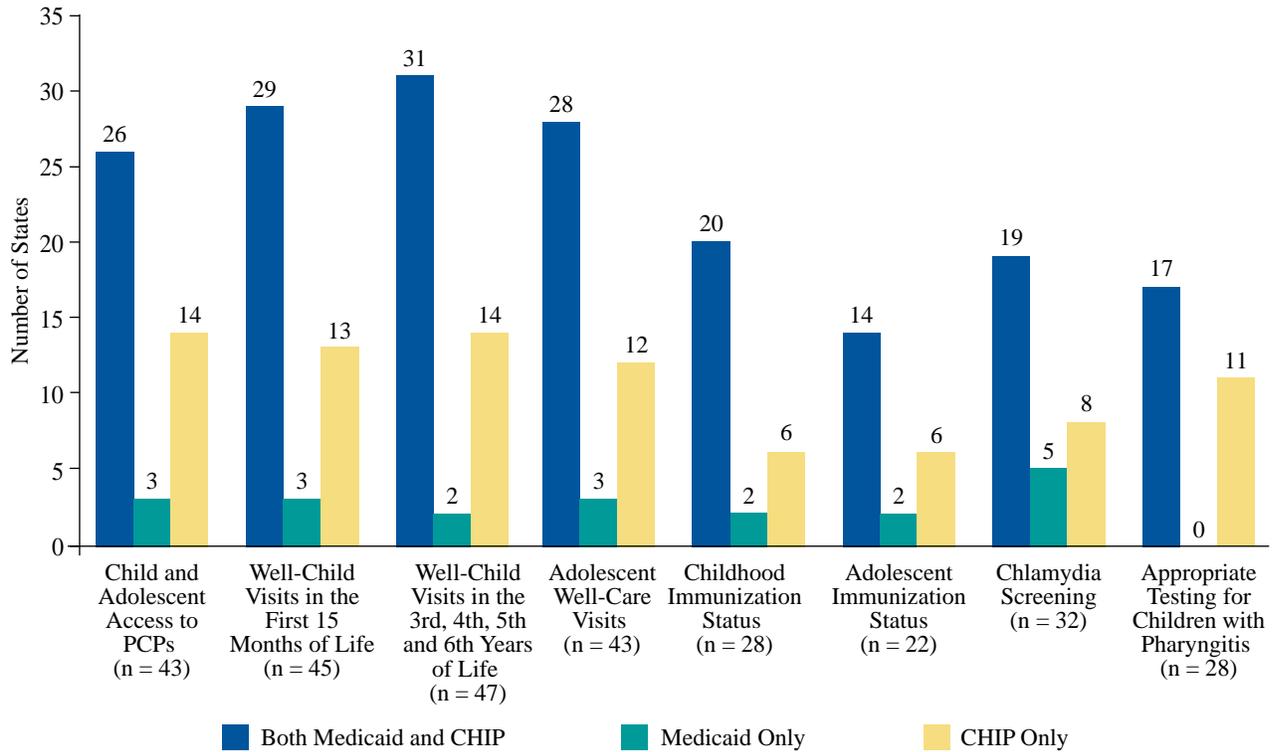
Sources: State data for FFY 2010 obtained from 2011 Secretary’s Report. State data for FFY 2011 from Mathematica analysis of CARTS reports as of June 20, 2012.

Notes: For each measure, analysis includes states that used HEDIS specifications to report rates in both the FFY 2010 and FFY 2011 CARTS reports. In the cases where a state reported rates for both their Medicaid and CHIP populations, the highest rate of the two populations was used. See Appendix Tables E.2–E.9 for details.

n = number of states.

PCP = Primary Care Practitioner.

Figure 5. Populations Included in Frequently Reported Medicaid/CHIP Children’s Health Care Quality Measures, FFY 2011



