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Outcomes of care for Iowa Medicaid enrollees. State Fiscal Year 2010. Final Report to the Iowa Department of Human Services

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PublicPolicy Center

The University of Iowa

July 2011

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State Fiscal Year 2010

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Introduction

Since 2008, the Centers for Medicare & Medicaid Services (CMS) have worked to define outcomes measures for children and adults in Medicare and Medicaid. The measures for children are outlined in a letter to state health officials dated February 14, 2011, from Cindy Mann, Director, Center for Medicaid, CHIP and Survey & Certification. These measures will be tested and refined by Centers of Excellence established through a grant program by AHRQ. The measures outlined below are recommended for Initial Core Set of Children's Healthcare Quality for Voluntary Reporting by Medicaid and CHIP Programs.

1. Frequency of ongoing prenatal care
2. Timeliness of prenatal care
3. Percent of live births weighing under 2,500 grams
4. Cesarean rate for low-risk first birth women
5. Childhood immunization status
6. Immunizations for adolescents
7. BMI documentation
8. Screening using standardized screening tools for potential delays in social and emotional development
9. Chlamydia screening for women
10. Well-child visits in the first 15 months of life
11. Well-child visits in the third, fourth, fifth and sixth year of life
12. Well-child visits for 12-21 years of age with a PCP or OB/GYN
13. Total eligible persons receiving preventive dental services
14. Appropriate testing for children with pharyngitis
15. Otitis Media with Effusion, avoidance of inappropriate use of systemic antimicrobials, ages 2-12
16. Total EPSDT eligible children who received dental treatment services
17. Emergency Department Utilization, average number of ED visits per member per reporting period
18. Pediatric catheter-associated blood stream infection rates
19. Annual number of asthma patients 1 year of age or older with 1 asthma-related ER visit

20. Follow-up care for children prescribed attention deficit/hyperactivity disorder medication
21. Follow-up after hospitalization for mental illness
22. Annual hemoglobin A1C testing
23. Family experience of care, CAHPS Health Plan Survey 4.0, child version including Medicaid and children with chronic conditions supplemental items
24. Children and adolescents' access to primary care practitioners

In addition to measures for children, CMS proposed the following measures for adults in the Federal Register dates 12/30/2010.

1. Flu shots for adults ages 50-64
2. Adult weight screening and follow-up
3. Breast cancer screening
4. Cervical cancer screening
5. Alcohol misuse: screening, brief intervention, referral for treatment
6. Medical assistance with smoking and tobacco use cessation
7. Screening for clinical depression and follow-up plan
8. Plan all-cause readmission
9. Diabetes, short-term complications
10. Perforated appendicitis
11. Diabetes, long-term complications
12. Chronic obstructive pulmonary disease
13. Hypertension
14. Congestive heart failure
15. Dehydration
16. Bacterial pneumonia
17. Urinary tract infection admission rate
18. Angina without procedure
19. Uncontrolled diabetes admission rate
20. Adult asthma
21. Lower extremity amputations among patients with diabetes
22. Use of imaging studies for low back pain

23. HBIPS-2 hours of physical restraint use
24. Follow-up after hospitalization for mental illness
25. Appropriate use of antenatal steroids
26. Elective delivery prior to 39 completed weeks gestation
27. Timely transmission of transition record

The University of Iowa Public Policy Center has provided the Iowa Department of Human Services (IDHS) with outcome measures related to the Medicaid program for over 15 years. For the past seven years, the PPC has provided a consistent set of measures:

1. Well-child visits in the first 15 months of life
2. Well-child visits in the third, fourth, fifth and sixth years of life
3. Children and adolescents' access to primary care practitioners
4. Use of appropriate medications for people with asthma
5. Adults' access to preventive/ambulatory health services
6. Prenatal and postpartum care
7. Comprehensive diabetes care: Hemoglobin A1c testing
8. Annual Dental Visit

Measures 1, 2, 3 and 6 in the previous list are also included in the initial core set for children. This year we have added well child visits for 12-21 years of age from the initial core set.

Eligibility

Eligibility measures are calculated for three groups: people in managed care (MediPASS); people in the traditional fee-for-service program (FFS); and people enrolled through Supplemental Security Income program (SSI). Enrollees eligible for managed care are income-eligible and live in a county where MediPASS (primary care case management) is available. Enrollees included in the FFS measures live in counties that do not have a managed care option available because providers are not willing to participate, or in counties that have a managed care option that is not available to everyone due to geographic constraints. The SSI population is included to provide additional information regarding their care process and outcomes.

Figure 1 indicates the percent of enrollees by age and gender enrolled for at least 1 month in one of the three programs during SFY 2010. Of 407,171 enrollees who were eligible for one of the three programs during SFY 2010, 241,678 were eligible for at least 11 month—an increase of almost 25,000 enrollees from SFY 2009.

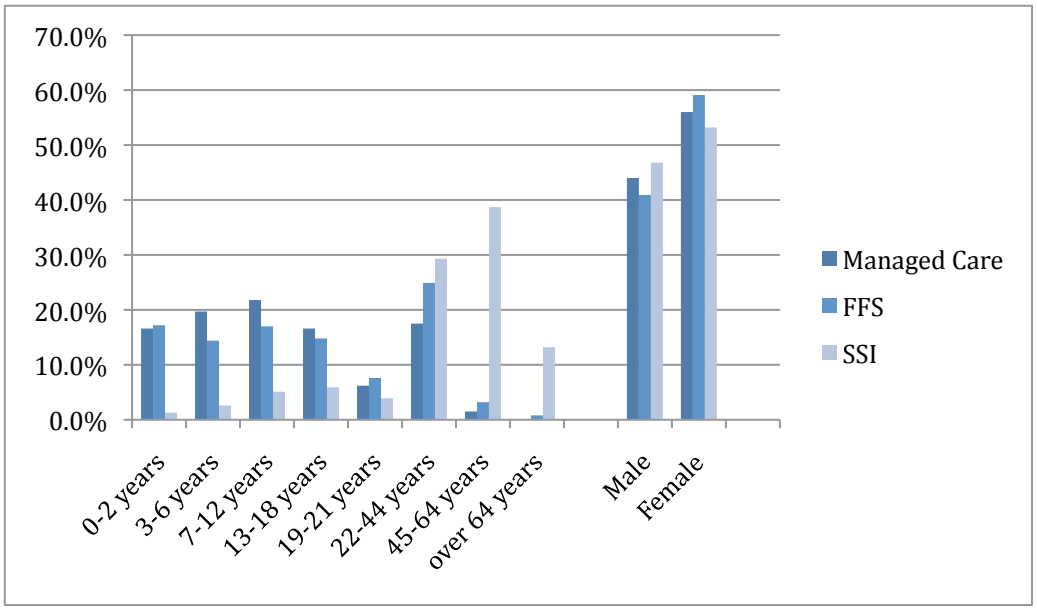

Figure 1. Comparisons of demographics for Medicaid enrollees who were eligible for at least 1 month in the measurement year, SFY 2010 by program

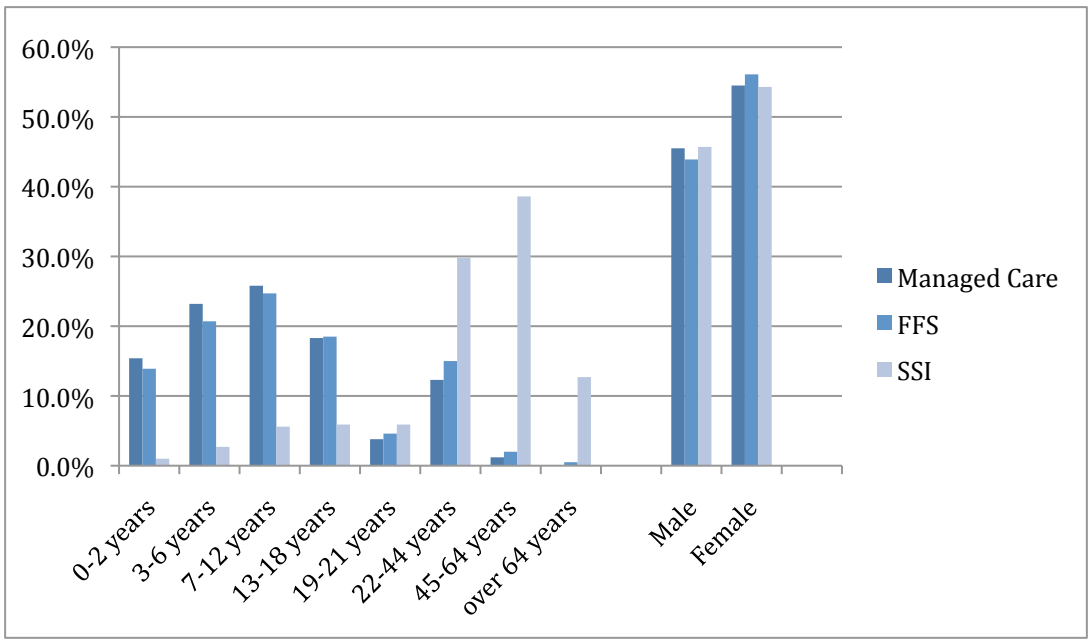

Figure 2. Comparisons of demographics for Medicaid enrollees who were eligible for at least 11 months in the measurement year, SFY 2010 by program

Table 1 provides the race of Medicaid enrollees who were enrolled for at least 11 months in SFY 2010. Nearly 30% of Medicaid enrollees did not indicate race, making it difficult to determine whether and for which measures racial disparities exist.

