

Washington State Health Care Authority

Report to the Legislature

Child Health Services: Provider Performance

Engrossed Substitute House Bill 2128
Chapter 463, Laws of 2009

July 31, 2012

Washington State Health Care Authority
Health Care Services
Office of Quality and Care Management
PO Box 45530
Olympia, WA 98504-5530
(360) 725-1640
Fax: (360) 753-7315

TABLE OF CONTENTS

	Executive Summary	3
1	Timeliness of Prenatal Care	5
2	Frequency of Ongoing Prenatal Care	9
3	Low Birth Weight	13
4	Cesarean Delivery (NTSV)	17
5	Childhood Immunization Status	21
6	Well-Child Visits	25
7	Adolescent Well-Care Visits	28
8	Preventive Dental Service and Dental Treatment Services	31
9	Emergency Department Visits	33
	Bibliography	41

EXECUTIVE SUMMARY

Section 3 of Engrossed Substitute House Bill 2128, enacted as Chapter 463, Laws of 2009, RCW 74.09.480, directs the Health Care Authority to provide a report related to provider performance on a set of explicit performance measures that can indicate whether the overall health of enrolled children is improving. These reports were to begin September 2010 and be submitted biennially thereafter.

The aforementioned bill states, *“The departments shall provide a report to the governor and the legislature related to provider performance on these measures beginning in September 2010 for 2007 through 2009 and the authority shall provide the report biennially thereafter.”* The statute further defines the types of performance measures to be addressed: *“Such indicators may include, but are not limited to:”*

- (a) Childhood immunization rates;
- (b) Well child care utilization rates;
- (c) Care management for children with chronic illnesses;
- (d) Emergency room utilization;
- (e) Visual acuity and eye health;
- (f) Preventive oral health service utilization; and
- (g) Children’s mental health status.

This report, the first in a series of biennial reports, presents child health performance measures for Medicaid-enrolled children, as required by RCW 74.09.480. Ten performance measures were selected for inclusion in this report, based on those listed in the statute, CMS’s Initial Core Set of Children’s Health Care Quality Measures, data availability, and the feasibility of reporting. The measure definitions are as specified in the CMS Technical Specifications and Resource Manual for the initial core measure set.

The most recent data available are from calendar year 2011. For most measures, data are reported for multiple time periods (up to five years, from 2007 to 2011), by Medicaid managed care plan, and by race/ethnicity. For selected measures, comparisons to the Non-Medicaid population are presented. Current Washington State values are also compared to those previously reported for managed care plans by Acumentra Health, national averages for Medicaid health maintenance organizations (HMOs) reported by the National Committee for Quality Assurance (NCQA), and averages reported by all states that submitted data for the core measure set.

Measures are based on data from Medicaid claims and eligibility (ProviderOne: All Paid Claims including encounter data and fee-for-service claims, and Client by Month), vital records (birth certificates from the Department of Health Center for Health Statistics, individually linked to Medicaid clients in the First Steps Database, Department of Social and Health Services, Research and Data Analysis), immunization history (records from Department of Health’s Child Profile immunization registry, individually linked to Medicaid clients), and the Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) CMS-416 report.

With these baseline data for ten measures from CMS’s Initial Core Set of Children’s Health Care Quality Measures, the Health Care Authority will have the opportunity to review performance with managed care plans and other stakeholders, set specific targets as appropriate, and explore incentives for providers and health plans that demonstrate and sustain improvement on these measures. The Health Care Authority will expand the number of reported performance measures over time, as resources permit, to include as many of the core measure set as possible.

KEY FINDINGS

- Washington State exceeded national goals for two measures: low birth weight and cesarean delivery (nulliparous, term, singleton, vertex, or NTSV). For an additional two measures, dental treatment services and preventive dental services, Washington's rates for Medicaid-enrolled children were in the top quartile for states reporting for the core measure set.
- One measure, Frequency of Ongoing Prenatal Care, was comparable to national averages.
- Two measures were slightly lower than national averages: Timeliness of Prenatal Care and Immunization Combination 2.
- Two measures were well below national averages: well-child visits for both 15-month-olds and children 3 to 6 years old, and well-care visits for adolescents 12-21 years old.
- Improving trends over time were noted for the following measures: Timeliness of Prenatal Care, and Frequency of Ongoing Prenatal Care, especially for enrollees of the Community Health Plan and Molina HealthCare.
- For all measures reported by race/ethnicity, strong differences were observed. The patterns of racial/ethnic disparities varied for measures related to pregnancy and delivery and those related to infant and child health service use. For pregnancy and delivery measures, those for white women tended to be most favorable and those for American Indians/Alaska Natives and Hawaiian/Pacific Islanders tended to be least favorable. For child health services measures, those for Asian children tended to be most favorable, and those for American Indian/Alaska Natives tended to be least favorable. For some measures, the differences by race/ethnicity were quite striking.

1 Timeliness of Prenatal Care

The best time for a pregnant woman to begin prenatal care (PNC) is during her first trimester. Early prenatal care facilitates early detection and treatment of medical and obstetric conditions. Early prenatal care also provides an opportunity to educate women about numerous factors that affect birth outcomes such as nutrition, appropriate weight gain and exercise, as well as risks associated with smoking, alcohol and illicit drugs, and environmental hazards (Lewis, Mathews, and Heuser, 1996). Women enrolled in Medicaid demonstrate a higher prevalence of risk factors for poor birth outcomes and are therefore more likely to benefit from early prenatal care.

The *Healthy People 2020* goal is to increase the proportion of pregnant women who begin prenatal care during the first trimester to 77.9%. Overall, Washington State exceeded this goal in 2010, with a rate of 80.2% prenatal care entry in the first trimester. Despite accomplishments of the First Steps program, disparities between Medicaid and Non-Medicaid women persist, with 72.2% of Medicaid women overall receiving first trimester prenatal care in 2010, compared to 88.2% of Non-Medicaid women. For both groups, Medicaid and Non-Medicaid, the 2010 rates reflect a significant upward trend (3% per year) beginning in 2008 (DOH Perinatal Indicators Report, 2012). Rates for 2011, still preliminary at this time, appear to have stabilized or decreased slightly.

Timely entry into prenatal care is defined as either first trimester entry or entry within 42 days of Medicaid enrollment. This definition attempts to control for factors that might delay entry into prenatal care such as the timing of enrollment into Medicaid and is thus slightly less stringent than measures based on first trimester entry only. (The NCQA uses the same measure definition as the CHIPRA core measure set.)

For each measure in this report, the data tables for Washington State follow a brief narrative description of the key findings for the measure. Tables 1a and 1b (Timeliness of Prenatal Care) may be found on pages 7 and 8.

Measure Definition: Timeliness of Prenatal Care

The percentage of deliveries that received a prenatal care visit in the first trimester or within 42 days of enrollment in Medicaid, for women continuously enrolled 43 days pre-delivery through 56 days post-delivery.

Data Collection Method: Birth certificates (linked to Medicaid claims and eligibility)

- The rate of timely PNC entry for managed care plans overall in 2011 was 77.0%, below the 2010 83.7% nationwide average for Medicaid HMOs (NCQA, 2011). Plans with rates at or above 77% included Asuris, CHP, Group Health, Molina, and Regence.
- The rate of timely PNC entry was slightly lower for pregnant women in fee-for-service: 74.7% of citizens and 75.0% of undocumented women in fee-for-service received timely initiation of PNC.

- Since 2007, timely PNC entry increased the most for undocumented women, who began this time period with a rate (67%) just below that of citizens in fee-for-service (67.6%) and finished with a rate (75%) exceeding that of citizens in Medicaid fee-for-service. Timely PNC entry increased modestly for women in managed care, and citizens in fee-for-service demonstrated an intermediate increase.
- The highest rates of timely PNC entry occurred among white women, with a rate of 78.4% in 2011. The rate for white women was consistently higher than that of any other race/ethnic group in all five years reported. The lowest rates of timely PNC entry occurred among American Indian/Alaska Natives (68.1%) and Hawaiian/Pacific Islanders (58.8%) in 2011. The rate for women of other or unknown race/ethnicity (68.4% in 2011) was the third lowest.

Sustaining recent gains in timely PNC entry depends on continued progress in at least three areas (Cawthon, 2008):

- Provider issues such as provider supply, community standards, and practice patterns;
- Client issues such as awareness of pregnancy and need for prenatal care, system knowledge, and health insurance; and
- System issues including Medicaid enrollment process and managed care plan assignment.

Table 1a. Timeliness of Prenatal Care
Prenatal Care First Trimester or Within 42 Days of Medicaid Enrollment by Managed Care Plan
Washington Medicaid Women with Births 2007-2011 Continuously Enrolled 43 Days Pre- through 56 Days Post-Delivery

Medicaid Managed Care Plan	2007			2008			2009			2010			2011 (Preliminary)		
	Women (N)	Timely PNC (N)	Timely PNC (%)	Women (N)	Timely PNC (N)	Timely PNC (%)	Women (N)	Timely PNC (N)	Timely PNC (%)	Women (N)	Timely PNC (N)	Timely PNC (%)	Women (N)	Timely PNC (N)	Timely PNC (%)
Asuris NW Health Plan	63	56	88.9%	87	79	90.8%	84	72	85.7%	120	105	87.5%	241	210	87.1%
Columbia United Providers	1,501	1,055	70.3%	1,485	1,030	69.4%	1,285	885	68.9%	1,734	1,238	71.4%	2,191	1,598	72.9%
Community Health Plan of WA	6,311	4,716	74.7%	6,661	5,026	75.5%	6,073	4,677	77.0%	7,937	6,309	79.5%	9,030	6,985	77.4%
Group Health Cooperative	631	503	79.7%	657	529	80.5%	628	484	77.1%	784	613	78.2%	650	526	80.9%
Kaiser	37	29	78.4%	31	29	93.5%	16	13	81.3%	15	12	80.0%	27	19	70.4%
Molina Healthcare of WA	11,099	8,233	74.2%	11,642	8,760	75.2%	10,317	7,838	76.0%	12,535	9,808	78.2%	11,567	8,909	77.0%
Regence Blue Shield	1,358	1,074	79.1%	1,341	1,076	80.2%	1,217	996	81.8%	1,378	1,167	84.7%	1,221	971	79.5%
Native Health PCCM (multiple agencies)	na	na	na	na	na	na	na	na	na	314	231	73.6%	292	208	71.2%
Medicaid Managed Care	21,000	15,666	74.6%	21,904	16,529	75.5%	19,620	14,965	76.3%	24,817	19,483	78.5%	25,219	19,426	77.0%
Medicaid Fee for Service (citizens)	8,156	5,515	67.6%	8,467	5,927	70.0%	6,947	4,940	71.1%	7,204	5,313	73.8%	6,505	4,861	74.7%
Medicaid Fee for Service (undocumented)	7,427	4,976	67.0%	7,975	5,386	67.5%	6,707	4,737	70.6%	6,377	4,705	73.8%	6,123	4,593	75.0%
Total Medicaid	36,583	26,157	71.5%	38,346	27,842	72.6%	33,274	24,642	74.1%	38,398	29,501	76.8%	37,847	28,880	76.3%

Excludes records with missing information about when prenatal care began (5.8% in 2011) and no prenatal care claims within 42 days of Medicaid enrollment, and women with eligibility for programs using state funds only. **Medicaid** refers to women who had Medicaid-paid maternity care. **Continuous enrollment** refers to Medicaid and is not plan-specific. Enrollment start is the 15th of the first month of eligibility for this analysis. **Plan** listed is enrollment plan during month of delivery. **Managed care** refers to Medicaid women enrolled in a state-contracted managed care plan during the month of delivery. **PCCM** is Primary Care Case Management through tribal agencies. **Medicaid Fee for Service (citizens)** includes citizens and legal residents. **na** = not available or not applicable. **Timely PNC** refers to women who began prenatal care in the first three months of pregnancy or within 42 days of Medicaid eligibility.

