

State of Colorado



Department of Health Care Policy and Financing

**2005–2006  
ADOLESCENT WELL-CARE  
FOCUSED STUDY REPORT**

June 2006



1600 East Northern Avenue, Suite 100 • Phoenix, AZ 85020

Phone 602.264.6382 • Fax 602.241.0757

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## Introduction

The Colorado Medicaid program, managed by the Department of Health Care Policy and Financing (the Department), coordinates quality initiatives through its Quality Improvement Committee (QuIC). These initiatives are designed to improve the quality of care delivered to Medicaid clients. In fiscal year (FY) 02, an adolescent well-care focused study included three areas of quality review: health plan self-assessments, provider interviews, and medical record reviews. During provider interviews, participants offered recommendations for overcoming barriers to adolescents accessing well-care services and for enhancing the information and services delivered to adolescents during provider visits.

The FY 06 Adolescent Well-Care Focused Study was a quantitative study that assessed the current reporting trends and utilization in adolescent well-care visits, and by documenting program and/or practice enhancements implemented by the Medicaid health plans.

The FY 06 adolescent study included the Colorado Medicaid Primary Care Physician Program (PCPP), the unassigned fee-for-service (FFS) program, and three Medicaid managed care organizations (MCOs): Colorado Access Plan (CO Access), Denver Health Medicaid Choice (DHMC), and Rocky Mountain Health Plans (RMHP).

## Methodology

The FY 06 Adolescent Well-Care Focused Study was a quantitative study that built on the findings of the qualitative adolescent well-care focused study that HSAG conducted in FY 02 to assess the MCO's infrastructure and adolescent care practices at provider offices. The FY 06 focused study was based on national HEDIS<sup>®1</sup> methodology and represented a new baseline focused study.

The HEDIS adolescent well-care measure was based on the percentage of enrolled members 12 to 21 years of age who had at least one comprehensive well-care visit with a primary care practitioner or an OB/GYN practitioner during the measurement year.

The FY 06 Adolescent Well-Care Focused Study included three quantifiable and two calculated measures:

- ◆ Measure 1—Adolescent well-care visits (HEDIS methodology)
- ◆ Measure 2—Adolescents with no services
- ◆ Measure 3—Adolescents with a physician office visit but no well-care visit

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<sup>1</sup> HEDIS<sup>®</sup> (Health Plan Employer Data and Information Set) is a registered trademark of the National Committee for Quality Assurance (NCQA).

The following two measures were not focused study indicators but are reported here to serve to provide a more complete picture of the services provided to the adolescents in the eligible population:

- ◆ Measure 4—Adolescents with services but no physician office visit or well-care visit
- ◆ Measure 5—Potential and missed opportunity

**Table 1-1—Summary of Rates for the Focused Study Measures**

2005 Rates Reported in 2006								
#	Measures	CO Medicaid	CO Access	DHMC	RMHP	PCPP	All MCOs and PCPP	FFS
1	<b>Denominator – all adolescents age 12–21</b>	42,367	5,114	1,276	1,405	5,314	13,109	29,258
2	<b>Measure 1</b> – Percentage of adolescents with at least one adolescent well-care visit	15.4%	27.7%	27.8%	35.7%	12.4%	22.4%	12.3%
3	<b>Measure 2</b> – Percentage of adolescents with no administrative claims or encounters (a lower percentage in this measure is better)	51.1%	12.9%	27.3%	8.9%	60.4%	33.1%	59.1%
4	<b>Measure 3</b> – Percentage of adolescents with no adolescent well-care visit, but with a physician office visit	17.2%	43.3%	40.2%	51.2%	16.7%	33.1%	10.1%
5	<b>Measure 4</b> – Percentage of adolescents with services such as inpatient hospitalization, or emergency room visits, but no physician office visit or well-care visit (a lower percentage in this measure is better)	16.3%	16.1%	4.7%	4.2%	10.5%	11.4%	18.5%
6	<b>Measure 5</b> – Potential and missed opportunity (a lower percentage in this measure is better)	84.6%	72.3%	72.2%	64.3%	87.6%	77.6%	87.7%

Adolescents in the FFS program account for the largest portion of the total population at 69.1 percent. This disproportionate group directly impacts the overall rates for this focused study. Due to this impact, the analysis in this report provides an overall estimate with and without the FFS population included.

The Colorado Medicaid rate for adolescent well-care visits (Measure 1) was below the HEDIS 2005 national Medicaid 50th percentile which equaled 38.0 percent, with the Colorado Medicaid rate being 15.4 percent. With the FFS population excluded, the overall rate was 22.4 percent.

The FFS program (59.1 percent) and the PCPP (60.4 percent) had the majority of their study population falling under Measure 2, which included adolescents who had not accessed the health care system. This could indicate underutilization. Member education could increase adolescent well-care visit rates for the FFS program and the PCPP.

The majority of the RMHP, CO Access, and DHMC populations fell into Measure 3 (51.2 percent, 43.3 percent, and 40.2 percent respectively). Knowing this provides the opportunity to target specific providers.

At this time, there have been no improvements from the interventions. CO Access, the PCPP, and the FFS program all had decreases in adolescent utilization of well-care services rates. The only MCO to maintain its performance was RMHP, at approximately 36 percent. Each MCO has implemented interventions in an effort to increase adolescent well-care visits. A comprehensive list of these interventions can be found in Appendix A. Based on these results, the MCOs reevaluate and modify their current intervention strategies.

Analysis of administrative data (claims and encounter data) was subject to potential data biases, such as inaccurate or missing data elements. Incomplete administrative data may have resulted in underreporting of adolescent well-care rates. However, this potential result was minimized by the fact that providers were reimbursed for conducting these services on a fee-for-service basis, which means a provider had to submit a claim for reimbursement. Nevertheless, the results from this study should be used with caution. The reported adolescent well-care visit rates in this report are most likely slightly lower than the actual rates.

## Conclusions and Recommendations

This FY 06 Adolescent Well-Care Focused Study highlights the continued need for increased utilization by the adolescent members for increased adolescent well-care visits, and increased adolescent patient and physician contact. The main conclusions for the study are outlined below and linked to the study objectives as follows:

Study objective:

1. To provide a baseline assessment for trends in adolescent well-care, as recommended by national guidelines, for each Colorado Medicaid program.
  - ◆ The study was successful in providing baseline data on adolescent well-care standards of care. Baseline rates for HEDIS adolescent well-care visits were calculated and ranged from a low of 12.3 percent for the FFS program to a high of 35.7 percent for RMHP. The overall combined rate was 15.4 percent with FFS included and 22.4 percent without FFS. For the other measures reported in the study, no national standards existed. These measures will serve as baseline rates for future focused studies.
2. To provide the Department with documentation of program and/or practice enhancements implemented by the Medicaid health plans.
  - ◆ Interventions were collected from each health plan (Appendix A). Although a variety of interventions were implemented, none yielded any improvement in the rates.