Table 1. Comparisons of race/ethnicity for Medicaid enrollees who were eligible for at least 11 months in the measurement year, SFY 2010 by program

		Managed Care	FFS	SSI	Total
White	Number	77728	25032	26891	129651
	%	51.5%	48.7%	68.2%	23.6%
Black	Number	9593	5560	3838	19991
	%	6.4%	10.8%	9.7%	7.9%
American Indian	Number	47	860	156	1063
	%	<1%	1.7%	0.4%	0.4%
Asian	Number	1295	508	538	2341
	%	0.9%	1.0%	1.4%	1.0%
Hispanic	Number	12234	2046	458	14738
	%	8.1%	4.0%	1.2%	6.1%
Pacific Islander	Number	148	54	8	210
	%	0.1%	0.1%	<0.1%	0.1%
Multiple-Hispanic	Number	3912	1203	396	5511
	%	2.6%	2.3%	1.0%	2.3%
Multiple-Other	Number	2459	1340	166	3965
	%	1.6%	2.6%	0.4%	1.6%
Unknown	Number	43407	14821	6980	65208
	%	28.8%	28.8%	17.7%	27.0%

OUTCOME MEASURES

Well-child visits in the first 15 months of life

The American Academy of Pediatrics and the Iowa Department of Public Health Early Periodic Screening, Diagnosis and Treatment (EPSDT) schedules continue to recommend that children have at least 8 visits during the first 15 months of life.[1] A child following the schedule will experience well-child visits at 2-3 days, and then at 1, 2, 4, 6, 9, 12, and 15 months of age. Visits are designed to assess and address developmental issues, provide anticipatory guidance to parents, and determine the health of the child. For the HEDIS measures, we indicate the proportion of children who turned 15 months of age during SFY 2010 and had 0 visits, 1 visit, 2 visits, 3 visits, 4 visits, 5 visits, and 6 or more visits timed as recommended by AAP. To be included in the measure, children had to be eligible for at least 14 of the first 15 months of life.

Table 2. Number and proportion of children receiving from zero to six or more well-child visits, SFY 2010

		Managed Care	FFS	SSI	Total
0 visits	Number	811	234	36	1081
	%	8.7%	7.9%	21.6%	8.7%
1 visit	Number	484	222	14	720
	%	5.2%	7.5%	8.4%	5.8%
2 visits	Number	645	219	20	884
	%	6.9%	7.4%	12.0%	7.1%
3 visits	Number	838	266	21	1125
	%	9.0%	9.0%	12.6%	9.0%
4 visits	Number	1174	389	27	1590
	%	12.6%	13.2%	16.2%	12.8%
5 visits	Number	1713	488	30	2231
	%	18.3%	16.5%	18.0%	17.9%
6 or more visits	Number	3672	1136	19	4827
	%	39.3%	38.5%	11.4%	38.7%
Total	Number	9337	2954	167	12458
	%	100.0%	100.0%	100.0%	100.0%

[1] http://www.iowaepsdt.org/ScreeningResources/PeriodicityChart2009.pdf

The majority of children do not receive the full complement of well-child visits within the first 15 months of life. Due to the importance of these visits for vaccinations, evaluation for developmental delays, and anticipatory guidance for parents, every effort should be made to increase the proportion of children who are able to receive at least 6 visits. Attaining a rate of 50% with at least 6 visits and 0% with no visits is a reasonable immediate goal.

Each year we document the proportion of children that had each recommended well-child visit in an effort to monitor which visits are most likely to be missed. We do not include screening visits that may have occurred at a WIC clinic, public health clinic or during a home visit. These are visits that appear in the claims data with T1015 or T1016 as the CPT codes. These claims meet the protocol set by HEDIS with a diagnosis code of V70.0-V70.9; however the activities represented by these codes are screening, and normally do not include the level of evaluation and guidance that are expected in a well-child visit. Children in the SSI program continue to be the least likely to get a well-child visit at any time.

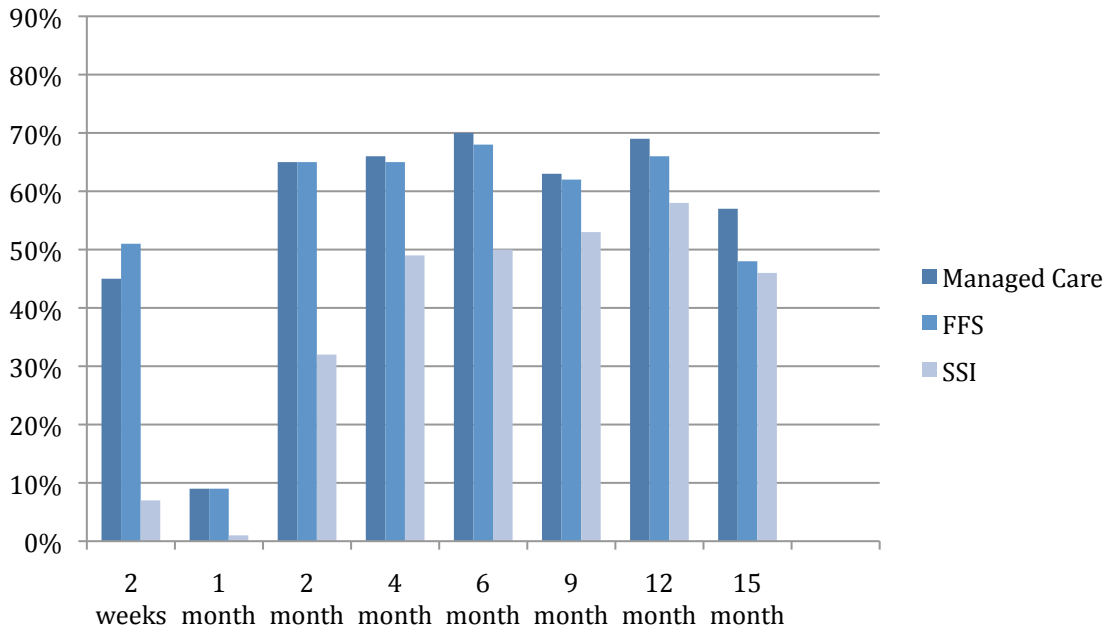

Figure 3. Proportion of children with a well-child visit at each recommended time by managed care program, SFY 2010

In Figure 4 we show the trend for visits in the first 15 months of life across all groups over the last 6 years. Nearly 40% of children were able to access 6 or more well-child visits in the first 15 months of life at the recommended intervals, this is an increase over SFY 2009. Though 100% compliance may be an unreasonable expectation, a target rate of 50% could be set.

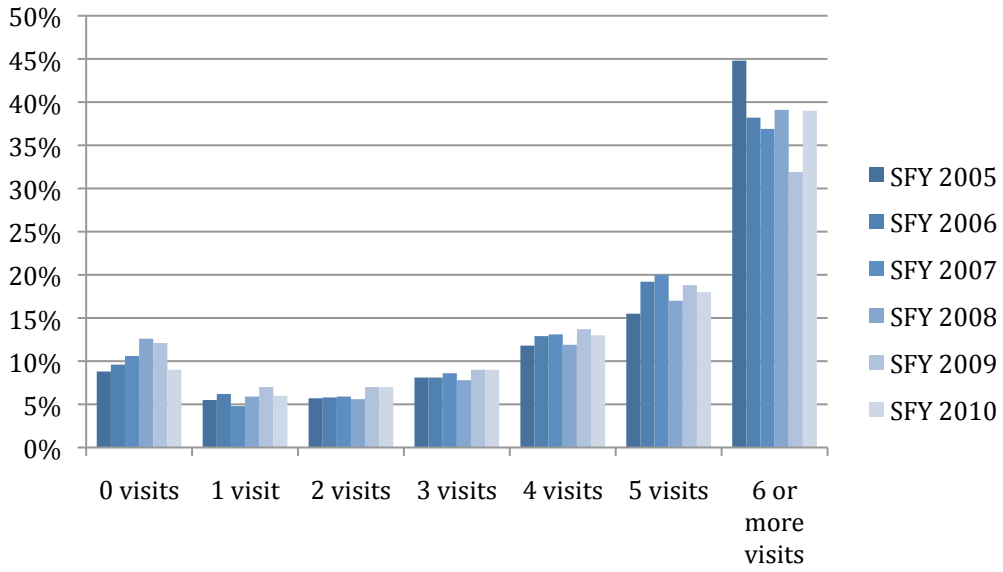

Figure 4. Proportion of children by number of well-child visits in the first 15 months of life and measurement year

Well-child visits in the third, fourth, fifth, and sixth years of life

This measure provides the proportion of children who turned 3-6 years of age by June 30, 2010, and were enrolled for at least 11 months in SFY 2010. Table 3 indicates the rates by age and across 3-6-year-olds. As we have seen over and over again, the rate for well-child visits drops after 5 years old. The 5-year check is needed to administer immunizations required to enter the public school system in Iowa. Once a child enters school parents seem much less likely to schedule a well-child visit.

