FY 07–08 Colorado Adolescent Well-Care Focused Study

June 2008

This report was produced by Health Services Advisory Group, Inc. for the Colorado Department of Health Care Policy & Financing.

HSAG Health Services Advisory Group

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

Phone 602.264.6382 ◆ Fax 602.241.0757

HSAG HEALTH SERVICES ADVISORY GROUP

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Introduction

Adolescence is a time of drastic change, both physically and emotionally. As such, well-care visits are an important preventive health care service during these transition years. Annual visits offer the opportunity to reinforce health promotion messages for both adolescents and their parents, identify adolescents who have initiated behaviors that are a risk to their health, identify adolescents who are at early stages of physical or emotional disorders, provide immunizations, and develop relationships with adolescents that will foster an open disclosure of future health information.[1-1]

In 2006, Health Services Advisory Group, Inc. (HSAG), in conjunction with the Colorado Department of Health Care Policy & Financing (the Department), conducted an administrative study that assessed the utilization of adolescent well-care visits. The results of this study showed that the Colorado Medicaid statewide average was well below the HEDIS 2005 national Medicaid 50th percentile. At the time of the 2006 focused study, the Colorado Medicaid health plans had implemented a variety of interventions aimed at improving the rate of adolescent well-care visits. These interventions had not been in place long enough to yield any improvement in rates. The Department, along with HSAG and the Medicaid health plans, agreed to remeasure the 2006 study. The goal of this 2008 focused study was to reevaluate adolescent utilization of services to determine whether interventions positively affected the rate of adolescent well-care visits. The study addressed the following question: To what extent are Colorado Medicaid providers performing adolescent well-care visits?

The FY 07–08 Colorado Adolescent Well-Care Focused Study included the Colorado Medicaid Primary Care Physician Program (PCPP), the unassigned fee-for-service (FFS) plan, Denver Health Medicaid Choice (DHMC), and Rocky Mountain Health Plans (RMHP).

Methodology

The study used administrative claims data to measure 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 (PCP) or an obstetrician/gynecologist (OB/GYN) during the measurement year. Sampling was not performed; the entire eligible population was used. Additional measures were included to identify where opportunities for adolescent well-care visits were missed.

[1-1] American Medical Association. Guidelines for Adolescent Preventative Services (GAPS). 1997.

Summary of Findings

Table 1-1 provides a summary of the results for each of the study measures evaluated in the current focused study.

Table 1-1—Summary of Findings

Health Plans	Measure 1[A]		Measure 2[B]		Measure 3[C]		Measure 4[D]	
	FY 05–06	FY 07–08	FY 05–06	FY 07–08	FY 05–06	FY 07–08	FY 05–06	FY 07–08
RMHP	35.7%	40.8%	8.9%	0.6%	51.2%	56.6%	4.2%	2.0%
DHMC	27.8%	31.9%	27.3%	22.3%	40.2%	36.6%	4.7%	9.2%
PCPP	12.4%	14.9%	7.5%	5.3%	56.7%	58.8%	23.4%	21.0%
FFS	12.3%	15.5%	15.6%	10.6%	44.2%	51.7%	27.9%	22.2%
Colorado Medicaid	**15.4%**	**17.3%**	**14.4%**	**10.7%**	**45.7%**	**51.4%**	**24.4%**	**20.6%**

[A] Measure 1 = Percentage of adolescents with a well-care visit
[B] Measure 2 = Percentage of adolescents who did not have any services
[C] Measure 3 = Percentage of adolescents with no well-care visits, but with a physician office visit
[D] Measure 4 = Percentage of adolescents with services but no well-care visits or physician office visits

Note: Due to the large population size, all reported differences between FY 05–06 and FY 07–08 were statistically significant, except Measure 3 for the PCPP. Additionally, the summation of Measures 1 through 4 may not add to 100 percent due to rounding error.

Overall, the percentage of adolescents with at least one well-care visit (Measure 1) increased across all health plans in FY 07–08. Differences between the baseline and remeasurement periods for individual health plans ranged from 2.5 percentage points (PCPP) to 5.1 percentage points (RMHP). The Colorado Medicaid rate increased 1.9 percentage points to 17.3 percent. However, individual health plan and statewide performance continues to be lower than the 2007 National Committee for Quality Assurance (NCQA) National HEDIS 50th percentile benchmark of 42.1 percent. Moreover, the score for only one health plan (RMHP) exceeded the 2007 NCQA national HEDIS 25th percentile of 35.3 percent. The percentage of adolescents receiving well-care visits in FY 07–08 for the PCPP and the FFS program was lower than the 2007 NCQA national HEDIS 10th percentile (31.3 percent). These results indicate substantive opportunities for improvement across all Colorado Medicaid health plans.

Additionally, the percentage of Colorado Medicaid adolescents who did not have any services during the study period dropped 3.7 percentage points in FY 07–08 to 10.7 percent. This finding suggests that more adolescents were utilizing health care services in FY 07–08 compared to FY 05–06. The decreases for Measures 2 and 4 were likely due to the increase in adolescents receiving well-care physician office visits (Measure 3). Overall, the Colorado Medicaid rate for adolescents receiving a physician office visit but not a well-care visit increased 5.7 percentage points to 51.4 percent in FY 07–08. Higher rates for this measure highlight the best opportunity to increase the adolescent well-care visit rate since adolescents are already in the physician's office. Similar to Measure 2, Measure 4—the number and percentage of adolescents receiving services other than well-care visits or physician office services (e.g., pharmacy, laboratory, inpatient, etc.)—decreased 3.8 percentage points in FY 07–08 to 20.6 percent.

