FISCAL YEAR 2008-2009 COLORADO PIP VALIDATION REPORT

Member Satisfaction with Access to Pharmacy Services within Denver Health

for

Denver Health Medicaid Choice

May 2009
for
Validation Year 4

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

HSAG HEALTH SERVICES ADVISORY GROUP

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for Denver Health Medicaid Choice

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The Balanced Budget Act of 1997 (BBA), Public Law 105-33, requires that states conduct an annual evaluation of their managed care organizations (MCOs) and prepaid inpatient health plans (PIHPs) to determine the MCOs' and PIHPs' compliance with federal regulations and quality improvement standards. According to the BBA, the quality of health care delivered to Medicaid members in MCOs and PIHPs must be tracked, analyzed, and reported annually. The Colorado Department of Health Care Policy & Financing (the Department) has contractual requirements with each MCO and behavioral health organization (BHO) to conduct and submit performance improvement projects (PIPs) annually.

As one of the mandatory external quality review activities under the BBA, the Department is required to validate the PIPs. To meet this validation requirement, the Department contracted with Health Services Advisory Group, Inc. (HSAG), as an external quality review organization. The primary objective of the PIP validation is to determine compliance with requirements set forth in the Code of Federal Regulations (CFR) at 42 CFR 438.240(b)(1), including:

◆ Measurement of performance using objective quality indicators.
◆ Implementation of system interventions to achieve improvement in quality.
◆ Evaluation of the effectiveness of the interventions.
◆ Planning and initiation of activities for increasing or sustaining improvement.

In its PIP evaluation and validation, HSAG used the Centers for Medicare & Medicaid Services (CMS) publication, *Validating Performance Improvement Projects: A Protocol for Use in Conducting Medicaid External Quality Review Activities*, final protocol, Version 1.0, May 1, 2002. In this report, HSAG refers to "steps" when discussing the PIP validation process and CMS Protocols for validating PIPs. HSAG refers to "activities" when discussing conducting a PIP and CMS Protocols for conducting PIPs based on the CMS publication, *Conducting Performance Improvement Projects: A Protocol for Use in Conducting Medicaid External Quality Review Activities*, final protocol, Version 1.0, May 1, 2002.

Overview

Denver Health Medicaid Choice (**DHMC**) continued its nonclinical PIP, *Member Satisfaction with Access to Pharmacy Services within Denver Health,* for fiscal year (FY) 08–09. This topic addressed CMS' requirements related to quality of care outcomes—specifically, improving member satisfaction. The purpose of the study was to evaluate Medicaid member reports of satisfaction and timeliness of pharmacy services received from **DHMC** and from other contracted pharmacies. The goal of the study was to improve member satisfaction and increase the use of internal pharmacies at **DHMC**.

DHMC stated its study question as follows: "Will planning enhancements for pharmacy services and benefits improve member satisfaction and increase the use of pharmacy services at Denver Health for members 18 years of age and older?"

DHMC defined its nine study indicators as follows:

⬩ Study Indicator 1: "The percentage of prescriptions filled: a) at Denver Health, b) outside of Denver Health at a contracted pharmacy."

⬩ Study Indicator 2: "Percentage of members completing the annual CAHPS Adult Medicaid Member Satisfaction survey who responded yes to obtaining prescriptions at Denver Health."

⬩ Study Indicator 3: "Percentage of members completing the annual CAHPS Adult Medicaid Member Satisfaction survey who responded yes to obtaining prescriptions at Denver Health and who stated it was 'not a problem'."

⬩ Study Indicator 4: "Percentage of members completing the annual CAHPS Adult Medicaid Member Satisfaction survey who responded yes to obtaining prescriptions at a contracted pharmacy outside of Denver Health."

⬩ Study Indicator 5: "Percentage of members completing the annual CAHPS Adult Medicaid Member Satisfaction survey who responded yes to obtaining prescriptions at a contracted pharmacy outside of Denver Health and who stated it was 'not a problem'."

⬩ Study Indicator 6: "Percentage of members completing the annual CAHPS Adult Medicaid Member Satisfaction survey who responded yes to filling a new prescription and receiving it within 45 minutes at Denver Health."

⬩ Study Indicator 7: "Percentage of members completing the annual CAHPS Adult Medicaid Member Satisfaction survey who responded yes to refilling a prescription and to receiving it within 24 to 48 hours at Denver Health."

⬩ Study Indicator 8: "The annual average member utilization rate for pharmacy by number of prescriptions filled internally and externally for members who utilize: a) only Denver Health pharmacies, b) only pharmacies outside of Denver Health, c) both internal and external pharmacies."

⬩ Study Indicator 9: "The annual average amount paid for a prescription based on amounts paid for number of prescriptions filled internally and externally for members who utilize: a) only Denver Health pharmacies, b) only pharmacies outside of Denver Health, c) both internal and external pharmacies."

The study population included adult **DHMC** members between the ages of 18 and 99+ who were enrolled in the health plan. For Study Indicators 2 through 7, the members must have been enrolled from July 1 through December 31 of the measurement year and meet the eligibility criteria for Medicaid Choice members receiving health care services during the measurement period.

Conclusions

For the FY 08–09 validation cycle, HSAG validated Steps I through X. The final validation finding for **DHMC**'s PIP showed an overall score of 96 percent, a critical element score of 100 percent, and a *Met* validation status. Going forward, HSAG recommends that the PIP be retired from submission for validation.

Table 1-1 displays the MCO's performance across all steps. The second column represents the total number of evaluation elements *Met* by the MCO compared to the total number of applicable evaluation elements for each step reviewed, including critical elements. The third column represents the total number of critical elements *Met* by the MCO for each step reviewed compared to the total number of applicable critical evaluation elements.

Table 1-1—Performance Across all Steps		
Review Steps	**Total Number of Evaluation Elements *Met*/Total Number Applicable Evaluation Elements**	**Total Number of Critical Elements *Met*/Total Number of Applicable Critical Evaluation Elements**
I. Review the Selected Study Topic(s)	6/6	1/1
II. Review the Study Question(s)	2/2	2/2
III. Review the Selected Study Indicator(s)	6/6	3/3
IV. Review the Identified Study Population	3/3	2/2
V. Review Sampling Methods	6/6	1/1
VI. Review Data Collection Procedures	6/6	Critical Element Not Applicable
VII. Assess Improvement Strategies	3/3	1/1
VIII. Review Data Analysis and the Interpretation of Study Results	9/9	2/2
IX. Assess for Real Improvement	2/4	No Critical Elements
X. Assess for Sustained Improvement	1/1	No Critical Elements

Overall Validity and Reliability of the Findings

Based on the validation of this PIP, HSAG's assessment determined high confidence in the results.

Strengths/PIP Progression

DHMC demonstrated strength in its study design and study implementation by receiving *Met* scores for all applicable evaluation elements in Steps I through VIII. **DHMC** developed its interventions based on causes/barriers, and the interventions were system changes that would have a long-term effect on the results. Although not all nine of the study indicators demonstrated improvement, overall, the PIP demonstrated sustained improvement and had a positive impact on member satisfaction. The PIP also showed an increase in the number of prescriptions filled internally at **DHMC** pharmacies.

Opportunities for Improvement and Recommendations

HSAG determines opportunities for improvement based on those evaluation elements that receive a *Partially Met* or a *Not Met* score, indicating that those elements are not in full compliance with CMS Protocols. The PIP also includes *Points of Clarification* as opportunities for improvement. For a detailed explanation of opportunities for improvement, see the PIP Validation Tool section of this report under the corresponding step.

Step III: Review the Selected Study Indicator(s)

DHMC should ensure that the question number in the study indicator matches the question number on the CAHPS survey.

Step IV: Review the Identified Study Population

The study population definition should include the exclusion criteria discussed on pages 23 and 24 of the PIP Summary Form.

Step VI: Review Data Collection Procedures

The cover letter that was sent out with the CAHPS survey should be provided with the PIP submission.

Step VIII: Review Data Analysis and the Interpretation of Study Results

The PIP should include *p* values for comparisons of all measurement periods, starting with Baseline to the first remeasurement and continuing through the final remeasurement period.

Step IX: Assess for Real Improvement

To receive a *Met* score for achieving real improvement, all study indicators must demonstrate improvement. Going forward with new PIPs, HSAG recommends that the **DHMC** focus on 1 or 2 study indicators rather than several indicators. It is very difficult to achieve improvement across all indicators when the study has several complex study indicators.

Comparison of Years I through 4

Each year, HSAG completes a review and evaluation of the entire PIP. The following table illustrates the PIP's progression, describing the activities completed for each PIP submission and the evaluation scores.

Table 1-2—Year-to-Year Comparison of Results				
Categories Compared	Year 1 FY 05-06	Year 2 FY 06-07	Year 3 FY 07-08	Year 4 FY 08-09
Steps Evaluated	III	VIII	IX	X
Percentage Score of Evaluation Elements *Met*	92	100	95	96
Percentage Score of Critical Elements *Met*	80	100	100	100
Validation Status	*Partially Met*	*Met*	*Met*	*Met*

For the FY 05–06 validation cycle, **DHMC** completed Activities I through III, receiving scores of 92 percent for evaluation elements *Met*, 80 percent for critical elements *Met*, and a *Partially Met* validation status. HSAG identified an opportunity for improvement in Step II with regard to correcting timelines within the study indicators.

For the FY 06–07 validation cycle, **DHMC** progressed through Activity VIII, receiving scores of 100 percent for evaluation elements and critical elements *Met*, and an overall validation status of *Met*. During this validation cycle, **DHMC** reported Baseline results. **DHMC** addressed the problem with the timelines in the study indicators identified during the previous year, and HSAG did not identify any opportunities for improvement during this validation cycle.

For the FY 07–08 validation cycle, **DHMC** progressed through Activity IX, reporting Baseline and Remeasurement 1 results. The PIP received a score of 95 percent for evaluation elements *Met*, 100 percent for critical elements *Met*, and a *Met* validation status. The PIP had several study indicators, which makes it difficult to achieve real improvement across all the indicators. Some of **DHMC**'s indicators demonstrated improvement, while others declined. HSAG recommended that **DHMC** perform another causal/barrier analysis to determine if there were new barriers preventing improvement across all indicators and revise or implement new interventions that would assist **DHMC** in achieving its desired outcomes.

For the FY 08–09 validation cycle, **DHMC** completed all 10 activities, reporting Baseline, Remeasurement 1, and Remeasurement 2 data. The PIP received a score of 96 percent for evaluation elements *Met*, 100 percent for critical elements *Met*, and a *Met* validation status. The PIP continued to have some study indicators that demonstrated improvement, while others declined; however, the PIP achieved sustained improvement overall.

Analysis of Results

For Remeasurement 2 (January 1, 2007, through December 31, 2007), the study methodology resembled that of Baseline and Remeasurement 1. **DHMC** included the entire eligible population in the study for study indicators that used administrative data (i.e., Study Indicators 1, 8, and 9). To measure study indicators related to member satisfaction (i.e., Study Indicators 2 through 7), **DHMC** generated a sample of 1,350 members from the eligible population and distributed the CAHPS survey to the members. The survey contained additional satisfaction questions specific to pharmacy services. Table 1-3 displays results for the study indicators for Baseline, Remeasurement 1, and Remeasurement 2.

Table 1-3—Summary of Results			
Indicator	**Baseline Measurement**	**Remeasurement 1**	**Remeasurement 2**
	Results	**Results**	**Results**
Study Indicator 1a: "Percentage of prescriptions filled at Denver Health."	46.06%	47.61%	57.63%
Study Indicator 1b: "Percentage of prescriptions filled outside of Denver Health."	53.94%	52.39%	42.37%
Study Indicator 2: "Percentage of members completing the CAHPS survey who responded yes to obtaining prescriptions at Denver Health."	58.29%	57.10%	58.46%
Study Indicator 3: "Percentage of members completing the CAHPS survey who responded yes to obtaining prescriptions at Denver Health and who stated that it was 'not a problem'."	62.33%	74.10%	76.16%
Study Indicator 4: "Percentage of members completing the CAHPS survey who responded yes to obtaining prescriptions at a contracted pharmacy outside of Denver Health."	54.62%	58.50%	58.46%
Study Indicator 5: "Percentage of members completing the CAHPS survey who responded yes to obtaining prescriptions at a contracted pharmacy outside of Denver Health and who stated that it was 'not a problem'."	77.36%	86.00%	84.21%
Study Indicator 6:"Percentage of members completing the CAHPS survey who responded yes to filling a new prescription and receiving it within 45 minutes at Denver Health."	54.50%	69.03%	64.06%
Study Indicator 7:"Percentage of members completing the CAHPS survey who responded yes to refilling a prescription and receiving it within 24 to 48 hours at Denver Health."	89.35%	92.00%	94.78%

Table 1-3—Summary of Results			
Indicator	**Baseline Measurement**	**Remeasurement 1**	**Remeasurement 2**
	Results	**Results**	**Results**
Study Indicator 8a: "Annual average member utilization rate for pharmacy for members who utilized only Denver Health pharmacies."	6.91	3.06	3.71
Study Indicator 8b: "Annual average member utilization rate for pharmacy for members who utilized only pharmacies outside of Denver Health."	6.86	2.23	2.49
Study Indicator 8c: "Annual average member utilization rate for pharmacy for members who utilized both internal and external pharmacies."	11.63	7.92	7.55
Study Indicator 9a: "Annual average amount paid for a prescription for members who utilized only Denver Health pharmacies."	$165.05	$71.68	$103.00
Study Indicator 9b: "Annual average amount paid for a prescription for members who utilized only pharmacies outside of Denver Health."	$329.04	$109.53	$124.46
Study Indicator 9c: "Annual average amount paid for a prescription for members who utilized both internal and external pharmacies."	$392.97	$279.82	$275.45

For Remeasurement 2, **DHMC** reported goals for Study Indicator 1 only. The goal for the percentage of prescriptions filled at Denver Health (Study Indicator 1a) was 55 percent, and the goal for the percentage of prescriptions filled outside of Denver Health (Study Indicator 1b) was 45 percent.

During Remeasurement 2, just over 57 percent of prescriptions were filled internally at Denver Health (Study Indicator 1a). This performance exceeded **DHMC**'s goal of 55 percent. In addition, the Remeasurement 2 rate demonstrated a significant increase of 10.02 percentage points from Remeasurement 1 in the proportion of prescriptions filled at Denver Health (Study Indicator 1a). This was also a significant improvement from the Baseline result (46.06 percent). Since an increase in Study Indicator 1a also corresponded to a decline in Study Indicator 1b, **DHMC** had significantly more prescriptions being filled internally since 2006 (Baseline).

Although there were no statistically significant increases in the proportion of CAHPS survey respondents obtaining prescriptions at Denver Health (Study Indicator 2) across all measurement periods, **DHMC** reported an increase in survey respondents who reported that obtaining prescriptions at Denver Health was "not a problem" (Study Indicator 3) for Remeasurement 2. During this period, 76.16 percent of surveyed members answered "not a problem," compared to 74.10 percent for Remeasurement 1 and 62.33 percent for Baseline. Nonetheless, the increase was not statistically significant.