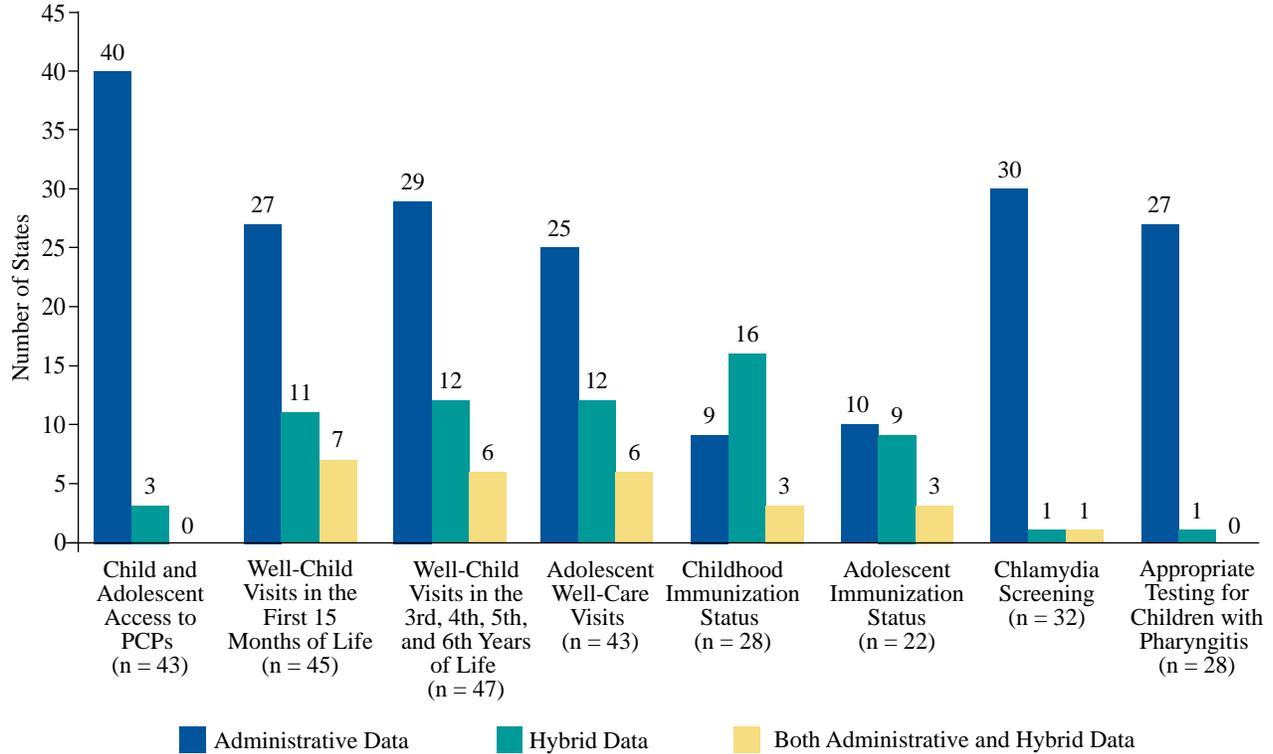
Source: Mathematica analysis of FFY 2011 CARTS reports as of June 20, 2012.

Notes: Figure includes states that used HEDIS specifications to report these measures. Figure excludes states that used other specifications and states that did not report these measures in FFY 2011 CARTS reports. In the cases where a state reported rates for both their Medicaid and CHIP populations, the highest rate of the two populations was used. See Appendix Tables E.2–E.9 for details.

n = number of states.

PCP = Primary Care Practitioner.

Figure 6. Data Sources Used for Frequently Reported Medicaid/CHIP Children’s Health Care Quality Measures, FFY 2011



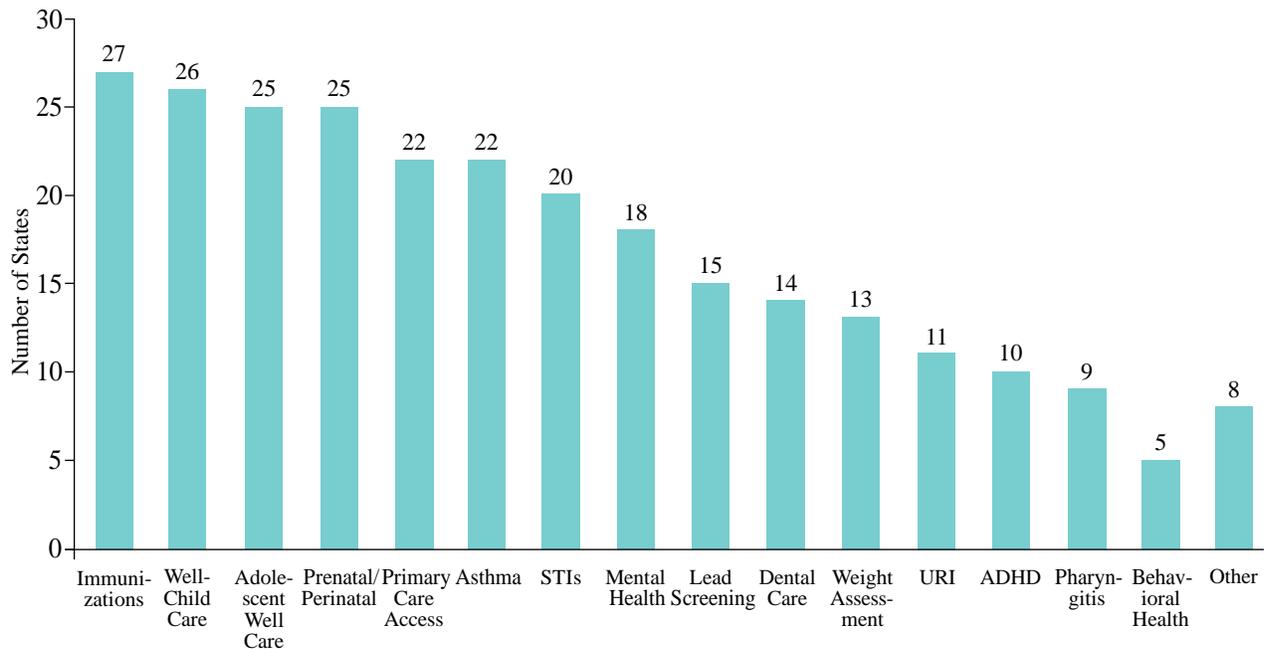
Source: Mathematica analysis of FFY 2011 CARTS reports as of June 20, 2012.

Notes: Figure includes states that used HEDIS specifications to report these measures. Figure excludes states that used other specifications and states that did not report these measures in FFY 2011 CARTS reports. Hybrid methods rely on both medical records and administrative data to calculate the measure. States are included in the hybrid and administrative category either if the plans within the state had the option to use either method or the state submitted separate data for their Medicaid and CHIP programs and used a different method for each program.

n = number of states.