The well-child visit rates for children 3-6 years old were lower this year. Figure 5 graphically portrays a steady decline in the proportion of children who are receiving an annual well-child visit. The downward trend of the last 4 years should be reversed as quickly as possible.

Table 3. Proportion of children receiving a well-child visit by program and age, SFY 2010

Age		Managed Care	FFS	SSI
3 years	Number	5175	1604	116
	%	54%	55%	53%
4 years	Number	5545	1722	144
	%	61%	63%	57%
5 years	Number	5305	1604	167
	%	64%	62%	61%
6 years	Number	3417	962	119
	%	43%	40%	40%
3-6 years	Number	19442	5892	546
	%	56%	56%	52%

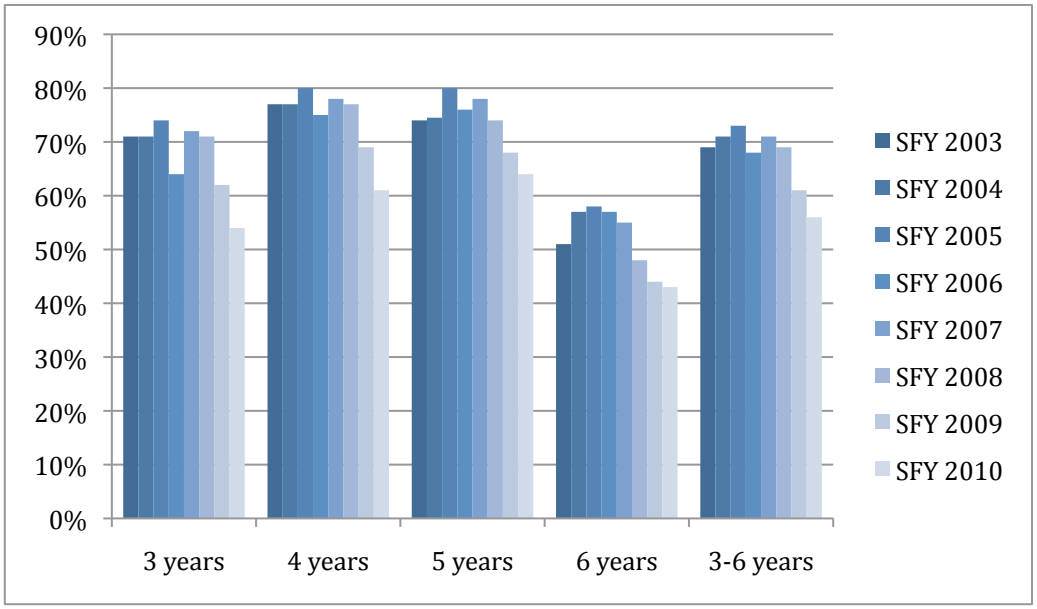

Figure 5. Proportion of children with a well-child visit by age and year

Adolescent well care

Adolescent well care visits are only required for students who would like to participate in school-sponsored sports teams or attend camps, such as sports camps or Boy Scout camps. Adolescent well-care visits are important to monitor and guide adolescents as they are exposed to a wide variety of age-specific risks. In addition, adolescents may have questions regarding their health and behavior that they would like to direct to responsible adults other than parents. Adolescent well-care visits may provide the only opportunity for young adults to speak to a non-parental adult about health and social issues that concern them.

Table 4 provides the rates of adolescent well care for SFY 2010 by gender. The rates are much lower than those for children 3-5 years of age. Clearly the rate of well care drops after entering school and does not increase significantly over time. In addition, SFY 2010 rates were calculated using only visits indicating either a well-person visit (99383-99385 or 99393-99395) or an expanded, detailed, or comprehensive level visit (99213-99215 or 99203-99205). In contrast to last year, this protocol does not result in large differences in the rate by gender. Figure 6 provides a chart indicating the percent of adolescents with a well-care visit by age and gender. Gender does not appear to make a difference

until later in the teen years, when women may be more likely to access well care for pregnancy prevention and well-woman care.

Table 4. Proportion of adolescents receiving a well care visit by program and age, SFY 2010

		Managed Care	FFS	SSI	Total
Female	Number	5392	1678	286	7356
	%	26%	22%	20%	25%
Male	Number	4894	1641	538	7073
	%	27%	26%	19%	26%
Total	Number	10286	3319	824	14429
	%	26%	24%	20%	25%

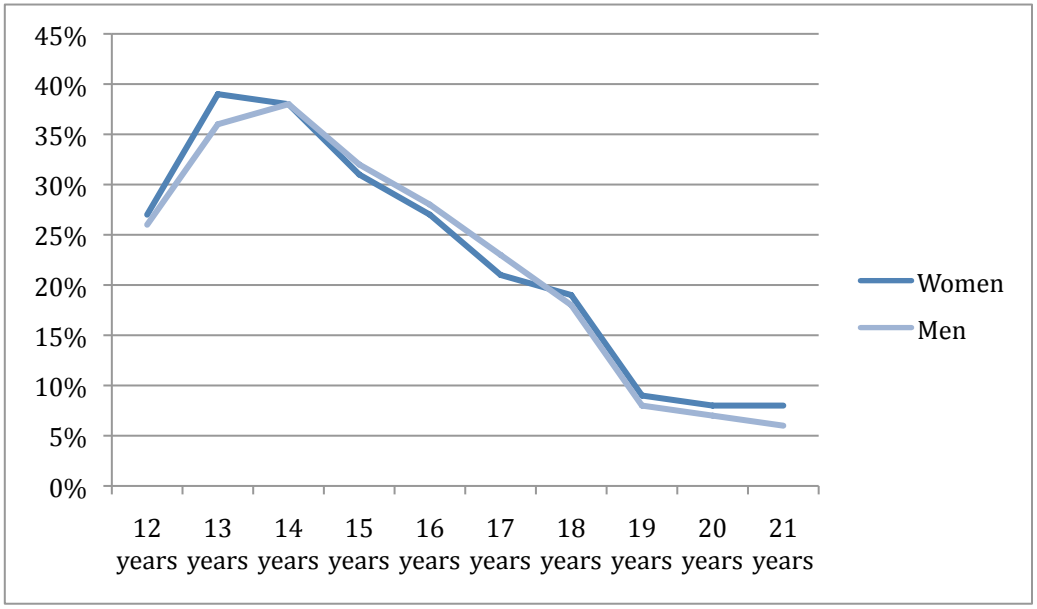

Figure 6. Proportion of adolescents with a well care visit by age and gender, SFY 2010

Annual dental visit

Early dental visits are necessary to establish good cleaning habits, understand tooth development, and provide guidance on nutrition for healthy teeth. There can be a variety of barriers to oral health care for children, including a shortage of dentists who will see children under 3, lack of transportation, parents' fear of dental care, and attitudes of dental office staff toward families with Medicaid coverage.

Table 5 presents the proportion of children with a dental visit, as defined by having a claim that was submitted by a dentist. This method does not include children who were evaluated and assessed for caries risk through the I-Smile program.

The proportion of children receiving an annual dental visit by age has been increasing for the last 3 years for every group except those 19-21 years of age. Rates continue to be lower among all programs for children two or three years of age as compared to other age groups. Though the I-Smile program visits are not included in these rates, it is not unreasonable to consider the I-Smile program as a mechanism for increasing dental visits for children. The program is designed to assess caries risk and refer children to a dentist as needed. With the I-Smile coordinator acting as an agent for referral children who would not have had their disease identified in the past and those with known disease who were unable to find a dentist may have fewer barriers to care.