**Table 1b. Timeliness of Prenatal Care
Prenatal Care First Trimester or Within 42 Days of Medicaid Enrollment by Race/Ethnicity
Washington Medicaid Women with Births 2007-2011 Continuously Enrolled 43 Days Pre- through 56 Days Post-Delivery**

	2007			2008			2009			2010			2011 (Preliminary)		
	Women (N)	Timely PNC (%)	Timely PNC (%)	Women (N)	Timely PNC (%)	Timely PNC (%)	Women (N)	Timely PNC (%)	Timely PNC (%)	Women (N)	Timely PNC (%)	Timely PNC (%)	Women (N)	Timely PNC (%)	Timely PNC (%)
Medicaid															
Hispanic	11,813	8,337	70.6%	12,652	8,968	70.9%	10,874	7,941	73.0%	11,797	8,943	75.8%	11,339	8,578	75.7%
Not Hispanic or Ethnicity Unknown															
White	17,890	13,336	74.5%	18,625	14,091	75.7%	16,322	12,525	76.7%	19,076	15,120	79.3%	18,752	14,710	78.4%
Asian	1,641	1,112	67.8%	1,690	1,157	68.5%	1,446	1,044	72.2%	1,778	1,336	75.1%	1,864	1,398	75.0%
Black	1,865	1,294	69.4%	1,915	1,342	70.1%	1,699	1,171	68.9%	2,033	1,517	74.6%	2,110	1,550	73.5%
American Indian/Alaska Native	999	615	61.6%	990	641	64.7%	863	568	65.8%	946	661	69.9%	936	637	68.1%
Hawaiian/Pacific Islander	524	249	47.5%	535	275	51.4%	488	250	51.2%	583	313	53.7%	577	339	58.8%
More Than One Race	1,363	929	68.2%	1,515	1,095	72.3%	1,256	913	72.7%	1,619	1,202	74.2%	1,649	1,244	75.4%
Other/Unknown	488	285	58.4%	424	273	64.4%	326	230	70.6%	566	409	72.3%	620	424	68.4%
Total Medicaid	36,583	26,157	71.5%	38,346	27,842	72.6%	33,274	24,642	74.1%	38,398	29,501	76.8%	37,847	28,880	76.3%

Excludes records with missing information about when prenatal care began (5.8% in 2011) and no prenatal care claims within 42 days of Medicaid enrollment, and women with eligibility for programs using state funds only.

Race/Ethnicity categories are mutually exclusive. Hispanic women may be of any race.

Medicaid refers to women who had Medicaid-paid maternity care. **Continuous enrollment** refers to Medicaid and is not plan-specific. Enrollment start is the 15th of the first month of eligibility for this analysis. **Timely PNC** refers to women who began prenatal care in the first three months of pregnancy or within 42 days of Medicaid eligibility.

2 Frequency of Ongoing Prenatal Care

Not only should a pregnant woman begin prenatal care during her first trimester, she also needs an appropriate number of visits throughout her pregnancy and the postpartum period. As pregnancy progresses, obstetric providers monitor for new onset or worsening diabetes, hypertension, and other potential complications. Early, comprehensive, and continuous prenatal care can promote healthier pregnancies and reduce the risk of costly adverse birth outcomes (NCQA, 2011).

The *Healthy People 2020* goal is to increase the proportion of pregnant women who receive early and adequate prenatal care (PNC) to 77.6%. In 2010, the NCQA reported that nationwide 61.1% of pregnant women in Medicaid HMOs who met enrollment criteria received at least 81% of the expected number of PNC visits (adjusted for gestational age and entry into prenatal care). In Washington State (2011), 60.2% of Medicaid women received at least 81% of the expected number of visits; this rate is just below the national average reported by the NCQA (61.1% in 2010).

Measure Definition: Frequency of Ongoing Prenatal Care

The percentage of deliveries that received $\geq 81\%$ of expected visits, for women continuously enrolled 43 days pre-delivery through 56 days post-delivery

Data Collection Method: Birth certificates (linked to Medicaid claims and eligibility)

- Since 2008, the proportion of Medicaid women who received at least 81% of expected visits has steadily increased, from a low of 51.8% in 2008 to 60.2% in 2011.
- During this time period, Medicaid citizens in fee-for-service consistently had the highest proportion (63.5% in 2011) of at least 81% of expected visits, and Medicaid women in managed care had the lowest proportion (58.7% in 2011). Undocumented women demonstrated the greatest improvement in frequency of ongoing prenatal care; the proportion with at least 81% of expected visits increased from a low of 47.2% in 2008 to 62.7% in 2011, and their ranking improved from lowest (2007-2009) to intermediate (2011), among these three groups of Medicaid women.
- Two health plans demonstrated consistent improvement in the frequency of ongoing prenatal care: the proportion of women in CHP with at least 81% of expected visits increased from 49.6% in 2007 to 59.5% in 2011, and the rate for women in Molina increased from 51.1% in 2007 to 58.5% in 2011.
- The highest rates of frequent PNC occurred among white women, with a rate of 61.8% in 2011. The rate for white women was consistently higher than that of any other race/ethnic group in all five years reported. The lowest rates of frequent PNC occurred among Hawaiian/Pacific Islanders (49.3%) and American Indian/Alaska Natives (52.4%) in 2011. The rate for women of other or unknown race/ethnicity was also 49.3%.

Both timeliness and frequency of prenatal care are related to the capacity of the maternity care system to meet the demand for obstetric care. The total number of births in Washington increased over 12% from about 80,000 in the early 2000s to over 90,000 in 2008. Since 2008, the number of births has declined 4% to 86,480 in 2010 (DOH Perinatal Indicators Report, 2012), with an overall anticipated decline of about 5% in 2011. As demand on the maternity care system relaxed with declining numbers of births, measures of PNC access have improved. The rate of timely prenatal care entry among Medicaid women increased from 71.5% in 2007 to 76.8% in 2010, and the proportion of Medicaid women who received at least 81% of expected visits steadily increased, from a low of 51.8% in 2008 to 60.2% in 2011.

**Table 2a. Frequency of Ongoing Prenatal Care
Washington Medicaid Women with Births 2007-2011 Continuously Enrolled 43 Days Pre- through 56 Days Post-Delivery
Women with >=81% of Expected Prenatal Visits by Managed Care Plan**

Medicaid Managed Care Plan	2007		2008		2009		2010		2011 (Preliminary)		
	Women >=81% (N)	>=81% (%)	Women >=81% (N)	>=81% (%)	Women >=81% (N)	>=81% (%)	Women >=81% (N)	>=81% (%)	Women >=81% (N)	>=81% (%)	
Asuris NW Health Plan	62	45 72.6%	87	67 77.0%	78	59 75.6%	118	90 76.3%	239	148 61.9%	
Columbia United Providers	1,506	863 57.3%	1,483	839 56.6%	1,293	701 54.2%	1,741	1,027 59.0%	2,197	1,256 57.2%	
Community Health Plan of WA	6,178	3,064 49.6%	6,527	3,068 47.0%	5,938	3,023 50.9%	7,722	4,424 57.3%	8,833	5,260 59.5%	
Group Health Cooperative	626	343 54.8%	649	356 54.9%	612	341 55.7%	770	432 56.1%	658	351 53.3%	
Kaiser	36	18 50.0%	30	17 56.7%	16	8 50.0%	14	9 64.3%	27	15 55.6%	
Molina Healthcare of WA	10,846	5,546 51.1%	11,354	5,849 51.5%	10,083	5,385 53.4%	12,313	7,104 57.7%	11,468	6,708 58.5%	
Regence Blue Shield	1,299	755 58.1%	1,307	739 56.5%	1,169	683 58.4%	1,269	800 63.0%	1,131	684 60.5%	
Native Health PCCM (multiple agencies)	na	na	na	na	na	na	na	308	173 56.2%	294	155 52.7%
Medicaid Managed Care	20,553	10,634 51.7%	21,437	10,935 51.0%	19,189	10,200 53.2%	24,255	14,059 58.0%	24,847	14,577 58.7%	
Medicaid Fee for Service (citizens)	8,127	4,637 57.1%	8,418	4,890 58.1%	6,876	4,222 61.4%	7,125	4,537 63.7%	6,449	4,098 63.5%	
Medicaid Fee for Service (undocumented)	7,240	3,474 48.0%	7,782	3,676 47.2%	6,513	3,350 51.4%	6,203	3,596 58.0%	5,929	3,717 62.7%	
Total Medicaid	35,920	18,745 52.2%	37,637	19,501 51.8%	32,578	17,772 54.6%	37,583	22,192 59.0%	37,225	22,392 60.2%	

Excludes records with missing birth certificate information for number of prenatal visits (7.3% of eligible women in 2011). **Medicaid** refers to women who had Medicaid-paid maternity care. **Continuous enrollment** refers to Medicaid and is not plan-specific. Enrollment start is the 15th of the first month of eligibility for this analysis. **Plan** listed is enrollment plan during month of delivery. **Managed care** refers to Medicaid women enrolled in a state-contracted managed care plan during the month of delivery. **PCCM** is Primary Care Case Management through tribal agencies. **Medicaid Fee for Service (citizens)** includes citizens and legal residents. **na** = not available or not applicable.

**Table 2b. Frequency of Ongoing Prenatal Care
Washington Medicaid Women with Births 2007-2011 Continuously Enrolled 43 Days Pre- through 56 Days Post-Delivery
Women with >=81% of Expected Prenatal Visits by Race/Ethnicity**

	2007			2008			2009			2010			2011 (Preliminary)		
	Women (N)	Timely PNC (%)	Timely PNC (N)	Women (N)	Timely PNC (%)	Timely PNC (N)	Women (N)	Timely PNC (%)	Timely PNC (N)	Women (N)	Timely PNC (%)	Timely PNC (N)	Women (N)	Timely PNC (%)	Timely PNC (N)
Medicaid															
Hispanic	11,526	48.3%	5,566	12,400	5.947	48.0%	10,591	5,427	51.2%	11,440	6,509	56.9%	11,026	6,600	59.9%
Not Hispanic or Ethnicity Unknown															
White	17,659	56.0%	9,895	18,304	10,143	55.4%	16,033	9,298	58.0%	18,730	11,562	61.7%	18,506	11,438	61.8%
Asian	1,580	53.5%	845	1,634	868	53.1%	1,405	763	54.3%	1,726	1,031	59.7%	1,807	1,097	60.7%
Black	1,800	50.2%	903	1,853	899	48.5%	1,641	826	50.3%	2,019	1,132	56.1%	2,110	1,226	58.1%
American Indian/Alaska Native	1,012	45.3%	453	994	488	49.1%	855	417	48.8%	931	495	53.2%	942	494	52.4%
Hawaiian/Pacific Islander	514	38.5%	198	539	230	42.7%	492	206	41.9%	583	260	44.6%	574	283	49.3%
More Than One Race	1,344	50.1%	674	1,492	748	50.1%	1,239	684	55.2%	1,606	910	56.7%	1,653	955	57.8%
Other/Unknown	485	21.1%	211	421	178	42.3%	322	151	46.9%	548	293	53.5%	607	299	49.3%
Total Medicaid	35,920	48.3%	18,745	37,637	19,501	51.8%	32,578	17,772	54.6%	37,583	22,192	59.0%	37,225	22,392	60.2%

Excludes records with missing birth certificate information for number of prenatal visits (7.3% of eligible women in 2011). **Medicaid** refers to women who had Medicaid-paid maternity care. **Continuous enrollment** refers to Medicaid and is not plan-specific. Enrollment start is the 15th of the first month of eligibility for this analysis.

Race/Ethnicity categories are mutually exclusive. Hispanic women may be of any race.