In general, 82.7 percent of Colorado Medicaid adolescents did not receive a well-care visit. Although this represents a decrease from FY 05–06 (84.6 percent), the finding still highlights considerable opportunities for improvement across all Colorado Medicaid health plans. Of these adolescent members, 12.9 percent did not access the health care system (Measure 2) while 87.1 percent (Measure 3 and 4) had a potential or missed opportunity for a well-care visit.

Conclusions and Recommendations

Conclusions

The main findings from this focused study were the following:

- Although the Colorado Medicaid *Adolescent Well-Care Visit* rate increased 1.9 percentage points in FY 07–08 (17.3 percent), it remained significantly below the 2007 NCQA national Medicaid HEDIS 10th percentile of 31.3 percent. This finding highlights a substantial opportunity for improvement. Moreover, among individual health plans, only RMHP (40.8 percent) exceeded the 2007 NCQA national Medicaid 25th percentile (35.3) and approached the 2007 NCQA national Medicaid 50th percentile (42.1 percent). The PCPP and FFS program (14.9 and 15.5 percent, respectively) remained below the 10th percentile while DHMC's rate (31.9 percent) exceeded it.
- In general, more adolescents were accessing health care as represented by the decreased percentage of adolescents who did not have any services (Measure 2) in FY 07–08 (10.7 percent) compared to FY 05–06 (14.4 percent). This finding suggests that Medicaid members were utilizing health care services more often in FY 07–08 than in FY 05–06.
- The percentage of adolescents who had a physician office visit but not a well-care visit increased in FY 07–08 for all health plans except DHMC. Statewide, about 5 out of 10 adolescents (51.4 percent) missed an opportunity for a well-care visit while having a physician office visit. This represents the greatest opportunity to improve the rate of well-care visits since the member is already being evaluated in the physician's office. Moreover, of all the potential and missed opportunities (i.e., the sum of Measures 2, 3, and 4), approximately 6 out of 10 adolescents (62.2 percent) had an office visit but not a well-care visit. (Refer to Figure 4-6 in the Results section of this report.)
- If adolescents receive a well-care visit, potential illness may be prevented before an emergency room (ER) or inpatient visit is needed. This was evidenced by RMHP having the lowest rate among the health plans for adolescents with services other than well-care visits and physician office visits. RMHP's rate for adolescent well-care visits was the highest of all the health plans while its rate for adolescent utilization of services was low relative to the other health plans.

Recommendations

Based on the above conclusions, HSAG recommends the following:

- The Department should work with the health plans to ensure that all providers understand that a well-care visit can be performed during routine physician office visits. The health plans should incorporate this information into current provider outreach activities such as newsletters, Web sites, and ongoing provider training. These educational resources should emphasize the importance of conducting well-child examinations when patients present themselves at a provider's office for other illnesses or events such as sports physicals, accidental injuries, and colds.
- The health plans should focus on ongoing communication designed to provide practitioners and their office staff with best practices that could help increase well-child visit rates. Providers should be directed to the Department's Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) toolkit to find a sample reminder letter that can be mailed to parents and guardians, notifying them that their child is overdue for an exam. This letter reminds parents of the importance of well-care appointments and explains what can be expected during a well-care appointment. In addition, the National Center for Education in Maternal and Child Health, at www.brightfutures.org, has resources that providers could use to help facilitate well-child visits. Standardized tracking forms could be modified and used to help providers track adolescent well-care visits.
- Health plans should conduct ongoing reviews of utilization by members younger than 21 years of age to identify those who are eligible for well-care visits. Quarterly reports that highlight adolescents in need of well-care visits could be generated for providers and used to promote visit reminders. In addition, member profile reports could be used as part of a provider incentive program to reduce the rate of missed opportunities.
- The health plans should educate providers and their front office personnel about reviewing the health records of all family members younger than 21 years of age before any of the family members' scheduled appointments. This step would allow the physician to 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

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."[2-1]

Nearly one in three adolescents engages 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.[2-2] Most health problems related to these factors are preventable. Annual visits with a health care provider can be helpful in mitigating the 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."[2-3]

Background

In 2006, HSAG, in conjunction with the Colorado Department of Health Care Policy & Financing (the Department), conducted a quantitative study that assessed the utilization of adolescent well-care visits. The results of this study showed that the percentage of adolescents in Colorado Medicaid health plans who had a well-care visit ranged from 12 to 36 percent. The statewide combined rate was only 15.4 percent, well below the HEDIS 2005 national Medicaid 50th percentile of 38.0 percent. Excluding the fee-for-service (FFS) population, the overall rate was 22.4 percent.

At the time of the 2006 focused study, the health plans had implemented a variety of interventions aimed at improving the rate of adolescent well-care visits. These interventions had not yet been in place long enough to yield any improvement in the rates. Since the 2006 study, the Department also implemented an intervention intended to raise awareness among Primary Care Physician Program (PCPP) and FFS members of the importance of adolescent well-care visits. Intervention strategies and materials varied by health plan.

[2-1] American Medical Association. Guidelines for Adolescent Preventative Services (GAPS). 1997.

[2-2] 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/chsr2ado.htm. Accessed March 5, 2008.

[2-3] American Academy of Pediatrics, Committee on Practice and Ambulatory Medicine. Recommendations for Preventative Pediatric Health Care (policy statement). Available online at: http://aappolicy.aappublications.org/cgi/content/full/pediatrics;105/3/645 Accessed March 5, 2008.

Study Goals and Objectives

The goal of the 2008 focused study was to determine the impact of health plan interventions on the rate of adolescent well-care visits. The study addressed the following question: *To what extent are Colorado Medicaid providers performing adolescent well-care visits?*

With this information, the Department and health plans will achieve the objective to be better informed and positioned to develop effective interventions to improve the rate of adolescent well-care visits.