There was a slight decline in the number of CAHPS survey respondents who reported obtaining prescriptions at a contracted pharmacy outside of Denver Health (Study Indicator 4) between Remeasurement 1 (58.5 percent) and Remeasurement 2 (58.46 percent). There was also a decline of 1.79 percentage points in the number of survey respondents who indicated that obtaining prescriptions at a contracted pharmacy outside of Denver Health was "not a problem" (Study Indicator 5) for Remeasurement 1 (86 percent). Neither of these declines was statistically significant.

DHMC reported that members obtaining prescriptions at an external pharmacy reported higher satisfaction (84.21 percent answered "not a problem") when compared to those obtaining prescriptions at Denver Health (76.16 percent). However, HSAG evaluated these results and determined that the difference between these two groups was not statistically significant (Chi-square=3.092, *p* value=0.0786).

DHMC reported a decline of nearly 5 percentage points in Study Indicator 6 from Remeasurement 1 (69.03 percent), although the decline was not statistically significant. The rate reported for Remeasurement 2 was almost 10 percentage points above the Baseline result. Since this indicator showed a statistically significant improvement for Remeasurement 1 from the Baseline rate of 54.50 percent, sustained improvement through the introduction of interventions was achieved for this indicator.

Study Indicator 7 demonstrated continued improvement for Remeasurement 2 (94.78 percent), with an increase of 2.78 percentage points from the Remeasurement 1 rate of 92 percent. Nonetheless, no statistical significance in improvement was observed across all measurement periods. Compared to the Baseline rate, Study Indicator 7 exhibited an increase of 5.43 percentage points.

Comparing the results from Remeasurement 2 to Remeasurement 1, **DHMC** reported a significant increase in the average member utilization rate for members using Denver Health pharmacies only (Study Indicator 8a: from 3.06 to 3.71), a significant increase for members using external pharmacies only (Study Indicator 8b: from 2.23 to 2.49), but an insignificant decline for members using both internal and external pharmacies (Study Indicator 8c: from 7.92 to 7.55). **DHMC** indicated that this was evidence of increased use of internal pharmacies.

Like the results for Study Indicators 8a–8c, **DHMC** reported a significant increase between Remeasurement 1 and Remeasurement 2 in the average prescription amount paid by members using Denver Health pharmacies only (Study Indicator 9a: from $71.68 to $103) and a significant increase in the amount paid by members using pharmacies outside of Denver Health only (Study Indicator 9b: from $109.53 to $124.46), but an insignificant decline in the amount paid by members using both external and internal pharmacies (Study Indicator 9c: from $279.82 to $275.45).

DHMC reported that the increase in prescriptions filled internally (Study Indicator 1a) was a result of the 2007 interventions. Consequently, **DHMC** attributed the increase in members filling prescriptions internally to the increase in the average member utilization rate (Study Indicator 8a) and amount paid for prescriptions (Study Indicator 9a). Based on CAHPS survey results, **DHMC** reported a significant increase in member satisfaction for filling new prescriptions at internal pharmacies within 45 minutes. No significant decline in satisfaction was observed for members refilling a prescription at **DHMC**. The health plan attributed these favorable results to the interventions that were implemented in clinic pharmacies.

PIP Scores

For this PIP, HSAG reviewed Steps I through X. Table 1-4 and Table 1-5 show **DHMC** scores based on HSAG's PIP evaluation of *Member Satisfaction with Access to Pharmacy Services within Denver Health*. Evaluators reviewed and scored each step according to HSAG's validation methodology.

	Table 1-4—Performance Improvement Project Scores for *Member Satisfaction with Access to Pharmacy Services within Denver Health* for **Denver Health Medicaid Choice**									
Review Step	**Total Possible Evaluation Elements** (Including Critical Elements)	**Total Met**	**Total Partially Met**	**Total Not Met**	**Total NA**	**Total Possible Critical Elements**	**Total Critical Elements Met**	**Total Critical Elements Partially Met**	**Total Critical Elements Not Met**	**Total Critical Elements NA**
I. Review the Selected Study Topic(s)	6	6	0	0	0	1	1	0	0	0
II. Review the Study Question(s)	2	2	0	0	0	2	2	0	0	0
III. Review the Selected Study Indicator(s)	7	6	0	0	1	3	3	0	0	0
IV. Review the Identified Study Population	3	3	0	0	0	2	2	0	0	0
V. Review Sampling Methods	6	6	0	0	0	1	1	0	0	0
VI. Review Data Collection Procedures	11	6	0	0	5	1	0	0	0	1
VII. Assess Improvement Strategies	4	3	0	0	1	1	1	0	0	0
VIII. Review Data Analysis and the Interpretation of Study Results	9	9	0	0	0	2	2	0	0	0
IX. Assess for Real Improvement	4	2	2	0	0	No Critical Elements				
X. Assess for Sustained Improvement	1	1	0	0	0	No Critical Elements				
Totals for All Steps	**53**	**44**	**2**	**0**	**7**	**13**	**12**	**0**	**0**	**1**

Table 1-5—Performance Improvement Project Overall Score for *Member Satisfaction with Access to Pharmacy Services within Denver Health* for **Denver Health Medicaid Choice**	
Percentage Score of Evaluation Elements *Met*	**96%**
Percentage Score of Critical Elements *Met*	**100%**
Validation Status*	***Met***

* The percentage score for all evaluation elements *Met* is calculated by dividing the total *Met* by the sum of all evaluation elements *Met*, *Partially Met*, and *Not Met*.

** The percentage score for critical elements *Met* is calculated by dividing the total critical elements *Met* by the sum of the critical elements *Met*, *Partially Met*, and *Not Met*.

*** *Met* equals confidence/high confidence that the PIP was valid.
Partially Met equals low confidence that the PIP was valid.
Not Met equals reported PIP results that were not valid.

Scoring Methodology

Below is the scoring methodology HSAG uses to evaluate PIPs conducted by the MCO to determine if a PIP is valid and to rate the percentage of compliance with CMS' Protocol for conducting PIPs.

Each PIP step consists of critical and noncritical evaluation elements necessary for successful completion of a valid PIP. Each evaluation element is scored as *Met*, *Partially Met, Not Met*, *Not Applicable,* or *Not Assessed*. In the PIP Validation Tool (Section 3), the column to the left of the evaluation element description indicates if that evaluation element is a critical element. Critical elements are essential to producing a valid and reliable PIP; therefore, each critical element must have a score of *Met*. For example, for Step II of the PIP Validation Tool, if the study question cannot be answered, then the critical element is scored as *Not Met* and the PIP is not valid.

The following is an example of how critical elements are designated in the PIP Validation Tool.

	Evaluation Element	Scoring
C	The written study question is answerable.	☐ *Met* ☐ *Partially Met* ☐ *Not Met* ☐ *NA*

HSAG scores each evaluation element as noted above and creates a table that totals all scores (for critical and noncritical elements). From this table (Table 3-1 in Section 3) HSAG calculates percentage scores and a validation status (Table 3-2 in Section 3). The percentage score for all evaluation elements is calculated by dividing the number of elements (including critical elements) *Met* by the sum of evaluation elements that were *Met, Partially Met*, and *Not Met*. The percentage score for critical elements *Met* is calculated by dividing the critical elements *Met* by the sum of critical elements that were *Met, Partially Met*, and *Not Met*. The validation status score is based on the percentage score and whether or not critical elements were *Met*, *Partially Met*, or *Not Met*. (See the scoring table on page 2-2 for more details.) The scoring methodology also includes the *Not Applicable* designation for those situations in which the evaluation element does not apply to the PIP. For example, in Activity V, if the PIP did not use sampling techniques, HSAG would score the evaluation elements in Activity V as *Not Applicable*. HSAG uses the *Not Assessed* scoring designation when the PIP has not progressed to the remaining steps in the CMS Protocol. HSAG uses a *Point of Clarification* when documentation for an evaluation element includes the basic components to meet requirements for the evaluation element (as described in the narrative of the PIP), but enhanced documentation would demonstrate a stronger understanding of CMS Protocols.

Due to the importance of critical elements, any critical element scored as *Not Met* will invalidate the PIP. Critical elements that are *Partially Met* and noncritical elements that are *Partially Met* or *Not Met* will not invalidate the PIP but will affect the overall percentage score (which indicates the percentage of the PIP's compliance with CMS' Protocol for conducting PIPs).

HSAG will provide technical assistance to help the MCO understand CMS' Protocol and make necessary revisions to the PIP. For future submissions, the MCO will submit a revised PIP Summary Form that includes additional information to address any *Points of Clarification* and any critical and noncritical areas scored as *Partially Met* or *Not Met.*

Met, *Partially Met*, and *Not Met* scores are aggregated to reflect an overall score based on the following criteria:

Met	(1)	All critical elements are *Met*
		and
	(2)	80 to 100 percent of all elements are *Met* across all activities.
Partially Met	(1)	All critical elements are *Met* **and** 60 to 79 percent of all elements are *Met* across all activities
		or
	(2)	One or more critical elements are *Partially Met* and the percentage score for all elements across all activities is 60 percent or more.
Not Met	(1)	All critical elements are *Met* **and** less than 60 percent of all elements are *Met* across all activities
		or
	(2)	One or more critical elements are *Not Met*.
Not Applicable (NA)	*Not Applicable* elements (including critical elements) are removed from all scoring.	
Not Assessed	*Not Assessed* elements (including critical elements) are removed from all scoring.	
Point of Clarification	A *Point of Clarification* is used when documentation for an evaluation element includes the basic components to meet requirements for the evaluation element (as described in the narrative of the PIP), but enhanced documentation would demonstrate a stronger understanding of CMS Protocols.	

HSAG then calculates an overall percentage and validation status score as follows:

Percentage Score of Evaluation Elements *Met**	**%**
Percentage Score of Critical Elements *Met***	**%**
Validation Status***	***<Met/Partially Met/Not Met>***

*   The percentage score for all evaluation elements *Met* is calculated by dividing the total *Met* by the sum of all evaluations elements *Met*, *Partially Met*, and *Not Met*.

**   The percentage score for critical elements *Met* is calculated by dividing the total critical elements *Met* by the sum of the critical elements *Met*, *Partially Met*, and *Not Met*.

***   *Met* equals confidence/high confidence that the PIP was valid.
      Partially Met equals low confidence that the PIP was valid.
      Not Met equals reported PIP results that were not credible.

The scoring methodology is designed to ensure that critical elements are a must-pass step. If at least one critical element is *Not Met*, the overall validation status is *Not Met*. In addition, the methodology addresses the potential situation in which all critical elements are *Met*, but suboptimal performance is observed for noncritical elements. The final outcome would be based on the overall percentage score.

Scoring Methodology Examples

HSAG calculates the score for the MCO as the percentage of elements across all activities that receive a *Met* score. The following examples demonstrate how scoring is applied.

Example 1:

The PIP scores are as follows: *Met*=43, *Partially Met*=1, *Not Met*=1, *NA*=8, and one critical element is *Partially Met*. The MCO receives an overall *Partially Met* validation status, indicating a valid PIP. The percentage score of evaluation elements *Met* for the MCO is calculated as 43/45=95.6 percent. The percentage score of critical elements *Met* is calculated as 12/13=92 percent.

Example 2:

The PIP scores are as follows: *Met*=38, *Partially Met*=11, *Not Met*=4, *NA*=0, and all the critical elements are *Met*. The MCO receives an overall *Partially Met* status, indicating a valid PIP. The percentage score of evaluation elements *Met* for the MCO is calculated as 38/53=71.7 percent. The percentage score of critical elements *Met* is calculated as 13/13=100 percent.

DEMOGRAPHIC INFORMATION		
Health Plan Name:	Denver Health Medicaid Choice	
Study Leader Name:	Mary Pinkney, RN, BS	Title: Director of Quality Improvement
Phone Number:	(720) 956-2356	E-mail Address: Mary.Pinkney@dhha.org
Name of Project/Study:	Member Satisfaction With Access to Pharmacy Services Within Denver Health	
Type of Study:	Nonclinical ☐ Collaborative ☐ HEDIS	
Date of Study:	1/1/2005 to 12/31/2007	
Type of Delivery System:	MCO	Number of Medicaid Members in MCO: Number of Medicaid Members in Study:
Year 4 Validation		Validated through Step: X
Results:	Remeasurement 2	
Initial Submission Date: 11/28/2008 Validation Date: 12/15/2008		
Resubmission Date: 1/28/2009 Validation Date: 1/31/2009		

EVALUATION ELEMENTS	SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation		
I. **Review the Selected Study Topic(s): Topics selected for the study should reflect the Medicaid-enrolled population in terms of demographic characteristics, prevalence of disease, and the potential consequences (risks) of disease. Topics could also address the need for a specific service. The goal of the project should be to improve processes and outcomes of health care. The topic may be specified by the State Medicaid agency or based on input from Medicaid members. The study topic:**		
1. Reflects high-volume or high-risk conditions.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The study topic selected reflected a high-volume service.
2. Is selected following collection and analysis of data. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The study topic was selected following the collection and analysis of data.
3. Addresses a broad spectrum of care and services. The score for this element will be Met or Not Met.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The study topic addressed a broad spectrum of care and services over time.
4. Includes all eligible populations that meet the study criteria. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	All eligible populations that met the study criteria were included in the PIP.
5. Does not exclude members with special health care needs. The score for this element will be Met or Not Met.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	Members with special health care needs were not excluded from the PIP.
C* 6. Has the potential to affect member health, functional status, or satisfaction. The score for this element will be Met or Not Met.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The study topic had the potential to affect member satisfaction and health status.

Results for Step I									
# of Total Evaluation Elements					**# of Critical Elements**				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
6	6	0	0	0	1	1	0	0	0

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

EVALUATION ELEMENTS		SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation			
II.	**Review the Study Question(s): Stating the study question(s) helps maintain the focus of the PIP and sets the framework for data collection, analysis, and interpretation. The study question:**		
C*	1. States the problem to be studied in simple terms. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The study question was stated in simple terms, maintained the focus of the study, and was in the correct format to meet CMS Protocols.
C*	2. Is answerable. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The study question was answerable.

Results for Step II									
# of Total Evaluation Elements					**# of Critical Elements**				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
2	2	0	0	0	2	2	0	0	0

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

EVALUATION ELEMENTS	SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation		
III.	**Review the Selected Study Indicator(s): A study indicator is a quantitative characteristic or variable that reflects a discrete event (e.g., an older adult has not received an influenza vaccination in the last 12 months) or a status (e.g., a member's blood pressure is or is not below a specified level) that is to be measured. The selected indicators should track performance or improvement over time. The indicators should be objective, clearly and unambiguously defined, and based on current clinical knowledge or health services research. The study indicators:**	
C* 1. Are well-defined, objective, and measurable. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The study indicators were well-defined, objective, and measurable. Point of Clarification: It was noted that for some indicators, the survey question listed was not the survey question on the actual survey provided. For example, Study Indicator 4 reported the survey question as 37e, but the survey question was 44e on the 2008 CAHPS survey that was provided. For Study Indicator 5, the PIP reported the survey question as 44g, but the actual survey question was 44f. Future submissions of the PIP should make sure the survey questions reported in the study indicators are the same questions provided in the CAHPS survey. Re-review January 2009: After a review of the resubmitted documentation, the Point of Clarification will remain. The plan should ensure that the question number in the study indicator matches the question number on the CAHPS survey.
2. Are based on current, evidence-based practice guidelines, pertinent peer-reviewed literature, or consensus expert panels.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The study indicators were based on current, evidence-based standards for pharmacy services established at DHMC.