3 Low Birth Weight

Birth weight is a primary indicator of the health of the newborn infant. Infants with a birth weight of less than 2500 grams (5.5 pounds) are classified as low birth weight. Low birth weight is associated with increased risk of infant death and a wide range of disorders including neuro-developmental conditions, learning disorders, and respiratory tract infections. Low birth weight, especially very low birth weight, is also a key driver of medical care expenditures during the first year of life. Established risk factors for low birth weight include poverty, smoking, medical risks, pregnancy complications, substance abuse, and African American race.

The *Healthy People 2020* (HP 2020) goal for low birth weight is 7.8%. Washington State has exceeded the HP 2020 goal, with an overall rate of low birth weight of 6.1% in 2011. In 2010 (the most recent year with rates from 50 states), Washington had the third lowest rate of low birth weight (in a three-way tie) among the 50 states (Hamilton, Martin, and Ventura, 2011).

Measure Definition: Low Birth Weight

Percentage of live births that weighed less than 2,500 grams (5.5 pounds)

Data Collection Method: Birth Certificates (linked to Medicaid claims and eligibility)

- Over the past five years, the low birth weight rate for infants born to mothers on Medicaid has been consistently higher than that for infants born to Non-Medicaid women: 6.7% versus 5.5% in 2011. Among women with Medicaid-funded maternity care, the lowest rate of low birth weight (5.2% in 2011) occurs among infants born to undocumented women. Their low birth weight rate (5.2% in 2011) is lower even than that for infants born to Non-Medicaid women (5.5% in 2011).
- Low birth weight rates for infants born to women in Medicaid managed care (7.0% in 2011) and in fee-for-service (citizens) (7.1%) were comparable, and higher than the rates for infants born to undocumented women and to Non-Medicaid women.
- The highest low birth weight rates occurred among infants born to African American women (10.0% for those on Medicaid, and 8.7% for Non-Medicaid in 2011) and those born to American Indian/Alaska Native women (9.1% for those on Medicaid, and 7.9% for Non-Medicaid in 2011). Infants born to women with Other or Unknown race/ethnicity also demonstrated high rates of low birth weight (9.4% for Medicaid and 8.4% for Non-Medicaid). The disparities in low birth weight for African American and Native American infants appear to have different mechanisms: established risk factors for low birth weight, such as poverty, smoking, and substance abuse, account for much, if not all, of the excess low birth weight among Native American infants. In contrast, among African Americans, the increased rate of low birth weight persists, even after controlling for their risk factors. Yet, in 2009, Washington demonstrated the fifth lowest rate of low birth weight for African Americans among the 45 states with reported rates for African Americans (Martin et al., 2011).

- As the proportion of Medicaid-paid births to undocumented women has decreased since 2008 (from 20.4% in 2008 to 16% in 2011), the low birth weight rate for Hispanic women on Medicaid has tended to increase, from 6.1% in 2008 to 6.4% in 2011.

Ongoing program activities support the health of pregnant women to ensure healthy birth outcomes:

- Assure access to prenatal care early in pregnancy by prompt enrollment in Medicaid/managed care and adequate provider networks;
- Continue Maternity Support Services (MSS) targeted to the women at highest risk of poor birth outcomes;
- Offer tobacco cessation services through MSS;
- Improve identification and treatment of pregnant substance abusers: enroll pregnant women who need chemical dependency treatment as early as possible in treatment and comprehensive services.

**Table 3a. Low Birth Weight (<2500 g) by Managed Care Plan
Live Births 2007-2011**

Medicaid Managed Care Plan	2007			2008			2009			2010			2011 (Preliminary)		
	Live Births (N)	LBW (%)	Live Births (N)	LBW (%)	Live Births (N)	LBW (%)	Live Births (N)	LBW (%)	Live Births (N)	LBW (%)	Live Births (N)	LBW (%)	Live Births (N)	LBW (%)	
Asuris NW Health Plan	64	2	3.1%	90	6	6.7%	101	9	8.9%	133	8	6.0%	260	12	4.6%
Columbia United Providers	1,575	110	7.0%	1,580	108	6.8%	1,615	112	6.9%	1,799	120	6.7%	2,311	146	6.3%
Community Health Plan of WA	6,869	478	7.0%	7,116	490	6.9%	7,548	526	7.0%	8,601	612	7.1%	9,837	704	7.2%
Group Health Cooperative	670	53	7.9%	691	47	6.8%	781	62	7.9%	828	55	6.6%	700	36	5.1%
Kaiser	41	1	2.4%	32	0	0.0%	24	2	8.3%	16	0	0.0%	29	0	0.0%
Molina Healthcare of WA	12,276	799	6.5%	12,556	820	6.5%	13,066	925	7.1%	13,511	932	6.9%	12,574	863	6.9%
Regence Blue Shield	1,457	83	5.7%	1,425	98	6.9%	1,470	96	6.5%	1,531	86	5.6%	1,389	113	8.1%
Native Health PCCM (multiple agencies)	na	na	na	na	na	na	na	na	na	352	22	6.3%	335	34	10.1%
Medicaid Managed Care	22,952	1,526	6.6%	23,490	1,569	6.7%	24,605	1,732	7.0%	26,771	1,835	6.9%	27,435	1,908	7.0%
Medicaid Fee for Service (citizens)	10,375	833	8.0%	10,606	803	7.6%	9,861	718	7.3%	9,245	709	7.7%	8,146	577	7.1%
Medicaid Fee for Service (undocumented)	8,314	445	5.4%	8,749	453	5.2%	8,475	461	5.4%	7,106	398	5.6%	6,803	355	5.2%
Total Medicaid	41,641	2,804	6.7%	42,845	2,825	6.6%	42,941	2,911	6.8%	43,122	2,942	6.8%	42,384	2,840	6.7%
Total Non-Medicaid	46,593	2,729	5.9%	46,757	2,836	6.1%	45,652	2,610	5.7%	42,780	2,454	5.7%	42,731	2,345	5.5%
State Total	88,242	5,533	6.3%	89,606	5,662	6.3%	88,597	5,521	6.2%	85,944	5,397	6.3%	85,357	5,201	6.1%

Excludes records with missing or invalid birth weight information. Medicaid figures exclude women with state-only Medicaid eligibility. **Medicaid** refers to women who had Medicaid-paid maternity care. Plan listed is enrollment plan during month of delivery. **Managed care** refers to Medicaid women enrolled in a state-contracted managed care plan during the month of delivery. **PCCM** is Primary Care Case Management through tribal agencies. na = not available or not applicable. **Medicaid Fee for Service (citizens)** includes citizens and legal residents.

**Table 3b. Low Birth Weight
Low Birth Weight (<2500 g) by Race/Ethnicity
Live Births 2007-2011**

	2007		2008		2009		2010		2011 (Preliminary)				
	Live Births (N)	LBW (%)	Live Births (N)	LBW (%)	Live Births (N)	LBW (%)	Live Births (N)	LBW (%)	Live Births (N)	LBW (%)			
Medicaid													
Hispanic	13,162	5.8%	13,899	6.1%	13,737	826	6.0%	13,321	834	6.3%	12,617	806	6.4%
Not Hispanic or Ethnicity Unknown													
White	20,218	1.341	20,760	1.320	21,003	1,370	6.5%	21,173	1,393	6.6%	20,832	1,276	6.1%
Asian	1,949	164	1,952	154	1,954	151	7.7%	2,034	161	7.9%	2,122	168	7.9%
Black	2,317	241	2,266	220	2,291	266	11.6%	2,366	241	10.2%	2,458	246	10.0%
American Indian/Alaska Native	1,212	110	1,142	101	1,138	85	7.5%	1,091	83	7.6%	1,112	101	9.1%
Hawaiian/Pacific Islander	611	29	624	27	670	48	7.2%	673	37	5.5%	668	37	5.5%
More Than One Race	1,599	113	1,717	127	1,674	129	7.7%	1,814	140	7.7%	1,839	137	7.5%
Other/Unknown	573	41	485	30	474	36	7.6%	650	53	8.2%	736	69	9.4%
Total Medicaid	41,641	2,804	42,845	2,825	42,941	2,911	6.8%	43,122	2,942	6.8%	42,384	2,840	6.7%
Non-Medicaid													
Hispanic	3,616	201	3,362	184	3,368	183	5.4%	2,796	192	6.9%	2,978	163	5.5%
Not Hispanic or Ethnicity Unknown													
White	34,535	1,892	34,766	2,004	33,775	1,812	5.4%	31,982	1,697	5.3%	31,464	1,572	5.0%
Asian	5,237	380	5,488	441	5,253	388	7.4%	5,098	341	6.7%	5,269	386	7.3%
Black	1,007	103	1,027	87	1,034	84	8.1%	879	79	9.0%	944	82	8.7%
American Indian/Alaska Native	334	27	317	21	330	21	6.4%	291	19	6.5%	280	22	7.9%
Hawaiian/Pacific Islander	269	13	312	18	282	21	7.4%	201	16	8.0%	237	14	5.9%
More Than One Race	1,255	83	1,212	63	1,303	86	6.6%	1,219	86	7.1%	1,225	78	6.4%
Other/Unknown	340	30	273	18	307	15	4.9%	314	24	7.6%	334	28	8.4%
Total Non-Medicaid	46,593	2,729	46,757	2,836	45,652	2,610	5.7%	42,780	2,454	5.7%	42,731	2,345	5.5%
State Total	88,242	5,533	89,606	5,662	88,597	5,521	6.2%	85,944	5,397	6.3%	85,357	5,201	6.1%

Excludes records with missing or invalid birth weight information, or for women with state-only Medicaid eligibility. **Race/ethnicity** categories are mutually exclusive; Hispanic women may be of any race. **Medicaid** refers to women who had Medicaid-paid maternity care. **Managed care** refers to Medicaid women enrolled in a state-contracted managed care plan during the month of delivery. **PCCM** is Primary Care Case Management through tribal agencies. na = not available or not applicable.

4 Cesarean Delivery (NTSV)

Cesarean delivery is now the most common operation in the United States, with rates increasing dramatically since 1970. While Cesarean delivery may be life-saving for mothers and their newborns in certain emergencies, overall the rise in C-section rates in the past forty years has not led to significant improvements in neonatal morbidity or maternal health (Blanchette, 2011).

Rising Cesarean delivery rates in the U.S. are the result of changes in the practice environment, including the widespread use of electronic fetal monitoring, the decrease in both vaginal breech deliveries and operative vaginal deliveries, and reduced availability of vaginal birth after Cesarean (VBAC) (ACOG, 2010). Other studies have attributed much of the increase in Cesarean deliveries over the past twenty years to an increase in elective inductions (Caughey, 2009; Martin, 2006).

Healthy People 2020 includes a goal to reduce Cesarean births among low-risk (full-term, singleton, vertex presentation) women giving birth for the first time to 23.9%. Overall, Washington women with Medicaid-financed maternity care exceeded this goal, with a Cesarean delivery (NTSV) rate of 21.7% in 2011. The 2011 rate represents a small decrease from prior years: from 2007 to 2010, the NTSV C-section rate for Washington Medicaid women fluctuated from 22.1% (2007) to 22.7% (2009). NTSV C-section rates for Non-Medicaid women followed a similar pattern, with a small decrease in 2011 to 26.8%. One reason for higher C-section rates among Non-Medicaid women is their age: the average age for Non-Medicaid women giving birth for the first time in 2011 was 29.2 years, the average age for Medicaid women was 22.9.