Based on the above conclusions, HSAG recommends the following:

- ◆ The Department should work with the MCOs to ensure that all providers understand the requirements and components of Colorado's well-care program. Additionally, ongoing communication designed to provide practitioners and their office staff with best practices may help to increase well-child visit rates.
- ◆ The Department, in conjunction with the MCOs, should further explore options to improve the quality of coding through training and continuing education.
- ◆ The MCOs should emphasize to providers that well-child examinations should be conducted when patients present themselves at a provider's office for other illnesses or events, such as sports physicals, accidental injuries, and colds.
- ◆ The MCOs should review the well-care status of all patients younger than 21 years of age to minimize the number of missed opportunities to treat this vulnerable population. Generating provider reports targeting adolescents would be a good intervention.
- ◆ The MCOs should educate providers and their front office personnel about the importance of reviewing the health records of all family members younger than 21 years of age before any of the family members' scheduled appointments. If this is done, the physician can remind parents of the need for well-care visits.
- ◆ Provider office staff should remind parents at the end of every well-care visit of the importance of returning for subsequent well-care visits.

## 2. Introduction and Background

### Introduction

The Colorado Medicaid program, managed by the Department, coordinates quality initiatives through its QuIC. These initiatives are designed to improve the quality of care delivered to Medicaid clients. Through a collaborative process with the Department, the MCOs and HSAG, adolescent well-care visits were identified as a study topic that could benefit from a quality initiative. Adolescent well-care visits are a leading indicator of the degree to which adolescents receive preventive-care visits, including screening tests, preventive counseling, and anticipatory guidance. For this reason, they are a key indicator in any adolescent quality-of-care study.

The study included the PCPP, the FFS program, and three Medicaid MCOs: CO Access, DHMC, and RMHP.

### Background

Adolescents are the largest and fastest growing segment of the Colorado Medicaid client population. This study measured aspects of the quality of care provided to this population. Timely well-care in adolescents can be effective in disease and injury prevention in later years of life.

Many of the most common, avoidable health risks to adolescents can be related to behaviors. According to the American Academy of Family Physicians (AAFP), car accidents, unintentional physical injury, homicide, and suicide are the top killers of teenagers and young adults, which provides evidence that most mortality in this age group may be attributed to unhealthy, high-risk behaviors.<sup>1</sup> Cancer and heart disease can also affect adolescents. Sexually transmitted diseases, substance abuse, pregnancy, and antisocial behavior are important causes of physical, emotional, and social problems among adolescents. Many behaviors that can cause the most common diseases leading to early mortality in adults (heart disease, cancer, and stroke) may begin in adolescence and are often preventable.

Adolescent well-care has received greater attention in recent years as the benefits of teaching good habits early in life have become more widely recognized. The American Medical Association (AMA) emphasizes the importance of annual visits in its *Guidelines for Adolescent Preventative Services (GAPS)*. “Annual visits offer the opportunity to reinforce health promotion messages for both adolescents and their parents, identify adolescents who have initiated health-risk behaviors or who are at early stages of physical or emotional disorders, provide immunizations, and develop relationships with the adolescents that will foster an open disclosure of future health information.”<sup>2</sup>

The Colorado Medicaid Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program and the American Academy of Pediatrics (AAP) have guidelines that include annual well-care visits. These visits should include a health history and physical, vision and hearing screening, a developmental/behavioral assessment, immunizations, lab testing, testing procedures for at-risk patients, and anticipatory guidance.<sup>3</sup>

In 2004, only 19 to 36 percent of adolescents in Colorado Medicaid health plans had a well-care visit. With the exception of the PCPP, performance of the Colorado Medicaid managed care plans was roughly equivalent to the national Medicaid 50th percentile benchmark of 35.9 percent, but below the 75th percentile of 45 percent. The adolescent well-care visit rate for the PCPP was 34 percent in 2004 and decreased to 19 percent in 2005. A goal of the Colorado Department of Public Health and Environment is to increase the percentage of Medicaid eligible teens who receive a comprehensive health exam to 50 percent by 2010.<sup>4</sup>

Keeping immunizations current is an important element of an adolescent well-care exam and of preventative care. Despite the documented success and cost-effectiveness of immunizations, adolescents are still affected by vaccine-preventable diseases such as measles, mumps, rubella, hepatitis B, and varicella (chicken pox).<sup>5</sup> In the National Committee for Quality Assurance (NCQA) State of Health Care Quality for 2004, results showed that the average immunization rate in the Mountain region of the United States was 36.6 percent.<sup>6</sup> The 2004 national Medicaid rate for adolescent immunization (Combination 1) was 57.3 percent.<sup>7</sup> Further, the AAP recommends that adolescents receive boosters for tetanus, diphtheria, and pertussis. Meningococcal vaccine should be given to all 11 to 12 year-olds or at high school and college entry.<sup>8</sup>

Nearly one in three adolescents engage in multiple risky behaviors that can affect their current and future health status. The Youth Risk Behavior Surveillance System (YRBSS) identifies the greatest risk factors for morbidity and mortality as injury; violence; HIV/STD; mental health; tobacco, alcohol, and other drugs; and nutrition and exercise.<sup>9</sup> Most health problems related to these factors are preventable. Annual visits with a health care provider can be helpful in mitigating consequences of these behaviors. Based on clinical guidelines, “if the health care provider identifies risk factors, screening tests will be ordered. After that teen reaches sexual maturity, additional tests and exams may be appropriate due to menstruation or sexual activity to screen for anemia or infections.”<sup>10</sup> Well-care visits can provide an avenue for anticipatory guidance that may lead to healthy development.

## **Anticipatory Guidance**

Successful completion of each developmental stage is important to health in the next stage. Guidance is an important part of every adolescent’s visit to a health care provider. The AMA recommends that adolescents receive guidance at least annually to help them cope with developmental challenges. “Developmentally, adolescents are at the crossroads of health. Emerging cognitive abilities and social experiences lead adolescents to question adult values and experiment with health risk behavior. The changes in cognitive abilities, however, also offer an opportunity to develop attitudes and lifestyles that enhance health and well-being.”<sup>11</sup> Colorado providers interviewed for the 2002 qualitative adolescent well-care focused study believed that adolescents need life skills coaching to help them cope with stress, conflict, change, and anxiety. This coaching will help them to learn independence and enable them to deal with life stresses in a healthy manner. The AMA also recommends that adolescents receive guidance annually to improve diet and fitness and to prevent injury.



## Barriers to Healthcare Access

Unlike children and adults, adolescents generally do not have a unique group of providers who care for their specific needs. Therefore, adolescents tend to enter the health care system from many points of entry. In the 2003 report *Adolescent Health in Colorado*, identified barriers to accessibility of health care for adolescents included a shortage of providers, lack of comprehensive services, and issues with developmental appropriateness and confidentiality.<sup>12</sup> Colorado providers interviewed for the 2002 qualitative adolescent well-care focused study made recommendations to help alleviate these barriers, such as providing parenting skills to parents of adolescents, a preferred provider directory for adolescents, and education on state laws regarding confidentiality for parents and adolescents. Identifying the needs of adolescents and improving their access to care through timely interventions can lead to decreased barriers to care.