*   "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

EVALUATION ELEMENTS	SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation		
III. **Review the Selected Study Indicator(s): A study indicator is a quantitative characteristic or variable that reflects a discrete event (e.g., an older adult has not received an influenza vaccination in the last 12 months) or a status (e.g., a member's blood pressure is or is not below a specified level) that is to be measured. The selected indicators should track performance or improvement over time. The indicators should be objective, clearly and unambiguously defined, and based on current clinical knowledge or health services research. The study indicators:**		
C* 3. Allow for the study question to be answered. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The study indicators allowed for the study question to be answered.
4. Measure changes (outcomes) in health or functional status, member satisfaction, or valid process alternatives. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The study indicators measured changes in member satisfaction.
C* 5. Have available data that can be collected on each indicator. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	There were data available to be collected on each study indicator.
6. Are nationally recognized measures, such as HEDIS technical specifications, when appropriate. The scoring for this element will be Met or NA.	☐ Met ☐ Partially Met ☐ Not Met ☑ NA	The study indicators were not nationally recognized measures.
7. Includes the basis on which each indicator(s) was adopted, if internally developed.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The basis on which each study indicator was developed was included in the PIP documentation.

Results for Step III									
# of Total Evaluation Elements					**# of Critical Elements**				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
7	6	0	0	1	3	3	0	0	0

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

EVALUATION ELEMENTS	SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation		
IV.	**Review the Identified Study Population: The selected topic should represent the entire eligible Medicaid-enrolled population, with systemwide measurement and improvement efforts to which the study indicators apply. The study population:**	
C* 1. Is accurately and completely defined. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The study population was completely and accurately defined. Point of Clarification: The PIP documented exclusion criteria on pages 23 and 24 of the PIP Summary Form. This exclusion criteria should be included as part of the study population definition. Also, it was noted on page 13 of the PIP Summary Form, Activity IV, the age criteria was reported as 18 to 99. On page 25, Activity VI, the age criteria was reported as 18 to 100. The age criteria should be consistent throughout the PIP documentation. Re-review January 2009: After a review of the resubmitted PIP documentation, the Point of Clarification will remain. The exclusion criteria referenced in the PIP should be included in the study population definition.
2. Includes requirements for the length of a member's enrollment in the health plan.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The required length of member enrollment was outlined in the study population definition.
C* 3. Captures all members to whom the study question applies. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The study population captured all members to whom the study question applied.

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

EVALUATION ELEMENTS	SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation		

Results for Step IV									
# of Total Evaluation Elements					**# of Critical Elements**				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
3	3	0	0	0	2	2	0	0	0

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

EVALUATION ELEMENTS	SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation		
V. **Review Sampling Methods: (This step is scored only if sampling is used.) If sampling is used to select members of the study, proper sampling techniques are necessary to provide valid and reliable information on the quality of care provided. The true prevalence or incidence rate for the event in the population may not be known the first time a topic is studied. Sampling methods:**		
1. Consider and specify the true or estimated frequency of occurrence.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The true or estimated frequency of occurrence was considered in the sampling equation.
2. Identify the sample size.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	For Indicators 1, 8, and 9 no sampling was used. For Indicators 2 through 7, the sample size was reported as 1,350.
3. Specify the confidence level.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The confidence level was reported as 95 percent.
4. Specify the acceptable margin of error.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The acceptable margin of error was reported as 2.7 percent.
C* 5. Ensure a representative sample of the eligible population.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The sampling techniques used for Indicators 2 through 7 ensured a representative sample of the eligible population.
6. Are in accordance with generally accepted principles of research design and statistical analysis.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The sampling techniques used were in accordance with generally accepted principles of research design and statistical analysis.

Results for Step V

# of Total Evaluation Elements					**# of Critical Elements**				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
6	6	0	0	0	1	1	0	0	0

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

	EVALUATION ELEMENTS	SCORING	COMMENTS
	Performance Improvement Project/Health Care Study Evaluation		
VI.	**Review Data Collection Procedures: Data collection must ensure that the data collected on the study indicators are valid and reliable. Validity is an indication of the accuracy of the information obtained. Reliability is an indication of the repeatability or reproducibility of a measurement. Data collection procedures include:**		
	1. The identification of data elements to be collected. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The data elements collected were identified in the PIP documentation.
	2. The identification of specified sources of data NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The sources for data collection were reported as pharmacy data and CAHPS survey results.
	3. A defined and systematic process for collecting Baseline and remeasurement data. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	A defined and systematic process for collecting Baseline and remeasurement data was discussed in the PIP.
	4. A timeline for the collection of Baseline and remeasurement data. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	A timeline for the collection of both Baseline and remeasurement data was provided.
	5. Qualified staff and personnel to abstract manual data.	☐ Met ☐ Partially Met ☐ Not Met ☑ NA	Manual data collection was not used for this study.
C*	6. A manual data collection tool that ensures consistent and accurate collection of data according to indicator specifications.	☐ Met ☐ Partially Met ☐ Not Met ☑ NA	Manual data collection was not used in this PIP. A CAHPS survey was used to collect data.
	7. A manual data collection tool that supports interrater reliability.	☐ Met ☐ Partially Met ☐ Not Met ☑ NA	Manual data collection was not used in this PIP.

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

EVALUATION ELEMENTS	SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation		
VI.	**Review Data Collection Procedures: Data collection must ensure that the data collected on the study indicators are valid and reliable. Validity is an indication of the accuracy of the information obtained. Reliability is an indication of the repeatability or reproducibility of a measurement. Data collection procedures include:**	
8. Clear and concise written instructions for completing the manual data collection tool.	☐ Met ☐ Partially Met ☐ Not Met ☑ NA	Manual data collection was not used in this PIP. Point of Clarification: Future submissions of the PIP should include the a copy of the cover letter that is sent out with the CAHPS survey. Re-review January 2009: After a review of the resubmitted PIP documentation, the Point of Clarification will remain. When surveys are used for data collection, a copy of the cover letter that is sent out with the survey should be included as part of the PIP submission.
9. An overview of the study in written instructions.	☐ Met ☐ Partially Met ☐ Not Met ☑ NA	Manual data collection was not used in this PIP.
10. Administrative data collection algorithms/flow charts that show activities in the production of indicators.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The administrative data collection process that showed the steps in the production of the study indicators was outlined in the PIP.

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

EVALUATION ELEMENTS	SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation		
VI. **Review Data Collection Procedures: Data collection must ensure that the data collected on the study indicators are valid and reliable. Validity is an indication of the accuracy of the information obtained. Reliability is an indication of the repeatability or reproducibility of a measurement. Data collection procedures include:**		
11. An estimated degree of administrative data completeness. Met = 80 - 100% Partially Met = 50 - 79% Not Met = <50% or not provided	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	Data completeness was completely discussed; however, in the 2007-2008 PIP Validation Tool, HSAG requested that the health plan provide the percentage of data completeness. For example, if the pharmacy data was 100 percent complete at the time they were pulled, then the PIP should have included this percentage. Re-review January 2009: After a review of the resubmitted PIP documentation, the score for this evaluation element has been changed from Partially Met to Met. The PIP reported that the estimated degree of administrative data completeness was 100 percent.

Results for Step VI									
# of Total Evaluation Elements					**# of Critical Elements**				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
11	6	0	0	5	1	0	0	0	1

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

EVALUATION ELEMENTS	SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation		
VII.	**Assess Improvement Strategies: Real, sustained improvements in care result from a continuous cycle of measuring and analyzing performance, as well as, developing and implementing systemwide improvements in care. Interventions are designed to change behavior at an institutional, practitioner, or member level. The improvement strategies are:**	
C* 1. Related to causes/barriers identified through data analysis and quality improvement processes. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The improvement strategies were related to causes/barriers identified through data analysis and quality improvement processes.
2. System changes that are likely to induce permanent change.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The interventions were system changes that were likely to induce permanent change.
3. Revised if the original interventions are not successful.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	Interventions were revised and new interventions implemented based on the data findings.
4. Standardized and monitored if interventions are successful.	☐ Met ☐ Partially Met ☐ Not Met ☑ NA	Interventions are continuing but have not been standardized at this time.

Results for Step VII									
# of Total Evaluation Elements					**# of Critical Elements**				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
4	3	0	0	1	1	1	0	0	0

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

EVALUATION ELEMENTS	SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation		
VIII. **Review Data Analysis and Study Results: Review the data analysis process for the selected clinical or nonclinical study indicators. Review appropriateness of, and adherence to, the statistical analysis techniques used.**		
C* 1. Are conducted according to the data analysis plan in the study design. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The data analysis was conducted according to the data analysis plan in the PIP.
C* 2. Allow for the generalization of results to the study population if a sample was selected. If no sampling was performed, this element is scored NA.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The sampling techniques used allowed for generalization of the results to the study population.
3. Identify factors that threaten internal or external validity of findings. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	Factors that may have threatened the validity of the data findings were documented.
4. Include an interpretation of findings. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	An interpretation of the findings was provided.
5. Are presented in a way that provides accurate, clear, and easily understood information. NA is not applicable to this element for scoring.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The data results were presented in a clear and easily understood format; however, because the variable names supplied in the attachment regarding the t tests were not labeled clearly, the HSAG PIP Review Team could not ascertain the validity of the results for Study Indicators 8 and 9. Re-review January 2009: After a review of the resubmitted PIP documentation, the score for this evaluation element has been changed from Partially Met to Met. The t test information that was provided was clearly labeled, and the HSAG PIP Review Team was able to validate the results for Study Indicators 8 and 9.

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

EVALUATION ELEMENTS	SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation		
VIII. **Review Data Analysis and Study Results: Review the data analysis process for the selected clinical or nonclinical study indicators. Review appropriateness of, and adherence to, the statistical analysis techniques used.**		
6. Identify the initial measurement and the remeasurement of study indicators.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The initial measurement and remeasurements for all study indicators were identified in the data analysis.
7. Identify statistical differences between the initial measurement and the remeasurement.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The PIP included the statistical differences between Remeasurement 1 and Remeasurement 2. Point of Clarification: The p values from Baseline to the first remeasurement period should also be included. Re-review January 2009: After a review of the resubmitted PIP documentation, the Point of Clarification will remain. The PIP should include p values for comparisons of all measurement periods, starting with Baseline to the first remeasurement and continuing through the last remeasurement period.
8. identify factors that affect the ability to compare the initial measurement with the remeasurement.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The PIP discussed factors that could have affected the ability to compare measurement periods.
9. Include an interpretation of the extent to which the study was successful.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	An interpretation of the extent to which the study was successful was included in the PIP documentation.

Results for Step VIII									
# of Total Evaluation Elements					**# of Critical Elements**				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
9	9	0	0	0	2	2	0	0	0

* "C" in this column denotes a critical evaluation element.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

EVALUATION ELEMENTS	SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation		
IX. **Assess for Real Improvement: Assess for any meaningful changes in performance observed and was demonstrated during the Baseline measurement. Assess for any random year-to-year variations, population changes, or sampling errors that may have occurred during the measurement process.**		
1. The remeasurement methodology is the same as the Baseline methodology.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	There were no changes to the methodology.
2. There is documented improvement in processes or outcomes of care.	☐ Met ☑ Partially Met ☐ Not Met ☐ NA	There was documented improvement for all indicators except for Study Indicators 4, 5, and 6. It was unclear to the HSAG PIP Review Team if results improved for Indicators 8 and 9 when the cost of prescriptions and membership increased. It appeared that there were confounding factors that could have affected the cost. Re-review January 2009: After a review of the resubmitted PIP documentation, the score for this evaluation element will remain Partially Met. The results for Study Indicators 4,5, and 6 did not change with the resubmission.
3. The improvement appears to be the result of planned intervention(s).	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	The improvement noted appeared to be as a result of the planned interventions.

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

EVALUATION ELEMENTS	SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation		
IX. **Assess for Real Improvement: Assess for any meaningful changes in performance observed and was demonstrated during the Baseline measurement. Assess for any random year-to-year variations, population changes, or sampling errors that may have occurred during the measurement process.**		
4. There is statistical evidence that observed improvement is true improvement.	☐ Met ☑ Partially Met ☐ Not Met ☐ NA	From Remeasurement 1 to Remeasurement 2 there was statistical evidence that demonstrated improvement was true improvement for Indicator 1b. All other improvement noted was not statistically significant. Re-review January 2009: After a review of the resubmitted PIP documentation, the score for this evaluation element will remain Partially Met. The results for Study Indicators 4,5, and 6 did not change with the resubmission.

Results for Step IX

	# of Total Evaluation Elements					# of Critical Elements			
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
4	2	2	0	0	0	0	0	0	0

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

![HSAG Health Services Advisory Group logo]

Section 3: **Colorado FY 08-09 PIP Validation Tool:**
Member Satisfaction With Access to Pharmacy Services Within Denver Health
for Denver Health Medicaid Choice

EVALUATION ELEMENTS	SCORING	COMMENTS
Performance Improvement Project/Health Care Study Evaluation		
X. **Assess for Sustained Improvement: Assess for any demonstrated improvement through repeated measurements over comparable time periods. Assess for any random year-to-year variations, population changes, or sampling error that may have occurred during the remeasurement process.**		
1. Repeated measurements over comparable time periods demonstrate sustained improvement or that a decline in improvement is not statistically significant.	☑ Met ☐ Partially Met ☐ Not Met ☐ NA	Of the 14 Indicators (including subindicators), 8 indicators achieved sustained improvement, 4 partially achieved sustained improvement, and 1did not achieve sustained improvement. There was 1 indicator (Indicator 3) that could not be assessed for sustained improvement. Another data point was needed after the second remeasurement period to assess for sustained improvement.

HSAG recommends that DHMC perform a causal/barrier analysis and develop improvement strategies for those study indicators that have not demonstrated improvement or achieved sustained improvement, and continue to monitor those indicators internally. |

Results for Step X									
# of Total Evaluation Elements					**# of Critical Elements**				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
1	1	0	0	0	0	0	0	0	0

** Total Evaluation Elements includes critical elements.

*** This number is a tally of the total number of critical evaluation elements for this review activity.

Review Step	Total Possible Evaluation Elements (Including Critical Elements)	Total Met	Total Partially Met	Total Not Met	Total NA	Total Possible Critical Elements	Total Critical Elements Met	Total Critical Elements Partially Met	Total Critical Elements Not Met	Total Critical Elements NA
Table 3-1—FY 08-09 PIP Validation Report Scores: Member Satisfaction With Access to Pharmacy Services Within Denver Health for Denver Health Medicaid Choice										
I. Review the Selected Study Topic(s)	6	6	0	0	0	1	1	0	0	0
II. Review the Study Question(s)	2	2	0	0	0	2	2	0	0	0
III. Review the Selected Study Indicator(s)	7	6	0	0	1	3	3	0	0	0
IV. Review the Identified Study Population	3	3	0	0	0	2	2	0	0	0
V. Review Sampling Methods	6	6	0	0	0	1	1	0	0	0
VI. Review Data Collection Procedures	11	6	0	0	5	1	0	0	0	1
VII. Assess Improvement Strategies	4	3	0	0	1	1	1	0	0	0
VIII. Review Data Analysis and Study Results	9	9	0	0	0	2	2	0	0	0
IX. Assess for Real Improvement	4	2	2	0	0	0	No Critical Elements			
X. Assess for Sustained Improvement	1	1	0	0	0	0	No Critical Elements			
Totals for All Steps	**53**	**44**	**2**	**0**	**7**	**13**	**12**	**0**	**0**	**1**

Table 3-2—FY 08-09 PIP Validation Report Overall Scores: Member Satisfaction With Access to Pharmacy Services Within Denver Health for Denver Health Medicaid Choice	
Percentage Score of Evaluation Elements Met*	**96%**
Percentage Score of Critical Elements Met**	**100%**
Validation Status***	***Met***

*   The percentage score is calculated by dividing the total Met by the sum of the total Met, Partially Met, and Not Met.