PCP = Primary Care Practitioner.

Figure 7. Performance Measures Evaluating Children or Pregnant Women Included in External Quality Review Organization (EQRO) Technical Reports for the 2011-2012 Reporting Cycle for 37 States, by General Topic



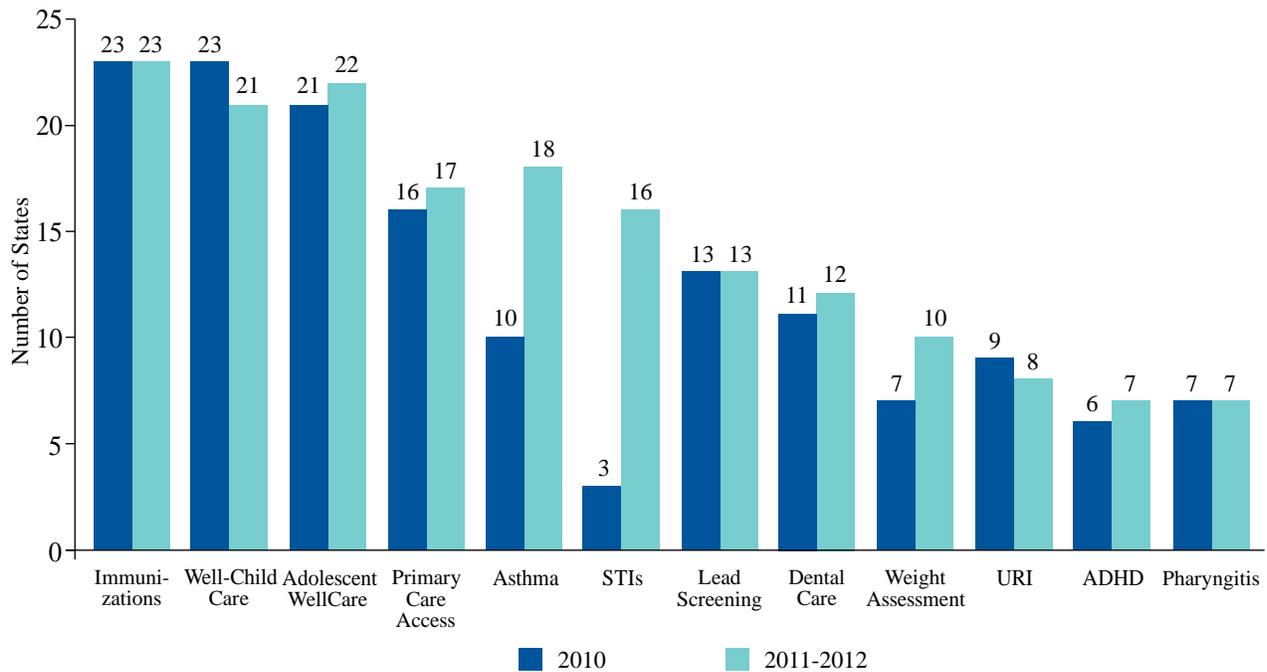
Source: EQRO technical reports submitted to CMS for the 2011-2012 reporting cycle as of July 31, 2012.

Notes: Alabama, Alaska, Arkansas, Connecticut, Idaho, Maine, Montana, New Hampshire, Oklahoma, South Dakota, and Wyoming do not have MCOs or PIHPs that enroll children covered by Medicaid or CHIP. Louisiana, Mississippi, and North Dakota have newly applicable managed care requirements and were not required to submit EQRO technical reports for 2011. North Carolina submitted an EQRO technical report, but managed care in the state was limited to behavioral health programs that did not enroll children, so the state is excluded from the analysis.

Analysis excludes plans that provide only limited services, such as primary care case management. Analysis also excludes plans that do not serve children or pregnant women, such as long-term care plans or Medicare Advantage plans that cover dual eligibles.

ADHD = Attention Deficit Hyperactivity Disorder; Pharyngitis = Appropriate Testing for Children with Pharyngitis; STI = Sexually Transmitted Infection; URI = Upper Respiratory Infection.

Figure 8. Comparison of Performance Measures Evaluating Children That Were Reported in External Quality Review Organization (EQRO) Technical Reports for 29 States, for the 2010 and 2011-2012 Reporting Cycles