Measure Definition: Cesarean Delivery (NTSV)

Percentage of women that had a cesarean delivery among women with first live singleton births at 37 weeks gestation or later, also known as Nulliparous, Term, Singleton, Vertex (NTSV)

Data Collection Method: Birth Certificates (linked to Medicaid claims and eligibility)

- Of the five managed care plans with more than 200 deliveries in 2011, four (CHP, GH, Molina, and Regence) had NTSV C-section rates between 20.2% (Molina) and 21.9% (GH). The fifth plan in this group, Columbia United Providers, had a rate of 23.1%.
- Overall, in 2011, Medicaid women in managed care plans had a lower C-section rate (21%) than women in fee-for-service, with rates of 22.2% for citizens and 25% for undocumented women.
- The highest C-section rates occurred among Non-Medicaid Asian and black women, with rates of 34.2% and 33.6%, respectively. While the rate for Asian Medicaid women was much lower (26.7%), the rate for black Medicaid women remained high (30.8%).

The HCA has established a statewide goal of 20% for the NTSV C-section rate, and the Bree Collaborative has included a C-section goal to decrease unsupported variability among Washington

hospitals in the primary C-section rate (August 2, 2012, Bree report on Obstetrics Care Topic). (Please see: <http://www.hta.hca.wa.gov/bree.html>)

Hospital-level reports of NTSV C-section rates have been distributed to hospitals with obstetric services across the state, and hospital-level reports will be posted on the HCA website. These feedback reports lay the foundation for future efforts to optimize C-section rates in Washington State. The Washington State Perinatal Collaborative (<http://www.waperinatal.org/>), Washington State Hospital Association (<http://www.wsha.org/>), and the HCA will focus their efforts in 2014 on improving the rate of NTSV C-sections among first-time mothers after other joint initiatives have been completed and a toolkit and data from a hospital survey become available to guide interventions.

While Washington's Cesarean delivery rates compare favorably with those for the U.S. overall and with the *Healthy People 2020* goals, substantial variability exists across hospitals. Through multi-faceted efforts, the HCA hopes to reduce variability across hospitals, and reduce the statewide rate of NTSV C-sections to 20% or less.

**Table 4a. Cesarean Delivery Rate (NTSV)
Cesarean Rate for Nulliparous Term Singleton Vertex Live Births by Managed Care Plan
2007-2011**

	2007		2008		2009		2010		2011 (Preliminary)	
	NTSV Births (N)	C-Sec (%)	NTSV Births (N)	C-Sec (%)	NTSV Births (N)	C-Sec (%)	NTSV Births (N)	C-Sec (%)	NTSV Births (N)	C-Sec (%)
Medicaid Managed Care Plan										
Asuris NW Health Plan	30	7 23.3%	44	9 20.5%	34	8 23.5%	58	12 20.7%	134	23 17.2%
Columbia United Providers	466	102 21.9%	463	88 19.0%	498	115 23.1%	543	136 25.0%	661	153 23.1%
Community Health Plan of WA	2,465	519 21.1%	2,623	611 23.3%	2,724	612 22.5%	3,073	705 22.9%	3,715	807 21.7%
Group Health Cooperative	199	30 15.1%	216	44 20.4%	272	51 18.8%	279	53 19.0%	210	46 21.9%
Kaiser	10	2 na	5	2 na	5	0 na	--	--	12	5 na
Molina Healthcare of WA	3,838	868 22.6%	4,117	963 23.4%	4,221	995 23.6%	4,284	963 22.5%	3,908	788 20.2%
Regence Blue Shield	472	102 21.6%	480	76 15.8%	460	81 17.6%	461	82 17.8%	429	91 21.2%
Native Health PCCM (multiple agencies)	na	na na	na	na na	na	na na	116	24 20.7%	107	16 15.0%
Medicaid Managed Care	7,480	1,630 21.8%	7,948	1,793 22.6%	8,214	1,862 22.7%	8,814	1,975 22.4%	9,176	1,929 21.0%
Medicaid Fee for Service (citizens)	3,418	777 22.7%	3,403	788 23.2%	3,096	721 23.3%	2,855	692 24.2%	2,506	565 22.5%
Medicaid Fee for Service (undocumented)	2,173	483 22.2%	2,203	499 22.7%	2,008	446 22.2%	1,450	311 21.4%	1,260	315 25.0%
Total Medicaid	13,071	2,890 22.1%	13,554	3,080 22.7%	13,318	3,029 22.7%	13,119	2,978 22.7%	12,942	2,809 21.7%
Total Non-Medicaid	16,232	4,457 27.5%	16,591	4,510 27.2%	16,111	4,388 27.2%	15,332	4,264 27.8%	15,904	4,256 26.8%
State Total	29,307	7,349 25.1%	30,146	7,590 25.2%	29,432	7,417 25.2%	28,480	7,250 25.5%	29,003	7,093 24.5%

Excludes records with missing or invalid birth weight information. Medicaid figures exclude women with state-only Medicaid eligibility. **Medicaid** refers to women who had Medicaid-paid maternity care. Plan listed is enrollment plan during month of delivery. **Managed care** refers to Medicaid women enrolled in a state-contracted managed care plan during the month of delivery. **PCCM** is Primary Care Case Management through tribal agencies. **na** = not available or not applicable. **Medicaid Fee for Service (citizens)** includes citizens and legal residents. **C-Sec** = C-Section. **NTSV**=nulliparous, term, single, vertex.

**Table 4b. Cesarean Delivery Rate (NTSV)
Cesarean Rate for Nulliparous Term Singleton Vertex Live Births by Race/Ethnicity
2007-2011**

	2007		2008		2009		2010		2011 (Preliminary)						
	NTSV Births (N)	C-Sec (%)	NTSV Births (N)	C-Sec (%)	NTSV Births (N)	C-Sec (%)	NTSV Births (N)	C-Sec (%)	NTSV Births (N)	C-Sec (%)					
Medicaid															
Hispanic	3,605	22.3%	3,840	20.6%	3,629	748	20.6%	3,423	676	19.7%	3,104	635	20.5%		
Not Hispanic or Ethnicity Unknown															
White	6,831	1,443	21.1%	7,094	1,610	22.7%	7,073	1,605	22.7%	6,983	1,579	22.6%	7,019	1,461	20.8%
Asian	684	163	23.8%	687	166	24.2%	686	175	25.5%	730	192	26.3%	731	195	26.7%
Black	702	215	30.6%	692	217	31.4%	672	195	29.0%	700	203	29.0%	747	230	30.8%
American Indian/Alaska Native	346	68	19.7%	310	66	21.3%	324	63	19.4%	284	61	21.5%	271	47	17.3%
Hawaiian/Pacific Islander	157	40	25.5%	163	48	29.4%	171	47	27.5%	183	51	27.9%	178	47	26.4%
More Than One Race	591	123	20.8%	644	144	22.4%	620	157	25.3%	657	173	26.3%	681	128	18.8%
Other/Unknown	155	33	21.3%	124	39	31.5%	143	39	27.3%	159	43	27.0%	211	66	31.3%
Total Medicaid	13,071	2,890	22.1%	13,554	3,080	22.7%	13,318	3,029	22.7%	13,119	2,978	22.7%	12,942	2,809	21.7%
Non-Medicaid															
Hispanic	1,148	308	26.8%	1,088	292	26.8%	1,034	273	26.4%	907	252	27.8%	1,075	279	26.0%
Not Hispanic or Ethnicity Unknown															
White	11,916	3,167	26.6%	12,104	3,136	25.9%	11,856	3,095	26.1%	11,295	2,947	26.1%	11,553	2,914	25.2%
Asian	2,146	671	31.3%	2,298	785	34.2%	2,108	699	33.2%	2,172	765	35.2%	2,187	747	34.2%
Black	310	106	34.2%	358	109	30.4%	356	114	32.0%	282	100	35.5%	345	116	33.6%
American Indian/Alaska Native	77	20	26.0%	91	17	18.7%	91	28	30.8%	80	25	31.3%	93	27	29.0%
Hawaiian/Pacific Islander	64	20	31.3%	90	25	27.8%	88	23	26.1%	54	17	31.5%	64	15	23.4%
More Than One Race	454	131	28.9%	456	115	25.2%	485	128	26.4%	434	121	27.9%	467	128	27.4%
Other/Unknown	117	34	29.1%	106	31	29.2%	93	28	30.1%	108	37	34.3%	120	30	25.0%
Total Non-Medicaid	16,232	4,457	27.5%	16,591	4,510	27.2%	16,111	4,388	27.2%	15,332	4,264	27.8%	15,904	4,256	26.8%
State Total	29,307	7,349	25.1%	30,146	7,590	25.2%	29,432	7,417	25.2%	28,480	7,250	25.5%	29,003	7,093	24.5%

Excludes records with missing or invalid birth weight information. Medicaid figures exclude women with state-only Medicaid eligibility. **Race/ethnicity** categories are mutually exclusive. Hispanic women may be of any race. **Medicaid** refers to women who had Medicaid-paid maternity care. **C-Sec**= C-Section. **NTSV**=nulliparous, term, single, vertex.

5 Childhood Immunization Status

Widespread administration of immunizations during early childhood has resulted in dramatic declines in vaccine-preventable diseases in the U.S., when compared with the pre-vaccine era. Immunizing one child not only protects the individual child's health but also the health of the community. Childhood immunizations are one of the most cost-effective prevention strategies in use today, and the success of immunization protocols for specific diseases is reflected in the expanding number of vaccine-preventable diseases for which immunizations are available. Immunization recommendations in the U.S. currently target 17 vaccine-preventable diseases across the lifespan. Universally recommended vaccines for young children target 15 diseases.

Healthy People 2020 has established goals for vaccination coverage of two-year-old children (19 to 35 months of age) at 90% for established vaccines and progressive increases to 90% coverage for vaccines within the first five years of a newly recommended vaccine. Immunizations for Hepatitis A, Rotavirus, and Influenza were reported to the NCQA for the first time in 2010.

The NCQA indicators for immunization status include individual vaccine rates for ten single or combination vaccines and nine separate combination rates, including a comprehensive rate for all ten vaccines. The CHIPRA median immunization rate for children turning 2 was 71% for 19 states that reported according to HEDIS specifications for 2010, compared to 74% reported by the NCQA (Combo 2) for Medicaid HMOs. State rates reported for CHIPRA measures varied widely, with some states reporting on Combo 2 and others reporting on Combo 3, Combo 6, or Combo 10. In this report, we report on individual vaccine rates and Combo 2.

In 2010, Acumentra reported that Washington's managed care plans achieved immunization rates nearly identical to, or better than, the NCQA national Medicaid averages for five vaccines (DTaP, IPV, HiB, Hep B, and PCV), and immunization rates for four vaccines (IPV, MMR, HiB, and Hep B) exceeded the HP 2020 goal of 90% in 2010.

Measure Definition: Childhood Immunization Status

Percentage of children that turned 2 years of age during the measurement year and had specific vaccines by their second birthday

Data Collection Method: Administrative data linked to immunization registry data (Child Profile)

- Medicaid-enrolled children in Washington State who turned 2 years old in 2011 exceeded the HP 2020 goal of 90% coverage for three vaccines: Polio (IPV) with a rate of 90.2%; Measles, Mumps, and Rubella (MMR) with a rate of 90.4%; and Hemophilus influenzae Type B (HiB) with a rate of 91.8%. For two vaccines, the Washington rate for Medicaid children was between 80 and 90%: Hepatitis B (Hep B) with a rate of 86.8% and Varicella zoster (VZV) with a rate of 88.6%. For two vaccines, the Washington rate for Medicaid children was between 70 and 80%:

Diphtheria, tetanus, and pertussis (DTaP) with a rate of 75.8% and pneumococcal conjugate (PCV) with a rate of 77.6%.