## Study Goal and Objectives

The goal of the 2005-2006 Adolescent Well-Care Focused Study was to create a baseline to measure how well Colorado Medicaid programs were providing adolescent well-care in comparison to each other and to national benchmarks.

The study had two main objectives:

- ◆ To provide a baseline assessment for trends in adolescent well-care, as recommended by national guidelines, for each Colorado Medicaid program.
- ◆ To provide the Department with documentation of program and/or practice enhancements implemented by the Medicaid health plans.

## References

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- <sup>9</sup> Role of Partnership: Second Annual Meeting of Child Health Services. *Adolescent Health Care and Health Services Research*. Agency for Healthcare Research and Quality. Available at: <http://www.ahrq.gov/research/chs2ado.htm>. Accessed January 23, 2006.
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## Overview

The 2005–2006 Adolescent Well-Care Focused Study was a quantitative study that built on the findings of the qualitative adolescent well-care focused study that HSAG conducted in 2002 to assess the Colorado Medicaid health plans' infrastructure and adolescent care practices at provider offices. The 2005–2006 focused study was based on national HEDIS<sup>®</sup> methodology and represented a new baseline focused study.

## Measures

The HEDIS adolescent well-care measure was based on the percentage of enrolled members 12 to 21 years of age who had at least one comprehensive well-care visit with a primary care practitioner or an OB/GYN practitioner during the measurement year. Adolescent well-care visits are a leading indicator of the degree to which adolescents receive preventive-care visits, including screening tests, preventive counseling, and anticipatory guidance. For this reason, well-care visits are a key indicator in any adolescent quality-of-care study.

The 2005–2006 Adolescent Well-Care Focused Study included three quantifiable measures:

- ◆ Measure 1—Adolescent well-care visits
  - Eligible adolescents who had at least one comprehensive well-care visit with a primary care practitioner or an OB/GYN practitioner during 2005. (Refer to the HEDIS 2006 technical specifications).
- ◆ Measure 2—Adolescents with no services
  - Eligible adolescents who did not have any services (i.e., no claims/encounter data) during 2005.
- ◆ Measure 3—Adolescents with a physician office visit but no well-care visit
  - Eligible adolescents who did not have any well-care visits (as defined in quantifiable Measure 1) during 2005 but had physician office visits in the ambulatory setting.

### Additional Analysis:

The following two measures were not required focused study indicators but serve to provide a more complete picture of the services provided to the adolescents in the eligible population.

- ◆ Measure 4—Adolescents with services but no physician office visits or well-care visits
  - Eligible adolescents who did not have any well-care visits (as defined in quantifiable Measure 1) or physician office visits in the ambulatory setting but had services in other settings during 2005.

- ◆ Measure 5—Potential and missed opportunity
  - Eligible adolescents who did not have any well-care visits (as defined in quantifiable Measure 1). This measure is the summation of Measures 2, 3, and 4.

## Data Collection

Following the HEDIS cycle, administrative data were collected for calendar year 2005 for reporting in June 2006. The population included members of CO Access, RMHP, DHMC, the PCPP, and the FFS program statewide. Claims/encounter data were used to identify Colorado Medicaid clients 12 to 21 years of age as of December 31, 2005, who were continuously enrolled during 2005 with no more than one 30-day gap in enrollment. (See the HEDIS 2006 technical specifications for a complete description of eligible members in the denominator.) Data collection was accomplished using a programmed pull from claims/encounter files of eligible members.

Baseline rates from HEDIS 2004 and 2005 data are displayed in Table 3-1. The 2004 and 2005 studies used a HEDIS hybrid methodology, while the 2006 study used the HEDIS administrative method. It is common practice for NCQA to compare HEDIS measures with different data collection methods from year to year. (i.e., hybrid vs. administrative methodology).

Table 3-1—Colorado Medicaid Adolescent Well-Care Visit Rates—2004 and 2005		
	2004	2005
CO Access	35.0%	34.4%
RMHP*	35.9%	35.9%
PCPP	34.3%	19.2%
FFS	30.4%	9.5%
*The same performance rate was reported for 2004 and 2005, as per NCQA guidelines for rotation of measures Note: DHMC was a new Medicaid MCO in 2004; therefore, HEDIS data collection began in 2006.		

## Limitations

Analysis of administrative data (claims and encounter data) was subject to potential data biases, such as inaccurate or missing data elements. Incomplete administrative data may have resulted in underreporting of adolescent well-care rates. However, this potential result was minimized by the fact that providers were reimbursed for conducting these services on a fee-for-service basis, which means a provider had to submit a claim for reimbursement. Nevertheless, the results from this study should be used with caution. The reported adolescent well-care visit rates in this report are most likely slightly lower than the actual rates.

Using administrative data to define a missed opportunity may overestimate the number of true missed opportunities. Administrative data only include well and sick visit codes. However, the medical record contains components of a well-care visit that may be completed within the context of a sick visit, which is not reflected in the coding of administrative data. All plans were equally affected by this limitation.

### Study Population Characteristics

The eligible population for this study consisted of 42,367 Colorado Medicaid clients between 12 and 21 years of age who were continuously enrolled in a Colorado Medicaid MCO, the PCPP or the FFS program for at least 11 months during the study period (i.e., January 1, 2005 – December 31, 2005) and were still enrolled as of December 31, 2005. For this study, the total eligible population was included and no sampling was used.

Table 4-1 displays the demographic distribution of adolescents in the study. Overall, the average age for adolescents was 16. The average age for DHMC and the PCPP population was slightly younger, at 15 years. The overall distribution of gender was fairly even with 53.6 percent female and 46.4 percent male. The larger portion of females in the population could potentially have an impact on the results since an OB/GYN visit was considered an acceptable location for an adolescent well-care visit. However, the distributions of males to females were more evenly distributed among the MCOs and the FFS population. Only the PCPP population had a larger ratio of males to females.

Table 4-1—Distribution of Age and Gender						
Measure Elements	CO Medicaid	CO Access	DHMC	FFS	PCPP	RMHP
<b>Gender</b>						
Females	22,716	2,590	660	16,079	2,607	780
Males	19,651	2,524	616	13,179	2,707	625
<b>Total Population</b>	<b>42,367</b>	<b>5,114</b>	<b>1,276</b>	<b>29,258</b>	<b>5,314</b>	<b>1,405</b>
Mean age of female adolescents	16	16	15	16	15	16
Mean age of male adolescents	15	15	15	15	15	15
<b>Total Population</b>	<b>16</b>	<b>16</b>	<b>15</b>	<b>16</b>	<b>15</b>	<b>16</b>

Adolescents in the FFS program account for the largest portion of the total population at 69.1 percent. This disproportionate group directly impacts the overall rates for this focused study. Due to this impact, the following analysis provides an overall estimate with and without the FFS population included.