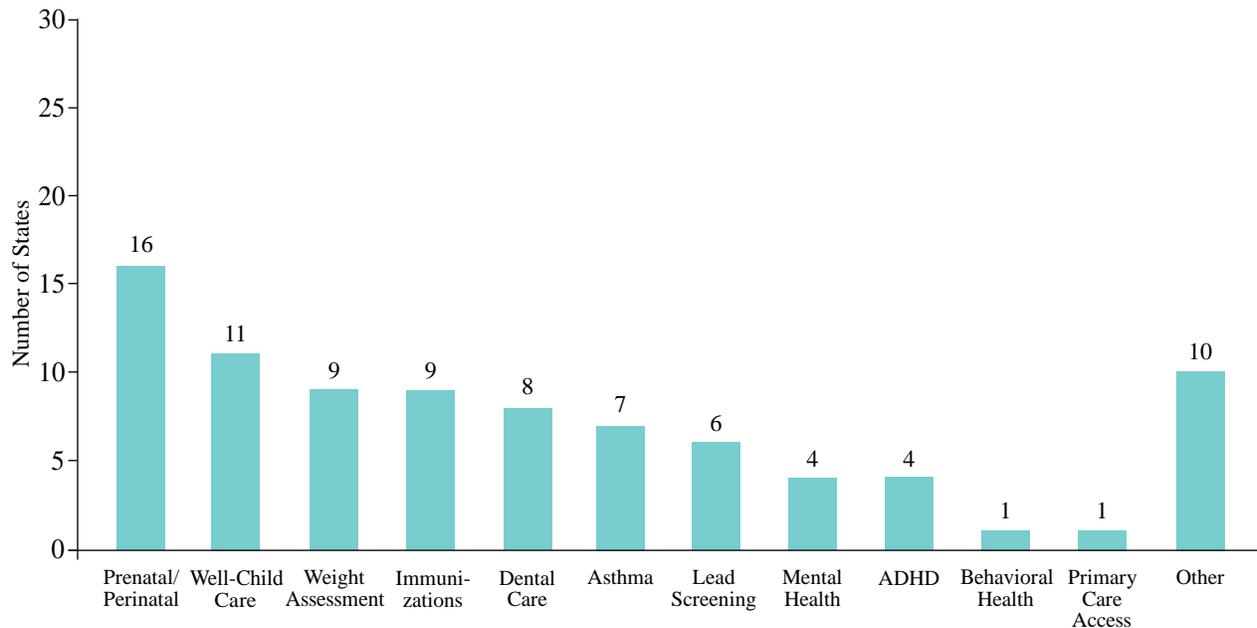
Sources: Performance measures for 2010 EQRO technical reports obtained from 2011 Secretary’s Report. Performance measures in the EQRO technical reports for the 2011-2012 reporting cycle from Mathematica analysis of 2011-2012 EQRO technical reports.

Notes: States include Arizona, California, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, Nevada, New Jersey, New Mexico, New York, Ohio, Pennsylvania, Rhode Island, Tennessee, Utah, Vermont, Virginia, Washington, West Virginia, and Wisconsin. South Carolina submitted EQRO technical reports in 2010 and 2011-2012 reporting cycle, but the 2011-2012 report did not list the performance measures, so the state is excluded from this analysis. North Carolina submitted an EQRO technical report, but managed care in the state is limited to behavioral health programs that did not enroll children, so the state is excluded from the analysis.

Analysis excludes plans that provide only limited services, such as primary care case management. Analysis also excludes plans that do not serve children or pregnant women, such as long-term care plans or Medicare Advantage plans that cover dual eligibles.

ADHD = Attention Deficit Hyperactivity Disorder; Pharyngitis = Appropriate Testing for Children with Pharyngitis; STI = Sexually Transmitted Infection; URI = Upper Respiratory Infection.

Figure 9. Performance Improvement Projects (PIPs) Targeting Children or Pregnant Women That Were Included in External Quality Review Organization (EQRO) Technical Reports for the 2011-2012 Reporting Cycle for 37 States, by General Topic



Source: EQRO technical reports submitted to CMS for the 2011-2012 reporting cycle as of July 31, 2012.

Notes: Alabama, Alaska, Arkansas, Connecticut, Idaho, Maine, Montana, New Hampshire, Oklahoma, South Dakota, and Wyoming do not have MCOs or PIHPs that enroll children covered by Medicaid or CHIP. Louisiana, Mississippi, and North Dakota have newly applicable managed care requirements and were not required to submit EQRO technical reports for 2011. North Carolina submitted an EQRO technical report, but managed care in the state was limited to behavioral health programs that did not enroll children.

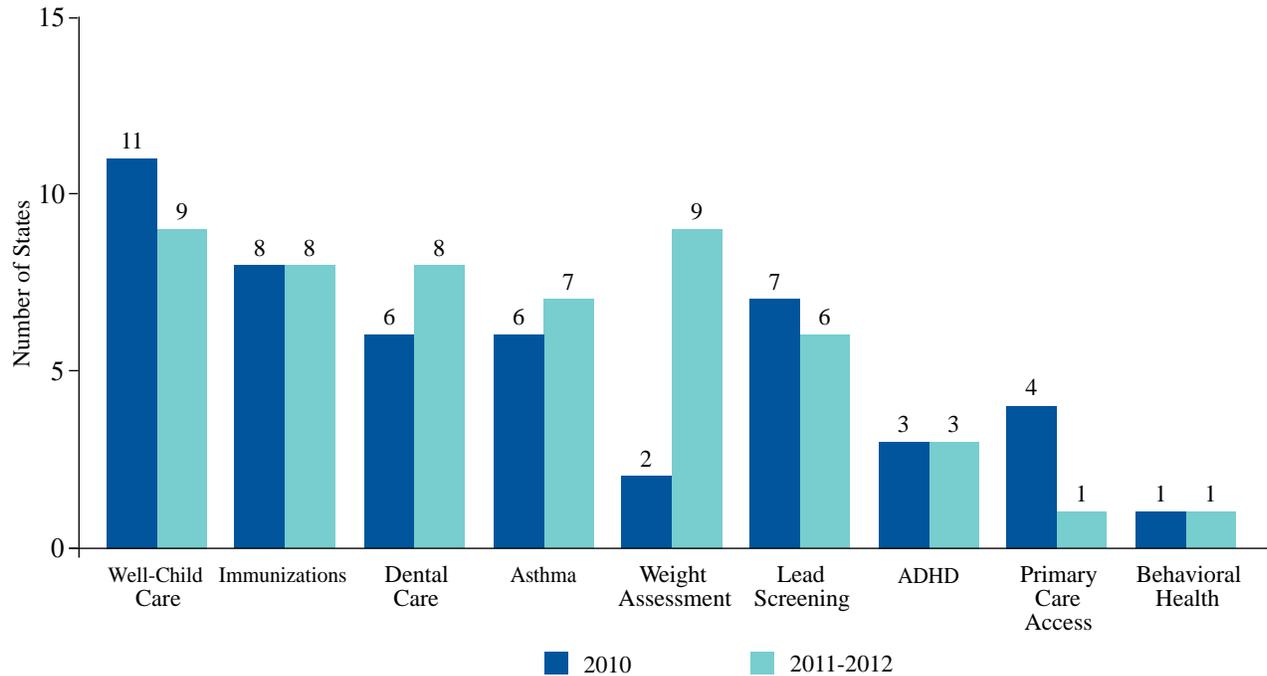
Analysis excludes plans that provide only limited services, such as primary care case management. Analysis also excludes plans that do not serve children or pregnant women, such as long-term care plans or Medicare Advantage plans that cover dual eligibles. Analysis includes PIPs listed in the EQRO technical report for each State that specifically targeted children or pregnant women.