Overview

The FY 07–08 Colorado Adolescent Well-Care Focused Study is a remeasurement of the focused study conducted by HSAG in FY 05–06. The current study evaluated the impact of health plan interventions implemented during FY 06–07 on the rate of adolescent well-care visits. This study answers the question: *To what extent are Colorado Medicaid providers performing adolescent well-care visits?* In addition to presenting current rates, the FY 07–08 study findings were compared to the findings from the FY 05–06 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 (PCP) or an obstetrician/gynecologist (OB/GYN) practitioner during the measurement year. Additional measures were also included to quantify where an opportunity for an adolescent well-care visit was missed. This information will aid in the development of future targeted interventions.

The FY 07–08 Colorado Adolescent Well-Care Focused Study included five measures:

Measure 1: Adolescent well-care visits (HEDIS 2008 methodology)

- The number of adolescents who had at least one well-care visit with a PCP or OB/GYN during the measurement year. (This measure was based on the HEDIS 2008 technical specifications.)

Measure 2: Adolescents with no services

- The number of adolescents who had no services, (i.e., no claims/encounter data) including well-care visits, during the measurement year.

Measure 3: Adolescents with a physician office visit, but no well-care visit

- The number of adolescents who had no well-care visits (as defined in Measure 1), but had at least one physician office visit in an ambulatory setting (e.g., a physician office, hospital emergency department, or urgent care center) during the measurement year.

Measure 4: Adolescents with services, but neither physician office visits nor well-care visits

- The number of adolescents who had no well-care visits (as defined in Measure 1) or physician office visits in an ambulatory setting (as defined in Measure 3), but had services (e.g., lab, inpatient, or pharmacy) in other settings during the measurement year.

Measure 5: Potential and missed opportunities

- The number of adolescents who did not have any well-care visits (as defined in Measure 1) during the measurement year, but had at least one other type of service. This measure is the summation of the numerators from Measures 2, 3, and 4.

Data Collection

The eligible population consisted of all Colorado Medicaid members 12 to 21 years of age as of December 31, 2007. An eligible member was continuously enrolled in one of the following health plans from January 1, 2007, through December 31, 2007, with no more than one 30-day gap in enrollment: FFS, PCPP, Denver Health Medicaid Choice (DHMC), or Rocky Mountain Health Plans (RMHP). HSAG used administrative data to identify Colorado Medicaid FFS and PCPP members. Data collection was accomplished using a programmed pull from claims/encounter files of eligible members. RMHP and DHMC were responsible for identifying their eligible populations and submitting a data submission file to HSAG containing the numerators and denominators for the five measures being studied. HSAG calculated rates for FFS and PCPP as well as an aggregated rate for all health plans combined.

Limitations

All studies are subject to potential limitation or bias. As such, it is important to consider this when interpreting the findings. This study relied on administrative data (claims and encounter data), which was subject to potential data biases, such as inaccurate or missing data elements. Providers who are not paid on a fee-for-service basis (e.g., capitated providers) may render services, but may neglect to submit the encounter to the managed care plan. Therefore, the results from this study should be used with caution. The following points should be considered when interpreting the study findings:

- The reported adolescent well-care visit rates in this report may be slightly lower than actual rates.
- Using administrative data to define a missed opportunity may overestimate the number of true missed opportunities.
- Administrative data only includes 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.
- Evaluating the effectiveness of interventions should be done with caution. A direct link between interventions implemented and changes that occurred was not evaluated. Changes in rates may not be directly attributed to interventions implemented.

Study Population Characteristics

The eligible population consisted of 40,010 Colorado Medicaid adolescents 12 to 21 years of age who were continuously enrolled in RMHP, DHMC, the PCPP, or the FFS program for at least 11 months during the study period (i.e., January 1, 2007–December 31, 2007) and were still enrolled as of December 31, 2007. The total eligible population was included and no sampling was used.

Table 4-1 displays the demographic distribution of adolescents in the study. The eligible population for all measures in the FY 07–08 study ranged from 1,173 cases for RMHP to 32,738 cases for the FFS population. The average age of adolescents in the Colorado Medicaid program was 16 years of age. The overall distribution of the population by gender was fairly even: 52.8 percent for females and 47.2 percent for males.

The average age of the adolescent population for RMHP, DHMC, and the PCPP was 15 years of age while the average age of adolescents in the FFS program was 16. The proportion of females in RMHP and the FFS program was about 4 percentage points higher (53.5 percent and 53.2 percent, respectively) than it was for the PCPP (49.2 percent). RMHP had the highest percentage of females (53.5 percent). The percentage of DHMC females (51.7 percent) was higher than the PCPP's rate, but lower than the percentage in RMHP and the FFS program. It is important to note that the larger proportion of FFS adolescents affects the overall rates because it accounts for 81.8 percent of the total eligible population.