**   The percentage score of critical elements Met is calculated by dividing the total critical elements Met by the sum of the critical elements Met, Partially Met, and Not Met.

***   Met equals confidence/high confidence that the PIP was valid.

Partially Met equals low confidence that the PIP was valid.

Not Met equals reported PIP results that were not credible.

EVALUATION OF THE OVERALL VALIDITY AND RELIABILITY OF PIP RESULTS
HSAG assessed the implications of the study's findings on the likely validity and reliability of the results based on CMS Validating Protocols. HSAG also assessed whether the State should have confidence in the reported PIP findings.
Met = Confidence/high confidence in reported PIP results   **Partially Met* = Low confidence in reported PIP results   ***Not Met* = Reported PIP results not credible
Summary of Aggregate Validation Findings   * [X] *Met*   ** [   ] *Partially Met*   *** [   ] *Not Met*
Summary statement on the validation findings: Steps I through X were assessed for this PIP Validation Report. Based on the validation of this PIP, HSAG's assessment determined high confidence in the results.

Introduction

Appendix A is the PIP Summary Form *DHMC* submitted to HSAG for review. HSAG has not altered the content or made grammatical corrections. This appendix does not include any attachments provided with the PIP submission. New or altered information in the PIP Summary Form is dated and highlighted or in bold. Deleted information appears in strike-through font.

- ◆ Appendix A: **Denver Health Medicaid Choice**'s PIP Summary Form for *Member Satisfaction with Access to Pharmacy Services within Denver Health*

HSAG HEALTH SERVICES ADVISORY GROUP

Appendix A: Colorado 2008–2009 PIP Summary Form:
Member Satisfaction with Access to Pharmacy Services within Denver Health
for **Denver Health Medicaid Choice**

DEMOGRAPHIC INFORMATION

MCO name: **Denver Health Medicaid Choice (DHMC)**

Study Leader Name: Mary Pinkney, RN, BS   Title: Director of QI for DHMC

Telephone Number: 720-956-2356   E-mail Address: Mary.Pinkney@dhha.org

Name of Project/Study: *Member Satisfaction with Access to Pharmacy Services within Denver Health*

Type of Study: ☐ Clinical ☒ Nonclinical ☐ Collaborative ☐ HEDIS	**Section to be completed by HSAG** _____ Year 1 Validation _____ Initial Submission _____ Resubmission _____ Year 2 Validation _____ Initial Submission _____ Resubmission _____ Year 3 Validation _____ Initial Submission _____ Resubmission __X__ Year 4 Validation _____ Initial Submission __X__ Resubmission
Type of Delivery System: MCO	
Date of Study: _____ to _____ From January 1, 2005 to December 31, 2005 (Baseline) From January 1,2006 to December 31, 2006(Intervention 1 – First Remeasurement is for 12 months)	_____ Baseline Assessment _____ Remeasurement 1 __X__ Remeasurement 2 _____ Remeasurement 3
From January 1, 2007 to December 31, 2007 (Intervention 2 – Second Remeasurement is for 12 months)	Year 1 validated through Step __III__ Year 2 validated through Step __VIII__ Year 3 validated through Step __IX__ Year 4 validated through Step __X__

Appendix A: Colorado 2008–2009 PIP Summary Form:
Member Satisfaction with Access to Pharmacy Services within Denver Health
for Denver Health Medicaid Choice

DEMOGRAPHIC INFORMATION			
11,351	Number of Medicaid Consumers served by MCO as of June 30, 2005	1350 sample 2007 NCQA Adult Medicaid CAHPS 4.0H (Indicators 2-7)	Number of Medicaid Consumers 18+ y/o in Project Study
9,696	Number of Medicaid Consumers served by MCO as of December 31, 2005	7,784 members with 110,888 prescriptions filled during 2006 (Indicators 1,8,9)	Number of Medicaid Consumers 18+ y/o in Project Study
35,321	Number of Medicaid Consumers served by MCO as of December 31, 2006		
1350 sample for 2006 NCQA Adult Medicaid CAHPS 3.0H (Indicators 2-7)	Number of Medicaid Consumers 18+ y/o in Project/Study	**1350 sample 2008 NCQA Adult Medicaid CAHPS 4.0H (Indicators 2-7)**	**Number of Medicaid Consumers 18+ y/o in Project Study**
4,602 members, with 155,336 prescriptions filled during 2005 (Indicators 1, 8, 9)	Number of Medicaid Consumers 18+ y/o in Project/Study	**9, 460 members with 157,031 prescriptions filled during 2007 (indicators 1,8, 9)**	**Number of Medicaid Consumers 18+ y/o in Project Study**

Submission Date: _____	

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Appendix A: Colorado 2008–2009 PIP Summary Form:
Member Satisfaction with Access to Pharmacy Services within Denver Health
for **Denver Health Medicaid Choice**

√ = *changed or updated since 2005 review*			**Table of Contents** ([Bookmarks])
√		40	Activity VIIIb. Analysis Notes. Results.
		40	Summary
	I	43	Activity IX. Reported Improvement
	J	50	Activity X. Sustained improvement
		51	Discussion and Graphed Results
√		53	Abbreviations in Use
√		55	Attachments

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Appendix A: Colorado 2008–2009 PIP Summary Form:
Member Satisfaction with Access to Pharmacy Services within Denver Health
for **Denver Health Medicaid Choice**

A. Activity I: Choose the study topic. PIP topics should target improvement in relevant areas of services and reflect the population in terms of demographic characteristics, prevalence of disease, and the potential consequences (risks) of disease. Topics may be derived from utilization data (ICD-9 or CPT coding data related to diagnoses and procedures; NDC codes for medications; HCPC codes for medications, medical supplies, and medical equipment; adverse events; admissions; readmissions; etc.); grievances and appeals data; survey data; provider access or appointment availability data; member characteristics data such as race/ethnicity/language; other fee-for-service data; or local or national data related to Medicaid risk populations. The goal of the project should be to improve processes and outcomes of health care or services to have a potentially significant impact on member health, functional status, or satisfaction. The topic may be specified by the state Medicaid agency or CMS, or it may be based on input from members. Over time, topics must cover a broad spectrum of key aspects of member care and services, including clinical and nonclinical areas, and should include all enrolled populations (i.e., certain subsets of members should not be consistently excluded from studies).

Study Topic: Will planning enhancements for pharmacy services and benefits improve member satisfaction and increase the use of **internal** pharmacy services at Denver Health (DH)?   <Back to TOC>

We chose this study because:
- It reflects a high volume of the Denver Health Medicaid population including members with special health care needs and a significant portion of Health Care Service expense (18.5% for the period of May 1, 2004 through December 31, 2004).
- It addresses CMS requirements related to Access and Availability of care, namely pharmacy services within Denver Health pharmacies ("Internal" services) versus those provided by outside pharmacies **through** our Pharmacy Benefit Manager (PBM) contract ("External" services).
- **Quarterly trend reports are sent to us from Caremark and these reports are reviewed by the internal Management team, Quality Assurance Committee (now the Medical management Committee), and Pharmacy and Therapeutics Subcommittee.**
- **Denver Health pharmacies provide an opportunity to manage internal pharmacy use through Life Clinical Resources (LCR, an internal medical record database), in a manner more cost effective than external pharmacies.**
- **In general, better service both internally and externally can improve member satisfaction and health status.**
- With increased utilization of internal pharmacies, costs for pharmaceutical should decrease, improving the ability for DH to serve all of its members more effectively.
- Pharmacy has been an area of concern related to services at Denver Health. During the 2nd quarter of 2004 (May of 2004) and continuing into 2005 several pharmacy enhancements were implemented to improve access and availability of pharmacy services.

The following enhancements were made for the internal pharmacy services at Denver Health:
1. Established standards in May of 2004 for new prescriptions to be available within 45 minutes.
2. Implemented standards for refills to be available within 24-48 hours in June of 2004.
3. Initiated a centralized system on June 14, 2004 making prescription medicines more accessible to members for pick up.

A. Activity I: Choose the study topic. PIP topics should target improvement in relevant areas of services and reflect the population in terms of demographic characteristics, prevalence of disease, and the potential consequences (risks) of disease. Topics may be derived from utilization data (ICD-9 or CPT coding data related to diagnoses and procedures; NDC codes for medications; HCPC codes for medications, medical supplies, and medical equipment; adverse events; admissions; readmissions; etc.); grievances and appeals data; survey data; provider access or appointment availability data; member characteristics data such as race/ethnicity/language; other fee-for-service data; or local or national data related to Medicaid risk populations. The goal of the project should be to improve processes and outcomes of health care or services to have a potentially significant impact on member health, functional status, or satisfaction. The topic may be specified by the state Medicaid agency or CMS, or it may be based on input from members. Over time, topics must cover a broad spectrum of key aspects of member care and services, including clinical and nonclinical areas, and should include all enrolled populations (i.e., certain subsets of members should not be consistently excluded from studies).

DH also has experience adding supplemental questions to the survey following NCQA protocols and obtaining NCQA approval. For this reason, DH decided to review member satisfaction with pharmacy use by adding a number of Pharmacy-service related Supplemental questions to the annual CAHPS survey. These questions were developed using the recommendations noted in HEDIS 2006 v. 3, "Protocol Enhancement Options." Following their approval by NCQA, these questions were added to the survey tool distributed in February 2005, which targets adults enrolled in the Medicaid Choice program. This survey provides us with the ability to monitor member satisfaction with access to pharmacy services as these services undergo the above mentioned changes. The goal of this Performance Improvement Project is to improve satisfaction with pharmacy use and increase internal pharmacy use by providing those who use internal pharmacy services with new incentives and rewards engaging in these activities.

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B. Activity II: Define the study question(s). Stating the question(s) helps maintain the focus of the PIP and sets the framework for data collection, analysis, and interpretation.

Study Question: Will planning enhancements for pharmacy services and benefits improve member satisfaction and increase the use of pharmacy services at Denver Health **for members 18 years of age and older**? <Back to TOC>

Indicators:

1. The percentage of prescriptions filled: a) at Denver Health, b) outside of Denver Health at a contracted pharmacy.*

2. Percentage of members completing the **annual CAHPS Adult Medicaid** Member Satisfaction survey who responded yes to obtaining prescriptions at Denver Health.**

3. Percentage of members completing the **annual CAHPS Adult Medicaid** Member Satisfaction survey who responded yes to obtaining prescriptions at Denver Health and who stated that it was "not a problem".**

4. Percentage of members completing the **annual CAHPS Adult Medicaid** Member Satisfaction survey who responded yes to obtaining prescriptions at a contracted pharmacy outside of Denver Health.**

5. Percentage of members completing the **annual CAHPS Adult Medicaid** Member Satisfaction survey who responded yes to obtaining prescriptions at a contracted pharmacy outside of Denver Health and who stated that it was "not a problem".**

6. Percentage of members completing the **annual CAHPS Adult Medicaid** Member Satisfaction Survey who responded yes to filling a new prescription and receiving it within 45 minutes at Denver Health.**

7. Percentage of members completing the **annual CAHPS Adult Medicaid** Member Satisfaction Survey who responded yes to refilling a prescription and to receiving it within 24 to 48 hours at Denver Health.**

8. The annual average member utilization rate for pharmacy by number of prescriptions filled internally and externally for **members who utilize: a) only Denver Health pharmacies, b) only pharmacies outside of Denver Health, c) both internal and external pharmacies.** *

9. The annual average amount paid for a prescription based on amounts paid for number of prescriptions filled internally and externally for **members who utilize: a) only Denver Health pharmacies, b) only pharmacies outside of Denver Health, c) both internal and external pharmacies.** *

* Based on data provided by Caremark.

*** Six custom questions **approved by NCQA** were added to the 2006 Adult Medicaid Choice CAHPS survey to obtain this data.*

***NOTE: This is the first year the 2006 CAHPS Adults Medicaid Survey was performed.

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C. Activity III: Select the study indicator(s). A study indicator is a quantitative or qualitative characteristic or variable that reflects a discrete event (e.g., an older adult has not received an influenza vaccination in the last 12 months) or a status (e.g., a member's blood pressure is/is not below a specified level) that is to be measured. The selected indicators should track performance or improvement over time. The indicators should be objective, clearly and unambiguously defined, and based on current clinical knowledge or health services research.	
Study Indicator 1:	Based on data provided by CareMark, percentage of prescriptions filled **by members 18+ years of age** at: a) Denver Health, b) a contracted pharmacy outside of Denver Health.
Numerator:	Number of prescriptions filled by Medicaid Choice members **18+ years of age** a) internally at Denver Health, b) externally at a contracted pharmacy.
Denominator:	Total number of prescriptions filled by Medicaid Choice members **18+ years of age**.
First Measurement Period:	January 1, 2005 to December 31, 2005
Second ~~Current~~ Measurement Period:	January 1, 2006 to December 31, 2006
Third Measurement Period:	January 1, 2007 to December 31, 2007
Benchmark:	N/A
Source of Benchmark:	
Baseline Goal:	75% DH pharmacy use; 25% outside pharmacy use (goal established at Quality Assurance Committee meeting (QAC)). **Updated: 55% DH pharmacy use; 45%outside pharmacy use(goal established ay Medical Management Committee Meeting - MMC on September 11, 2007)**

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Study Indicator 2:	Percentage of members completing the ~~2007~~ **CAHPS Adult Medicaid 4.0H** Member Satisfaction survey*** who responded yes to obtaining prescriptions at Denver Health.
Numerator:	Number of members who responded "Yes" to obtaining pharmacy services at Denver Health in the ~~2006~~ Adult CAHPS Member Satisfaction Survey [question 44a].
Denominator:	**[Total] Number of members who responded to [question 44a in] the ~~2007~~ 2008 CAHPS Adult Medicaid 4.0H Member Survey, for surveys considered complete by Synovate. [Changed 12-13-06.]**
First Measurement Period:	January 1, 2005 to December 31, 2005
Second ~~Current~~ Measurement Period	January 1, 2006 to December 31, 2006
Third Measurement Period	January 1, 2007 to December 31, 2007
Benchmark:	
Source of Benchmark:	
Baseline Goal:	**55% DH pharmacy use; 45%outside pharmacy use(goal established at MMC meeting on Sept.11,07)**