PIPs for children on “Other” topics include appropriate treatment for children with pharyngitis (South Carolina); assuring Better Child Health and Development (Oregon); communication with child’s doctor (Georgia); emergency room diversion (Colorado, West Virginia); EPSDT participation rates (Illinois, Kentucky, Ohio); improving customer service rates (Kansas); improving rates of cervical cancer screening (California); rating of child’s doctor (Georgia); reduction of Out-of-Home Placement (California); school attendance rates (California); sexually transmitted infections (Kansas).

Well-Child Care PIPs include PIPs that target well-care visits for children or adolescents.

ADHD = Attention Deficit Hyperactivity Disorder; EPSDT = Early and Periodic Screening, Diagnosis and Treatment; MCO = Managed Care Organization; PIHP = Prepaid Inpatient Health Plan.

Figure 10. Comparison of Performance Improvement Projects (PIPs) Targeting Children That Were Reported in External Quality Review Organization (EQRO) Technical Reports for the 2010 and 2011-2012 Reporting Cycles for 30 States, Selected Topics



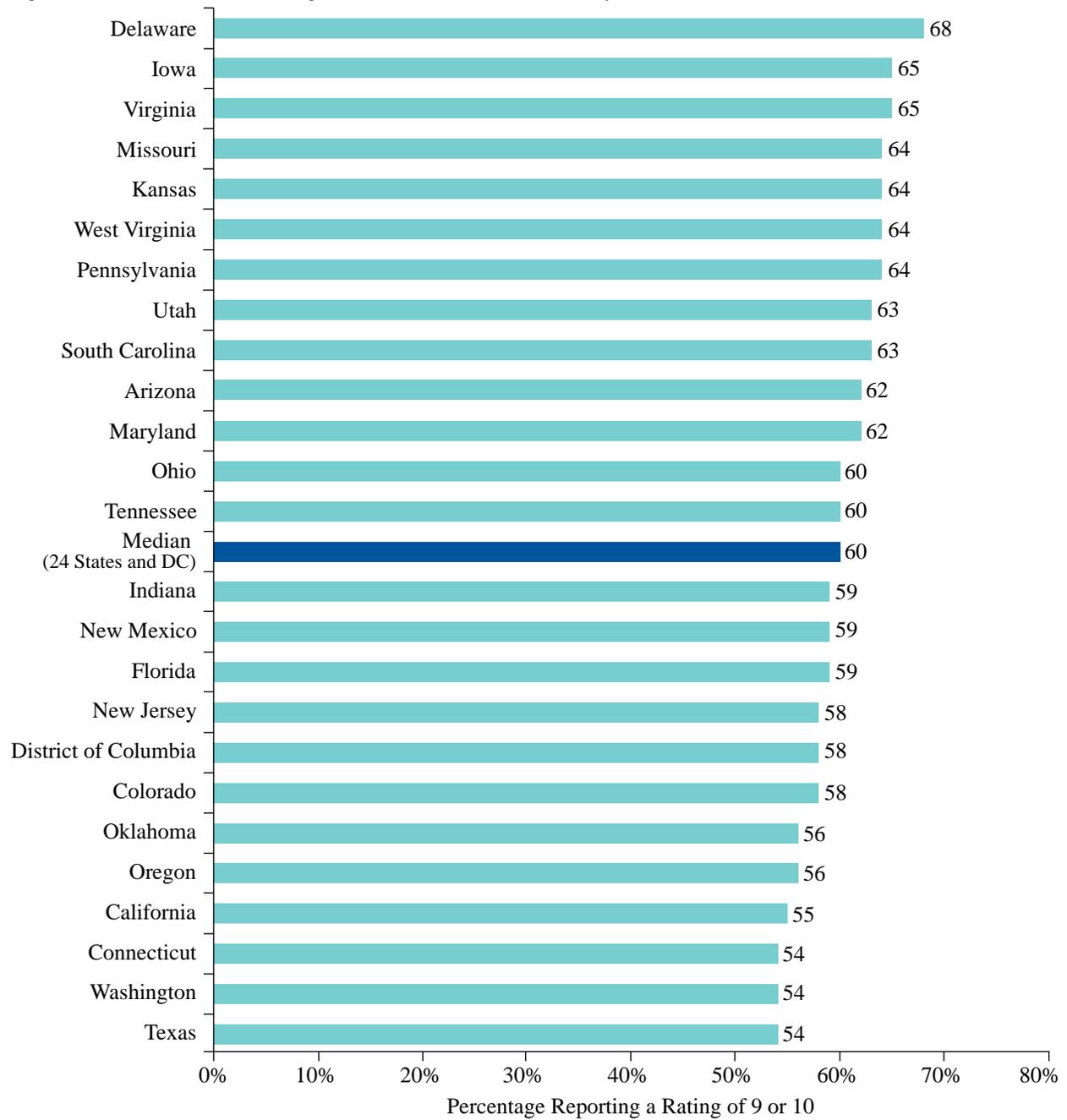
Sources: Performance measures for 2010 EQRO technical reports obtained from 2011 Secretary’s Report. Performance measures in the EQRO technical reports from Mathematica analysis of reports for the 2011-2012 reporting cycle.