Table 4-1—Age and Gender Distribution by Colorado Medicaid Health Plan

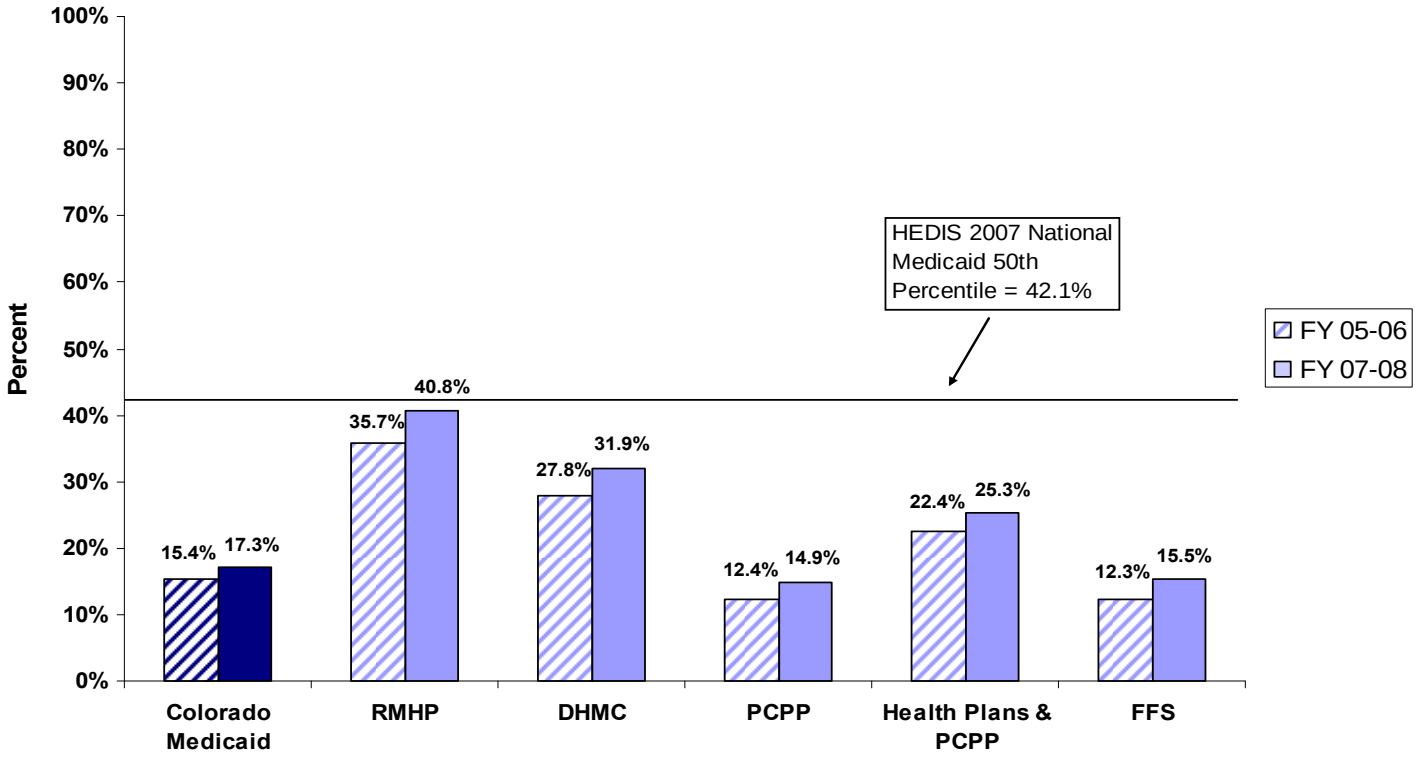
Demographic	Colorado Medicaid		RMHP		DHMC		PCPP		FFS	
Measure Element	N	%	N	%	N	%	N	%	N	%
Gender										
Females	21,107	52.8%	627	53.5%	1,384	51.7%	1,684	49.2%	17,412	53.2%
Males	18,903	47.2%	546	46.5%	1,291	48.3%	1,740	50.8%	15,326	46.8%
Total Population	**40,010**	**100.0%**	**1,173**	**100.0%**	**2,675**	**100.0%**	**3,424**	**100.0%**	**32,738**	**100.0%**
Mean age of female adolescents	16		16		16		15		16	
Mean age of male adolescents	15		15		15		15		15	
Total Population	**16**		**15**		**15**		**15**		**16**	

Key Findings

Measure 1: Percentage of Adolescents With Well-Care Visits in 2007

Figure 4-1 illustrates program and measurement-year comparisons for the NCQA HEDIS 2008 *Adolescent Well-Care Visits* measure for all health plans, including and excluding FFS.

Figure 4-1—Percentage of Adolescents With Well-Care Visits by Measurement Year



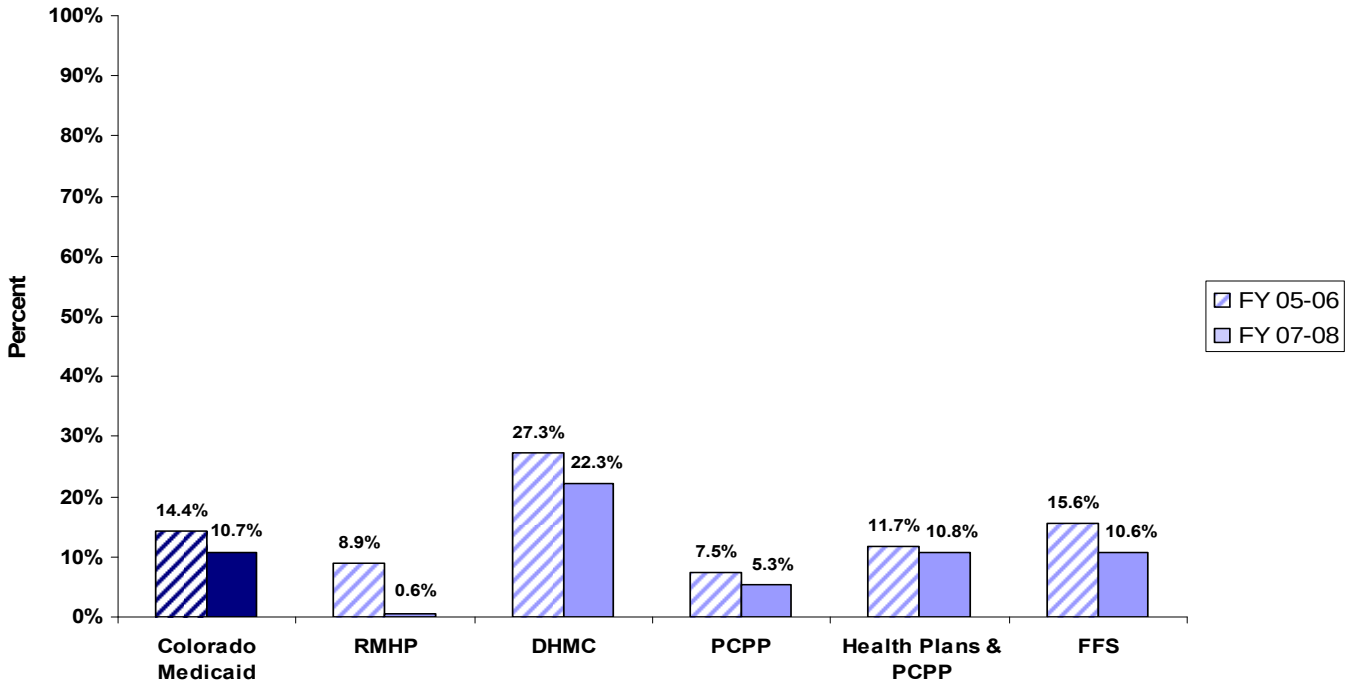
Note: Due to the large population sizes, all reported differences between FY 05–06 and FY 07–08 were statistically significant.