### Key Findings

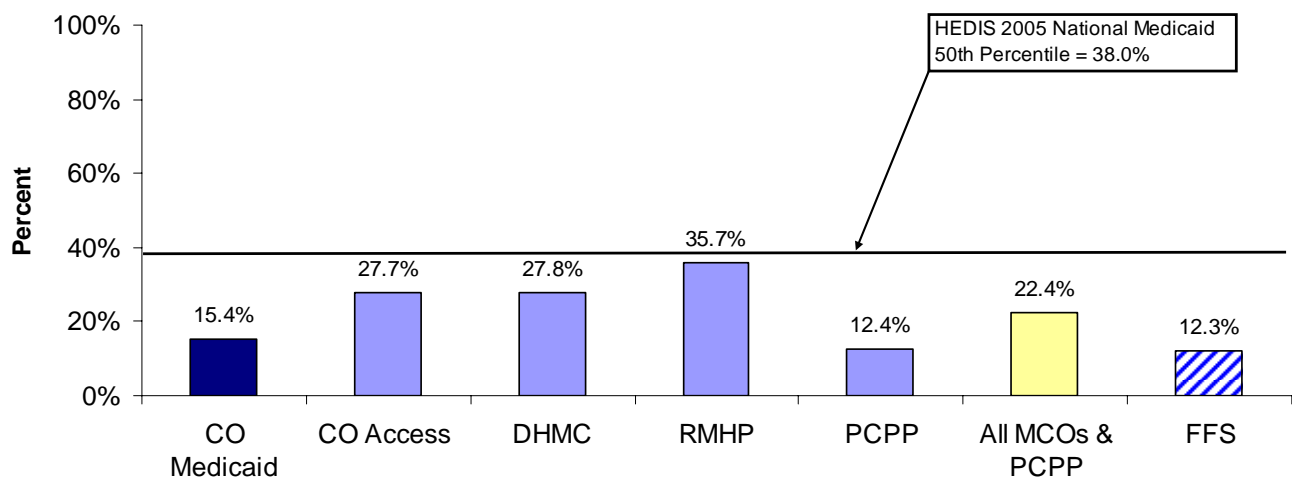
The NCQA, GAP, the federal Bright Futures program, and the AAFP guidelines all recommend comprehensive annual health care visits for adolescents. Access to preventive care is critical to the ongoing diagnosis and treatment of health problems. Additionally, well-care visits allow physicians the opportunity to provide information to parents and children concerning child development and safety practices.

### Measure 1: Percentage of Adolescents With Well-Care Visits in 2005

Figure 4-1 illustrates a comparison of Measure 1 among the Colorado Medicaid programs, MCOs, and overall population including and excluding FFS. The rate for all adolescents enrolled in Colorado's Medicaid program (CO Medicaid) was 15.4 percent, well below the HEDIS 2005 national Medicaid 50th percentile of 38.0 percent. With the FFS population excluded, the overall rate was 22.4 percent.

The rates for all three MCOs, the PCPP, and the FFS program were also below the HEDIS 2005 national Medicaid 50th percentile. The highest compliance for Measure 1 was reported by RMHP at 35.7 percent. CO Access and DHMC performed essentially the same at 27.7 percent and 27.8 percent, respectively. Likewise, the rates for FFS and PCPP were nearly identical at 12.3 percent and 12.4 percent, respectively.

**Figure 4-1—Percentage of Adolescents with Well-Care Visits in 2005**

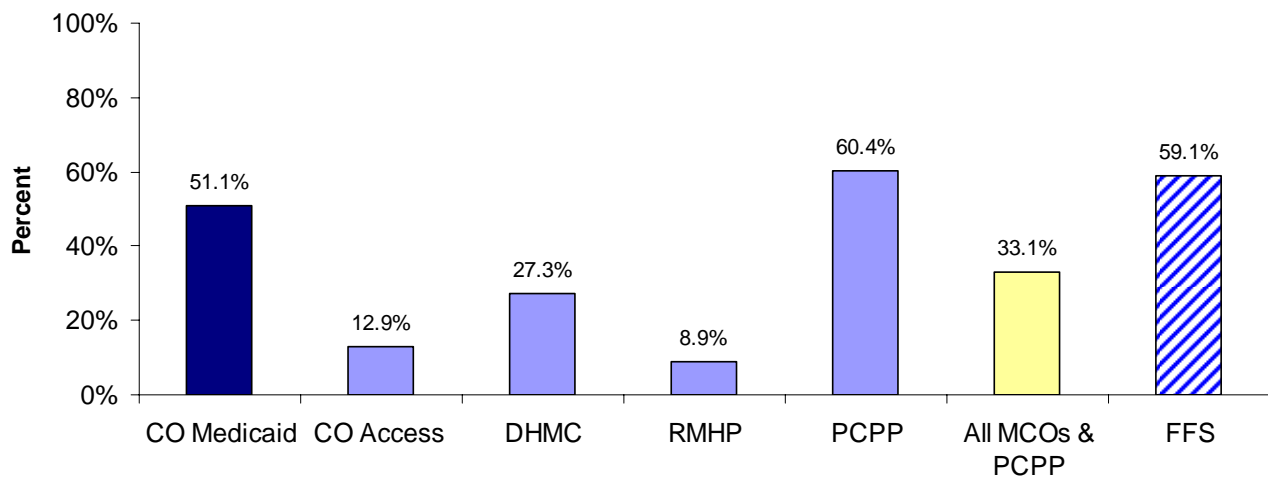


**Measure 2: Percentage of Adolescents Who Did Not Have Any Services (i.e., No Claims or Encounter Data) During 2005**

This measure is a potential proxy for underutilization and/or incomplete or missing encounter data. High rates for this measure indicate that adolescents either did not receive any services or the services were not reported. This finding may represent an opportunity for the MCOs to improve their rate for adolescent well-care visits. Member-based educational materials are one potential intervention. The MCOs should explore the reasons adolescents have not accessed their health system.

The CO Medicaid rate for this measure was 51.1 percent (Figure 4-2). Without the FFS population, the overall rate was 33.1 percent. The three MCOs were diverse in the percentages reported, with RMHP at 8.9 percent, DHMC at 27.3 percent, and CO Access at 12.9 percent. PCPP had the highest percentage of adolescents with no claims or encounters at 60.4 percent followed by FFS at 59.1 percent.

**Figure 4-2—Percentage of Adolescents with No Claims or Encounters in 2005**



Note: This measure is not a HEDIS measure and no benchmarks were available for comparison.