- Vaccines with more recent recommendations—Hepatitis A (Hep A), Rotavirus (RV) and Influenza—showed lower rates: 32.7%, 62.7%, and 50.2% respectively. For RV and Influenza, the rates for Washington Medicaid children were higher than those reported by the NCQA for Medicaid HMOs (57.6% and 43.6%, respectively).
- Overall for Combination 2 (DTaP, IPV, MMR, HiB, Hep B, and VZV), the rate for Medicaid children was 68.4% in 2011. This rate was somewhat lower than the rates reported by the NCQA (74.1% for 2010) and for the 19 states that reported on the CHIPRA core measure set (71%).
- The highest immunization rates for Washington Medicaid-enrolled children occurred among children whose mothers were undocumented women at the time of their babies' birth, with a rate of 79.7% on Combo 2. The lowest rates occurred among Medicaid children enrolled in fee-for-service, with a rate of 61.3% on Combo 2. The rate for Medicaid children enrolled in managed care (69% on Combo 2) was intermediate.
- For Combo 2, two managed care plans demonstrated rates above 70%: CHP (74%) and Native Health PCCM (76.6%). The rates for all other managed care plans were between 60 and 70%.
- Of the three vaccines with overall immunization rate greater than 90% for Washington Medicaid children, rates for three to six managed care plans also exceeded 90%. For IPV, rates for children enrolled in CHP, Molina, and Native Health PCCM exceeded 90%. Rates for all other plans were between 80 and 90%. For MMR, rates for children enrolled in CHP, Molina, Regence, and Native Health PCCM exceeded 90%. For HiB, rates for children enrolled in Asuris NW, CHP, GH, Molina, Regence, and Native Health PCCM exceeded 90%. The highest immunization rates across all vaccines typically occurred among CHP and Native Health PCCM enrollees, with few exceptions.
- Asian children demonstrated the highest immunization rates for 9 out of 10 individual vaccines. For Hep B, the highest rate occurred among American Indian/Alaska Native children, with a rate of 91.7%. Children of Hispanic ethnicity had the second highest immunization rates for 10 of 10 individual vaccines. For Combo 2, the rate for Asian children was 78.2%, and for Hispanic children, 75.5%. The Combo 2 rates for all other race/ethnic groups were between 60.7% (Hawaiian/Pacific Islander) and 67% (Black and American Indian/Alaska Native). The Combo 2 rate for children of Other/Unknown race/ethnicity was 55.1%.

Table 5a. Childhood Immunization Status
Childhood Immunizations by Age Two for Children Who Turned Two in 2011 by Managed Care Plan
Children With Continuous Medicaid/CHIP Eligibility in the Twelve Months Prior to the Child's Second Birthday

	TOTAL ELIGIBLE CHILDREN	Four DTaP		Three IPV		One MMR		Three HiB		Three Hep B	
		% of		% of		% of		% of		% of	
		N	Total	N	Total	N	Total	N	Total	N	Total
Asuris NW Health Plan	107	77	72.0%	95	88.8%	93	86.9%	97	90.7%	90	84.1%
Columbia United Providers	2,018	1,443	71.5%	1,800	89.2%	1,766	87.5%	1,802	89.3%	1,792	88.8%
Community Health Plan of WA	11,304	8,882	78.6%	10,400	92.0%	10,393	91.9%	10,508	93.0%	10,297	91.1%
Group Health Cooperative	995	725	72.9%	894	89.8%	867	87.1%	909	91.4%	875	87.9%
Kaiser	23	17	73.9%	19	82.6%	19	82.6%	19	82.6%	18	78.3%
Molina Healthcare of WA	18,863	14,370	76.2%	16,987	90.1%	17,053	90.4%	17,349	92.0%	16,068	85.2%
Regence Blue Shield	1,872	1,320	70.5%	1,665	88.9%	1,704	91.0%	1,716	91.7%	1,559	83.3%
Native Health PCCM (multiple agencies)	158	125	79.1%	148	93.7%	145	91.8%	148	93.7%	149	94.3%
Medicaid Managed Care	35,340	26,959	76.3%	32,008	90.6%	32,040	90.7%	32,548	92.1%	30,848	87.3%
Medicaid Fee for Service	3,123	2,193	70.2%	2,673	85.6%	2,719	87.1%	2,760	88.4%	2,520	80.7%
Mother Undocumented at Delivery	6,791	5,704	84.0%	6,471	95.3%	6,517	96.0%	6,548	96.4%	6,354	93.6%
Total	38,463	29,152	75.8%	34,681	90.2%	34,759	90.4%	35,308	91.8%	33,368	86.8%

Medicaid Managed Care Plan	One VZV		Four PCV		Two Hep A		Two/Three RV		Two Influenza		Combination 2	
	% of		% of		% of		% of		% of		% of	
	N	Total	N	Total	N	Total	N	Total	N	Total	N	Total
Asuris NW Health Plan	87	81.3%	84	78.5%	32	29.9%	64	59.8%	52	48.6%	66	61.7%
Columbia United Providers	1,695	84.0%	1,500	74.3%	400	19.8%	1,243	61.6%	722	35.8%	1,327	65.8%
Community Health Plan of WA	10,279	90.9%	8,954	79.2%	4,370	38.7%	7,323	64.8%	5,697	50.4%	8,373	74.1%
Group Health Cooperative	854	85.8%	761	76.5%	193	19.4%	629	63.2%	432	43.4%	665	66.8%
Kaiser	19	82.6%	18	78.3%	10	43.5%	17	73.9%	7	30.4%	16	69.6%
Molina Healthcare of WA	16,719	88.6%	14,777	78.3%	6,139	32.5%	11,949	63.3%	9,731	51.6%	12,675	67.2%
Regence Blue Shield	1,667	89.0%	1,417	75.7%	533	28.5%	1,145	61.2%	951	50.8%	1,139	60.8%
Native Health PCCM (multiple agencies)	144	91.1%	117	74.1%	45	28.5%	62	39.2%	97	61.4%	121	76.6%
Medicaid Managed Care	31,464	89.0%	27,628	78.2%	11,722	33.2%	22,432	63.5%	17,689	50.1%	24,382	69.0%
Medicaid Fee for Service	2,629	84.2%	2,233	71.5%	857	27.4%	1,691	54.1%	1,624	52.0%	1,913	61.3%
Mother Undocumented at Delivery	6,473	95.3%	5,855	86.2%	3,085	45.4%	5,135	75.6%	4,157	61.2%	5,412	79.7%
Total	34,093	88.6%	29,861	77.6%	12,579	32.7%	24,123	62.7%	19,313	50.2%	26,295	68.4%

Child may have been enrolled in more than one plan over the two year period. **Plan** listed is the plan that the child was enrolled in for the greatest amount of time, or, in the case of a tie, the most recently occurring enrollment. **PCCM** is Primary Care Case Management through tribal agencies. **Mother Undocumented at Delivery** identified for children with matching Medicaid ID in First Steps Database. **Excludes** children with state-only Medicaid/CHIP eligibility. **DTaP** = diphtheria, tetanus, and acellular pertussis. **IPV** = polio. **MMR** = measles, mumps, and rubella. **HiB** = H influenza type B. **Hep B** = Hepatitis B. **VZV** = chicken pox. **PCV** = pneumococcal conjugate. **Hep A** = hepatitis A. **RV** = rotavirus (two or three depending on vaccine or vaccine mix requirements). **Flu** = influenza. Combination measures have met full recommendations for each immunization included. **Combination 2** = DtaP+IPV+MMR+HiB+Hep B+VZV. Documented **history of illness** is counted for MMR, Hep B, VZV, and Hep A immunizations.

Table 5b. Childhood Immunization Status
Childhood Immunizations by Age Two for Children Who Turned Two in 2011 by Race/Ethnicity
Children With Continuous Medicaid/CHIP Eligibility in the Twelve Months Prior to the Child's Second Birthday

	TOTAL ELIGIBLE CHILDREN	Four DTaP		Three IPV		One MMR		Three HiB		Three Hep B	
		% of		% of		% of		% of		% of	
		N	Total	N	Total	N	Total	N	Total	N	Total
Hispanic	13,345	10,767	80.7%	12,464	93.4%	12,577	94.2%	12,631	94.7%	12,179	91.3%
Not Hispanic or Ethnicity Unknown											
White	17,739	12,996	73.3%	15,625	88.1%	15,505	87.4%	16,017	90.3%	14,834	83.6%
Asian	1,418	1,204	84.9%	1,339	94.4%	1,348	95.1%	1,346	94.9%	1,290	91.0%
Black	2,145	1,564	72.9%	1,961	91.4%	1,936	90.3%	1,980	92.3%	1,901	88.6%
American Indian/Alaska Native	892	649	72.8%	819	91.8%	797	89.4%	826	92.6%	818	91.7%
Hawaiian/Pacific Islander	704	474	67.3%	620	88.1%	628	89.2%	626	88.9%	600	85.2%
More Than One Race	1,040	760	73.1%	928	89.2%	929	89.3%	949	91.3%	878	84.4%
Other/Unknown	1,180	738	62.5%	925	78.4%	1,039	88.1%	933	79.1%	868	73.6%
Total	38,463	29,152	75.8%	34,681	90.2%	34,759	90.4%	35,308	91.8%	33,368	86.8%

	TOTAL ELIGIBLE CHILDREN	One VZV		Four PCV		Two Hep A		Two/Three RV		Two Influenza		Combination 2	
		% of		% of		% of		% of		% of		% of	
		N	Total	N	Total	N	Total	N	Total	N	Total	N	Total
Hispanic	13,345	12,455	93.3%	10,999	82.4%	5,444	40.8%	9,239	69.2%	7,320	54.9%	10,071	75.5%
Not Hispanic or Ethnicity Unknown													
White	17,739	15,040	84.8%	13,338	75.2%	4,724	26.6%	10,561	59.5%	8,010	45.2%	11,332	63.9%
Asian	1,418	1,337	94.3%	1,206	85.0%	597	42.1%	1,048	73.9%	984	69.4%	1,109	78.2%
Black	2,145	1,930	90.0%	1,626	75.8%	680	31.7%	1,309	61.0%	1,078	50.3%	1,438	67.0%
American Indian/Alaska Native	892	785	88.0%	672	75.3%	236	26.5%	414	46.4%	476	53.4%	598	67.0%
Hawaiian/Pacific Islander	704	616	87.5%	507	72.0%	199	28.3%	389	55.3%	367	52.1%	427	60.7%
More Than One Race	1,040	924	88.8%	800	76.9%	337	32.4%	652	62.7%	526	50.6%	670	64.4%
Other/Unknown	1,180	1,006	85.3%	713	60.4%	362	30.7%	511	43.3%	552	46.8%	650	55.1%
Total	38,463	34,093	88.6%	29,861	77.6%	12,579	32.7%	24,123	62.7%	19,313	50.2%	26,295	68.4%

Excludes children with state-only Medicaid/CHIP eligibility. **Race/ethnicity** categories are mutually exclusive. Hispanic women may be of any race. Where claims-based race information was not known and the child had a Medicaid ID in the First Steps Database, mother's race/ethnicity from the birth certificate was substituted as the race/ethnicity indicator. **DTaP** = diphtheria, tetanus, and acellular pertussis. **IPV** = polio. **MMR** = measles, mumps, and rubella. **HiB** = H influenza type B. **Hep B** = Hepatitis B. **VZV** = chicken pox. **PCV** = pneumococcal conjugate. **Hep A** = hepatitis A. **RV** = rotavirus (two or three depending on vaccine or vaccine mix requirements). **Flu** = influenza. Combination measures have met full recommendations for each immunization included. **Combination 2** = DtaP+IPV+MMR+HiB+Hep B+VZV. Documented **history of illness** is counted for MMR, Hep B, VZV, and Hep A immunizations.

6 Well-Child Visits

Regular visits for screening and examinations by medical providers are recommended during early childhood and throughout the adolescent years to support healthy growth and development, as well as for counseling on nutrition, physical activity, injury prevention, and other age-appropriate topics.

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. (Please see <http://practice.aap.org> for a detailed schedule of recommended visits.) For the 40 states that reported CHIPRA measures for 2010, the performance on this measure was best, on average, for children ages 3 to 6, with a median of 64% receiving the recommended annual well-child visit. The median of 64% reflects a wide range across states, from a low of 26% of children ages 3 to 6 to a high of 82%. Possible explanations for the high variability include differences in provider service delivery or a data artifact (CHIPRA 2011 Annual Report).