Table 5. Proportion of children and adolescents with an annual dental visit by age and program, SFY 2010

Age		Managed Care	FFS	SSI
2-3 years	Number %	7762 40%	2426 41%	138 34%
4-6 years	Number %	17143 68%	4963 65%	474 57%
7-10 years	Number %	18283 67%	5609 63%	830 58%
11-14 years	Number %	13561 63%	4330 59%	801 53%
15-18 years	Number %	9841 56%	3338 54%	725 45%
19-21 years	Number %	2440 43%	982 41%	589 40%
Total	Number %	69030 59%	21648 56%	3557 49%

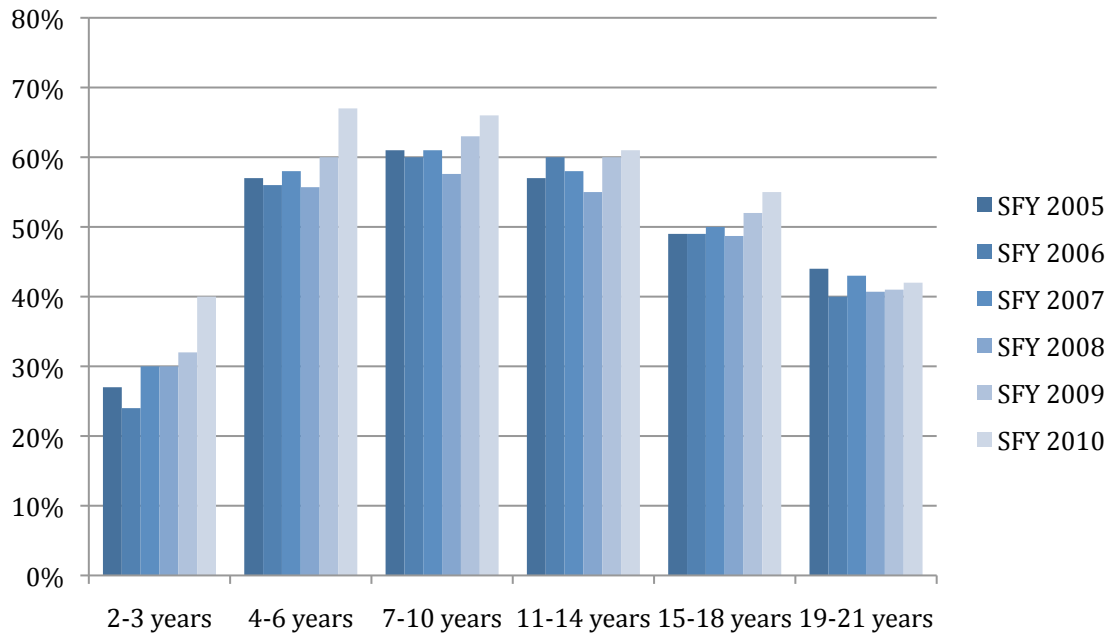

Figure 7. Proportion of children within the managed care program with an annual dental visit by age and measurement year

Children and adolescents' access to primary care practitioners

Rates of access to primary care practitioners include well-child visits, as well as visits for acute or chronic illness care. The denominator consists of children who turned 12-24 months, 25 months-6 years, 7-11 years, and 12-19 years during the measurement year. Children 12 months-6 years had to be eligible for at least 11 months during SFY 2010, while children and adolescents 7-19 years old had to be eligible for at least 11 months during SFY 2010 and at least 11 months during SFY 2009. This measure included only physicians with a primary care specialty (general practice, family practice, pediatrics, OB-Gyn, and internal medicine) or a visit to a rural health clinic or FQHC. In addition, visits to the provider specialty designated as 'Clinic' were considered primary care if the provider type was a physician. Eliminating 'Clinic' visits from the counts reduces the proportion by half.

The proportions of children and adolescents with access to primary care practitioners are listed in Table 6. The rates are high with every age group within each program, achieving an overall rate of over 90%. Over 95% of children 12-24 months within all three programs had access to primary care practitioners. These rates indicate that a lack of well care does not translate into a complete avoidance of needed ambulatory care.

Table 6. Proportion of children and adolescents' with access to primary care practitioners, SFY 2010

Age		Managed care	FFS	SSI
12-24 months	Number %	11919 99%	3625 99%	200 96%
25 months-6 years	Number %	34817 95%	10398 94%	867 94%
7-11 years	Number %	25674 95%	8182 94%	1502 96%
12-19 years	Number %	27764 93%	9324 93%	2589 93%
Total	**Number** **%**	**99544** **95%**	**31529** **94%**	**5158** **94%**

Use of appropriate medications for people with asthma

The denominator for this measure consists of individuals who have been enrolled for at least 11 months during each of SFY 2010 and SFY 2009 and met the case finding criteria for persistent asthma (see Appendix H). The rate of persistent asthma is lower this year than in previous years (Table 7). There are two reasons for this decline. First, the HEDIS deleted some inpatient services from being used to identify individuals with persistent asthma. Second, we continue to refine the protocol to better identify persons with COPD or emphysema and remove them from the group of individuals with persistent asthma. The numerator consists of individuals with persistent asthma who were prescribed primary asthma therapy.

Table 7. Proportion of children and adults with persistent asthma, SFY 2010

Age		Managed care	FFS	SSI
5-11 years	Number %	895 2.4%	277 2.3%	102 4.9%
12-50 years	Number %	1260 3.2%	471 3.2%	971 5.3%
Total	**Number** **%**	**2155** **2.8%**	**748** **2.8%**	**1073** **5.2%**

The proportions of children and adults using the appropriate medication for asthma are shown in Figure 8. Though individuals 12-50 years of age are less likely to receive the appropriate medications, the rates are high for both groups.

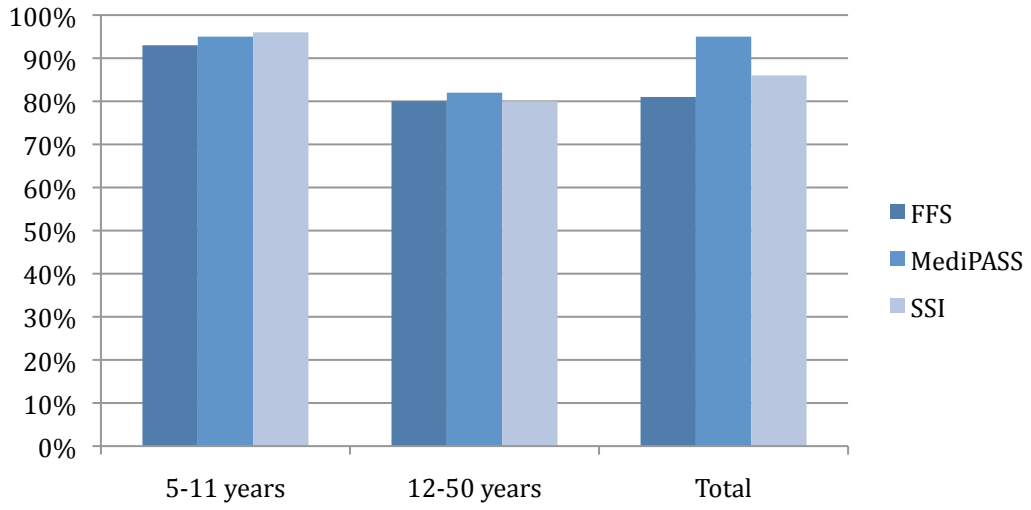

Figure 8. Proportion of children and adults using appropriate medications for asthma, SFY 2010

Adults' access to preventive/ambulatory health services

It is important for adults, particularly those with chronic illness and/or disability, to have adequate access to medical services to ensure the rapid diagnosis and proper treatment for not only acute problems, but also for chronic disease that may be emerging. The denominators for these rates include all adults who turned 20-44 years of age or 45-64 years of age during SFY 2010 and were enrolled for at least 11 months during SFY 2010. The numerators for the rates include the adults in these age groups who had at least one preventive or ambulatory visit during SFY 2010. The rates for adults' access to preventive/ambulatory health services are given in Table 8. These rates indicate that access to medical care is high; however, it is much lower for enrollees categorized as SSI.

Table 8. Adults' access to preventive/ambulatory health services by program and age, SFY 2010

Age		MediPASS	FFS	SSI
20-44 years	Number	18689	7711	7734
	%	86%	84%	61%
45-64 years	Number	1603	906	9804
	%	87%	84%	64%
Total	Number	20292	8617	17538
	%	86%	84%	62%

Prenatal and Postpartum Care

The prenatal care rate is the proportion of women with a delivery who received a prenatal care visit within the first trimester or within 42 days of enrollment. The postpartum care rate is the proportion of women with a delivery who had a postpartum visit on or between 21 and 56 days of delivery. The denominator for both rates is the number of women with a live delivery between May 6, 2009, and May 5, 2010, who were continuously enrolled for 43 days prior to delivery through 56 days after delivery. The numerator for the prenatal care rate is the number of women in the denominator who had a prenatal care visit in the first trimester of care or within 42 days of becoming eligible. The numerator for the postpartum care rate is the number of women in the denominator who had a postpartum care visit between 21 and 56 days after delivery.

During the specified time there were 14,365 live births identified for which the mother was continuously enrolled between 43 days prior to the delivery and 56 days after the delivery.

Table 9 provides the rate of prenatal care based on the time the woman was enrolled in Medicaid. The overall rate of prenatal care was 76% in SFY 2010, compared with 68% in SFY 2009.

As has been evident in the past, women who had bundled prenatal care codes were far more likely to have received early prenatal care than those without bundled care. Women whose enrollment commenced during the first trimester were just as likely to have received prenatal care as women continuously enrolled for the first trimester when prenatal care was bundled, but less likely when it was not bundled. Approximately 60% of women who were not enrolled until after the first trimester received timely prenatal care.