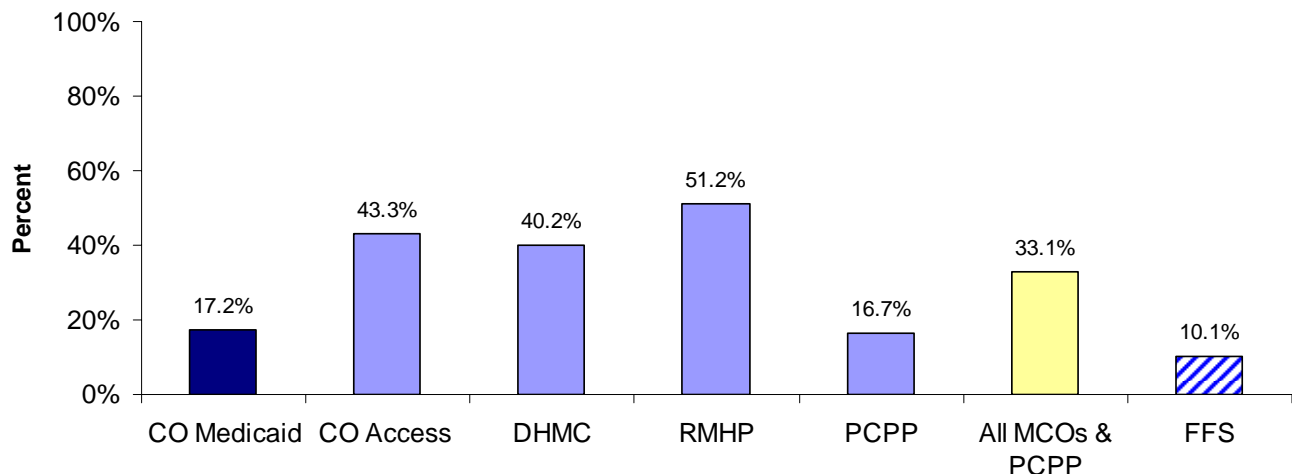
### Measure 3: Percentage of Adolescents With at Least One Physician Office Visit But No Well-Care Visit During 2005

Figure 4-3 evaluates adolescents who had a physician office visit but no well-care visit. High rates for this measure indicate the best opportunity to increase the adolescent well-care visit rate (Measure 1) because the adolescent is already in the physician's office.

For CO Medicaid, the reported rate was 17.2 percent, indicating that the overall adolescent well-care visit rate could have improved from 15.4 percent (Figure 4-1) to 32.6 percent, had a well-care visit occurred each time an adolescent was in a physician's office. RMHP (51.2 percent), CO Access (43.3 percent) and DHMC (40.2 percent) had the highest rates for this measure, indicating that approximately half the adolescents had physician office visits, but the visits were not well-care visits.

While high rates for this measure may indicate opportunities for improvement, lower rates may indicate that access to services was an issue or that members were less inclined to see a provider unless they were sick. Both the PCPP and FFS populations had considerably lower rates than the MCOs. The Department should explore the possible reasons for the lower rates to determine if there were issues, and if interventions could be targeted for these populations.

**Figure 4-3—Percentage of Adolescents With No Well-Care Visits, but With a Physician Office Visit in 2005**



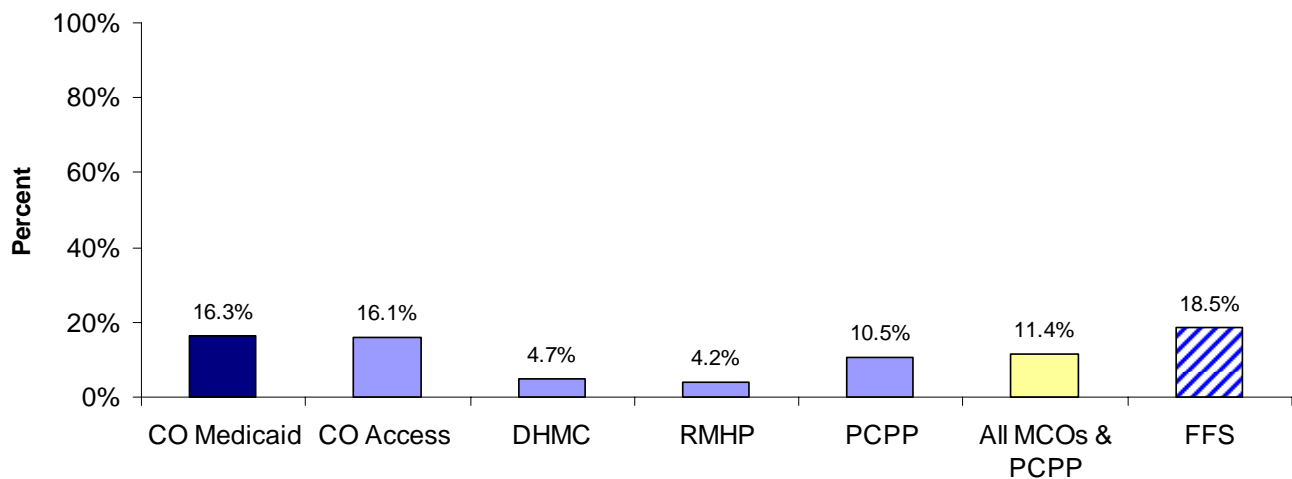


#### **Measure 4: Percentage of Adolescents With Services But No Well-Care Visits or Physician Office Visits During 2005**

Figure 4-4 shows the percentage of adolescents with services but no physician office visit or well-care visit. These adolescents most likely went to the emergency room or had an inpatient visit. In general, low rates are better for this measure. A more in-depth review of the adolescents meeting the criteria for this measure would reveal if an opportunity exists for education about well-care visits.

The overall CO Medicaid rate for adolescents was 16.3 percent, and 11.4 percent with FFS excluded. RMHP had the lowest rate at 4.2 percent, followed by DHMC at 4.7 percent. The rates for CO Access, PCPP, and FFS were between 10.5 percent and 18.5 percent, indicating a potential utilization issue.

**Figure 4-4—Percentage of Adolescents With Services, But No Well-Care Visits or Physician Office Visits in 2005**



### Measure 5: Percentage of the Total Potential Opportunities to Improve the Rate of Adolescent Well-Care Visits

Figure 4-5 displays the total potential opportunity to increase rates for adolescent well-care visits, and is calculated by totaling Measures 2, 3, and 4. This measure, which represented the percentage of adolescents who did not have an adolescent well-care visit, was the inverse of Measure 1. Low rates were better for this measure. Overall, the CO Medicaid rate was 84.6 percent, and decreased to 77.6 percent without the FFS population. The three MCOs had the lowest rates.