The NCQA reported that 71.6% of children enrolled in Medicaid HMOs received at least one well-child visit in 2010. This is higher than the Washington State rate of 62.1% for Healthy Options plans for 2010. In their 2010 HEDIS report, Acumentra found that Healthy Options plans continued to lag behind national Medicaid performance on measures of well-child visits.

Performance on the well-child visit measure for 3- to 6-year-olds (annual visits) is typically better than that for children age 0 to 15 months (with at least 6 visits). For the 40 states that reported CHIPRA measures for 15-month-olds, the median rate was 56%. The NCQA reported an average of 60.2% for 15-month-olds enrolled in Medicaid HMOs; the Washington HEDIS rate for 2010 was 52.6%.

Measure Definition: Well-Child Visits (WCVs)

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 during their first 15 months of life.

Percentage of children ages 3 to 6 that had one or more well-child visits with a primary care practitioner during the measurement year

Data Collection Method: Administrative

- For 3- to 6-year-olds, the 2010 and 2011 rates of one or more well-child visit reported here for children in managed care (59.7% and 61.6%, respectively) are slightly lower than the rate reported by Acumentra for 2010, 62.2%. For 15-month-olds, the difference was greater: Acumentra reported that 52.6% of children in the first 15 months of life received six or more WCVs during 2010. The rates reported here for 15-month-olds are much lower: 42.7% for 2010 and 40.0% for 2011. One potential reason for the large difference is that Acumentra used a hybrid method of data collection: both administrative data and review of medical records. The rates reported here are based on administrative data only.

- In both 2010 and 2011, the rates of well-child visits among children enrolled in managed care plans exceeded those for children in fee-for-service, for both 15-month-old children and those ages 3 to 6. In 2011, 40% of 15-month-olds enrolled in managed care received at least six visits; the rate was just 21.9% for 15-month-olds in fee-for-service. For 3- to 6-year-olds, overall rates were higher, with 61.6% of children in managed care receiving at least one visit, and 34.8% of children in fee-for-service.
- While rates for 3- to 6-year-olds tended to improve from 2010 to 2011, increasing from 56.4% (2010) to 58.2% (2011), rates for 15-month-olds declined slightly, from 40.8% in 2010 to 38.7% in 2011.
- The proportion of 15-month-old children who had at least 6 well-child visits was highest for Hispanic and Asian children in 2011 (45.2% and 43.1%, respectively). Similarly, the proportion of 3- to 6-year-olds with at least one annual visit was highest for Asian and Hispanic children (66% and 64.1%, respectively).

**Table 6. Well-Child Visits
Children With Continuous Medicaid/CHIP Eligibility During the Year (Ages 3-6)
or 31 Days to 15 Months of Age (15 Months Old) by Managed Care Plan**

	2010						2011					
	15 Months Old			Age 3-6			15 Months Old			Age 3-6		
	Eligible (N)	Six or More Visits (N)	Six or More Visits (%)	Eligible (N)	Had Visit (N)	Had Visit (%)	Eligible (N)	Six or More Visits (N)	Six or More Visits (%)	Eligible (N)	Had Visit (N)	Had Visit (%)
Medicaid Managed Care Plan												
Asuris NW Health Plan	119	56	47.1%	396	218	55.1%	140	49	35.0%	681	394	57.9%
Columbia United Providers	1,967	739	37.6%	7,909	3,989	50.4%	2,274	792	34.8%	11,196	6,387	57.0%
Community Health Plan of WA	11,084	4,366	39.4%	41,254	23,606	57.2%	11,176	4,340	38.8%	43,543	26,213	60.2%
Group Health Cooperative	978	226	23.1%	3,638	1,785	49.1%	962	90	9.4%	3,563	1,894	53.2%
Kaiser	32	10	31.3%	127	91	71.7%	14	5	35.7%	123	93	75.6%
Molina Healthcare of WA	18,650	8,674	46.5%	66,890	42,256	63.2%	17,958	7,578	42.2%	67,720	43,528	64.3%
Regence Blue Shield	1,945	835	42.9%	7,561	4,477	59.2%	1,869	962	51.5%	7,691	4,566	59.4%
Native Health PCCM (multiple agencies)	154	20	13.0%	953	379	39.8%	177	22	12.4%	874	351	40.2%
Medicaid Managed Care	34,929	14,926	42.7%	128,728	76,801	59.7%	34,570	13,838	40.0%	135,391	83,426	61.6%
Medicaid Fee for Service	3,258	654	20.1%	18,777	6,391	34.0%	2,823	617	21.9%	19,725	6,864	34.8%
Total	38,187	15,580	40.8%	147,505	83,192	56.4%	37,393	14,455	38.7%	155,116	90,290	58.2%
Race/Ethnicity												
Hispanic	13,311	5,760	43.3%	48,653	30,308	62.3%	12,639	5,708	45.2%	51,190	32,788	64.1%
Not Hispanic or Ethnicity Unknown												
White	18,254	7,374	40.4%	66,193	34,976	52.8%	17,831	6,421	36.0%	69,147	37,851	54.7%
Asian	1,374	605	44.0%	4,856	3,018	62.1%	1,407	606	43.1%	5,086	3,357	66.0%
Black	2,149	792	36.9%	8,472	4,812	56.8%	2,136	688	32.2%	8,681	5,094	58.7%
American Indian/Alaska Native	878	201	22.9%	3,570	1,657	46.4%	885	193	21.8%	3,709	1,798	48.5%
Hawaiian/Pacific Islander	702	259	36.9%	2,805	1,480	52.8%	664	225	33.9%	2,944	1,539	52.3%
More Than One Race	1,067	440	41.2%	3,047	1,702	55.9%	1,082	374	34.6%	3,502	2,008	57.3%
Other/Unknown	452	149	33.0%	9,909	5,239	52.9%	749	240	32.0%	10,857	5,855	53.9%
Total	38,187	15,580	40.8%	147,505	83,192	56.4%	37,393	14,455	38.7%	155,116	90,290	58.2%

Age refers to the age of the child as of December 31. A child may have a single enrollment gap of no more than 45 days and still be considered **continuously eligible**. **Excludes** children with state-only Medicaid/CHIP eligibility. Child may have been enrolled in more than one **plan** over the specified period. **Plan** listed is the plan that the child was enrolled in for the greatest amount of time, or, in the case of a tie, the most recently occurring enrollment. **PCCM** is Primary Care Case Management through tribal agencies. **Race/ethnicity** categories are mutually exclusive. Hispanic women may be of any race. Where claims-based race information was not known and the child had a Medicaid ID in the First Steps Database, mother's race/ethnicity from the birth certificate was substituted as the race/ethnicity indicator. **Recommended screening schedule** is five screenings in the first year of life, three screenings ages 1-2, and one screening per 12-month period for 3-6 year olds.

7 Adolescent Well-Care Visits

Well-care visits during the adolescent years provide opportunities for counseling about risk-taking behaviors, interventions and treatment for chronic diseases, and timely and relevant health promotion advice. The American Academy of Pediatrics recommends an annual visit for adolescents; however, in Washington, the state-specific recommendation is for one visit every two years. The Washington recommended screening schedule is available at:

http://hrsa.dshs.wa.gov/download/Billing_Instructions/EPSDT/EPSDT_BI.pdf

As reported for CHIPRA, adolescents had the lowest rate of well-child visits, with a median of 47% of adolescents ages 12 to 21 receiving at least one well-child visit. For adolescents enrolled in Medicaid HMOs, the NCQA reported an average rate of well-care visits of 48.1% (2010). The HEDIS measure reported by Acumentra for Washington's managed care plans 2010 was 36.6%

Measure Definition: Adolescent Well-Care Visit

Percentage of adolescents ages 12 to 21 that had at least one comprehensive well-care visit with a primary care practitioner or an obstetrics-gynecology (OB-GYN) practitioner during the measurement year

Data Collection Method: Administrative

- In both 2010 and 2011, the rates of well-care visits for adolescents enrolled in managed care plans exceeded those for adolescents in fee-for-service. In 2011, 33.8% of 12- to 21-year-olds enrolled in managed care received at least one visit; the rate was just 20.1% for 12- to 21-year-olds in fee-for-service.
- The overall rate of well-care visits increased slightly from 2010 to 2011, from 29.7% to 30.6%. The rate for adolescents enrolled in managed care plans (from 32.3% to 33.8%) increased while the rate for those in fee-for-service (from 21.6% to 20.1%) decreased slightly.
- The proportion of 12- to 21-year-olds with at least one well-care visit was highest for Asians in both 2010 and 2011 (34.5% and 36.3%, respectively). Black and Hispanic adolescents had the next highest rates. The lowest rates occurred among American Indian/Alaska Native youth.

**Table 7a. Adolescent Well-Care Visits
Children 12-21 With Continuous Medicaid/CHIP Eligibility During the Year**

	2010			2011		
	Eligible (N)	Had Visit (N)	Had Visit (%)	Eligible (N)	Had Visit (N)	Had Visit (%)
Medicaid Managed Care Plan						
Asuris NW Health Plan	468	156	33.3%	891	295	33.1%
Columbia United Providers	9,999	2,502	25.0%	13,536	3,934	29.1%
Community Health Plan of WA	50,997	14,693	28.8%	53,560	16,212	30.3%
Group Health Cooperative	6,493	2,016	31.0%	6,013	1,916	31.9%
Kaiser	269	85	31.6%	198	82	41.4%
Molina Healthcare of WA	73,377	26,287	35.8%	73,926	27,836	37.7%
Regence Blue Shield	10,132	3,387	33.4%	10,310	3,446	33.4%
Native Health PCCM (multiple agencies)	1,181	210	17.8%	1,102	211	19.1%
Medicaid Managed Care	152,916	49,336	32.3%	159,536	53,932	33.8%
Medicaid Fee for Service	48,304	10,416	21.6%	49,241	9,922	20.1%
Total	201,220	59,752	29.7%	208,777	63,854	30.6%

Age refers to the age of the child as of December 31. A child may have a single enrollment gap of no more than 45 days and still be considered **continuously eligible**. **Excludes** children with state-only Medicaid/CHIP eligibility. Child may have been enrolled in more than one **plan** over the specified period. **Plan** listed is the plan that the child was enrolled in for the greatest amount of time, or, in the case of a tie, the most recently occurring enrollment. **PCCM** is Primary Care Case Management through tribal agencies. **The recommended screening interval** is one screening per 24-month period for 7-20 year olds. **Adolescents who did not have a visit during 2011 may still be within screening interval recommendations.**

**Table 7b. Adolescent Well-Care Visits
Children 12-21 With Continuous Medicaid/CHIP Eligibility During the Year**

	2010			2011		
	Eligible (N)	Had Visit (N)	Had Visit (%)	Eligible (N)	Had Visit (N)	Had Visit (%)
Race/Ethnicity						
Hispanic	44,312	14,457	32.6%	47,434	16,308	34.4%
Not Hispanic or Ethnicity Unknown						
White	109,427	30,911	28.2%	110,980	31,700	28.6%
Asian	7,332	2,526	34.5%	7,598	2,760	36.3%
Black	14,250	4,698	33.0%	14,470	4,861	33.6%
American Indian/Alaska Native	6,009	1,419	23.6%	6,009	1,492	24.8%
Hawaiian/Pacific Islander	3,945	1,146	29.0%	4,187	1,302	31.1%
More Than One Race	1,378	454	32.9%	1,503	482	32.1%
Other/Unknown	14,567	4,141	28.4%	16,596	4,949	29.8%
Total	201,220	59,752	29.7%	208,777	63,854	30.6%

Age refers to the age of the child as of December 31. A child may have a single enrollment gap of no more than 45 days and still be considered **continuously eligible**. **Excludes** children with state-only Medicaid/CHIP eligibility. **Race/ethnicity** categories are mutually exclusive. Hispanic women may be of any race. Where claims-based race information was not known and the child had a Medicaid ID in the First Steps Database, mother's race/ethnicity from the birth certificate was substituted as the race/ethnicity indicator. The **recommended screening interval** is one screening per 24-month period for 7-20 year olds. Adolescents who did not have a visit during 2011 may still be within screening interval recommendations.