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Study Indicator #3:	Percentage of members completing the ~~2007~~ **2008 CAHPS Adult Medicaid 4.0H** Member Satisfaction survey who responded "Yes" to obtaining prescriptions at Denver Health and stated that it was "not a problem".
Numerator:	Number of members who responded it was "not a problem" to obtain pharmacy services at Denver Health in the 2006 Adult CAHPS Member Satisfaction Survey [question 44b].
Denominator:	**[Total] Number of members who responded to [question 44b in] the ~~2007~~ CAHPS Adult Medicaid 4.0H Member Survey, for surveys considered complete by Synovate. [Changed 12-13-06.]**
First Measurement Period:	January 1, 2005 to December 31, 2005
~~Current~~ **Second Measurement Period:**	January 1, 2006 to December 31, 2006
Third Measurement Period	January 1, 2007 to December 31, 2007
Benchmark:	
Source of Benchmark:	
Baseline Goal:	**55% DH pharmacy use; 45%outside pharmacy use(goal established at Medical Management Committee meeting on September 11, 2007)**

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Study Indicator #4:	Percentage of members completing the ~~2006~~ **CAHPS Adult Medicaid** Member Satisfaction survey who responded yes to obtaining prescriptions at a contracted pharmacy outside of Denver Health. <Back to TOC>
Numerator:	Number of members who responded "Yes" to obtaining pharmacy services at a contracted pharmacy outside of Denver Health in the 2008 ~~2006~~ Adult CAHPS Member Satisfaction Survey [question 37e].
Denominator:	**[Total] Number of members who responded to [question 44f in] the ~~2007~~ CAHPS Adult Medicaid 4.0H Member Survey, for surveys considered complete by Synovate. [Changed 12-13-06.]**
First Measurement Period:	January 1, 2005 to December 31, 2005
Second ~~Current~~ Measurement Period:	January 1, 2006 to December 31, 2006
Third Measurement Period:	January 1, 2007 to December 31, 2007
Benchmark:	
Source of Benchmark:	
Baseline Goal:	**55% DH pharmacy use; 45%outside pharmacy use(goal established at Medical Management Committee meeting on September 11, 2007)**

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Study Indicator #5:	Percentage of members completing the ~~2007~~ **2008 CAHPS Adult Medicaid 4.0H** Member Satisfaction survey who responded "Yes" to obtaining prescriptions at a contracted pharmacy outside of Denver Health and stated that it was "not a problem".
Numerator:	Number of members who responded it was "not a problem" to obtain pharmacy services at a contracted pharmacy outside of Denver Health in the ~~2007~~ 2008 Adult CAHPS 4.0H Member Satisfaction Survey [question 44g].
Denominator:	**[Total] Number of members who responded to [question 44g in] the ~~2006~~ 2008 CAHPS Adult Medicaid Member Survey, for surveys considered complete by Synovate. [Changed 12-13-06.]**
First Measurement Period:	January 1, 2005 to December 31, 2005
Second ~~Current~~ Measurement Period:	January 1, 2006 to December 31, 2006
Third Measurement Period:	January 1, 2007 to December 31, 2007
Benchmark:	
Source of Benchmark:	
Baseline Goal:	**55% DH pharmacy use; 45%outside pharmacy use(goal established at Medical Management Committee meeting on September 11, 2007)**

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Study Indicator #6:	Percentage of members completing the ~~2007~~ 2008 **CAHPS Adult Medicaid 4.0H** Member Satisfaction Survey who responded yes to filling a new prescription and receiving it within 45 minutes at Denver Health. <Back to TOC>
Numerator:	Number of members who responded "Yes" to filling a new prescription and receiving it within 45 minutes at Denver Health [question 44d].
Denominator:	**[Total] Number of members who responded to [question 44d in] the ~~2007~~ 2008 CAHPS Adult Medicaid 4.0H Member Survey, for surveys considered complete by Synovate. [Changed 12-13-06.]**
First Measurement Period:	January 1, 2005 to December 31, 2005
Second ~~Current~~ Measurement Period:	January 1, 2006 to December 31, 2006
Third Measurement Period:	January 1, 2007 to December 31, 2007
Benchmark:	
Source of Benchmark:	
Baseline Goal:	**55% DH pharmacy use; 45%outside pharmacy use(goal established at Medical Management Committee meeting on September 11, 2007)**

C. Activity III: Select the study indicator(s). A study indicator is a quantitative or qualitative characteristic or variable that reflects a discrete event (e.g., an older adult has not received an influenza vaccination in the last 12 months) or a status (e.g., a member's blood pressure is/is not below a specified level) that is to be measured. The selected indicators should track performance or improvement over time. The indicators should be objective, clearly and unambiguously defined, and based on current clinical knowledge or health services research.	
Study Indicator #7:	Percentage of members completing the ~~2006~~ **CAHPS* Adult Medicaid** Member Satisfaction Survey who responded yes to refilling a prescription and to receiving it within 24 to 48 hours at Denver Health.
Numerator:	Number of members who responded "Yes" to [refilling a prescription] and receiving it within 24 to 48 hours at Denver Health [question 37d]. [Changed 12-13-06.]
Denominator:	**[Total] Number of members who responded to [question 37d in] the ~~2006~~ 2008CAHPS* Adult Medicaid Member Survey, with surveys considered complete by Synovate. [Changed 12-13-06.]**
First Measurement Period:	January 1, 2005 to December 31, 2005
Second ~~Current~~ Measurement Period:	January 1, 2006 to December 31, 2006
Third Measurement Period:	January 1, 2007 to December 31, 2007
Benchmark:	N/A
Source of Benchmark:	
Baseline Goal:	**55% DH pharmacy use; 45%outside pharmacy use(goal established at Medical Management Committee meeting on September 11, 2007)**

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Study Indicator #8:	Based on data provided by CareMark, the quarterly average member utilization rate for pharmacy by number of prescriptions filled per member per study period for: a) *members* **18+ years of age** *utilizing only* Denver Health, b) *members* **18+ years of age** *utilizing only pharmacies* outside of Denver Health, c) *members* **18+ years of age** *utilizing both internal and external pharmacies*. <Back to TOC>
Numerator:	**Total number of prescriptions filled during the study period for Medicaid Choice members 18+ years of age utilizing: a) only Denver Health pharmacy, b) only pharmacies outside of Denver Health, c) both internal and external pharmacies.**
Denominator:	**Total number of members 18+ years of age enrolled in DH during the study period who obtained prescriptions a) only through a Denver Health pharmacy, b) only through pharmacies outside of Denver Health, c) through both internal and external pharmacies.**
First Measurement Period:	January 1, 2005 to December 31, 2005
Second ~~Current~~ Measurement Period:	January 1, 2006 to December 31, 2006
Third Measurement Period:	January 1, 2007 to December 31, 2007
Benchmark:	N/A
Source of Benchmark:	
Baseline Goal:	**55% DH pharmacy use; 45%outside pharmacy use(goal established at MMC meeting on Sept.11,07)**

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Study Indicator #9:	
Numerator:	The total dollars spent for prescriptions filled during the measurement period, based on quarterly dollar amounts for *Amount Paid Per Member Per Quarter,* for a) members 18+ years of age who only obtained their prescriptions internally at Denver Health for the entire measurement period, b) members 18+ years of age who only obtained their prescriptions externally at a contracted pharmacy for the entire measurement period, c) members 18+ years of age who obtained their prescriptions at both internal and external pharmacies during the measurement period.
Denominator:	Total number of members 18+ years of age who obtained their prescriptions during the study period from: a) only a Denver Health pharmacy during the entire measurement period, b) only contracted pharmacies during the entire measurement period, c) from both internal and external contracted pharmacies during the measurement period.
First Measurement Period:	January 1, 2005 to December 31, 2005
Second ~~Current~~ Measurement Period	January 1, 2006 to December 31, 2006
Third Measurement Period:	January 1, 2007 to December 31, 2007
Benchmark:	N/A
Source of Benchmark:	
Baseline Goal:	**55% DH pharmacy use; 45%outside pharmacy use(goal established at Medical Management Committee meeting on September 11, 2007)**
Use this area to provide additional information. Discuss the guidelines used and the basis for each study indicator.	

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D. Activity IV: Use a representative and generalizable study population. The selected topic should represent the entire eligible population of Medicaid members, with systemwide measurement and improvement efforts to which the study indicators apply. Once the population is identified, a decision must be made whether or not to review data for the entire population or a sample of that population. The length of a member's enrollment needs to be defined to meet the study population criteria.

Identified Study Population:

All measures pertain to members of the Adult Medicaid Choice population between the ages of 18 and 99+ yo and who were enrolled in the program in 2005 [ATT 1—demography].

The Jan to Dec 2005 Caremark pharmacy use population

For measures 1, 8 and 9, all members 18 to 99+ years old qualify, regardless of period of enrollment during the study period (Jan. 1, 2005 to Dec. 31, 2005). They are selected regardless of age, race, ethnicity, or medical history, including history of disability or handicap [ATT 2]. These measures are based upon the number of prescriptions obtained by members between January 1, 2005 and December 31, 2005; this data is produced using the CareMark RxNavigator/TM and is derived from the CareMark Pharmacy database [ATT 2 series].

The 2006 Adult CAHPS Survey Population

For measures 2 through 7, six custom questions are administered as part of the annual Medicaid CAHPS Survey [ATT 3 series, CAHPS]. To qualify for this CAHPS survey, these members must be enrolled during the past six months (July 1, 2005 to Dec. 31, 2005) and meet the eligibility criteria for Medicaid Choice recipients receiving health care services during this period. Aside from the age limitation defined for the Adult CAHPS survey (18+ y/o), members are selected to participate regardless of age, race, ethnicity, or medical history, including history of disability or handicap [see ATT 3, description of CAHPS member recruitment]. To participate in this survey, members 18 years of age and older are randomly selected using an NCQA defined protocol for the Adult Medicaid CAHPS survey performed by the agency contracted to administer and analyze the results for this survey—Synovate/TM.

As part of the Synovate survey administration process, the 2006 Adult CAHPS Survey follows NCQA specifications for engaging in Mail/Phone Surveys, utilizing an NCQA certified survey tool with questions pertaining to the member's health plan, health care services, and physician/staff performance. Synovate allows a maximum of 15 supplemental questions to be added to the Survey by the health plan, and requires approval of these questions by NCQA. Each year, the final survey script is administered during the first quarter of the year, around mid-February (see Attachment 3—Synovate/CAHPS). Following analysis of these responses, Synovate generates reports on the raw data and a summary of entire survey results and special topics reviews.

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Study Population for 2006:

All measures pertain to members of the Adult Medicaid Choice population between the ages of 18 and 99+ yo and who were enrolled in the program in 2006 [ATT 1b—demography].

The Jan to Dec 2006 Caremark pharmacy use population

For measures 1, 8 and 9, all members 18 to 99+ years old qualify, regardless of period of enrollment during the study period (Jan. 1, 2005 to Dec. 31, 2006). They are selected regardless of age, race, ethnicity, or medical history, including history of disability or handicap [ATT 2]. These measures are based upon the number of prescriptions obtained by members between January 1, 2006 and December 31, 2006; this data is produced using the CareMark RxNavigator/TM and is derived from the CareMark Pharmacy database [ATT 2 series].

The 2007 Adult CAHPS Survey Population

The CAHPS Health Plan Survey 4.0H Adult version was implemented for CAHPS 2007 the revisions were: changed the order of the numbers; wording of survey questions; made changes to composites. The number of supplemental questions permitted was increased. These changes do not impact our custom questions because we did not change these custom questions. The number of the questions did change.

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E. Activity V: Use sound sampling methods. If sampling is used to select members of the study, proper sampling techniques are necessary to provide valid and reliable information on the quality of care provided. The true prevalence or incidence rate for the event in the population may not be known the first time a topic is studied.

Measure	Sample Error and Confidence Level	Sample Size	Population	Method for Determining Size (*describe*)	Sampling Method (*describe*)
1, 8, 9. Prescriptions filled at Denver Health, versus outside Denver Health.	2005 PIP. 4,602 represents 95.22% of the total population (4,833). At 95% CI, the chance for a sampling error is 0.3%.	N = 4,602, no sampling was done. According to the 12/31/05 MCD population review, 4,833 members (49.9% of total MCD population) were 18+ y/o. The 4602 members in this study represent approximately 47.5% of the total population, and 95% of the 18+ y/o population.	9,696 members are in the Medicaid Choice population as of 12/31/05; 4,833 members are 18+ y/o. 4602 of these members were 18+ y/o and had their prescriptions filled between Jan. 1 and Dec. 31, 2005 according to Caremark data; all of their scripts are reviewed,	All prescription data related to all 18+ y/o members active during the study period was used, regardless of HEDIS enrollment-eligibility history during the study year.	Prescriptions not included in this study are eliminated due to limited availability or lack of an adequate price control mechanism (See p. 18 for Exclusion criteria)
	2006 PIP. 7,784 represent 57.2% of the total population (13,599). At 95% CI, the chance for a sampling error is 0.3%.	N = 7,784, no sampling was done. According to a 2006 MCD population review, 13,599 members (38.5% of total MCD population) were 18+ y/o.	35,321 members are in the Medicaid Choice population as of 12/31/06; 13,599 members are 18+ y/o. 7,784 of these members were 18+ y/o and had their prescriptions filled between Jan. 1 and Dec. 31, 2006 according to Caremark data; all of their scripts are reviewed,	All prescription data related to all 18+ y/o members active during the study period was used, regardless of HEDIS enrollment-eligibility history during the study year.	Prescriptions not included in this study are eliminated due to limited availability or lack of an adequate price control mechanism (See p. 18 for Exclusion criteria)
	2007 PIP: 9,460 represent 72% of the total population (13,177).	**N=9,460, no sampling was done. According to 12/2007 demographics report, 36.2% of the total MCD population was 18+ y/o**	**36,414 members are in the Medicaid Choice population as of 12/31/07; 13,177 members are 18+ y/o and of these, 9,460 had their prescriptions filled between Jan 1 to Dec 31, 2007 according to Caremark data.**	**All prescription data related to all 18+ y/o members active during the study period was used, regardless of HEDIS enrollment-eligibility history during the study year.**	**Prescriptions not included in this study are eliminated due to limited availability or lack of an adequate price control mechanism**

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E. Activity V: Use sound sampling methods. If sampling is used to select members of the study, proper sampling techniques are necessary to provide valid and reliable information on the quality of care provided. The true prevalence or incidence rate for the event in the population may not be known the first time a topic is studied.