**Figure 4-5—Percentage of the Total Potential Missed Opportunities to Improve the Rate of Adolescent Well-Care Visits**

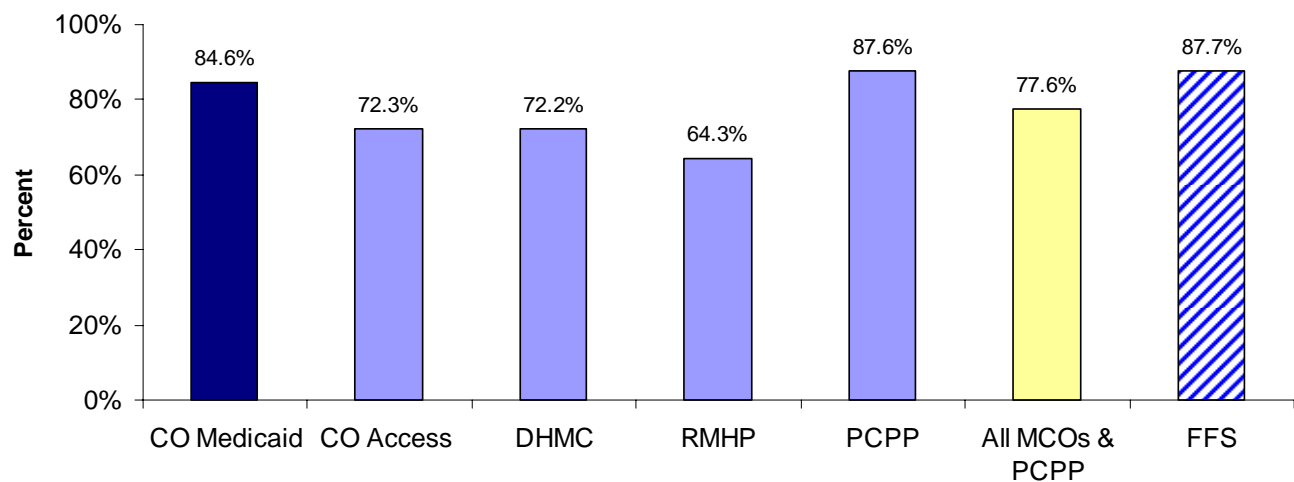
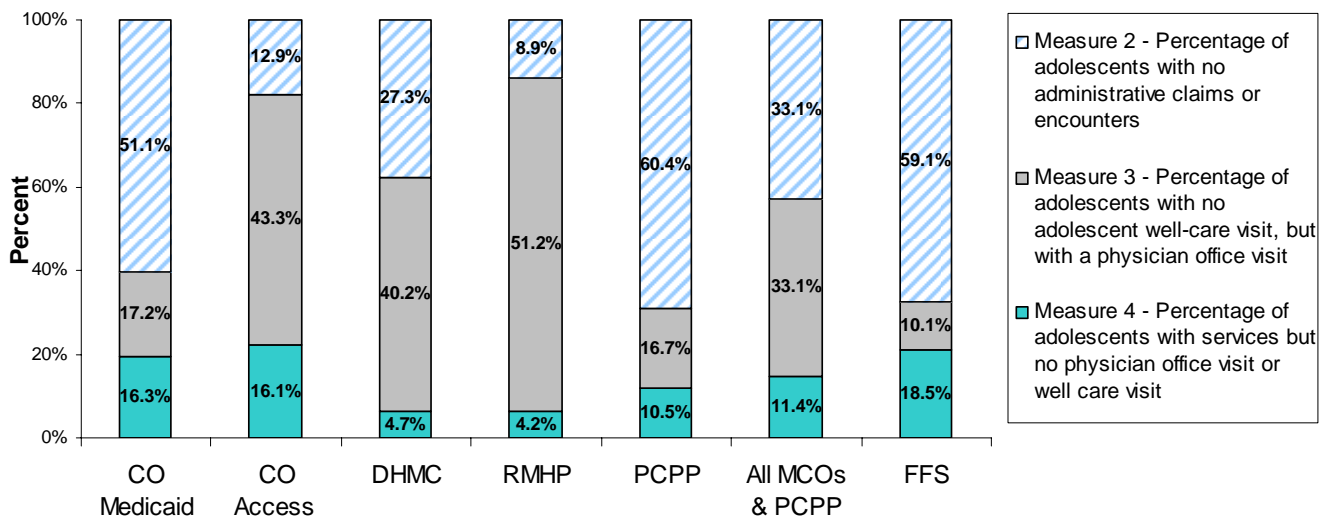


Figure 4-6 displays the breakdown of how each individual Measure (2, 3, and 4) contributed to Measure 5. The total missed opportunity was composed of adolescents not accessing the health care system (Measure 2), adolescents who had a physician office visit, but not a well-care visit (Measure 3), and adolescents who had no physician office visit or well-care visit, but did have claims for services provided (Measure 4).

The FFS program (59.1 percent) and the PCPP (60.4 percent) had the majority of their study population falling under Measure 2, which represented adolescents who had not accessed the health care system. These results could indicate potential underutilization. An appropriate intervention to increase adolescent well-care visit rates for the FFS and PCPP population could be member education stressing the importance of regular preventive care services.

Knowing that the missed opportunity was largely composed of Measure 3 provides the opportunity to target specific providers. RMHP, CO Access and DHMC fell into this category with the majority of their study population (51.2 percent, 43.3 percent, and 40.2 percent respectively) falling under Measure 3.

**Figure 4-6—Percentage of Total Potential Missed Opportunity by Measure**



## ***Trending Results***

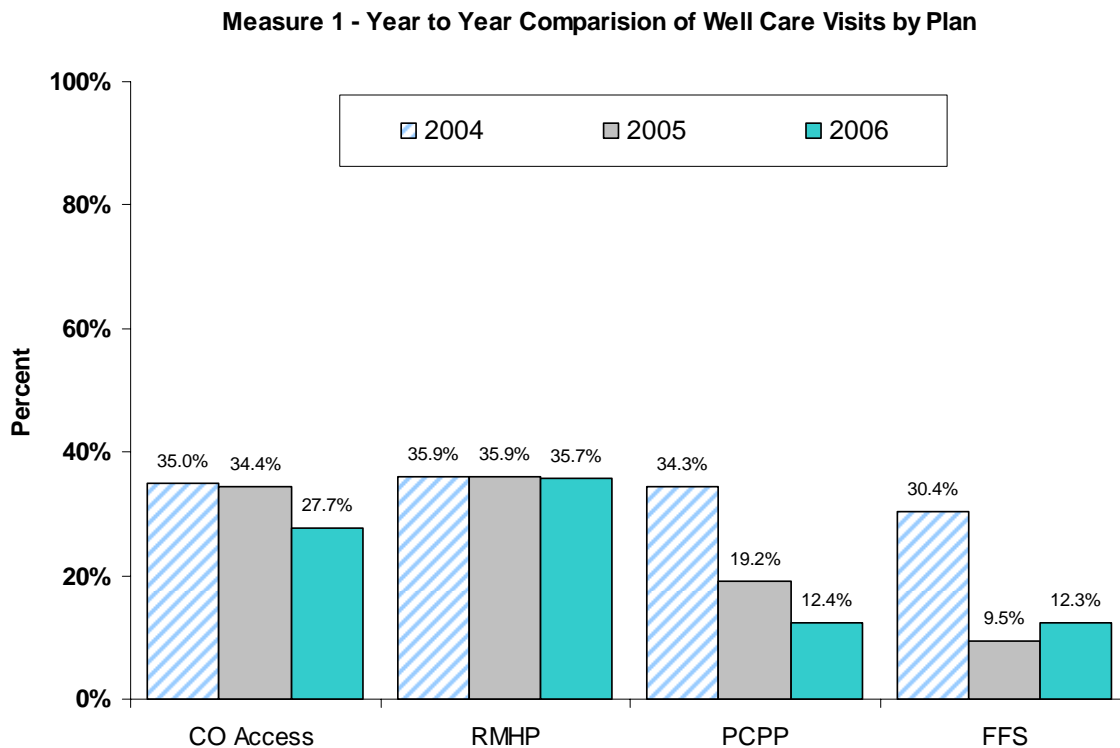
Although this study represented a baseline measurement, the adolescent well-care visit rate (Measure 1) has been collected in Colorado for several years, and the MCOs implemented interventions are based on results from the prior focused studies. Therefore, the rates for the other measures in the FY 06 focused study were not calculated in the original baseline study and cannot be trended at this time. The 2004 and 2005 studies used a HEDIS hybrid methodology, while the 2006 study used the HEDIS administrative method. It is common practice for NCQA to compare HEDIS measures with different data collection methods from year to year. (i.e., hybrid vs. administrative methodology). A follow-up study with trending of the results for all measures in this baseline focused study will occur after interventions have been implemented.