Notes: States include Arizona, California, Delaware, Florida, Georgia, Hawaii, Illinois, Indiana, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, Nevada, New Jersey, New Mexico, New York, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Utah, Vermont, Virginia, Washington, West Virginia, and Wisconsin.

Analysis excludes plans that provide only limited services, such as primary care case management. Analysis also excludes plans that do not serve children or pregnant women, such as long-term care plans or Medicare Advantage plans that cover dual eligibles. Analysis includes PIPs listed in the EQRO technical report for each state that specifically targeted children or pregnant women.

ADHD = Attention Deficit Hyperactivity Disorder.

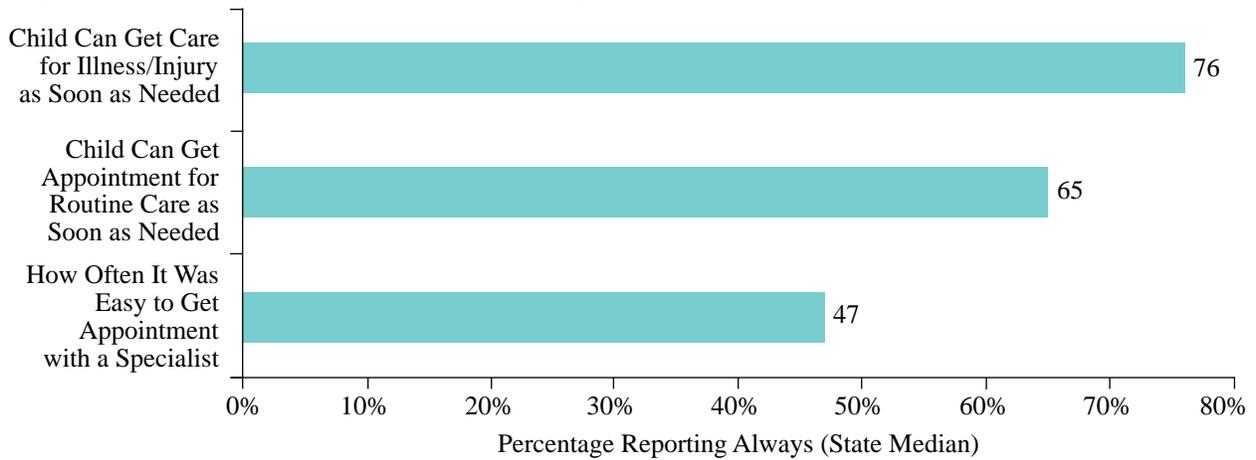
Figure 11. Parents' Overall Rating of Their Child's Health Care, by State, 2010



Source: Mathematica analysis of National CAHPS Benchmarking Database.

Note: Parents assessed overall rating of health on a scale of 0 to 10, where 0 is “worst possible” and 10 is “best possible.” This figure shows the percentage reporting a rating of 9 or 10.