Measure	Sample Error and Confidence Level	Sample Size	Population	Method for Determining Size (*describe*)	Sampling Method (*describe*)
2 - 7. A sampling of the Medicaid population for the 2006 CAHPS survey (for three questions) will be performed by Synovate following NCQA protocol. Members selected for survey will be contacted by mail and/or by phone if no response to mail.	By selecting 1350 members out of approx. 4,833 members, at CI = 95%, the survey has a 2.7% chance for sampling error. With a 50% response rate, this sampling error increases to 3.5% for the same CI; a 33% reply rate produces 4.5% error.	N = 1350 members, selected from a population of approximately 4,833 members 18 years of age or older. This represents a selection of 27.9% of the total members in the appropriate age group.	The specific age range for participants is 18+ y/o, for which all members are eligible to participate. Otherwise, there is no limitation on members included in this study based on ethnicity, cultural background, language spoken, disability or age.		See related Synovate attachments.
The CAHPS sampling and surveying method remainunchanged for 2007.	By selecting 1350 members out of approx .13,599 members, at CI = 95%, the survey has a 2.7% chance for sampling error. With a 50% response rate, this sampling error increases to 3.5% for the same CI; a 33% reply rate produces 4.5% error.	N = 1350 members, selected from a population of approximately 13,599 members 18 years of age or older. This represents a selection of 10% of the total members in the appropriate age group.	The specific age range for participants is 18+ y/o, for which all members are eligible to participate. Otherwise, there is no limitation on members included in this study based on ethnicity, cultural background, language spoken, disability or age.		See related Synovate attachments.

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E. Activity V: Use sound sampling methods. If sampling is used to select members of the study, proper sampling techniques are necessary to provide valid and reliable information on the quality of care provided. The true prevalence or incidence rate for the event in the population may not be known the first time a topic is studied.

Measure	Sample Error and Confidence Level	Sample Size	Population	Method for Determining Size (*describe*)	Sampling Method (*describe*)
The CAHPS sampling and surveying method remain unchanged for the 2008 CAHPS survey	By selecting 1350 members out of approx .13,177 members, at CI = 95%, the survey has a 2.7% chance for sampling error. With a 50% response rate, this sampling error increases to 3.5% for the same CI; a 33% reply rate produces 4.5% error.	N = 1350 members, selected from a population of approximately 13,177 members 18 years of age or older. This represents a selection of 10% of the total members in the appropriate age group	The specific age range for participants is 18+ y/o, for which all members are eligible to participate. Otherwise, there is no limitation on members included in this study based on ethnicity, cultural background, language spoken, disability or age.		See related Synovate attachments.

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F. Activity VIa: Use valid and reliable data collection procedures. Data collection must ensure that data collected on study indicators are valid and reliable. Validity is an indication of the accuracy of the information obtained. Reliability is an indication of the repeatability or reproducibility of a measurement.

Data Sources

[ ] Hybrid (medical/treatment records and administrative)

[ ] Medical/treatment record abstraction
    Record Type
      [ ] Outpatient
      [ ] Inpatient
      [ ] Other _____

    Other Requirements
      [**X**] Data collection tool attached
      [**X**] Data collection instructions attached
      [**X**] Summary of data collection training attached
      [**X**] IRR process and results attached

[**X**] Other data: **CareMark/TM Pharmacy database;**
    Synovate/TM CAHPS 4.0H Survey

    Collection instructions, tools, summary and description of related IRR process attached.

Description of Data Collection Staff (include training, experience, and qualifications)

Mary Pinkney RN; **Cindy Ashley**, ~~Melissa Cook~~, **Jennifer Kikla, Tasha Oliver**

[ ] Administrative data
    Data Source
      [ ] Programmed pull from claims/encounters
      [ ] Complaint/appeal
      [**X**] Pharmacy data (**CareMark/TM Pharmacy database, measures 1,8,9)**
      [ ] Telephone service data /call center data
      [ ] Appointment/access data
      [ ] Delegated entity/vendor data _____
      [ ] Other _____
    Other Requirements
      [ ] Data completeness assessment attached
      [ ] Coding verification process attached

[**X**] Survey Data (Baseline: for Synovate's 2006 CAHPS* 3.0h Adult Medicaid Survey, measures 2 through 7); Intervention 1: 2007 CAHPS* 4.0h Adult Medicaid Survey; **Intervention 2: 2008 CAHPS 4.0H Adult Medicaid Survey**

    Fielding Method
      [ ] Personal interview
      [**X**] Mail
      [**X**] Phone with CATI script
      [ ] Phone with IVR
      [ ] Internet
      [ ] Other _____

    Other Requirements
      [ ] Number of waves _____
      [**X**] Response rate (See **CAHPS 4.0H** Survey Tool attachments)
      [ ] Incentives used _NONE_____

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F. Activity VIb: Determine the data collection cycle.	Determine the data analysis cycle.
[**X**] Once a year (**CAHPS 4.0H Survey**) [ ] Twice a year [ ] Once a season [**X**] Once a quarter (**CareMark Prescription data**) [ ] Once a month [ ] Once a week [ ] Once a day [ ] Continuous [ ] Other (list and describe): **The Prescription data may be collected quarterly for periodic review, annually for PIP review and for presentation to staff and the Quality Assurance Committee(replaced by Medical Management Committee January, 2007.** The CAHPS* Adult Medicaid Member Survey is done annually, and focuses on experiences for the past six months of the year prior to administration.	[**X**] Once a year (for **CAHPS** and **CareMark** data analysis) [ ] Once a season [ ] Once a quarter [ ] Once a month [ ] Continuous [ ] Other (list and describe):

F. Activity VIc. Data analysis plan and other pertinent methodological features.

<u>**Modified verbiage for Indicators 1, 8 and 9.</u>

Indicators 1, 8 and 9, which pertain to the Caremark prescription data review, were modified in order to focus on a population more representative of the CAHPS Survey population reviewed by Indicators 2 through 7. Since the CAHPS survey targets Medicaid Choice Adults 18 years of age and older, the only Caremark prescription data to be reviewed for this study is for members who were 18 years of age or older during the study period.

<u>Data to be collected</u>

CareMark/RxNavigator-derived Pharmacy Data **(ATT 2--CareMark background and ATT 4--Methodology series)**; CAHPS 4.0H Survey results data **(ATT 3)**.

F. Activity VIc. Data analysis plan and other pertinent methodological features.

Data sources, collection period(s), methods

Data Collection:
CareMark (Measures 1, 8, 9)**:** February 2006 – CareMark prescription data review; March 2006--analysis of baseline data. **This process was repeated for the Intervention 1 study, during March 2007 to May 2007.** [Note: Due to the significant size of the dataset for this work, data collected for pharmacy may be obtained quarterly. Using an Excel spreadsheet, this data is then rolled-up for each quarter and used to produce results for the complete study period of one year reported in the PIP (see ATT 4 and 5 for various Methodology notes).]

CAHPS Survey (Measures 2 through 6): May 15, 2006 preliminary data review; June 15 data collection, July 31 data analysis of baseline data. For the Baseline study period, twelve months of data will be used from the period of January 1, 2006 to December 31, 2006. All study periods will be for 12 months and extend from January 1st through December 31st of the study year. The CAHPS Survey performed for the initial baseline period of study will be distributed to members in early 2006. Data collected for the 2006 Adult CAHPS Survey will pertain to past twelve months of experience (January 1, 2005 to December 31, 2005). **This process remains unchanged for 2007 CAHPS Survey.**

Data sources: Prescription data is extracted from Caremark pharmacy data (**ATTs 2 and 4**). **[Unchanged, data updated to 2006 results]**
Survey results data provided by the Survey administrator Synovate (**ATT 3**). **[Unchanged, data updated to 2006 results]**

All of the pharmacy data will be reconciled upon receipt by Denver Health.
Statistical reviews of this data will be produced by CareMark using a tool produced for review of members' prescription history (**ATT 4a-f**).
QI staff will enter data extracted from this tool into the PIP summary.
An analysis of this information will be done to determine validity and accuracy of the data.. (**ATTs 6 and 7**)

A summary of the Survey and raw data will be provided by Synovate following completion of the Survey and its analysis.
Statistical reviews of this data produced by Synovate will be reviewed by QI staff for validity based on comparisons with previous years data and results. This data will then be entered into the PIP summary.

Who will collect the data <Back to TOC>

CareMark IS team	Oversight of CareMark Prescription database	_____
Dave Bryant, Synovate	Oversight of CAHPS Survey design, implementation, analysis and presentation.	_____
Mary Pinkney RN, BS	Inter-reliability/database auditor	12years Managed Care experience. Experienced project manager, with 10 years HEDIS/CAHPS experience. DH training includes Medical Records Imaging and Diamond utilization. Tiermed training includes the

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		use of the 2006 Compass Navigator tool for data entry, analysis and auditing/quality control functions. HEDIS 2007 Training.
Cindy Ashley	Quality Improvement Supervisor	16 years Managed Care experience. Experienced project manager with 4 years of HEDIS/CAHPS experience. DH training includes Medical Records Imaging, Diamond training and Peradigm training. Tiermed training includes the use of the 2007 Compass Navigator Tool and the Data Collection Tool. These tools are used for analysis, auditing and quality control Functions.
Jennifer Kikla MSPH	Intervention Manager	Experienced researcher x4 years with DH training including Enterprise Document Management Diamond and Peradigm,
Tasha Oliver, MBA	Medical Compliance Specialist	Experience database technician 10yrs; DH training includes Peradigm, CareMark Rx Navigator, Enterprise Document Management, and VaxTrax.

No longer within Denver Health:

Brian Altonen MS, MPH	Database Development	Experienced spatial epidemiologist 22 yr; researcher 20yrs; DH training including Medical Records Imaging, VaxTrax, CIIS, and Diamond, with HEDIS Help trained on the use of the 2006 Hybrid Help tool and auditing functions. Tier Med training
Melissa Cook	**Database development**	**Experienced Database technician x3 years DH training including Enterprise Document Management Diamond and Peradigm, CareMark and HEDIS 2007 training.**

Data Collection Process **[Process unchanged for Intervention 1 and 2 ~~year, study of 2006 data performed May 2007~~]**

The data for Measures 1, 8 and 9 of this study are from CareMark/TM. The datasets for this study are produced using search caches developed by the QI analyst and stored in the CareMark *My Reports* folder. The information produced by these caches can be queried for and then downloaded for review and analysis using Excel tools. The results are then entered into the PIP [**ATT 4a & b**]. For indicators 1, 8 and 9, quarterly counts of the prescriptions are collected and used to produce the end-of-year summaries entered into this PIP. For Indicators 8 and 9, quarterly results are summed on a yearly basis. To accomplish these tasks, the following query-related steps are taken using Caremark RxNavigator:

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1. *Pharmacy Utilization Reports. Goal: calculate results for Measure 1 pertaining to Internal versus External pharmacy utilization. Method: using the Create Report tool in CareMark to produce a special reports on pharmacy utilization by members [**ATT 4c**]. One report summarizes internal pharmacy use, the other summarizes external pharmacy use. Each of these reports produces quarterly data which can then be summed up to produce annual statistics and entered into the PIP document [**ATT 4d & e**]. These reports provide a listing of members along with quarterly prescription and utilization statistics calculated by Caremark. The following values (known as metrics in the RxNavigator) are produced through this query: Average cost per prescription per member per quarter, Average utilization (prescriptions per member per quarter), total cost for the quarter, total number of prescriptions filled. Following a run of the internal or external query, the resulting table is exported into Excel and analyzed for changes in quarterly values or rates for each of the metrics related to pharmacy use. These tables will be merged for the next review process.*

2. *Defining three groups of members. Goal: define three groups of members and calculate relevant statistics for Measures 8 and 9; the three groups: those who use only the Denver Health & Hospital Authority pharmacy (internal only), those who use only one or more external pharmacies covered by Denver Health Managed Care (external only), and those who use both internal and external pharmacies (both) throughout the study year [**ATT 4 f**]. To produce the dataset for this review, the Pharmacy Utilization Reports from the previous step are merged into a single database, a "Source" column is then added (with option of Internal or External entry), and the data re-sorted by Name and related personal identifiers. A Pivot table is then generated, using the unique personal identifiers for row entries (one row per member) and "Source" column for headers of columns (Internal, External). Members may then be identified as users of "Internal," "External" or "Both" (for "Both", Internal and External columns will have entries). Any related metrics to be compared between groups (Average number of Prescriptions per Quarter, Total Cost per Quarter, etc) may be added to this table. This data may then be reviewed as a part of quarterly and annual statistics recapitulations.*

Instruments used to collect the data

CAHPS Survey (ATT 3 series): The CAHPS Survey is administered yearly by Synovate, an NCQA-certified vendor. Questions in this study are reviewed and approved by NCQA. As part of this process, NCQA takes the following factors into consideration when reviewing the supplemental questions for the CAHPS survey: Where will the questions be placed in the survey tool? Has the MCO asked the question in prior surveys administered? Does the MCO intend to use the supplemental questions data for trending purposes? Synovate provides a set of questions from CAHPS 3.0 Supplemental to use as a guide in designing the final questions. These questions are developed and then submitted to NCQA for review and approval. Once survey questions are approved by NCQA, they are added to the survey being administered. This survey is then administered and evaluated, and a report generated by *Synovate*. As part of an Internal quality control process managed by Synovate, a percentage of complete responses are reviewed for each survey. Some surveys are not included in the review process because the member did not respond to 80% or more of the questions. As part of a final review process, each survey question undergoes its own evaluation for percent response to each question or series of questions. Once completed, Synovate submits the Survey report to DHMC, who evaluate the results further before adding them to this Study. The results of these custom questions for the PIP are reviewed for changes and trended [ATT 5], and any needed summaries produced [ATT 6]. A final Internal review process takes place before any presentation of the results [ATT 7].

2007 CAPHS 4.0H Survey revised the definition of "complete survey or valid survey". The definition of a "complete survey" has changed to

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include all surveys on which 1 or more questions are answered,. The requirement that question1 and at least 80%of other questions be answered was dropped.

Data Sources   [Process unchanged for Intervention 1 year, study of 2006 data performed May 2007; **Process unchanged for Intervention 2**]
Pharmacy data
   Counts of prescriptions filled during the study period for all Medicaid Choice members. Data is received from the CareMark database (description attached). Caremark data is gathered at least one month following the completion of the study period to avoid missing any late claims filed.

Survey data (attach the survey tool and the complete survey protocol):
   CAHPS is done annually. Summaries of replies to questions in the CAHPS 2006 Survey will be used (ATT 3).

Study Population (n= 9,696, for Medicaid Choice population as of 12/31/05)

Pharmacy Data. For this study all members who obtained prescriptions as Denver Health Medicaid Choice members during the study period are included. In 2005, 7,439 members (76.7% of the total MCD population) received a prescription according to Caremark data. 4602 (61.9%) of the members were 18 years of age or older (4,602/4,833, 95.2%) are included in this study. Therefore, no sampling process was used. Only scripts obtained through regular pharmacy utilization process are reviewed   (*exclusions are noted in next section*).

Survey Data. December 31, 2005. The population of members who will participate in the Synovate survey are selected randomly by a process explained in the attached documentation [ATT 3].   This survey is administered to 1350 members 18 years of age and older.   Of the approximately 9,696 members in this population, approximately 4833 (49.8%) are 18 years of age and older (see ATT 1 for description of Medicaid Choice demographics.

Survey Data. December 31, 2006. The population of members who will participate in the Synovate survey are selected randomly by a process explained in the attached documentation [ATT 3].   This survey is administered to 1350 members 18 years of age and older.   Of the approximately 35,321 members in this population, approximately 13,599 (38.5%) are 18 years of age and older (see ATT 1 for description of Medicaid Choice demographics.