The overall Colorado Medicaid rate increased 1.9 percentage points from 15.4 percent in FY 05–06 to 17.3 percent in FY 07–08. All health plan rates increased from their FY 05–06 baseline results, with differences ranging from 2.5 percentage points (PCPP) to 5.1 percentage points (RMHP). This finding suggests that efforts by the health plans to increase adolescent well-care visits were somewhat successful. The overall Colorado Medicaid rate (17.3 percent) was significantly below the NCQA HEDIS 2007 national Medicaid 50th percentile of 42.1 percent. Despite the increase in rates from the FY 05–06 study across all health plans, this measure continues to be an opportunity for improvement. Although performance for the individual health plans varied, none of the health plans exceeded the 2007 NCQA national HEDIS Medicaid 50th percentile (42.1 percent), and only one (RMHP) exceeded the 2007 NCQA national HEDIS 25th percentile (35.3 percent). DHMC's rate (31.9 percent) was the second highest among the health plans and more than double the rate for the PCPP (14.9 percent) and FFS (15.5 percent). The combined rate for all health plans, excluding FFS, was 25.3 percent, which was 8 percentage points higher than the Colorado Medicaid rate (17.3 percent), illustrating the negative impact of the FFS rate on the overall Colorado Medicaid rate.

Measure 2: Percentage of Adolescents Who Did Not Have Any Services During 2007

The results from Measure 2 highlight underutilization and/or incomplete or missing encounter data among adolescents. High rates for this measure indicate that adolescents either did not receive any services during the review period or that the services were not reported. Both situations, however, represent an opportunity for the health plans to improve the rate of adolescents who receive well-care visits. Conversely, a decrease in this measure indicates that more adolescents are accessing health care or having their encounters reported. Figure 4-2 illustrates program and measurement-year comparisons for the percentage of *Adolescents Who Did Not Have Any Services* for all health plans, including and excluding FFS.

Figure 4-2—Percentage of Adolescents With No Claims or Encounters by Measurement Year



Note: The FY 05–06 rates for the FFS and PCPP populations were recalculated based on methodology refinements in the current study. Additionally, due to large population sizes, all reported differences between FY 05–06 and FY 07–08 were statistically significant except the Health Plans & PCPP.

The overall Colorado Medicaid rate decreased 3.7 percentage points from 14.4 percent in FY 05–06 to 10.7 percent in FY 07–08. This finding indicated that more services were performed or reported to the Colorado Medicaid program. Despite some variation across individual health plans, all health plan rates decreased from their FY 05–06 baseline results. Differences in the FY 07–08 rates ranged from 2.2 percentage points (PCPP) to 8.3 percentage points (RMHP), suggesting that more adolescents were either accessing health care or having their encounters reported. The combined rate for all health plans, excluding FFS, was 10.8 percent, which was slightly less than the FY 05–06 rate of 11.7 percent.

All health plans should investigate the root cause for the noted decline in rates during the remeasurement year to understand the nature of this improvement—especially RMHP due to its