Trending the adolescent well-care visit rates was conducted using only administrative data (i.e., claims or encounter data). There was the potential for missing or incomplete data, referred to as data completeness issues, because of the different types of reimbursement submission methods. MCOs that compensate their providers on a fee-for-service basis require a submission of a claim for reimbursement. However, providers paid on a capitated or salaried basis do not need to submit a claim to be paid. Instead of a claim, the office provides encounter data indicating the type of visit. Receiving all encounter data from providers can be challenging and may have negatively impacted adolescent well-care visit rates.

Based on findings from the Colorado 2004–2005 Focused Study Evaluation of EPSDT Services, data completeness did not appear to be an issue for CO Access or RMHP. In addition, the Department reimbursed EPSDT claims for adolescent well-care visits based on a flat fee, so data completeness for PCPP and FFS also did not appear to be an issue (e.g., FFS providers must submit a claim to be reimbursed, so claims for adolescent well-care visits should have been available for analysis). DHMC reimburses providers on a capitated basis and may experience data completeness issues, as evident from Figure 4-6 (page 4-7). However, DMHC was not part of the two baseline focus studies; therefore, its data was not presented for trending.

Figure 4-7 compares the rate for adolescent well-care visits since 2004. To date, there have been no improvements from the interventions. CO Access, the PCPP, and the FFS program all had decreases in their rates. RMHP's rate maintained at approximately 36 percent in 2004 and 2006. Each MCO implemented interventions to increase compliance with adolescent well-care visit rates. A comprehensive list of these interventions can be found in Appendix A. Based on these results, the MCOs should reevaluate and modify their current intervention strategies.

**Figure 4-7—Percentage of Well-Care Visits Age 12–21 by Year by Medicaid Health Plan**



**Note:** For RMHP the same performance was reported in 2004 and 2005 per NCQA guidelines for rotation of measures. DHMC was omitted from this graph because they became a new Medicaid MCO in 2004 and did not participate in the baseline study.

## 5. Overall Medicaid Conclusions and Recommendations

### Introduction

This FY 06 Adolescent Well-Care Focused Study provides baseline assessment for trends in adolescent well-care, as recommended by national guidelines, for each Colorado Medicaid program. The study also contains documentation of program and/or practice enhancements implemented by the Medicaid health plans.

### Overall Conclusions

Table 5-1 displays the rates for all of the measures by health plan. In general, the results from this study indicate that there have been changes from the baseline study. Specifically, the adolescent well-care visit rates for CO Access, the FFS program and the PCPP have continued to decrease since 2004. The rates for RMHP did not change in 2004 and 2006. All of the rates for Measure 1 were below the HEDIS 2005 50th percentile of 38.0 percent for adolescent well-care visits.

Table 5-1—Summary of Rates for the Focused Study Measures								
2005 Rates Reported in 2006								
#	Measures	CO Medicaid	CO Access	DHMC	RMHP	PCPP	All MCOs and PCPP	FFS
1	<b>Denominator – all adolescents age 12–21</b>	42,367	5,114	1,276	1,405	5,314	13,109	29,258
2	<b>Measure 1</b> – Percentage of adolescents with at least one adolescent well-care visit	15.4%	27.7%	27.8%	35.7%	12.4%	22.4%	12.3%
3	<b>Measure 2</b> – Percentage of adolescents with no administrative claims or encounters (a lower percentage in this measure is better)	51.1%	12.9%	27.3%	8.9%	60.4%	33.1%	59.1%
4	<b>Measure 3</b> – Percentage of adolescents with no adolescent well-care visit, but with a physician office visit	17.2%	43.3%	40.2%	51.2%	16.7%	33.1%	10.1%
5	<b>Measure 4</b> – Percentage of adolescents with services such as inpatient hospitalization, or emergency room visits, but no physician office visit or well-care visit (a lower percentage in this measure is better)	16.3%	16.1%	4.7%	4.2%	10.5%	11.4%	18.5%
6	<b>Measure 5</b> – Potential and missed opportunity (a lower percentage in this measure is better)	84.6%	72.3%	72.2%	64.3%	87.6%	77.6%	87.7%

For the FFS program (59.1 percent) and the PCPP (60.4 percent), the majority of adolescents did not access the health care system (Measure 2). These results could indicate underutilization. The majority of adolescents in RMHP, CO Access and DHMC fell under Measure 3. This measure indicated that adolescents saw their provider (most likely when sick), but did not have well-care visits. Measure 3 offers the best opportunity for improving adolescent well-care visits because the member is already at the provider's office.

The main conclusions for the study have been outlined below and linked to the study objectives as follows:

Study objective:

1. To provide a baseline assessment for trends in adolescent well-care, as recommended by national guidelines, for each Colorado Medicaid program.
  - ◆ The study was successful in providing baseline data on adolescent well-care standards of care. Baseline rates for HEDIS adolescent well-care visits were calculated and ranged from a low of 12.3 percent for FFS to a high of 35.7 percent for RMHP. The overall combined rate was 15.4 percent with FFS included and 22.4 percent without FFS. For the other measures reported in the study, no national standards existed. These measures will serve as baseline rates for future focus studies.
2. To provide the Department with documentation of program and/or practice enhancements implemented by the Medicaid health plans.
  - ◆ Interventions were collected from each health plan (Appendix A). Although a variety of interventions were implemented, none yielded any significant improvement. In fact, all of the MCOs (except for RMHP) the PCPP, and the FFS program had a decrease in the rate of adolescent well-care visits from the baseline HEDIS numbers in 2004 to the 2006 study. RMHP's rates did not change in 2004 and 2006.