Rates of postpartum care are presented in Table 19. The rate of postpartum care increased slightly from SFY 2008 to SFY 2010 from 40% to 45%. A number of women have Healthcare Common Procedure Coding System (HCPCS) codes indicative of postpartum care received at a maternal health center or a rural health center. These codes have been included as indicative of postpartum care in Table 12.

Table 9. Rates of early prenatal care, SFY 2006 to SFY 2010

Enrollment period	Prenatal care not bundled	Bundled prenatal care	Total
Continuously enrolled for first trimester			
2010	46%	91%	**84%**
2009	36%	87%	**77%**
2008	41%	87%	**76%**
2007	37%	88%	**81%**
2006	46%	90%	**81%**
Last enrollment segment commenced on or between 219 and 279 days prior to the EDD			
2010	36%	91%	**81%**
2009	30%	85%	**74%**
2008	32%	84%	**72%**
2007	26%	84%	**74%**
2006	32%	86%	**74%**
Last enrollment segment commenced less than 219 days prior to the EDD			
2010	24%	71%	**59%**
2009	15%	63%	**50%**
2008	16%	62%	**47%**
2007	15%	62%	**50%**
2006	15%	66%	**51%**
Total			
2010	**35%**	**86%**	**76%**
2009	**27%**	**80%**	**68%**
2008	**29%**	**79%**	**66%**
2007	**24%**	**79%**	**69%**
2006	**29%**	**81%**	**69%**

Table 10. Rates of postpartum care, SFY 2006 to SFY 2010†

Year	Postpartum care not bundled	Bundled Postpartum care	Total
2010	49%	44%	45%
2009	47%	38%	40%
2008	35%	36%	35%
2007	33%	35%	34%
2006	39%	38%	38%

† Using an expanded definition that includes codes indicative of postpartum care received at a maternal health center or a rural health center.

Tables 11 and 12 list the rates of prenatal and postpartum care by year and Medicaid program. Rates of prenatal care were 71% among the FFS program and 79% for managed care. Postpartum care rates were 43% for managed care and 46% for the FFS program. These rates are all increased from SFY 2009.

Table 11. Rates of prenatal care by program, SFY 2006 to SFY 2010

Program	2010	2009	2008	2007	2006
Managed care	79%	71%	68%	70%	70%
Fee-for-service	71%	63%	62%	66%	65%

Table 12. Rates of postpartum care† by program, SFY 2006 to SFY 2010

Program	2010	2009	2008	2007	2006
Managed care	46%	39%	36%	33%	36%
Fee-for-service	43%	42%	35%	36%	47%

† Using an expanded definition that includes codes indicative of postpartum care received at a maternal health center or a rural health center.

Comprehensive diabetes care: Hemoglobin A1c testing

The HEDIS measure for comprehensive diabetes care includes Hemoglobin A1c testing, HbA1c poor control, HbA1c good control, eye exam, LDL-C screening performed, LDL-C control, medical attention for nephropathy, and blood pressure control. We have chosen Hemoglobin A1c testing as an easy, effective method to determine whether proper monitoring of diabetes is occurring. The denominator for this measure includes all enrollees 18 to 75 years old identified as having diabetes in either SFY 2009 or SFY 2010 and enrolled for at least 11 months during SFY 2010. The protocol using medical, outpatient, inpatient, emergency room, and prescriptions identified a larger number of members with diabetes in SFY 2010. This may reflect an inclusion of more members with less severe diabetes and may account for the lower proportion of members with diabetes that received a Hemoglobin A1c test. The numerator consists of all enrollees in the denominator with Hemoglobin A1c testing done during SFY 2010. The proportion of enrollees with diabetes that had hemoglobin A1c testing is shown in Table 13 by program. The proportion of adults with testing is highest in SSI and lowest in MediPASS. The variability in this measure from year to year is of concern.

Table 13. Proportion of adults 18-75 years of age with diabetes that had a Hemoglobin A1c test, SFY 2010

Year		MediPASS	FFS	SSI
2010	Number %	765 43%	508 44%	1767 51%
2009	Number %	588 73%	292 78%	2041 84%

APPENDIX A: SUMMARY OF OUTCOMES BY MEDICAID ELIGIBILITY PROGRAM, SFY 2010

Measure	MediPASS	FFS	SSI	Performance Target
Well-child visits in the first 15 months of life				
0 visits	9%	8%	22%	7%
1 visit	5%	8%	8%	4%
2 visits	7%	7%	12%	5%
3 visits	9%	9%	13%	8%
4 visits	13%	13%	16%	11%
5 visits	18%	17%	18%	23%
6 or more visits	39%	39%	11%	42%
Well-child visits in the third, fourth, fifth and sixth year of life				
Visit in the 3rd year of life	53%	55%	53%	60%
Visit in the 4th year of life	61%	63%	57%	65%
Visit in the 5th year of life	64%	62%	61%	68%
Visit in the 6th year of life	43%	40%	40%	50%
Visit in 3rd-6th years of life	58%	56%	52%	68%
Annual dental visit				
2–3 years old	40%	41%	34%	45%
4–6 years old	68%	64%	57%	70%
7–10 years old	67%	63%	58%	70%
11–14 years old	63%	59%	53%	65%
15–18 years old	56%	54%	45%	60%
19-21 years old	43%	41%	40%	45%
Children's and adolescents' access to primary care practitioners				
12–24 months old	97%	97%	95%	99%
2–6 years old	85%	84%	88%	95%
7–11 years old	83%	84%	89%	95%
12–19 years old	84%	84%	84%	95%
Combined	86%	85%	87%	95%
Use of appropriate medications for people with asthma				
5–11 years old	95%	93%	96%	100%
12–50 years old	82%	80%	80%	90%
Combined	87%	85%	82%	90%
Adult's access to preventive/ambulatory health services				
20–44 years old	86%	84%	61%	90.0%
45–64 years old	87%	84%	64%	90.0%
Prenatal and postpartum care				
Prenatal care	79%	71%		80.0%
Postpartum care	46%	43%		75.0%
Comprehensive diabetes care				
Hemoglobin A1c	43%	44%	51%	60.0%

APPENDIX B: SUMMARY OF OUTCOMES BY MEDICAID ELIGIBILITY PROGRAM, SFY 2009

Measure	MediPASS	FFS	SSI	Performance Target
Well-child visits in the first 15 months of life at the recommended time				
0 visits	13.%	9%	17%	7.5%
1 visit	8%	6%	9%	4.5%
2 visits	7%	7%	11%	5.0%
3 visits	9%	9%	16%	8.0%
4 visits	13%	15%	19%	13.0%
5 visits	18%	21%	19%	20.0%
6 or more visits	32%	33%	10%	42.0%
Well-child visits in the first 15 months of life regardless of timing				
0 visits	10%	7%	16%	
1 visit	8%	5%	3%	
2 visits	7%	6%	9%	
3 visits	6%	7%	11%	
4 visits	9%	9%	16%	
5 visits	12%	15%	11%	
6 or more visits	49%	50%	34%	
Well-child visits in the third, fourth, fifth and sixth year of life				
Visit in the 3rd year of life	61%	63%	53%	75.0%
Visit in the 4th year of life	68%	70%	58%	75.0%
Visit in the 5th year of life	68%	68%	65%	75.0%
Visit in the 6th year of life	45%	40%	48%	65.0%
Visit in 3rd-6th years of life	61%	61%	56%	68.0%
Annual dental visit				
2–3 years old	32%	33%	28%	35.0%
4–6 years old	60%	55%	49%	65.0%
7–10 years old	63%	55%	52%	65.0%
11–14 years old	60%	52%	49%	60.0%
15–18 years old	52%	47%	41%	60.0%
19-21 years old	41%	38%	36%	45.0%
Children's and adolescents' access to primary care practitioners				
12–24 months old	97%	97%	95%	99.0%
2–6 years old	85%	84%	88%	95.0%
7–11 years old	83%	84%	89%	95.0%
12–19 years old	84%	84%	84%	95.0%
Combined	86%	85%	87%	95.0%

Measure	MediPASS	FFS	SSI	Performance Target
Use of appropriate medications for people with asthma				
5–11 years old	88%	84%	77%	75.0%
12–50 years old	75%	72%	74%	75.0%
Combined	81%	77%	74%	75.0%
Adult's access to preventive/ambulatory health services				
20–44 years old	92%	92%	64%	90.0%
45–64 years old	89%	85%	64%	90.0%
Prenatal and postpartum care				
Prenatal care	71%	63%		75.0%
Postpartum care	39%	42%		75.0%
Comprehensive diabetes care				
Hemoglobin A1c	73%	78%	84%	75.0%