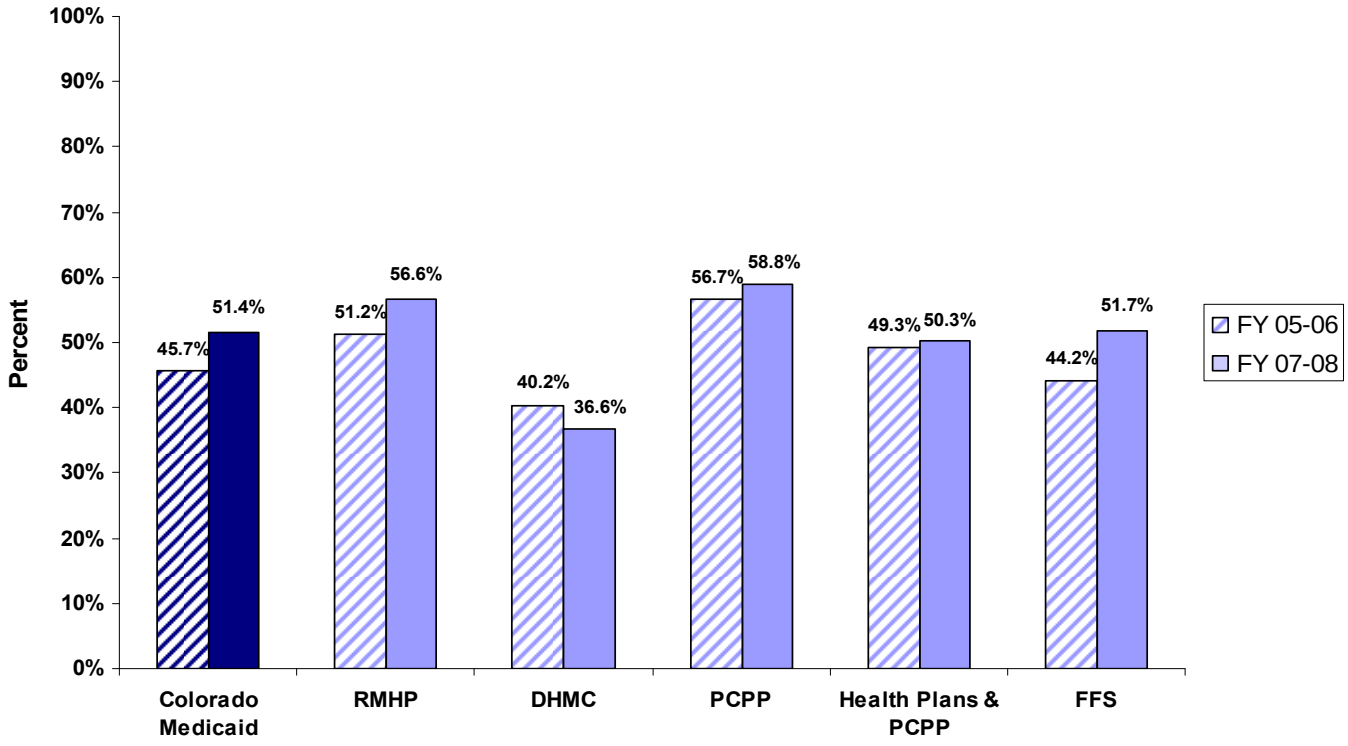
substantive decrease. A comparison of adolescents' utilization between measurement years would allow the health plans and programs to identify areas of opportunity for a well-care visit. More members accessing health care may indicate that more members are receiving adolescent well-care visits. However, this conclusion can only be made after analyzing if adolescents had a well-care visit or other services such as pharmacy, lab, ER, or inpatient. The remaining measures identify whether the increase in adolescent members accessing health care services is related to the increase in well-care visits or other services such as pharmacy, laboratory, inpatient, etc.

Measure 3: Percentage of Adolescents With at Least One Physician Office Visit But No Well-Care Visit During 2007

Measure 3 evaluates adolescent members who received a physician office visit during the measurement period, but not a well-care visit. In most cases, these services represented sick or non-preventive visits. High rates for this measure indicate the best opportunity for improving adolescent well-care visits (Measure 1) since an adolescent is already being evaluated in the physician's office.

Figure 4-3 presents program and measurement-year comparisons for *Adolescents Who Had a Physician Office Visit But No Well-Care Visit* for all health plans, including and excluding FFS.

Figure 4-3—Percentage of Adolescents With No Well-Care Visits But With a Physician Office Visit by Measurement Year



Note: The FY 05–06 rates for the FFS and PCPP populations were recalculated based on methodology refinements in the current study. Additionally, due to large population sizes, all reported differences between FY 05–06 and FY 07–08 were statistically significant except the PCPP and Health Plans & PCPP.

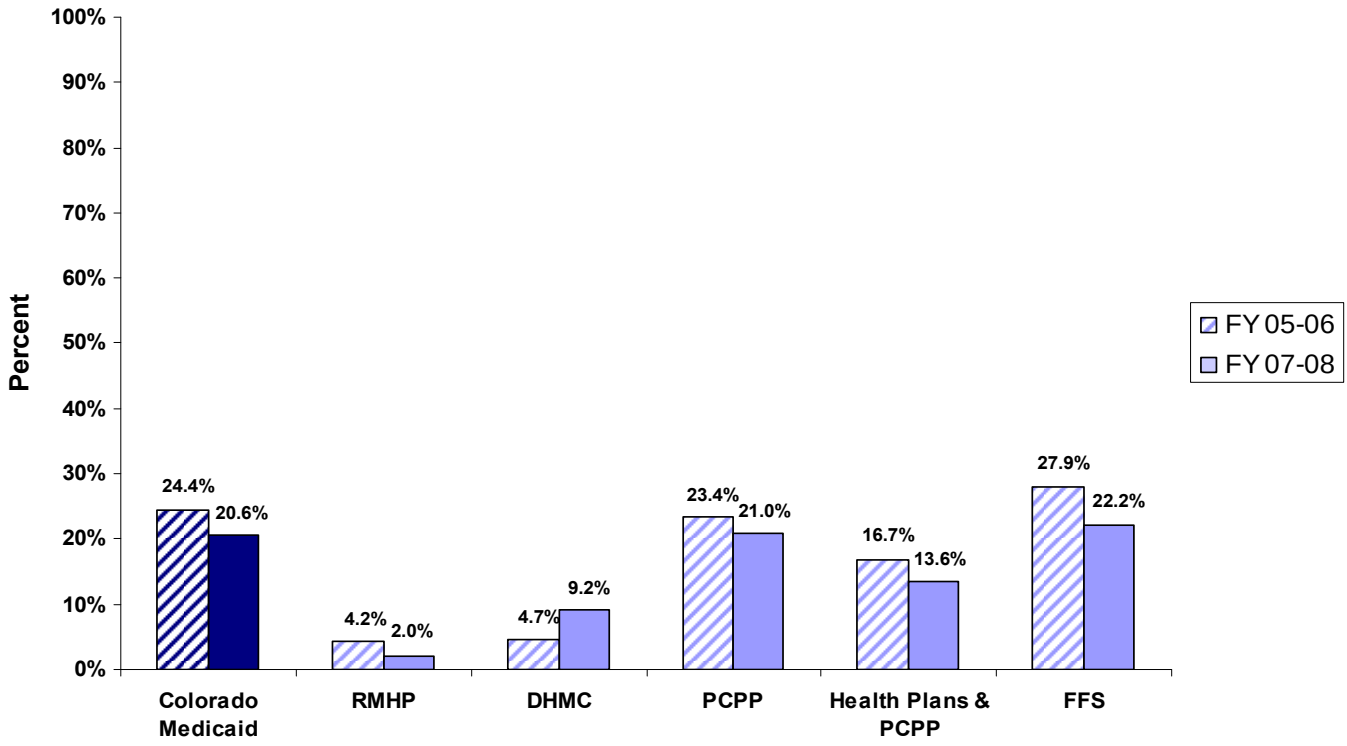
The Colorado Medicaid reported rate increased 5.7 percentage points, from 45.7 percent in FY 05–06 to 51.4 percent in FY 07–08. Similarly, the FFS program, RMHP, and the PCPP had increases in their rates (7.5, 5.4, and 2.1 percentage points, respectively) between FY 05–06 and FY 07–08, while DHMC exhibited a decrease (3.6 percentage points). The PCPP had the highest rate (58.8 percent) in FY 07–08, with nearly 6 out of 10 adolescents being seen in physician offices yet not having a well-care visit. The combined rate for all health plans, excluding FFS, was 50.3 percent, which was slightly more than the FY 05–06 rate of 49.3 percent.