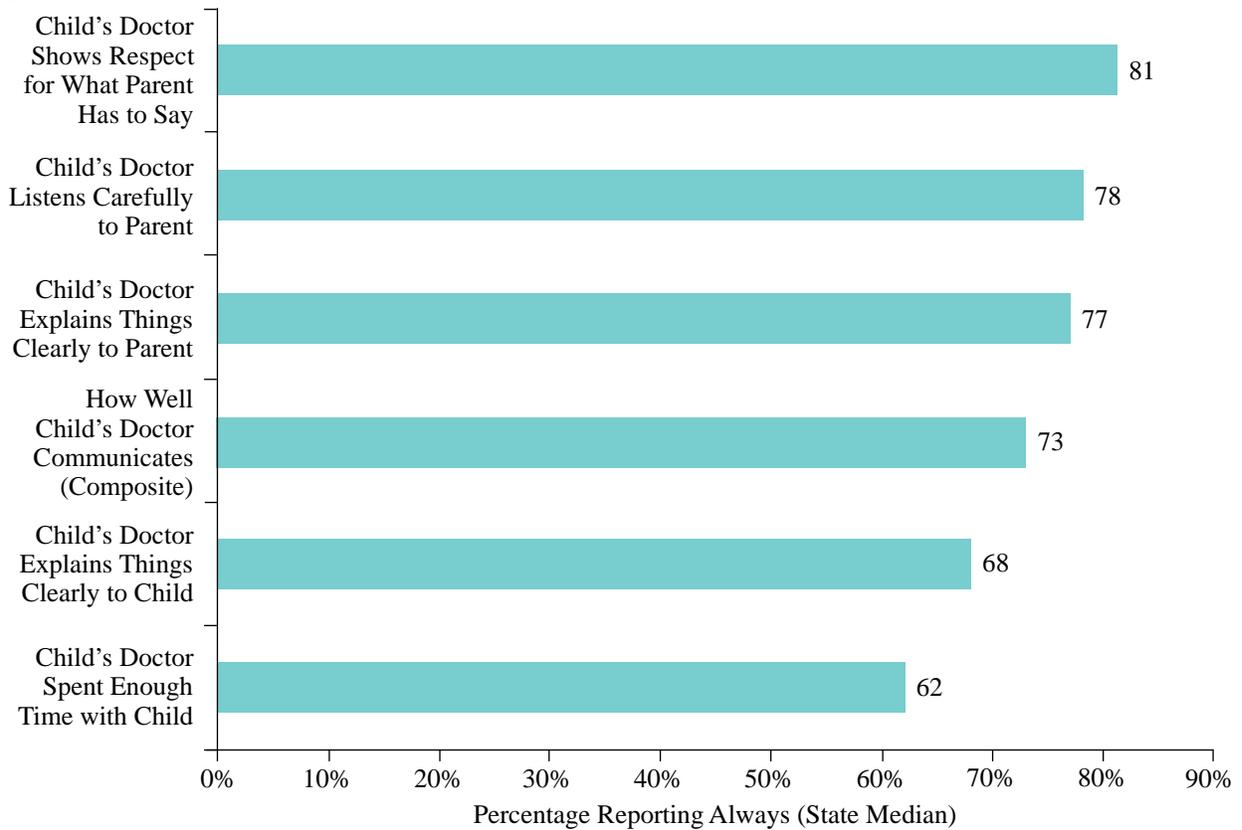
Figure 12. Parents' Assessment of the Ease of Getting Care for Their Child, 25 States, 2010



Source: Mathematica analysis of National CAHPS Benchmarking Database.

Note: Parents assessed the ease of getting care on a four-point scale (never, sometimes, usually, always). The percentages shown here are the median percentages reporting "always."

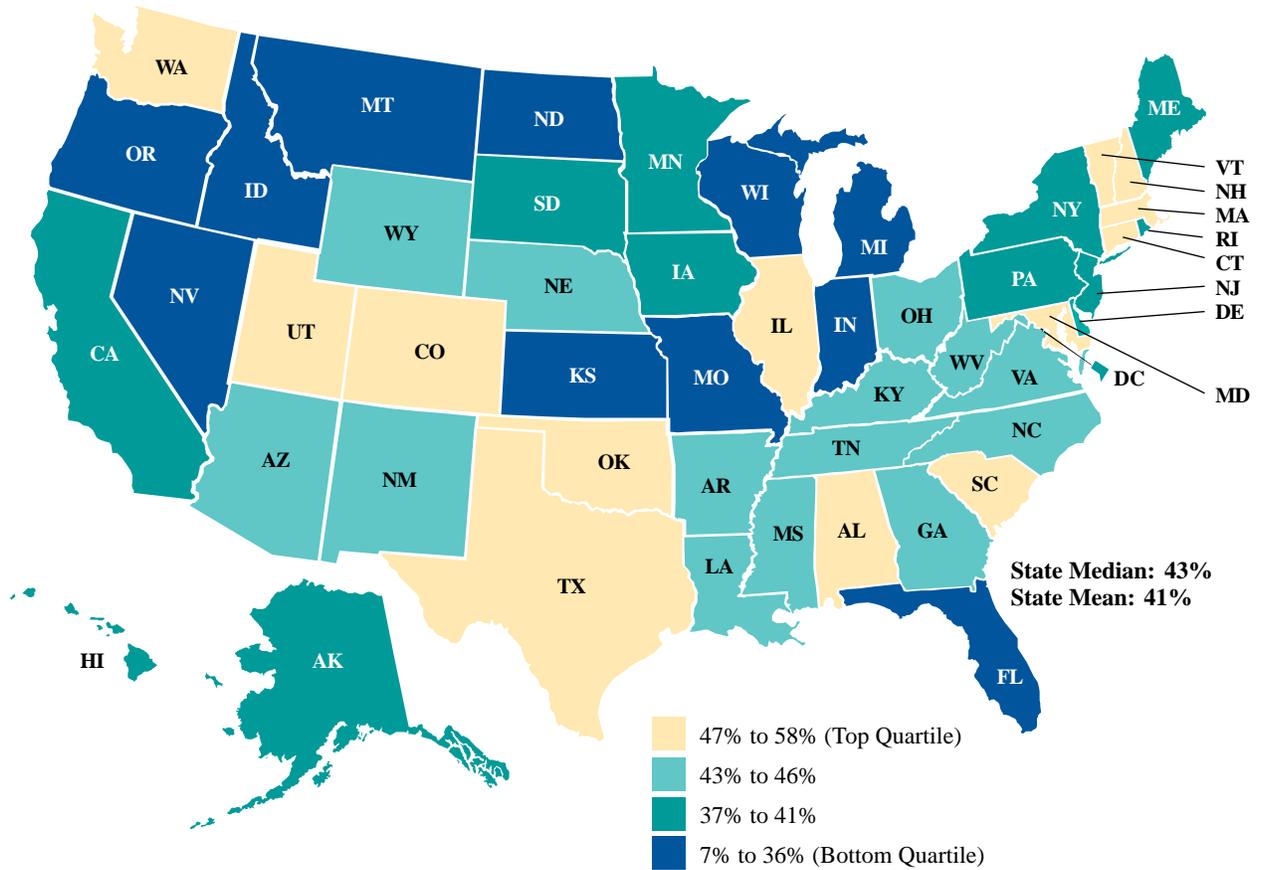
Figure 13. Parents' Assessment of How Well Their Child's Doctor Communicates, 25 States, 2010