Survey Data: **December 31, 2007. The population of members who will participate in the Synovate survey are selected randomly by a process explained in the attached documentation [Att 3]. The survey is administered to 1350 members 18 years of age and older. Of the approximately 36,414 Medicaid Choice members, approximately 13,177 (36.2%) are 18 years of age and older. [see Att 1 for updated demographics information].**

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Exclusion Criteria [Process unchanged for Intervention 1 year; Internal Validity section modified due to May 2007 CareMark results; **Process unchanged for Intervention 2**]]

Since this is a study of prescription costs related to costs that can be modified by increasing the use of internal pharmacies at Denver Health, only prescriptions impacted by this successful intervention are considered appropriate for use as valid indicators. Excluded from this review are the following types of prescriptions and/or groups of members with DHMC coverage:

1. Prescriptions provided to members residing at Long Term care facilities by specific alternative delivery services, since the cost and source for these medications is not managed and/or cannot be modified by Denver Health Managed Care. As part of the Medicaid Choice program, DHMC only provides these members with coverage for cost of these medications and a pharmacy program not part of DH delivers these scripts.
2. Prescriptions that are provided to members by Access Behavioral Health [a behavioral health program] are excluded, since these medications are managed and provided by an external pharmacy chain and since both the source and cost for these medications are currently not managed by DHMC. As part of the Medicaid Choice contract DHMC provides these members with coverage for cost of these behavioral health medications. Due to possible inclusion of Access Behavioral Health prescriptions with pharmacy services managed by DHMC in the future, this data is managed separately with similar results calculated, but not reported due to exclusion of this group from the External Pharmacy users list.
3. Prescriptions that represent bioengineered, high technology products and/or advanced genetically active and/or advanced immunoactive products, when these products are available through only a single or few non-competitive sources. As part of the Medicaid Choice program, DHMC provides full coverage for these prescriptions regardless of cost. These medications are identified by a review of pharmacy chain name.
4. Finally, as part of the query process for quarterly prescription of Medicaid Choice members, an additional exclusion is provided by Caremark, as part of the "Create Report" feature. When "Specialty Drugs Excluded" option is added to the Create Report, this removes drugs that are not part of the regular formulary but included in the member's prescriptions for unique reasons requiring pre-approval.

Based on the above, several Pharmacy Chains were excluded from the Caremark RxNavigator search tool developed for the 2006 Baseline Year study. These exclusions and the exclusion process are provided as **ATT 4g**.

Data Completeness. Several steps need to be taken to minimize threats related to lack of data completeness, accuracy or reliability. <Back to TOC>

- For All Measures: this study uses the entire membership that meets the criteria defined for this study based on HEDIS criteria. Throughout the research process, a number of reviews are carried out to ensure data completeness and integrity, including implementation of any needed reconciliation processes.
- For Measures 1, 8, 9: The CareMark "live database" is updated instantly with each use by a pharmacist, and central downloads and updates of this database occur approximately every 3 days. To identify members for this study, a list is developed using the Caremark RxNavigator approximately 3 months (150 days) after the last date of the study period. Data downloads are checked manually for the integrity of fill dates before any evaluation process begins. Since the Caremark database is current or "live," with at most a 3 day lag, claims lags (typically 60 to 90 days) typically do not impact this process. Methods used to research the CareMark database are summarized in **ATT 2** and **ATT 4 series**.
- For Measures 2 through 7: The CAHPS Survey tool used for this study is produced by Synovate (**ATT 3**). To ensure data completeness for this

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blinded study, TierMed produces a list of eligible members according to NCQA standards and then forwards this list to Synovate, where a sample is generated according to NCQA requirements. The steps taken to identify the survey population and validate this selection process is detailed in ATT 3a. The survey process itself is detailed in the remaining sections, with the method used by Synovate to calculate rates defined in **ATT 3f**.

==1/23/09 The pharmacy and survey data was 100% complete at the time it was pulled for the PIP.==

Internal Validity. <Back to TOC>

Internal validity is impacted by the selection process. Populations excluded from this study such as Long Term Care residents or the Access Behavioral Health population can bear different results for the same measures. Due to the age distribution of members in the CAHPS portion of this study (18 to 100+), mortality during the study period is not a major concern. However, due to the age constraints on selecting this study population, results may not correlate well with similar studies performed on the younger age group (under 18 y/o). History is a threat to this study based on other Denver Health interventions that are ongoing at this facility, leaving open the possibility that interventions not produced by the Quality Assurance Committee may take place and possibly impact the outcomes of this PIP project. No changes are expected in the future instrumentation of this part of the PIP study, and any such changes will be duly noted in related reports.

Caremark Pharmacy data.

The entire population of Medicaid Choice members 18 to 100+ y/o participating in pharmacy-related activities are reviewed for this study.

A comparison of the 2005 and 2006 study population, prescription and cost values suggests significant differences exist between 2005 and 2006, resulting in considerable fluctuations in recorded script counts.

A comparison chart of all study years prescription and cost values are included in [ATTACHMENT6].

CAHPS Survey. <Back to TOC>

As part of the standard CAHPS Medicaid Survey protocol, 1350 members are randomly selected for participating in this survey; this includes a selection of 10% additional members for the purpose of increasing the number of survey returns. This survey focuses on the past six months experience by members, reducing the likelihood for problems or errors related to recall.

With the distribution of 1350 surveys, a 100% return of all 1350 records would represent responses from approximately 27.9% of this age group (n-4,833) and 14% of the total MCD population (n= 9,696) as of December 2005. Since number of returns are first measured as percent of total surveys filled out, followed by a review of the number/percent of members replying to each survey question, this allows for the following estimates for the following given ranges of anticipated survey returns: a return of 40% (540 surveys returned) would represent approximately 10% of the total MCD population 18 years of age and older, 50% return (675 surveys returned) would represent approximately 11% of the total MCD population 18 years of age and older. For this reason, the most important risk to validity of the CAHPS Survey is the return of surveys by members not representative of the total population. The CAHPS Survey is administered in written form in just one language (English), but offers each member the possibility of assistance through phone messages and postcards provided in both Spanish and English. This could reduce the number of

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replies to this survey by families with Foreign-language speaking members.

For CAHPS 4.0 (2007) no over sampling was done based on the increased cost to conduct more surveys. No added value could be determined for the over sampling. Out of the 1350 surveys mailed 368 were returned for a response rate of 28.79%. The biggest threat to validity of the survey is to generalize the survey population to the entire Medicaid population when only 4% was sampled.

Population selection comparison. Aside from group size and selection processes, a temporal difference exists between the two study populations defined for this PIP. The survey administered to the Medicaid population refers to just the last 6 months of experience, whereas the DHMP survey pertains to 12 months of experience. In essence, this defines the population surveyed for pharmacy experience (n = 1350) as a subgroup of the population studied for pharmacy use (n = 4906). However, in the year 2006, the subgroup of the population studied for the pharmacy use was n=7784

 For the 2008 CAHPS 4.0H, out of the 1350 surveys mailed 373 were returned for a response rate of 28.37%. This sample of 373 responses represent about 3% of the total Medicaid Choice population that is 18+ y/o (13,177). Similar to previous years the number sampled represents a small portion of the population which can make it hard to generalize to the entire Medicaid population.

External Validity of results from Pharmacy Data and Survey Data. <Back to TOC>

Regional demographic differences in Colorado can impact our ability to relate the results of our study to similar studies by other institutions. According to a 2005 HSAG meeting (July 2005), for example, rural settings can contain significantly different percentages than urban settings for certain age and income groups. Since this study engages members who reside in a fairly urban to sub-urban setting, the applicability of our results at a state level may be limited.   On the other hand, this impact of population differences on external validity may be reduced should it be found that although some epidemiological features differ from region to region, certain interventions and treatment programs remain broadly applicable from one region to the next.

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Attachments <Back to TOC>

1. Demography. MCD Demographics; Study Population based on Caremark RxNavigator 2006 prescription list for entire population (2p)
2. CareMark/RxNavigator (86 pp) -   Unchanged
    a.   *Product Overview.* Source: CareMark WebResolve. (2 pp)
    b. *Shared Reports.* Source: CareMark WebResolve. (14 pp)
    c. *Ad Hoc Reports.* Source: CareMark WebResolve. (19 pp)
    d. *Use of CareMark Rx Navigator for the Performance Improvement Project (PIP) Member* Satisfaction with Access to Pharmacy Services at Denver Health. Source: DHMC Training materials. (47 pp)
    e.   Correspondence: 7/14/06--"RxNavigator. New Functionality", 8/3/06—Meeting Notes on PMPM/PMPQ, and Internal-External/three-groups methodology.
3.   Synovate/TM Member Survey Documentation (CAHPS Survey information)
    a. *Denver Health Medicaid Choice. 2007 CAHPS 4.0H Adult Medicaid Report*. Pages 2-5. Synovate.
    b. DHMC Custom Questions. Problems Getting Prescriptions. *Ibid*,(2pp).
    c. Appendix A: Response Rates and Survey Protocol. *Ibid*, pp. 34-35.
    d. Appendix B: Summary Rates and Means. *Ibid*, pp. 36-39.
    e. Appendix C: Technical Notes. *Ibid,* pp. 40-45.
    f. "Appendix 2: CAHPS 4.0H Adult Questionnaire (Medicaid)." *Ibid*, pp. 52-54.
4.   Evaluating CareMark Data - Unchanged
    a. [Flowchart.] "Information Flow for Member Satisfaction with Access to Pharmacy Services . . ." (1p)
    b. [Database development and analysis methodology.] Parts 1-4: Preliminary Review; Extracting and Preparing Quarterly Utilization Data; developing Final table; Analysis (4 pp).
    c. Caremark RxNavigator--Create Report Tool (*Ad Hoc Reports*)
    d. Internal Pharmacy Utilization Report
    e. External Pharmacy Utilization Report
    f. [Flowcharts.] Internal vs. External Pharmacy Utilization. Defining three groups of members: Internal, External, Both
    g. Exclusions for Pharmacy Utilization Review (Pharmacy Chains: Inclusion-Exclusion Criteria).
5. Evaluating CAHPS Data--an Excel Spreadsheet for evaluating CAHPS Survey data.
6. Statistical review of Caremark Data: *2006 data review*.
7. IRR
8. Preliminary Results. Focus Group Activity
9. QAC Meeting minutes (Replace by Medical Management Committee on January 2007)
    a.   Goals approved on September 11, 2007 by Medical Management Committee

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        b. Medical Management Committee minutes (November, December 06,Feb07,May-June07, September 07)
  10. Newsletters: Provider(2nd,3rd,and 4th Qtr2006 & 2nd and 3rd Qtr 2007); Member(February, May/June and August 2007)

Attachments for Intervention 1 (2006 population study completed in 2007)

1. Demography. Population[[Updated]

2. CareMark RxNavigator. (Unchanged)

3. Synovate (Updated)

4. Evaluating CareMark Data (Unchanged)

5. Evaluating CAHPS Data - Statistical Significance [Updated]

6. Statistical review of Caremark Data [Updated]

7. IRR

8. Preliminary Results – Focus Group Activity [NEW ADDITIONS]

    a. Telephone Script

    b. Focus Group Project – Planning Document

    c.   Report. Quality Improvement Summary Sheet

    d. Selection of Members

9. QAC Meeting Minutes (replaced by Medical Management Committee on January 2007) accomplishments and Future Plans [Updated]

    a. Goals approved on September 11, 2007

    b.   Medical Management Committee minutes (November, December 06, Jan-Feb 2007, May-June 2007, September 2007)

10. Newsletters: Provider: 2nd, 3rd and 4th Quarter 2006;

           Member: February, May/June, and August 2007

G. Activity VIIa: Include improvement strategies (interventions for improvement as a result of analysis). List chronologically the interventions that have had the most impact on improving the measure. Describe only the interventions and provide quantitative details whenever possible (e.g., "Hired four customer service representatives" as opposed to "Hired customer service representatives"). Do not include intervention planning activities.

Date Implemented (MMYY)	Check if Ongoing	Interventions	Barriers That Interventions Address

Describe the process used for the causal/barrier analyses that led to the development of the interventions:

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G. Activity VIIb: Implement intervention and improvement strategies. Real, sustained improvements in care result from a continuous cycle of measuring and analyzing performance, as well as, developing and implementing systemwide improvements in care. Describe interventions designed to change behavior at an institutional, practitioner, or member level.

Several planned Interventions are under review. These include activities directed towards members, practitioners and the Denver Health care system. These interventions will target member utilization pertaining only to the pharmacy services reviewed in CareMark RxNavigator. (For excluded forms of pharmacy utilization, see **ATT4b** (flowchart) and **4g**.)

      Possible interventions targeting the membership population include: 1) a focus group project designed to determine why members choose to utilize outside pharmacies, 2) development of promotional materials with the goal of increasing inside pharmacy utilization, 3) expanding the current successful mail-order prescription refill program, and 4) identify the high cost patients who utilize outside pharmacies with the goal of increasing their use of internal pharmacies by implementing programs designed to improve their access to these services and PCP monitoring activities related to the use of the internal medical records system. Possible interventions directed towards practitioners include: 1) the development of an electronic prescribing system, 2) obtaining feedback from providers about the use of this program in order to improve methods for obtaining refills which are already in place, and 3) publishing up-to-date information regarding internal versus external prescription costs in order to improve their awareness of internal and external utilization costs. Finally, possible system-related interventions include: 1) development of an electronic prescribing program, 2) increasing the internal supply of high cost medications with the goal of reducing the number of members re-directed towards outside pharmacy use, and 3) providing home delivery and/or mail order to members on maintenance medications.

Baseline to Intervention 1 [NEW]

    [The main goal of this study is to monitor the impact of the pharmacy enhancements on patient satisfaction and internal Denver Health pharmacy use. The following enhancements were made for the internal pharmacy services at Denver Health:1. Established standards in May of 2004 for new prescriptions to be available within 45 minutes.
    2. Implemented standards for refills to be available within 24-48 hours in June of 2004.

We continued to monitor these interventions for baseline through intervention 1 (see indicators 6 and 7). Also in 2006 interventions from both pharmacy and managed care were implemented to improve customer service and member satisfaction within the Denver Health pharmacies and internal pharmacy usage.

Managed Care implemented the following interventions in 2006: (Att 10 - see provider newsletters for more information)
    1. Continued provider education on the benefits for patients and Denver Health on using the internal pharmacy network rather than outside pharmacies.
    2. Expanded mail order prescriptions on a case by case basis for our Medicaid Choice members.
    3. Managed care pharmacy nurses worked with members to synchronize medications so patients could pick up all their refills once a month. They also contacted Medicaid Choice members with the highest medication costs at outside pharmacies to explain the benefits of getting their prescriptions filled at Denver Health.

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G. Activity VIIb: Implement intervention and improvement strategies. Real, sustained improvements in care result from a continuous cycle of measuring and analyzing performance, as well as, developing and implementing systemwide improvements in care. Describe interventions designed to change behavior at an institutional, practitioner, or member level.