8 Preventive Dental Service and Dental Treatment Services

Despite considerable progress in pediatric oral health in recent years, tooth decay remains one of the most common chronic diseases of childhood. Tooth decay can cause significant pain, loss of school days, infections, and even death. Dental care is an essential element of primary care for children. The CMS Oral Health Initiative seeks, by 2015, to improve by at least 10 percentage points the proportion of children enrolled in Medicaid-CHIP who receive a preventive dental service. (Please see: <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/CMS-Oral-Health-Strategy.pdf>)

One of the *Healthy People 2020* oral health goals is to increase the proportion of low-income children and adolescents who received any preventive dental service during the past year to 29.4%. Washington State exceeded that goal by a wide margin in 2011: 53% of Medicaid-enrolled children received preventive dental services.

Washington State was one of four states recently honored at the 2nd Annual CMS Medicaid-CHIP Quality Conference (June 2012) for better-than-average performance in providing access to dental care for children enrolled in Medicaid and for reporting and data accuracy related to dental information. Washington State's performance in 2009 on the preventive dental services measure was in the top quartile, as was Washington's performance on the dental treatment service measure.

Measure Definition: Preventive Dental Services

Percentage of individuals ages 1 to 20 eligible for Medicaid or CHIP or Medicaid Expansion programs (that is, individuals eligible for EPSDT services) that received preventive dental services.

Measure Definition: Dental Treatment Services

Percentage of individuals ages 1 to 20 eligible for Medicaid or CHIP or Medicaid Expansion programs (that is, individuals eligible for EPSDT services) that received dental treatment services.

Data Collection Method: Administrative (EPSDT CMS-416)

- In 2011, 53% of Medicaid enrolled children received preventive dental care services, and 34% received dental treatment services.

**Table 8. Child Dental Prevention and Treatment Services
Percentage of Medicaid Eligible Children Age 1-20 that Received Dental Services in 2011**

Total Eligible	Received Preventive Services		Received Treatment Services	
	N	% of Total	N	% of Total
741,792	393,058	53.0%	252,380	34.0%

Source: Form CMS-416

9 Emergency Department Visits

Although visits to the emergency department (ED) do not indicate poor quality of care, unnecessary use of emergency care may signal a lack of access to more appropriate sources of medical attention.

While the reasons that patients decide to visit an ED instead of a clinic or medical provider's office are complex, unnecessary and non-urgent ED visits are costly, result in ER over-crowding, and contribute to long wait times. Access to sources of ambulatory care other than the ED can improve patient outcomes and maintain a high quality of care.

The Washington Health Care Authority continues to focus on implementation of best practices to reduce medically unnecessary ED visits, in consultation with the Washington State Hospital Association, the Washington State Medical Association, and the Washington Chapter of the American Chapter of Emergency Physicians (HCA Report to the Legislature, 2012). While these efforts are not specifically targeted to children's use of ED services, Medicaid children may benefit from improved access to and coordination of medical care which the HCA is promoting through the best practices.

ED visit rates are typically reported for Medicaid enrollees under age 65. NCQA reported a rate of 62.0 visits per 1000 member months for Medicaid HMO enrollees in 2010; Acumentra reported a 2010 Healthy Options enrollee average of 59.8. From 2006 to 2010, Acumentra reported that the state managed care average was consistently lower than the national average. No ED visit rates for children were available from the NCQA or from Acumentra for comparison.

Measure Definition: Emergency Department (ED) Visits

Rate of ED visits per 1,000 member months among children up to age 19. This measure is calculated for three age groups: less than 1, 1 to 9, and 10 to 18.

Data Collection Method: administrative

- ED visits varied greatly by age: the highest visit rates (89.9 visits per 1000 member months in 2011) occurred among infants (less than one year old); the rate for children 1 to 9, 40.0 visits per 1000 member months (2011), was intermediate; and the rate for youth 10 to 18 was the lowest (30.9 in 2011).
- ED visit rates among plans also varied widely. Group Health and Kaiser consistently demonstrated the lowest rates of ED visits. It is tempting to point to the system of care—Group Health and Kaiser are both traditional health maintenance organizations that offer coordinated care including walk-in clinics and after-hours care—as a contributing factor to the low rates for these two plans. Acumentra, using different methods entirely, also found that Kaiser had the lowest rate of ED visits among all enrollees less than 65.
- ED visit rates for children in fee-for-service were consistently lower than those for managed care enrollees. This was true for all three age groups, though most pronounced for infants.

- Between 2007 and 2011, ED visit rates for children decreased modestly. This was true for both fee-for-service and managed care enrollees and for all three age groups.
- The highest rates of ED visits occurred among American Indians/Alaska Natives. This was consistent over time and for all three age groups. The second highest rates occurred among Hawaiian/Pacific Islanders (120.1 per 1000 member months for infants, 2011), Hispanics (45.6 per 1000 member months for 1- to 9-year olds), and Blacks (34.4 per 1000 member months for 10- to 18-year-olds, 2011).
- The lowest rates of ED visits occurred among Asians. This was true for all time periods and all age groups. The ED visit rate for Asians ranged from one-third to two-thirds of the overall rate for all races. The Asian rate for infants, 49.4, was 55% of the overall rate. For children 1 to 9 years old, the rate for Asians, 24.2 per 1000, was 60% of the overall rate. For youth 10-18, the rate for Asians, 10.1 per 1000, was 33% of the overall rate.

**Table 9b. Ambulatory Care -- Emergency Department Visits
Emergency Visits During the Year for Children Age One to Nine Enrolled in Medicaid or CHIP for at least One Month
Emergency Visits per 1,000 Months of Eligibility 2007-2011**

Medicaid Managed Care Plan	2007				2008				2009				2010				2011			
	Total ED Visits		Visits per 1,000 Mths		Total ED Visits		Visits per 1,000 Mths		Total ED Visits		Visits per 1,000 Mths		Total ED Visits		Visits per 1,000 Mths		Total ED Visits		Visits per 1,000 Mths	
	Visits	Months	1,000	Mths	Visits	Months	1,000	Mths	Visits	Months	1,000	Mths	Visits	Months	1,000	Mths	Visits	Months	1,000	Mths
Asuris NW Health Plan	274	7,293	37.6	347	8,698	39.9	414	10,361	40.0	528	12,521	42.2	667	19,877	33.6					
Columbia United Providers	6,526	167,342	39.0	6,368	174,336	36.5	7,451	202,085	36.9	7,045	228,988	30.8	10,180	311,936	32.6					
Community Health Plan of WA	44,389	838,575	52.9	47,254	904,567	52.2	61,734	1,023,512	60.3	57,984	1,167,128	49.7	55,869	1,227,963	45.5					
Group Health Cooperative	2,128	88,730	24.0	2,101	90,103	23.3	2,872	98,381	29.2	2,719	107,512	25.3	2,472	102,393	24.1					
Kaiser	59	5,113	11.5	40	4,160	9.6	66	4,406	15.0	51	3,713	13.7	94	3,723	25.2					
Molina Healthcare of WA	61,313	1,380,268	44.4	63,218	1,460,054	43.3	79,079	1,646,059	48.0	77,530	1,854,176	41.8	74,729	1,863,739	40.1					
Regence Blue Shield	10,314	186,726	55.2	11,291	187,995	60.1	13,640	197,871	68.9	12,841	212,980	60.3	11,226	213,556	52.6					
Native Health PCCM (mult. agencies)	1,177	17,661	66.6	1,309	19,960	65.6	1,500	22,034	68.1	1,478	28,359	52.1	1,228	25,287	48.6					
Medicaid Managed Care	126,180	2,691,708	46.9	131,928	2,849,873	46.3	166,756	3,204,709	52.0	160,176	3,615,377	44.3	156,465	3,768,474	41.5					
Medicaid Fee for Service	29,512	750,338	39.3	29,896	790,385	37.8	32,685	857,603	38.1	26,064	793,526	32.8	25,433	785,905	32.4					
Total	156,278	3,442,046	45.4	162,389	3,640,258	44.6	200,060	4,062,312	49.2	186,466	4,408,903	42.3	182,007	4,554,379	40.0					

Excludes children with state-only Medicaid/CHIP eligibility. Child may have been enrolled in more than one plan over time. PCCM is Primary Care Case Management through tribal agencies. **Emergency visits** occurring on the same day were considered one visit.

**Table 9c. Ambulatory Care -- Emergency Department Visits
Emergency Visits During the Year for Children Age Ten to Eighteen Enrolled in Medicaid or CHIP for at least One Month
Emergency Visits per 1,000 Months of Eligibility 2007-2011**

Medicaid Managed Care Plan	2007				2008				2009				2010				2011			
	Total ED Visits		Visits per 1,000 Mths		Total ED Visits		Visits per 1,000 Mths		Total ED Visits		Visits per 1,000 Mths		Total ED Visits		Visits per 1,000 Mths		Total ED Visits		Visits per 1,000 Mths	
	Visits	Months	Visits	per 1,000 Mths	Visits	Months	Visits	per 1,000 Mths	Visits	Months	Visits	per 1,000 Mths	Visits	Months	Visits	per 1,000 Mths	Visits	Months	Visits	per 1,000 Mths
Asuris NW Health Plan	168	5,224	32.2	194	6,081	31.9	258	7,125	36.2	231	8,443	27.4	433	14,486	29.9					
Columbia United Providers	3,325	116,704	28.5	3,471	122,318	28.4	4,098	145,074	28.2	4,243	168,563	25.2	5,469	226,411	24.2					
Community Health Plan of WA	23,457	608,751	38.5	24,787	643,736	38.5	32,138	723,146	44.4	30,691	835,699	36.7	29,480	890,790	33.1					
Group Health Cooperative	1,898	86,224	22.0	1,711	85,892	19.9	2,265	93,144	24.3	2,234	102,809	21.7	1,907	98,501	19.4					
Kaiser	52	5,363	9.7	54	4,797	11.3	61	4,967	12.3	57	4,304	13.2	78	3,298	23.7					
Molina Healthcare of WA	31,380	909,789	34.5	31,488	932,978	33.8	39,316	1,048,726	37.5	39,620	1,195,334	33.1	38,518	1,224,763	31.4					
Regence Blue Shield	5,761	136,613	42.2	6,340	137,658	46.1	7,642	147,029	52.0	7,336	161,844	45.3	6,681	166,129	40.2					
Native Health PCCM (mult. agencies)	744	15,034	49.5	800	15,746	50.8	948	16,835	56.3	963	21,589	44.6	838	19,381	43.2					
Medicaid Managed Care	66,785	1,883,702	35.5	68,845	1,949,206	35.3	86,726	2,186,046	39.7	85,375	2,498,585	34.2	83,404	2,643,759	31.5					
Medicaid Fee for Service	26,159	838,636	31.2	26,980	842,083	32.0	29,659	884,928	33.5	25,059	850,255	29.5	23,426	843,341	27.8					
Total	93,871	2,722,338	34.5	96,766	2,791,289	34.7	117,646	3,070,974	38.3	111,443	3,348,840	33.3	107,744	3,487,100	30.9					

Excludes children with state-only Medicaid/CHIP eligibility. Child may have been enrolled in more than one **plan** over time. **PCCM** is Primary Care Case Management through tribal agencies. **Emergency visits** occurring on the same day were considered one visit.