Source: Mathematica analysis of National CAHPS Benchmarking Database.

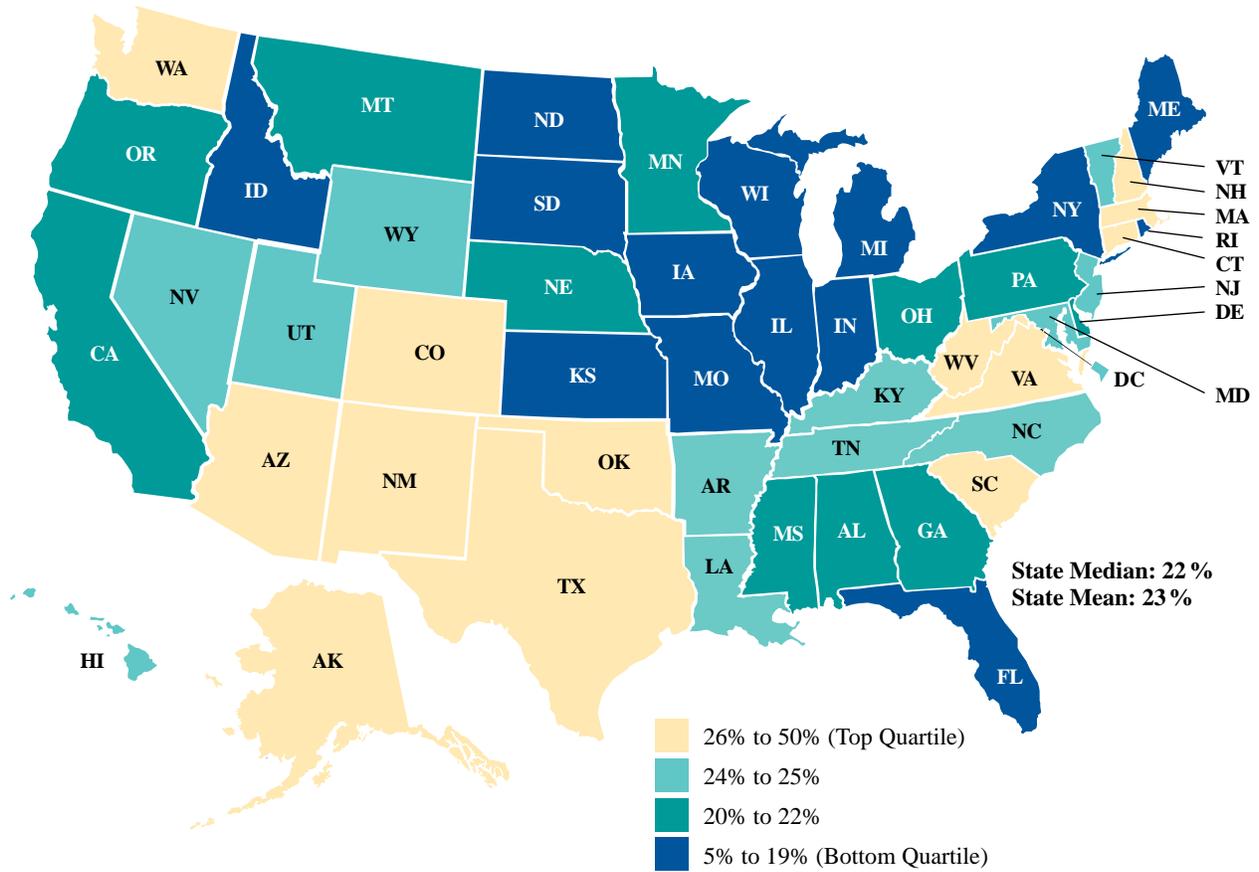
Note: Parents assessed doctor's communication on a four-point scale (never, sometimes, usually, always). The percentages shown here are the median percentages reporting "always."

Figure 14. Geographic Variation in the Percentage of Children Receiving Preventive Dental Services, FFY 2010



Source: FFY 2010 CMS-416 reports, Line 1b, Line 12b.

Figure 15. Geographic Variation in the Percentage of Children Receiving Dental Treatment Services, FFY 2010



Source: FFY 2010 CMS-416 reports, Line 1b, Line 12c.