The overall rate indicates that the adolescent well-care visit rate could have improved from 17.3 percent (Figure 4-1) to 68.7 percent if providers had performed a well-care visit when an adolescent accessed care in the physician's office. While high rates for this measure indicate opportunities for improvement, lower rates may indicate that access to care was an issue or that adolescents were less inclined to see a provider for a well-care visit, accessing care only when they were sick.

Measure 4: Percentage of Adolescents With Services But No Well-Care Visits or Physician Office Visits During 2007

Measure 4 assessed the proportion of adolescents who received health care services other than a physician office visit or well-care visit. These members would have had either pharmacy, laboratory, other outpatient, or inpatient services. Figure 4-4 presents program and measurement-year comparisons for *Adolescents With Services But No Well-Care Visits or Physician Office Visits* for all health plans, including and excluding FFS.

Figure 4-4—Percentage of Adolescents With Services But No Well-Care Visits or Physician Office Visits by Measurement Year



Note: The FY 05–06 rates for the FFS and PCPP populations were recalculated based on methodology refinements in the current study. Additionally, due to large population sizes, all reported differences between FY 05–06 and FY 07–08 were statistically significant.

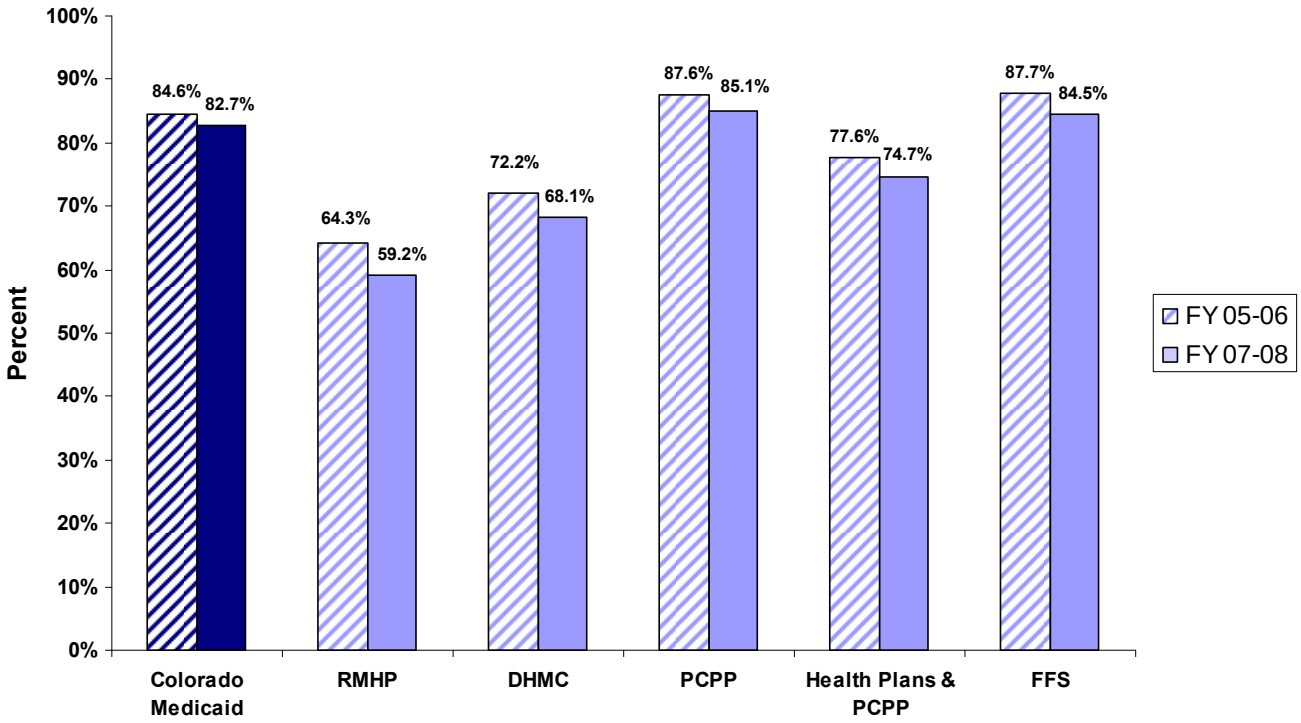
Overall, 20.6 percent of the adolescents enrolled in Colorado's Medicaid program received health care services other than a well-care or physician office visit. This represented a decrease of 3.8 percentage points, from 24.4 percent in FY 05–06 to 20.6 percent in FY 07–08. The FFS program, the PCPP, and RMHP exhibited decreases (5.7, 2.4, and 2.2 percentage points, respectively) in their rates from FY 05–06 to FY 07–08 while DHMC showed an increase (4.5 percentage points). Among individual health plans, FFS had the highest rate (22.2 percent) followed by the PCPP (21 percent) and DHMC (9.2 percent). RMHP's rate (2.0 percent) was considerably lower than the other rates.