APPENDIX C: SUMMARY OF OUTCOMES BY MEDICAID ELIGIBILITY PROGRAM, SFY 2008

Measure	MediPASS	FFS	SSI	Performance Target
Well-child visits in the first 15 months of life				
0 visits	13.9%	8.9%	19.1%	7.5%
1 visit	6.7%	3.7%	12.4%	4.5%
2 visits	5.9%	4.8%	11.9%	5.0%
3 visits	7.8%	7.7%	10.8%	8.0%
4 visits	11.6%	12.7%	17.5%	13.0%
5 visits	16.6%	18.4%	15.5%	20.0%
6 or more visits	37.6%	43.8%	12.9%	42.0%
Well-child visits in the third, fourth, fifth and sixth year of life				
Visit in the 3rd year of life	71.4%	70.1%	68.6%	75.0%
Visit in the 4th year of life	78.3%	74.3%	73.0%	75.0%
Visit in the 5th year of life	75.2%	70.5%	68.5%	75.0%
Visit in the 6th year of life	52.4%	46.7%	55.4%	65.0%
Visit in 3rd-6th years of life	69.6%	65.9%	65.3%	68.0%
Annual dental visit				
2–3 years old	29.7%	29.6%	25.6%	35.0%
4–6 years old	57.9%	50.0%	47.0%	65.0%
7–10 years old	59.6%	53.0%	49.0%	65.0%
11–14 years old	57.2%	51.0%	45.5%	60.0%
15–18 years old	51.0%	45.9%	37.3%	60.0%
19-21 years old	42.4%	40.1%	36.1%	45.0%
Children's and adolescents' access to primary care practitioners				
12–24 months old	86.5%	91.9%	90.6%	99.0%
2–6 years old	78.4%	80.4%	85.0%	95.0%
7–11 years old	80.8%	82.4%	86.5%	95.0%
12–19 years old	46.5%	79.5%	78.6%	95.0%
Combined	79.4%	82.0%	82.3%	95.0%
Use of appropriate medications for people with asthma				
5–9 years old	93.3%	92.7%	89.7%	75.0%
10–17 years old	86.7%	83.6%	86.9%	75.0%
18–56 years old	80.9%	78.6%	78.8%	75.0%
Combined	87.2%	85.0%	83.0%	75.0%
Adult's access to preventive/ambulatory health services				
20–44 years old	82.9%	82.7%	54.3%	90.0%
45–64 years old	80.3%	74.6%	57.0%	90.0%

Measure	MediPASS	FFS	SSI	Performance Target
Prenatal and postpartum care				
Prenatal care	68.1%	61.7%	-	75.0%
Postpartum care	35.7%	34.8%	-	75.0%
Comprehensive diabetes care				
Hemoglobin A1c	36.2%	45.9%	43.4%	75.0%

APPENDIX D: SUMMARY OF OUTCOMES BY MANAGED CARE PLAN, SFY 2007

Measure	Coventry	MediPASS	FFS	Performance Target
Well-child visits in the first 15 months of life				
0 visits	9.3%	9.9%	8.4%	7.5%
1 visit	6.3%	5.2%	5.0%	4.5%
2 visits	7.4%	5.9%	6.2%	5.0%
3 visits	12.1%	8.8%	9.0%	8.0%
4 visits	14.2%	12.6%	14.1%	13.0%
5 visits	17.9%	20.5%	19.4%	20.0%
6 or more visits	33.7%	37.0%	37.1%	42.0%
Well-child visits in the third, fourth, fifth and sixth year of life				
Visit in the 3rd year of life	58.5%	72.9%	71.3%	75.0%
Visit in the 4th year of life	73.8%	78.0%	76.7%	75.0%
Visit in the 5th year of life	65.6%	78.1%	77.7%	75.0%
Visit in the 6th year of life	47.0%	55.0%	55.7%	65.0%
Visit in 3rd-6th years of life	60.7%	71.2%	70.5%	68.0%
Annual dental visit				
2–3 years old	16.6%	29.6%	27.1%	35.0%
4–6 years old	48.9%	58.2%	51.0%	65.0%
7–10 years old	47.5%	61.0%	55.1%	65.0%
11–14 years old	45.7%	58.0%	52.9%	60.0%
15–18 years old	46.0%	50.2%	47.3%	60.0%
19-21 years old	38.8%	42.8%	42.9%	45.0%
Children's and adolescents' access to primary care practitioners				
12–24 months old	99.1%	99.4%	98.9%	99.0%
2–6 years old	93.0%	94.6%	92.5%	95.0%
7–11 years old	92.2%	93.2%	90.9%	95.0%
12–19 years old	91.3%	91.2%	88.6%	95.0%
Combined	93.1%	93.8%	91.6%	95.0%
Use of appropriate medications for people with asthma				
5–9 years old	66.7%	65.3%	63.2%	75.0%
10–17 years old	50.0%	61.3%	62.5%	75.0%
18–56 years old	14.3%	53.1%	53.2%	75.0%
Combined	45.0%	60.4%	59.5%	75.0%
Adult's access to preventive/ambulatory health services				
20–44 years old	94.0%	88.8%	87.0%	90.0%
45–64 years old	78.9%	86.1%	77.4%	90.0%

Measure	Coventry	MediPASS	FFS	Performance Target
Prenatal and postpartum care				
Prenatal care	76.5%	69.9%	66.2%	75.0%
Postpartum care	55.4%	32.7%	35.9%	75.0%
Comprehensive diabetes care				
Hemoglobin A1c	57.9%	72.7%	60.9%	75.0%

APPENDIX E: SUMMARY OF OUTCOMES BY MANAGED CARE PLAN, SFY 2006

Measure	Coventry	MediPASS	FFS
Well-child visits in the first 15 months of life			
0 visits	1.7%	10.0%	9.4%
1 visit	3.7%	6.5%	5.5%
2 visits	9.4%	5.5%	6.1%
3 visits	12.7%	7.7%	8.8%
4 visits	13.7%	12.5%	13.9%
5 visits	21.7%	18.7%	20.3%
6 or more visits	37.1%	39.0%	36.1%
Well-child visits in the third, fourth, fifth and sixth year of life			
Visit in the 3rd year of life	48.6%	65.3%	63.3%
Visit in the 4th year of life	55.6%	75.4%	74.1%
Visit in the 5th year of life	53.8%	77.6%	74.8%
Visit in the 6th year of life	35.6%	58.2%	55.6%
Visit in 3rd-6th years of life	48.3%	69.3%	67.0%
Annual dental visit (new categories)			
2–3 years old	15.5%	24.2%	23.9%
4–6 years old	46.3%	55.6%	51.2%
7–10 years old	50.8%	59.2%	53.5%
11–14 years old	46.4%	55.5%	49.7%
15–18 years old	46.0%	48.7%	45.2%
19-21 years old	40.4%	39.9%	42.7%
Children's and adolescents' access to primary care practitioners			
12–24 months old	97.5%	81.2%	84.5%
2–6 years old	83.9%	67.0%	64.3%
7–11 years old	87.4%	78.4%	79.5%
12–19 years old	89.8%	77.5%	79.0%
Combined	87.8%	73.7%	73.4%
Use of appropriate medications for people with asthma			
5–9 years old	83.3%	84.7%	78.3%
10–17 years old	63.6%	84.6%	80.9%
18–56 years old	61.1%	80.9%	75.8%
Combined	68.3%	83.5%	78.3%
Adult's access to preventive/ambulatory health services			
20–44 years old	87.3%	85.0%	83.9%
45–64 years old	88.4%	84.6%	76.4%

Measure	Coventry	MediPASS	FFS
Prenatal and postpartum care			
Prenatal care	67.2%	70.4%	65.0%
Postpartum care	42.4%	36.1%	46.8%
Comprehensive diabetes care			
Hemoglobin A1c	57.5%	70.3%	61.9%