## Overall Recommendations

Based on the above conclusions, HSAG recommends the following:

- ◆ The Department should work with the MCOs to ensure that all providers understand the requirements and components of Colorado's well-care program. Additionally, ongoing communication designed to provide practitioners and their office staff with best practices may help to increase well-child visit rates.
- ◆ The Department, in conjunction with the MCOs, should further explore options to improve the quality of coding through training and continuing education.
- ◆ The MCOs should emphasize to providers that well-child examinations should be conducted when patients present themselves at a provider's office for other illnesses or events, such as sports physicals, accidental injuries, and colds.
- ◆ The MCOs should review the well-care status of all patients younger than 21 years of age to minimize the number of missed opportunities to treat this vulnerable population. Generating provider reports targeting adolescents would be a good intervention.

- ◆ The MCOs should educate providers and their front office personnel to review the health records of all family members younger than 21 years of age before any of the family members' scheduled appointments. If this is conducted, the physician can remind parents of the need for well-care visits.
- ◆ Provider office staff should remind parents at the end of every well-care visit about the importance of returning for subsequent well-care visits.



## *Appendix A.* Health Plan Intervention Strategies and Barriers

This appendix contains information reported by the Colorado Medicaid health plans summarizing the adolescent well-care-related interventions conducted as program or practice enhancements since the initial qualitative focused study of adolescent well-care completed in the past several years. This appendix also summarizes the barriers encountered while conducting these interventions. All health plans participated in the development of the 2006 EPSDT toolkit Web site, which will be key to assisting provider offices in identifying areas of intervention focus.

### Colorado Access Plan

#### *Intervention Strategies*

- ◆ There was an annual open enrollment mailing to members that included age-specific well-care and immunization information (11–20 years of age).
- ◆ A baby/adolescent immunization flyer, information on the importance of a medical home, and Get a Well Child Check educational brochures were sent to members 21 years of age and younger who completed a health risk assessment.
- ◆ A health outcomes unit was developed and established to address population-based preventive and wellness activities and to develop a more rigorous structure for health promotions program development and evaluation, outcomes measurement, and results dissemination both internally and externally. CO Access will develop and maintain this program as an integral part of its ongoing commitment to clinical quality improvement.
- ◆ Seven private pediatric practices contracted with CO Access in the Denver metropolitan area implemented the removal of nine barriers to caring for children in Medicaid and Children's Health Plan Plus through a pilot program called the Colorado Children Healthcare Access Program: A Medical Home for Every Child. The goal was to create a high quality medical home for all Colorado low income children. A dedicated CO Access social worker assisted parents with identifying resources, obtaining needed services, and removing barriers to accessing primary care. CO Access nurses helped providers by providing care management to the patients who needed it.
- ◆ Members 12–18 years of age who had high utilization of the emergency department were contacted for risk assessment and potential enrollment into the Access First case management program. This program aimed to reduce unnecessary use of hospital emergency departments and to increase use of outpatient primary care services for children. Education was provided regarding appropriate use of the emergency department and the elimination of barriers to primary care access.
- ◆ All identified pregnant and delivering members (including teens) were contacted and encouraged to access postpartum and regular preventive care, including family planning services after delivery, as part of the Access Health Mom, Healthy Baby program.

- ◆ There was an annual fall mailing encouraging at-risk members (including adolescents) to access their primary care doctor and get a flu shot as part of the Access Get Your Flu Shot program.
- ◆ Spanish radio and TV programs promoted immunizations and well care.
- ◆ Preventive care guidelines and information regarding EPSDT was available on the CO Access Web site.
- ◆ Information regarding access to well care was included in the member handbook.
- ◆ EPSDT provider notices highlighting the EPSDT program were sent in February. They included a letter from the medical director, a fact sheet, and practice-specific rates. Member lists were available upon request.
- ◆ The CO Access Web site contained an EPSDT provider guide, an EPSDT fact sheet and EPSDT billing information.
- ◆ New provider and refresher EPSDT training was provided at offices by Provider Network Services.
- ◆ Preventive care guidelines were available on the CO Access Web site.
- ◆ There was provider handbook information on the EPSDT program.
- ◆ The Colorado Children Healthcare Access Program: A Medical Home for Every Child project was piloted in selected practices, providing a full-time pediatric case management resource for providers.

### **Barriers**

- ◆ Adolescents accessed care episodically (during problem oriented visits) or not at all rather than accessing care routinely for well care.
- ◆ The 18–21-year-old age group was particularly difficult to target because they are considered adults and may access care through an adult (internal medicine) provider.
- ◆ There was lack of good demographic information to support outreach.

## **Denver Health Medicaid Choice**

### **Intervention Strategies**

- ◆ Denver Health has a dedicated Teen Clinic at the Westside Family Health Center.
- ◆ Eleven school-based clinics in metropolitan Denver provided no-cost medical services to students such as physical exams, immunizations, routine lab tests, pregnancy testing, testing and treatment of sexually transmitted diseases, birth control information, and vision and hearing screening.
- ◆ School-based health centers provided education and counseling services. Each school-based health center had a multidisciplinary team consisting of a:

- School psychologist—provided mental and behavioral health services for students and educational training for teachers.
  - School social worker—addressed truancy issues and crisis intervention services, and addressed social needs such as food, housing, and clothing.
  - School nurse—identified, triaged, and managed student health needs; provided mandated services such as hearing tests and immunizations; and provided health education to students, teachers, and parents.
  - Substance abuse counselor—provided substance abuse assessment/evaluation, prevention classes, and individual and group services, including six-week education groups. The substance abuse counselor was the link to community resources and programs.
  - Physician assistant/nurse practitioner—provided primary medical, ambulatory, and emergency care; was the link to the primary care provider, and provided student/parent/school education.
- ◆ Prevention guidelines were available to all providers on the Denver Health Web site.
  - ◆ Provider manuals included specific information on EPSDT.
  - ◆ Provider newsletters contained information on EPSDT results.
  - ◆ Educational materials related to adolescent health issues were available to print for members on the Denver Health Web site.
  - ◆ Member handbooks contained information on well care and how to access health care.

### **Barriers**

- ◆ Health centers and school based clinics may not adequately define adolescent well care visits, or may not provide the information to DHMC. For 2006, DHMC plans to better define the number of adolescent well visits that occur in the health centers and to work with the school-based clinics to develop strategies to increase the number of adolescent well-care visits and to improve the reporting of well-care visits.

## **Rocky Mountain Health Plans**

### **Intervention Strategies**

- ◆ Office record reviews—During office record reviews performed by medical directors, documentation of adolescent well-care issues were assessed and evaluated. Education was provided to physicians in areas that required improvement.
- ◆ Member newsletter—Articles related to childhood and adolescent health issues were periodically published in the member newsletter.
- ◆ Provider manual—Adolescent well-care visit guidelines were published in the provider manual.
- ◆ Provider newsletter—Adolescent well-care visit guidelines were published in the provider newsletter annually.

- ◆ Online provider directory—With a small number of providers who specialize in adolescent care, RMHP had an on-line provider directory that identified the business categories each provider accepted.

### ***Barriers***

- ◆ Because of the busy practice schedules of providers, the challenge was identifying innovative ways to motivate provider offices to implement changes to their current care model structure.