**Table 9d. Ambulatory Care -- Emergency Department Visits
Emergency Visits During the Year for Children Under Age One Enrolled in Medicaid or CHIP for at least One Month
Emergency Visits per 1,000 Months of Eligibility 2007-2011**

	2007		2008		2009		2010		2011						
	Total ED Visits	Visits per 1,000 Mths	Total ED Visits	Visits per 1,000 Mths	Total ED Visits	Visits per 1,000 Mths	Total ED Visits	Visits per 1,000 Mths	Total ED Visits	Visits per 1,000 Mths					
Hispanic	20,477	168,082	21,733	182,364	119.2	22,812	183,248	124.5	21,269	182,701	116.4	18,678	168,990	110.5	
Not Hispanic or Ethnicity Unknown	22,318	259,527	86.0	22,061	264,671	83.4	22,982	276,627	83.1	20,983	272,998	76.9	21,023	274,609	76.6
White	1,074	20,361	52.7	1,125	21,378	52.6	1,061	21,901	48.4	1,123	22,752	49.4	1,136	22,991	49.4
Asian	3,188	30,213	105.5	3,031	29,656	102.2	3,029	30,278	100.0	3,020	30,096	100.3	3,072	29,976	102.5
Black	1,824	13,885	131.4	1,919	14,028	136.8	1,788	13,132	136.2	1,778	12,950	137.3	1,535	12,209	125.7
American Indian/Alaska Native	1,227	10,134	121.1	1,155	9,816	117.7	1,263	10,943	115.4	1,071	10,247	104.5	1,245	10,365	120.1
Hawaiian/Pacific Islander	1,196	12,054	99.2	1,260	13,428	93.8	1,344	14,637	91.8	1,283	14,898	86.1	1,581	17,100	92.5
More Than One Race	1,126	11,547	97.5	1,207	12,533	96.3	1,276	12,522	101.9	1,389	17,700	78.5	1,692	19,795	85.5
Other/Unknown															
Total	52,430	525,803	99.7	53,491	547,874	97.6	55,555	563,288	98.6	51,916	564,342	92.0	49,962	556,035	89.9

Excludes children with state-only Medicaid/CHIP eligibility. **Race/ethnicity** categories are mutually exclusive. Hispanic women may be of any race. Where claims-based race information was not known and the child had a Medicaid ID in the First Steps Database, mother's race/ethnicity from the birth certificate was substituted as the race/ethnicity indicator. **Emergency visits** occurring on the same day were considered one visit.

**Table 9e. Ambulatory Care -- Emergency Department Visits
Emergency Visits During the Year for Children Age One to Nine Enrolled in Medicaid or CHIP for at least One Month
Emergency Visits per 1,000 Months of Eligibility 2007-2011**

	2007			2008			2009			2010			2011		
	Total ED Visits	Total Elig Months	Visits per 1,000 Mths	Total ED Visits	Total Elig Months	Visits per 1,000 Mths	Total ED Visits	Total Elig Months	Visits per 1,000 Mths	Total ED Visits	Total Elig Months	Visits per 1,000 Mths	Total ED Visits	Total Elig Months	Visits per 1,000 Mths
Hispanic	52,569	953,674	55.1	57,910	1,063,092	54.5	77,081	1,208,260	63.8	68,568	1,338,719	51.2	63,780	1,398,371	45.6
Not Hispanic or Ethnicity Unknown															
White	72,858	1,756,064	41.5	72,608	1,786,590	40.6	83,220	1,947,106	42.7	79,857	2,062,500	38.7	79,067	2,089,429	37.8
Asian	2,916	109,773	26.6	3,014	115,186	26.2	3,858	132,569	29.1	3,510	146,135	24.0	3,683	151,915	24.2
Black	10,144	220,381	46.0	9,952	227,568	43.7	12,172	240,857	50.5	11,442	249,958	45.8	11,468	252,288	45.5
American Indian/Alaska Native	5,231	94,850	55.2	5,414	97,596	55.5	6,037	102,882	58.7	5,443	106,302	51.2	5,264	106,938	49.2
Hawaiian/Pacific Islander	2,735	60,378	45.3	2,853	65,466	43.6	3,555	74,986	47.4	3,275	81,443	40.2	3,419	86,481	39.5
More Than One Race	2,159	38,177	56.6	2,589	48,534	53.3	3,432	62,254	55.1	3,712	77,083	48.2	3,964	91,035	43.5
Other/Unknown	7,666	208,749	36.7	8,049	236,226	34.1	10,705	293,398	36.5	10,659	346,763	30.7	11,362	377,922	30.1
Total	156,278	3,442,046	45.4	162,389	3,640,258	44.6	200,060	4,062,312	49.2	186,466	4,408,903	42.3	182,007	4,554,379	40.0

Excludes children with state-only Medicaid/CHIP eligibility. **Race/ethnicity** categories are mutually exclusive. Hispanic women may be of any race. Where claims-based race information was not known and the child had a Medicaid ID in the First Steps Database, mother's race/ethnicity from the birth certificate was substituted as the race/ethnicity indicator. **Emergency visits** occurring on the same day were considered one visit.

**Table 9f. Ambulatory Care -- Emergency Department Visits
Emergency Visits During the Year for Children Age Ten to Eighteen Enrolled in Medicaid or CHIP for at least One Month
Emergency Visits per 1,000 Months of Eligibility 2007-2011**

	2007			2008			2009			2010			2011		
	Total ED Visits	Total Elig Months	Visits per 1,000 Mths	Total ED Visits	Total Elig Months	Visits per 1,000 Mths	Total ED Visits	Total Elig Months	Visits per 1,000 Mths	Total ED Visits	Total Elig Months	Visits per 1,000 Mths	Total ED Visits	Total Elig Months	Visits per 1,000 Mths
Hispanic	15,157	431,643	35.1	17,717	507,036	34.9	26,472	613,876	43.1	25,603	731,408	35.0	25,243	802,223	31.5
Not Hispanic or Ethnicity Unknown	57,192	1,545,274	37.0	57,628	1,567,539	36.8	65,135	1,687,681	38.6	62,096	1,795,953	34.6	59,704	1,822,759	32.8
White	1,165	91,222	12.8	1,089	93,556	11.6	1,558	109,507	14.2	1,352	121,767	11.1	1,291	127,340	10.1
Asian	7,441	205,454	36.2	7,409	207,037	35.8	8,752	217,879	40.2	8,414	228,954	36.7	7,964	231,341	34.4
Black	4,557	94,638	48.2	4,698	94,076	49.9	5,188	96,603	53.7	4,695	98,442	47.7	4,253	96,558	44.0
American Indian/Alaska Native	1,163	52,129	22.3	1,218	55,354	22.0	1,679	63,224	26.6	1,534	69,334	22.1	1,556	75,457	20.6
Hawaiian/Pacific Islander	371	9,017	41.1	377	11,083	34.0	573	14,691	39.0	720	20,527	35.1	845	24,865	34.0
More Than One Race	6,825	292,961	23.3	6,630	255,608	25.9	8,289	267,513	31.0	7,029	282,455	24.9	6,888	306,557	22.5
Other/Unknown															
Total	93,871	2,722,338	34.5	96,766	2,791,289	34.7	117,646	3,070,974	38.3	111,443	3,348,840	33.3	107,744	3,487,100	30.9

Excludes children with state-only Medicaid/CHIP eligibility. **Race/ethnicity** categories are mutually exclusive. Hispanic women may be of any race. Where claims-based race information was not known and the child had a Medicaid ID in the First Steps Database, mother's race/ethnicity from the birth certificate was substituted as the race/ethnicity indicator. **Emergency visits** occurring on the same day were considered one visit.

BIBLIOGRAPHY

Acumentra Health. 2010 Performance Measure Comparative Analysis Report. Portland, OR: Acumentra Health (November 2010). Available at:

<http://hrsa.dshs.wa.gov/healthyoptions/newho/reports/2010HEDIS.pdf>

American Congress of Obstetricians and Gynecologists. ACOG Practice bulletin no. 115: Vaginal birth after previous cesarean delivery. *Obstet Gynecol.* 2010; 116(2 pt 1): 450-463.

Blanchette H. The rising cesarean delivery rate in America: What are the consequences? *Obstet Gynecol.* 2011; 118: 687-690.

Bree Collaborative. Obstetric Care Topic: Report and Recommendations. Olympia, WA: Washington State Health Care Authority (August 2, 2012) Available at:

http://www.hta.hca.wa.gov/documents/bree_ob_report.docx

Caughey AB. Reducing primary cesarean delivery: Can we prevent current and future morbidity and mortality? *J Perinatol* 2009 29(11): 717-8.

Cawthon L, Woodcox P, Lyons D. County Profiles: Birth and unintended pregnancy statistics 1990 to 2006. Olympia, WA: Washington Department of Social and Health Services (RDA Report 9.91) (February 2008). Available at: <http://publications.rda.dshs.wa.gov/1269/>

Center for Medicaid and CHIP Services, Centers for Medicare & Medicaid Services. Initial Core Set of Health Care Quality Measures for Children in Medicaid and CHIP. 2011.

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

Center for Medicaid and CHIP Services, Centers for Medicare & Medicaid Services. Initial Core Set of Children's Health Care Quality Measures: Technical specifications and resource manual for Federal fiscal year 2011 reporting. December 2011. Available at:

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

Hamilton BE, Martin JA, Ventura SJ. Births: Preliminary data for 2010. *National Vital Statistics Reports*; 60(2): 1-26. Hyattsville, MD: National Center for Health Statistics. 2011. Available at:

http://www.cdc.gov/nchs/data/nvsr/nvsr60/nvsr60_2.pdf

Lewis CT, Mathews TJ, and Heuser RL. Prenatal care in the United States, 1980-94. *Vital and Health Statistics* 21(54): 1-17. Hyattsville, MD: National Center for Health Statistics. 1996. Available at:

http://www.cdc.gov/nchs/data/series/sr_21/sr21_054.pdf

Martin JA, Hamilton BE, Sutton PD, Venture SJ, Menacker F, Kimeyer S Births: Final data for 2004. *National Vital Statistics Reports*; 55(1): 1-101. Hyattsville, MD: National Center for Health Statistics. 2011. Available at:

http://www.cdc.gov/nchs/data/nvsr/nvsr55/nvsr55_01.pdf

Martin JA, Hamilton BE, Ventura SJ, et al. Births: Final data for 2009. National Vital Statistics Reports; 60(1):1-72. Hyattsville, MD: National Center for Health Statistics. 2011. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr60/nvsr60_01.pdf

National Committee for Quality Assurance. Continuous improvement and the expansion of quality measurement: The state of health care quality 2011. Washington, DC: National Committee for Quality Assurance. Available at: <http://www.ncqa.org/LinkClick.aspx?fileticket=J8kEuhuPqxk%3d&tabid=836>

U.S. Department of Health and Human Services. Children's Health Insurance Program Reauthorization Act: 2011 Annual Report on the Quality of Care for Children in Medicaid and CHIP. September 2011. Available at: http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/2011_StateReporttoCongress.pdf

U.S. Department of Health and Human Services. Office of Disease Prevention and Health Promotion. Healthy People 2020. Washington, DC. Available at: <http://www.healthypeople.gov/2020/topicsobjectives2020/default.aspx>.

Washington Department of Health. Perinatal Indicators Report for Washington Residents: 2010 Data. Olympia, WA: Washington Department of Health. (DOH 950-153). 2012. Available at: http://www.doh.wa.gov/Portals/1/Documents/Pubs/950-153_PerinatalIndicatorsforWashingtonResidents.pdf

Washington Health Care Authority 2012. Report to the Legislature: Emergency Department Utilization: Hospital Attestation to Best Practices. Olympia, WA: Washington State Health Care Authority (July 15, 2012). Available at: <http://www.hca.wa.gov/documents/legreports/3ESHB2127C7L2012E2PVEmergencyDepartmentUtilizationReport.pdf>