N/A-No rate provided in NCQA audited means, percentiles and ratios

APPENDIX F: SUMMARY OF OUTCOMES BY MANAGED CARE PLAN, SFY 2005

Measure	Coventry	MediPASS	FFS	IHS to MediPASS	IHS to FFS
Well-child visits in the first 15 months of life					
0 visits	2.1%	11.9%	8.1%	1.9%	2.0%
1 visit	3.8%	6.4%	5.0%	3.7%	2.6%
2 visits	4.3%	5.8%	6.7%	4.8%	5.1%
3 visits	9.0%	7.3%	8.3%	10.5%	7.5%
4 visits	14.5%	11.3%	12.0%	13.3%	11.4%
5 visits	21.8%	15.0%	15.2%	14.2%	19.1%
6 or more visits	44.4%	42.2%	44.7%	51.5%	52.3%
Well-child visits in the third, fourth, fifth and sixth year of life					
Visit in the 3rd year of life	73.2%	76.6%	74.2%	76.2%	82.7%
Visit in the 4th year of life	79.0%	80.1%	78.7%	79.9%	87.8%
Visit in the 5th year of life	79.7%	81.2%	77.3%	80.0%	85.2%
Visit in the 6th year of life	31.2%	63.5%	55.5%	54.5%	57.4%
Visit in 3rd-6th years of life	66.9%	74.8%	71.6%	73.1%	80.4%
Annual dental visit (new categories)					
2–3 years old	17.8%	26.6%	26.8%	28.9%	32.1%
4–6 years old	55.2%	57.4%	52.7%	56.9%	61.5%
7–10 years old	56.9%	61.1%	54.3%	58.8%	60.0%
11–14 years old	50.9%	56.9%	52.0%	54.2%	55.6%
15–18 years old	49.4%	49.4%	47.1%	45.0%	50.5%
19-21 years old	41.4%	43.5%	41.0%	38.8%	41.1%
Annual dental visit (old categories)					
1–3 years old	11.8%	19.0%	19.5%	20.3%	23.6%
4–6 years old	55.2%	57.4%	52.7%	56.9%	61.5%
7–11 years old	55.9%	60.8%	54.4%	58.7%	59.5%
12–15 years old	50.2%	54.6%	51.3%	51.0%	53.9%
16–18 years old	49.8%	49.3%	45.1%	45.0%	50.5%
Children's and adolescents' access to primary care practitioners					
12–24 months old	99.6%	99.2%	97.2%	99.2%	100.0%
2–6 years old	86.8%	93.9%	90.4%	92.6%	93.8%
7–11 years old	88.3%	91.2%	89.4%	91.7%	93.1%
12–19 years old	86.9%	91.9%	89.9%	91.4%	94.1%
Combined	89.2%	93.3%	90.7%	93.1%	94.7%

Measure	Coventry	MediPASS	FFS	IHS to MediPASS	IHS to FFS
Use of appropriate medications for people with asthma					
5–9 years old	57.1%	92.4%	95.7%	76.9%	80.0%
10–17 years old	100.0%	95.1%	90.0%	78.4%	78.9%
18–56 years old	80.0%	85.2%	81.0%	84.8%	81.0%
Combined	77.3%	91.4%	88.1%	79.5%	80.0%
Adult's access to preventive/ambulatory health services					
20–44 years old	87.8%	85.1%	84.5%	84.3%	90.7%
45–64 years old	88.2%	85.3%	62.3%	84.9%	85.7%
Prenatal and postpartum care					
Prenatal care	43.1%	65.8%	58.1%	55.3%	52.4%
Postpartum care	52.7%	35.3%	36.1%	23.5%	25.2%
Comprehensive diabetes care					
Hemoglobin A1c	54.3%	33.9%	28.5%	40.6%	60.0%

APPENDIX G: SUMMARY OF OUTCOMES BY MANAGED CARE PLAN, SFY 2004

Measure	John Deere	Coventry	Iowa Health Solutions	MediPASS
Well-child visits in the first 15 months of life				
0 visits	3.1%	0.0%	1.0%	0.2%
1 visit	8.5%	0.0%	2.6%	0.7%
2 visits	6.3%	4.3%	7.1%	2.0%
3 visits	11.6%	14.9%	13.6%	2.6%
4 visits	15.9%	19.1%	23.3%	6.7%
5 visits	19.8%	38.3%	26.4%	10.1%
6 or more visits	34.8%	23.4%	26.0%	77.7%
Well-child visits in the third, fourth, fifth and sixth year of life				
Visit in the 3rd year of life	53.2%	72.5%	64.3%	76.4%
Visit in the 4th year of life	65.4%	80.2%	70.3%	80.8%
Visit in the 5th year of life	64.6%	82.8%	63.8%	80.8%
Visit in the 6th year of life	38.2%	20.1%	44.3%	63.5%
Visit in 3rd-6th years of life	56.2%	75.3%	61.3%	75.6%
Annual dental visit				
1–3 years old	28.0%	11.7%	21.2%	19.7%
4–6 years old	64.4%	55.4%	59.4%	60.9%
7–11 years old	62.3%	51.1%	59.6%	64.0%
12–15 years old	53.9%	52.4%	52.0%	58.1%
16–18 years old	46.4%	54.8%	45.1%	50.2%
Children's and adolescents' access to primary care practitioners				
12–24 months old	98.1%	100.0%	97.6%	92.4%
2–6 years old	87.1%	85.7%	88.7%	83.0%
7–11 years old	86.0%	88.8%	86.9%	82.6%
12–19 years old	89.7%	88.0%	84.6%	81.4%
Use of appropriate medications for people with asthma				
5–9 years old	40.6%	50.0%	63.3%	79.9%
10–17 years old	52.9%	75.0%	58.0%	70.6%
18–56 years old	50.0%	20.0%	55.3%	55.1%
Combined	47.8%	38.9%	57.8%	69.3%
Adult's access to preventive/ambulatory health services				
20–44 years old	85.1%	88.8%	88.7%	81.0%
45–64 years old	78.8%	81.3%	86.5%	85.5%

Measure	John Deere	Coventry	Iowa Health Solutions	MediPASS
Prenatal and postpartum care				
Prenatal care	63.0%	55.5%	63.0%	63.8%
Postpartum care	—	—	—	—
Comprehensive diabetes care				
Hemoglobin A1c	84.8%	90.0%	20.0%	27.9%

APPENDIX H: SUMMARY OF OUTCOMES BY MANAGED CARE PLAN, SFY 2003

Measure	John Deere	Coventry	Iowa Health Solutions	MediPASS
Well-child visits in the first 15 months of life				
0 visits	1.5%	0.0%	0.2%	0.3%
1 visit	8.7%	1.1%	4.0%	1.8%
2 visits	9.0%	2.2%	5.2%	2.2%
3 visits	10.0%	9.7%	8.9%	4.3%
4 visits	12.6%	29.0%	12.6%	6.9%
5 visits	15.9%	24.7%	19.1%	11.6%
6 or more visits	42.2%	33.3%	50.1%	73.0%
Well-child visits in the third, fourth, fifth and sixth year of life				
Visit in the 3rd year of life	56.1%	89.4%	73.4%	77.6%
Visit in the 4th year of life	62.7%	85.3%	78.7%	82.8%
Visit in the 5th year of life	58.8%	73.6%	75.9%	81.7%
Visit in the 6th year of life	37.8%	55.7%	43.3%	61.2%
Visit in the 3rd-6th years of life	53.9%	76.7%	68.9%	76.2%
Annual dental visit				
1–3 years old	21.9%	18.0%	21.3%	18.7%
4–6 years old	62.7%	54.3%	57.2%	54.3%
7–11 years old	62.9%	50.9%	57.9%	63.5%
12–15 years old	56.2%	46.5%	51.3%	57.0%
16–18 years old	47.5%	47.0%	45.8%	51.2%
Children's and adolescents' access to primary care practitioners				
12–24 months old	71.9%	91.0%	90.0%	92.8%
2–6 years old	59.2%	69.7%	73.2%	83.6%
7–11 years old	75.2%	72.7%	76.9%	82.7%
12–19 years old	72.3%	77.1%	74.5%	82.1%
Use of appropriate medications for people with asthma				
5–9 years old	55.6%	33.3%	55.8%	58.4%
10–17 years old	51.5%	25.0%	62.7%	57.1%
18–56 years old	55.4%	42.9%	40.5%	56.9%
Combined	54.2%	33.3%	54.7%	57.5%
Adult's access to preventive/ambulatory health services				
20–44 years old	69.5%	88.8%	87.2%	84.6%
45–64 years old	63.6%	70.6%	87.7%	83.4%
Prenatal and postpartum care				
Prenatal care	60.4%	53.5%	63.5%	65.2%
Postpartum care	—	—	—	—

Measure	John Deere	Coventry	Iowa Health Solutions	MediPASS
Comprehensive diabetes care				
Hemoglobin A1c	51.3%	46.2%	48.2%	28.7%

APPENDIX H: TECHNICAL SPECIFICATIONS FOR OUTCOME MEASURES

Well-child visits in the first 15 months of life

Denominator: Children who turn 15 months of age during the measurement year and are continuously eligible for the period from 31 days of age through 15 months of age with no more than a 1-month gap. Whether children are 31 days of age is calculated by adding 31 days to the date of birth and whether they are 15 months is calculated as the date of the first birthday plus 90 days.
Numerator: Children within the denominator who had a well-child visit defined by any one of the procedure codes: 99381, 99382, 99391, 99392, 99432 or one of the diagnosis codes: V20.2, V70.0, V70.3, V70.5, V70.6, V70.8, V70.9.
Rates: Seven rates are computed for this measure. These rates encompass the proportion of children that had 0, 1, 2, 3, 4, 5, *or* 6 or more well visits during the
15-month period.

Well-child visits in the third, fourth, fifth, and sixth year of life

Denominator: Children who turn three through six years of age during the measurement year and are eligible for at least 11 months during the measurement year.
Numerator: Children within the denominator who had a well-child visit defined by any one of the procedure codes: 99382, 99383, 99392, 99393 or one of the diagnosis codes: V20.2, V70.0, V70.3, V70.5, V70.6, V70.8, V70.9.
Rates: Five rates are calculated, one for each year of age and one combined.