RMHP's Measure 1 rate of 40.8 percent may explain why its adolescents may be accessing other services (i.e., pharmacy, lab, ER, and inpatient) less frequently than the other health plans and programs. If adolescents receive an annual well-care visit, illnesses may be prevented, reducing unnecessary ER visits. A more in-depth review of the adolescents meeting the criteria for this measure would reveal if an opportunity exists for member education about the benefits of well-care visits. The combined rate for all health plans and the PCPP, excluding FFS, was 13.6 percent, which was 3.1 percentage points less than the FY 05–06 rate of 16.7 percent.

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

Measure 5 represents an inverse of Measure 1 and highlights the overall opportunity for improvement in adolescent well-care visits. It is calculated by summing the indicators for Measures 2, 3, and 4. The total potential and missed opportunities measure 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 who did have claims for services provided (Measure 4). Figure 4-5 presents program and measurement-year comparisons for *Potential and Missed Opportunities* for all health plans, including and excluding FFS. In general, low rates are better for this measure.

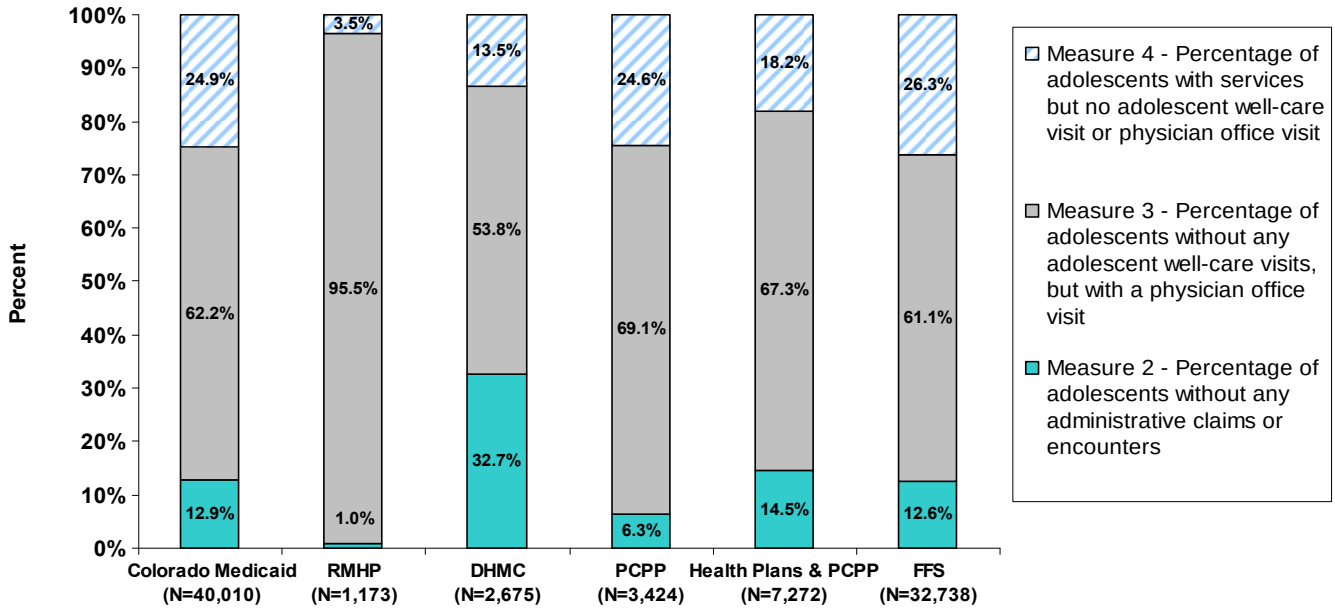
Figure 4-5—Percentage of Potential and Missed Opportunities by Measurement Year



Overall, the Colorado Medicaid rate decreased 1.9 percentage points, from 84.6 percent in FY 05–06 to 82.7 percent in FY 07–08. This decrease was equal to the increase reported for Measure 1. As expected, all health plan and program rates decreased from their FY 05–06 baseline results, ranging from decreases of 2.5 percentage points (PCPP) to 5.1 percentage points (RMHP). The decreases indicate that more adolescent well-care visits were being performed. The combined rate for all health plans, excluding FFS, was 74.7 percent, which was 2.9 percentage points less than the FY 05–06 rate of 77.6 percent.

To further understand the impact of the individual measures, Figure 4-6 displays the percentage that Measures 2, 3, and 4 each contributed to Measure 5. The percentages displayed on each bar represent the percentage that each measure contributed to the total potential and missed opportunities.

Figure 4-6—Percentage of Total Potential and Missed Opportunities FY 07–08



In total, more than 6 out of 10 visits (62.2 percent) represented a missed opportunity for an adolescent well-care visit (Measure 3). Individual health plan and program rates for missed opportunities related to Measure 3 ranged from 95.5 percent (RMHP) to 53.8 percent (DHMC). With Measure 3 accounting for the largest percentages of missed opportunities, there is a substantial opportunity to target specific providers who did not perform a well-care visit while an adolescent was in their office. Provider profiling reports displaying adolescents who had a physician office visit but no well-care visit could be used to target provider-level interventions to improve adolescent well-care visit rates.

DHMC had the largest proportion (32.7 percent) of potential and missed opportunities for adolescents not accessing health care (Measure 2), which was more than double the rate of the other health plans and programs. This result could indicate potential underutilization. An appropriate intervention to increase adolescent well-care visit rates for DHMC could be member education stressing the importance of regular preventive care services.