Annual dental visit

Denominator: Children 2–21 years of age who are eligible for at least 11 months during the measurement year.
Numerator: Children within the denominator who had a visit with a dental provider during the measurement year.
Rates: The rate is calculated for six age groups: 2–3 years old, 4–6 years old, 7–10 years old, 11–14 years old, 15–18 years old, and 19-21 years old.

Children’s and adolescent’s access to primary care practitioners

Denominator: Children who turn 12 months–6 years of age during the measurement year and who are eligible for at least 11 months during the measurement year *and* children 7 years of age to adolescents 19 years of age who are eligible for at least 11 months during the measurement year and 11 months during the year prior to the measurement year.

Numerator: Children 12 months–6 years of age who have had a primary care visit during the measurement year *and* children 7 years of age through adolescents 19 years of age who have had a primary care visit during the measurement year or the year prior to the measurement year. A primary care visit was defined as any visit with one of the procedure codes: 99201-99205, 99211-99215, 99241-99245, 99341-99350, 99401-99404, 99411, 99412, 99420, 99429, 99381-99385 or 99391-99395 or one of the diagnosis codes: V20.2, V70.0, V70.3, V70.5, V70.6, V70.8, V70.9.
Rates: This rate is calculated for four different age groups: 12–24 months, 25 months–6 years, 7–11 years, and 12–19 years.

Use of appropriate medications for people with asthma

Denominator: People ages 5–56 years old who are eligible for at least 11 months during the measurement year and 11 months during the year prior to the measurement year with persistent asthma. People are considered to have persistent asthma if they meet one of the four protocols listed below during both the year *prior* to the measurement year and the measurement year.

- At least one emergency visit defined by one of the procedure codes: 99281-99285 or one of the revenue codes: 450-459, 981 and with a principal diagnosis of asthma (ICD-9-CM 493).
- At least one hospital discharge defined by one of the procedure codes: 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263, or 99291 or one of the revenue codes: 100-149, 119, 120-124, 129, 150-154, 159, 160-169, 200-229, 720-729, or 987 and with a principal diagnosis of asthma (ICD-9-CM 493).
- Have at least 4 outpatient/physician visits defined by one of the procedure codes: 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99271-99275, 99341-99345, 99347-99350, 99382-99386, 99392-99396, 99401-99404, 99411, 99412, 99420, 99429 or 99499 or one of the revenue codes: 510-519, 520-523, 529, 570-599, 770-779, 982 or 983 and with any diagnosis of asthma (ICD-9-CM 493).
- Have at least four asthma medicine dispensing events. A list of asthma medications is found on the NCQA website.

Numerator: The numerator consists of those people in the denominator who had at least one medication prescribing event for a long-term control medication during the measurement year. A list of these medications is found on the NCQA website.
Rates: This rate is calculated for four different age groups: 5–9 years olds, 10–17 year olds, 18–56 year olds, and a combined rate containing everyone 5–56 years old.

Adult access to preventive/ambulatory health services

Denominator: Adults 20-64 years of age who are eligible for at least 11 months in the measurement year.
Numerator: Adults within the denominator who had a preventive/ambulatory visit within the measurement year. Preventive/ambulatory visits are defined as a visit with one of the procedure codes: 99210-99205, 99211-99215, 99241-99245, 99341-99350, 99301-99303, 99311-99313, 99321-99323, 99331-99333, 99385-99387, 99395-99397, 99401-99404, 99411-99412, 99420, 99429, 99499, 92002, 92004, 92012, 92014 or one of the revenue codes: 770, 771, 779, 510-529, 982, 983.
Rates: This rate is calculated for two age groups: 20–44 year olds and 45–64 year olds.

Prenatal and postpartum care

Denominator: Women with a live birth during the year ending 56 days before the end of the measurement year and who were eligible for the period 43 days prior to delivery through 56 days after delivery.
Live births were defined by one of the diagnosis codes: 72.0-73.99, 74.0-74.2, 74.4, 74.99, 640.01-640.91, 641.01-641.91, 642.01-642.91, 643.01-643.91, 644.21, 645.11, 645.21, 646.01-646.91, 646.12, 646.22, 646.42, 646.52, 646.62, 646.82, 647.01-647.92, 648.01-648.92, 651.01-652.91, 653.01-653.91, 654.01-654.91, 654.02, 654.12, 654.32, 654.42, 654.52, 654.62, 654.72, 654.82, 654.92, 655.01-655.91, 656.01, 656.11, 656.21, 656.31, 656.51, 656.61, 656.71, 656.81, 656.91, 657.01, 658.01-658.91, 659.01-659.91, 660.01-660.91, 661.01-661.91, 662.01-662.91, 663.01-663.91, 664.01-664.91, 665.01, 665.11, 665.22, 665.31, 665.41, 665.51, 665.61, 665.71, 665.72, 665.81, 665.82, 665.91, 665.92, 666.02-666.92, 667.02-667.92, 668.01-668.91, 668.02-668.92, 669.01, 669.02, 669.11, 669.12, 669.21, 669.22, 669.32, 669.41, 669.42, 669.51, 669.61, 669.71, 669.81, 669.82, 669.91, 669.92, 670.02, 671.01, 671.02, 671.11, 671.12, 671.21, 671.22, 671.31, 671.42, 671.51, 671.52, 671.81, 671.82, 671.92, 671.92, 672.02, 673.01-673.91, 673.02-673.92, 674.01, 674.02-674.92, 675.01-675.91, 675.02-675.92, 676.01-676.91, 676.02-676.92 or one of the procedure codes 59400, 59409, 59410, 59510, 59514, 59515, 59610, 59612, 59614, 59618, 59620, 59622 or one of the DRG codes: 370-375. Any claim with one of the diagnosis codes 630-637, 656.4, 768.0, 768.1, V27.1, V27.4, or V27.7 is considered *not* to represent a live birth.
Numerator: Women within the denominator who had a prenatal care visit in the first trimester or within 42 days of becoming eligible. See HEDIS 2004, Volume 2, Technical Specifications for greater detail. A prenatal visit is defined by one of the procedure codes: 59400, 59510, 59610, 59618, 59425, 59426 with a date indicating first prenatal visit or one of the procedure codes: 99201-99205, 99211-99215 or revenue code 514 in combination with one of the procedure codes or procedure code combinations: 76801, 76802, 76805, 76811, 76812, 76815, 76816, 76817, 76818, 80055, 80090, 86762 and 86900 or 86762 and 86901 or in combination with one of the diagnosis codes: 640.x3, 641.x3, 642.x3, 643.x3, 644.x3, 645.x3, 646.x3, 647.x3, 648.x3, 651.x3, 652.x3, 653.x3, 654.x3, 655.x3, 656.x3, 657.x3, 658.x3, 659.x3, V22-V23. Postpartum care was defined by one of the procedure codes: 57170, 58300, 59400, 59410, 59430, 59510, 59515, 59610, 59614, 59618, 59622, 88141-88145, 88147, 88148, 88150-88155, 88164-88167, 88174, 88175 or one of the diagnosis codes: 91.46, V24.1, V24.2, V25.1, V72.3, V76.2 or revenue code 923.
Rates: Two rates are calculated, one for prenatal care and one for postpartum care.

Comprehensive diabetes care

Denominator: Adults with diabetes18–64 years of age who were eligible for at least 11 months in the measurement year *and* who met one of the following protocols during the measurement year or the year prior to the measurement year.

> At least one emergency visit defined by one of the procedure codes: 99281-99288 or one of the revenue codes: 450-459, 981 and with a principal diagnosis of diabetes (ICD-9-CM 250.00-250.99, 357.2, 362.0, 366.41, 648.0 or DRG 205 or 294) or one hospital discharge defined by one of the procedure codes: 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99261-99263, or 99291 or one of the revenue codes: 100-149, 119, 120-124, 129, 150-154, 159, 160-169, 200-229, 720-729, or 987 or DRG 462 and with a principal diagnosis of diabetes (ICD-9-CM 250.00-250.99, 357.2, 362.0, 366.41, 648.0 or DRG 205 or 294).
> At least 2 outpatient/physician/non-acute inpatient visits defined by one of the procedure codes: 92002-92014, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99271-99275, 99289, 99290, 99301-99303, 99311-99313, 99321-99323, 99331-99333, 99341-99355, 99384-99387,

99394-99397, 99410-99404, 99411, 99412, 99420, 99429, 99499 or one of the revenue codes: 118, 128, 138, 148, 158, 190-199, 510-529, 550-559, 570-599, 660-669, 770-779, 820-859, 880-889, 982 or 983 and with a diagnosis of diabetes (ICD-9-CM 250.00-250.99, 357.2, 362.0, 366.41, 648.0).

Have at least one diabetes medication-dispensing event. A list of insulin and oral hypoglycemic medications is found on the NCQA website.

Numerator: Adults within the denominator who had a hemoglobin A1c test (procedure code 83036) during the measurement year.

Rates: One rate, including all adults, is calculated for this measure.