Denver Health pharmacy implemented the following interventions in 2006; (Att10 - see pharmacy newsletters for more information)
    1. Renovation of the Eastside Outpatient Clinic to allow for more convenient access to drop off and pick up medications. (completed in October 2006)
    2. Improved inpatient discharge pharmacy processes to ensure discharge medication regimen orders are complete, safe and appropriate with individual payer source. Additional pharmacists were hired to facilitate this process.
    3. New outpatient pharmacy opened in Webb Center for Primary Care in November 2006.]

Deleted 1/24/08 1) ~~The purpose of the Focus Group activity is to identify reasons why members use both internal and external pharmacies and to determine if any changes that need to be made to improve internal pharmacy services.~~
~~The focus group project took place on~~ ~~March 9, 2007.~~ ~~The process for selecting members for this activity is defined in the Results section [ATT 8c].~~ ~~Members who use both internal and external pharmacy services were targeted for this activity due to the need to identify reasons why members utilize~~ ~~both~~ ~~internal (Denver Health or DH) and external (non-DH) pharmacies, rather than just an external or internal pharmacy.~~ ~~(see ATT 8d for selection process).~~
~~On February 2006, attempts were made to contact 83 members for this study by phone.~~ ~~Messages were left when members did not answer their phone.~~ ~~83 members were contacted; 11 agreed on the telephone to participate in this activity; 3 members showed up for the focus group activity.~~ ~~Major topics discussed include reasons for choice of internal versus external pharmacy use, and the value of incentives in increasing internal pharmacy use.~~ ~~This discussion lasted 120 minutes, during which time lunch was served.~~ ~~A number of conclusions and observations were recorded regarding need for internal change and the value of incentives [ATT 8e].~~

G. Activity VIIb: Implement intervention and improvement strategies. Real, sustained improvements in care result from a continuous cycle of measuring and analyzing performance, as well as, developing and implementing systemwide improvements in care. Describe interventions designed to change behavior at an institutional, practitioner, or member level.

Intervention 1 to Intervention 2

We monitored the following Managed Care interventions in 2007: (Att 10 - see provider newsletters for more information)

1. Continued provider education on the benefits for patients and Denver Health by using the internal pharmacy network rather than outside pharmacies.
2. Expanded mail order prescriptions on a case by case basis for our Medicaid Choice members.
3. Managed care pharmacy nurses worked with members to synchronize medications so patients could pick up all their refills once a month. They also contacted Medicaid Choice members with the highest medication costs at outside pharmacies to explain the benefits of getting their prescriptions filled at Denver Health.

Denver Health pharmacy implemented the following interventions in 2007; (Att10 - see pharmacy newsletters for more information)

1. Revised and updated the Medicaid Choice pharmacy formulary
2. New LCR based electronic prescribing for clinics to reduce pharmacy wait times.

In March of 2007 a Focus Group activity was conducted to identify reasons why members use both the internal and external pharmacies and to seeif the member had any feedback on improving internal pharmacy services.

The focus group project took place on March 9, 2007. The process for selecting members for this activity is defined in the Results section [ATT 8]. Members who use both internal and external pharmacy services were targeted for this activity due to the need to identify reasons why members utilize <u>both</u> internal (Denver Health or DH) and external (non-DH) pharmacies, rather than just an external or internal pharmacy.

On February 2007, attempts were made to contact 83 members for this study by phone. Messages were left when members did not answer their phone. 83 members were contacted; 11 agreed on the telephone to participate in this activity; 3 members showed up for the focus group activity. Major topics discussed included: reasons for choice of internal versus external pharmacy use, and the value of incentives in increasing internal pharmacy use. This discussion lasted 120 minutes, during which time lunch was served. A number of conclusions and observations were recorded regarding the need for internal change and the value of incentives [ATT 8e].

H. Activity VIIIa. Data analysis: Describe the data analysis process done in accordance with the data analysis plan and any ad hoc analyses (e.g., data mining) done on the selected clinical or nonclinical study indicators. Include the statistical analysis techniques used and *p* values.

Baseline Measurement (January 1, 2005 to December 31, 2005)

CAHPS Survey, preliminary review of results (Measures 2 through 7).

Denver Health pharmacy users (Measures 2, 3, 6 and 7). 58.3% of members who responded appropriately to the survey stated that they obtained prescriptions at Denver Health. Of those who responded 'yes' to this question: 62.3% stated it was **not** a problem; [54.5%] were able to fill that prescription in 45 minutes or less; 89.4% received their refills from the Denver Health pharmacy within 24 to 48 hours.

Outside Pharmacy users. (Measures 4 and 5). 54.6% of members who responded appropriately to the survey indicated that they obtained their prescriptions at a pharmacy outside of Denver Health; 77.4% stated this was **not** a problem.

Discussion. Members who used Denver Health pharmacies were less satisfied with these services than those using external pharmacies. Potential reasons for this difference have not been determined and so will be reviewed as part of the PIP review at a QAC meetings, and again as part of the intervention processes currently underway. Possible intervention activities underway were discussed in Step 7.

Caremark Pharmacy Utilization, preliminary review of results (measures 1, 8, 9).

Denver Health vs. Outside pharmacy scripts and costs (Measures 1, 8, and 9). 46.06% of all prescriptions (71,546 of 155,336) in 2005 for Medicaid Choice members were managed by Denver Health pharmacy (53.94% or 83,790 scripts came from an outside source). Of the 4,602 members reviewed for this study, 1,505 (32.70%) used both internal and external pharmacies in 2005. The most significant difference between groups of members reviewed for this study related to the average number of prescriptions filled per member by members using only and internal or external pharmacy, versus members who used both in 2005. Members using both internal and external pharmacies averaged 11.63 scripts per member per quarter in 2005. This amount contrasts greatly with the number of scripts filled by the other two groups. Members using just the internal Denver health pharmacy obtained 6.91 scripts per member per quarter in 2005; those using just the external pharmacies obtained 6.86 scripts.   In terms of costs, 43.6% of the total annual prescription costs were spent by members utilizing both internal and external pharmacy services (Total cost = $5,420,445.00 for 155,336 scripts, filled by 4,602 members). Those who used just external pharmacies in 2005 made up 37.4% of the total cost, whereas those using only internal pharmacies were responsible for just 19.0% of the total annual cost.

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H. Activity VIIIa. Data analysis: Describe the data analysis process done in accordance with the data analysis plan and any ad hoc analyses (e.g., data mining) done on the selected clinical or nonclinical study indicators. Include the statistical analysis techniques used and *p* values.

INTERVENTION 1 (January 1, 2006 to December 31, 2006)

<u>Denver Health vs. Outside pharmacy scripts and costs</u> (Measures 1, 8, and 9). 46.06% of all prescriptions (71,546 of 110, 888) in 2006 for Medicaid Choice members were managed by Denver Health pharmacy (53.94% or 83,790 scripts came from an outside source). Of the 7,784 members reviewed for this study, 1,429 (18.36%) used both internal and external pharmacies in 2006.

The average number of prescriptions per member dropped by almost half for all three groups in 2006 compared to 2005. [The difference in number of prescriptions per member from 2005 to 2006 was statistically significant for all three groups.] The biggest difference in utilization rates is seen in those members that use both the internal and external pharmacies compared to those that use either an outside pharmacy or a DH pharmacy only. The average number of prescriptions filled per member utilizing both pharmacies is 7.92 compared 3.06 prescriptions for those that use a Denver Health pharmacy only and 2.23 scripts for those that use an outside pharmacy only. The cost of prescriptions per member stayed relatively the same from 2005 to 2006; however the cost per prescription varied greatly between the three groups. The cost per prescription is much lower if filled at a DH pharmacy ($23.43) compared to prescriptions filled at outside pharmacies ($49.22) or prescriptions filled by members utilizing both a DH pharmacy and an outside pharmacy ($35.34).

Total pharmacy expenditures for the year 2006 was $3,972,627.22.00, which is down $1,447,817.8 from 2005. External pharmacy costs contributed 40.14% of the total cost and members utilizing both internal and external pharmacies contributed 40.26% of the total costs, while internal pharmacy costs only contributed 19.60% of the total annual cost for 2006. [The average amount of money spent per member per quarter (PMPQ) on medication scripts for all three groups was statistically significant less than in 2005. Amount spent PMPQ was the lowest for the group that used the internal pharmacy only.]

2007 CAHPS Survey, review of results (Measures 2 through 7).

<u>Denver Health pharmacy users</u> (Measures 2, 3, 6 and 7). 57.1% of members who responded appropriately to the survey stated that they obtained prescriptions at Denver Health. Of those who responded 'yes' to this question: 74.1% stated it was not a problem; [60%] were able to fill that prescription in 45 minutes or less; 91.9% received their refills from the Denver Health pharmacy within 24 to 48 hours.

<u>Outside Pharmacy users.</u> (Measures 4 and 5). 58.5% of members who responded appropriately to the survey indicated that they obtained their prescriptions at a pharmacy outside of Denver Health; 86.2% stated this was not a problem.

<u>Discussion</u>. Overall a little more half of our members surveyed are using an outside pharmacy to fill their prescriptions. The satisfaction rates were also higher for members that used an outside pharmacy compared to those that used the internal system. While the overall satisfaction is lower for Denver Health pharmacies when compared to the previous year internal results we have seen a statistically significant increase (p = 0.02) in satisfaction in those were able to obtain a prescription at Denver Health with out a problem. Our costs per member also went down this year compared to last year for all three groups measured (DH only, pharmacies outside of DH and both internal and external pharmacy use). We had an overall cost savings of $1,447,817.8 this year compared to last.

H. Activity VIIIa. Data analysis: Describe the data analysis process done in accordance with the data analysis plan and any ad hoc analyses (e.g., data mining) done on the selected clinical or nonclinical study indicators. Include the statistical analysis techniques used and *p* values.

INTERVENTION 2 (January 1, 2007 to December 31, 2007)

2008 CAHPS Survey review of results (Measures 2 through 7):

The 2008 CAHPs results regarding Member Satisfaction with Access to Pharmacy Services remained relatively unchanged for all measures. There were only slight variations in percentages from the previous year. Comparing the internal results to external results continued to show higher satisfaction ratings for those that fill outside. For members filling prescriptions outside of DH 84% responded they did not have a problem filling their prescription where as 76% of members filling scripts at Denver Health did not have a problem.

Caremark Pharmacy Utilization, review of results (measures 1, 8, 9):

According to the data received from Caremark our Pharmacy Benefit Manager, the quarterly average member utilization rate for pharmacy by number of prescriptions filled per member per month increased in addition to the quarterly average amount paid for a prescription. These increases could be attributed to our increase members. In 2006 we sampled 7784 members and in 2007 we had a total of 9460, an 18% increase. The internal cost went up from last year which can be correlated to the increase in membership.

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H. Activity VIIIb. Interpretation of study results: Describe the results of the statistical analysis, interpret the findings, and compare and discuss results/changes from measurement period to measurement period. Discuss the successfulness of the study and indicate follow-up activities. Identify any factors that could influence the measurement or validity of the findings.

Interpretation of Baseline Measurement (January 1, 2005 to December 31, 2005)

Comparing Medicaid Choice members with DHMP members: the CAHPS 3.0H results for PIP measures 2 through 7 can be compared with the **Adult Commercial CAHPS** 3.0H (Denver Health Medical Plan survey) results.   However, one important difference should be noted: the survey administered to the Medicaid population refers to the last 6 months of experience, whereas the DHMP survey pertains to 12 months of experience.

For DHMP members, 36.4% (63/173) replied to all appropriate parts of the survey and stated they did **not** experience a problem getting prescriptions from the Denver Health pharmacy (inferred from Q34b, members who experienced problems with pharmacy). When asked if they had a problem filling new prescriptions within 45 minutes, 58 out of 80 responded yes (72.5%), implying *37.5% did **not** experience a problem* filling new prescriptions. This response contrasts with the results for Q37b of the Medicaid population survey, for which *62.3%* of the members who replied stated it was a **not** a problem getting new medications from the pharmacy.

Regarding outside pharmacy use, only 23% (40/174) of the DHMP members who responded said they experienced problems (of any type) with the use of outside pharmacies; *77.4%* (134/174) stated it was **not** a problem. For Medicaid Choice members, 164 out of 212 (*77.4%*) stated it was **not** a problem obtaining an outside prescription.   However, when specific problems were addressed regarding outside pharmacy use by DHMP members, 16/28 (*57.1%)* stated they did **not** experience a problem filling new prescriptions at an outside pharmacy (42.9% or 12/28 did experience this problem).

In summary:

 ➤ Medicaid members were more satisfied with Denver Health pharmacy services than DHMP members in relation to:
  • Obtaining a prescription at Denver Health
  • Receiving a new prescription within 45 minutes
 ➤ There was no difference in member satisfaction experienced by both groups with regard to:
  • Receiving refills within the allotted 24 to 48 hour refill time by Denver Health
  • Obtaining a prescription from outside pharmacies.

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H. Activity VIIIb. Interpretation of study results: Describe the results of the statistical analysis, interpret the findings, and compare and discuss results/changes from measurement period to measurement period. Discuss the successfulness of the study and indicate follow-up activities. Identify any factors that could influence the measurement or validity of the findings.

INTERVENTION 1 (January 1, 2006 to December 31, 2006)

Comparing Medicaid Choice members with DHMP members: the CAHPS 4.0H results for PIP measures 2 through 7 can be compared with the Adult Commercial CAHPS 4.0H (Denver Health Medical Plan survey) results.   However, one important difference should be noted: the survey administered to the Medicaid population refers to the last 6 months of experience, whereas the DHMP survey pertains to 12 months of experience.

For DHMP members, 73.3% (162/221) replied to all appropriate parts of the survey and stated they did not experience a problem getting prescriptions from the Denver Health pharmacy (inferred from Q52a, members who experienced problems with pharmacy). When asked if they had a problem filling new prescriptions within 45 minutes, 18 out of 38 responded yes (47.4%), implying *52.6% did not experience a problem* filling new prescriptions. This response contrasts with the results for Q37b of the Medicaid population survey, for which *74%* of the members who replied stated it was a not a problem getting new medications from the pharmacy.

Regarding outside pharmacy use, only 34.2% (13/38) of the DHMP members who responded said they experienced problems (of any type) with the use of outside pharmacies; *65.8%* (25/38) stated it was not a problem. For Medicaid Choice members, 119 out of 138 (*86%*) stated it was not a problem obtaining an outside prescription.   However, when specific problems were addressed regarding outside pharmacy use by DHMP members, 22/38 (*57.9%)* stated they did not experience a problem filling new prescriptions at an outside pharmacy (42.1% or 16/38 did experience this problem).

In summary:

- ➢ Medicaid members were more satisfied with Denver Health pharmacy services than DHMP members in relation to:
  - Obtaining a prescription at Denver Health
  - Receiving a new prescription within 45 minutes
- ➢ There was no difference in member satisfaction experienced by both groups with regard to:
  - Receiving refills within the allotted 24 to 48 hour refill time by Denver Health
  - Obtaining a prescription from outside pharmacies.

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H. Activity VIIIb. Interpretation of study results: Describe the results of the statistical analysis, interpret the findings, and compare and discuss results/changes from measurement period to measurement period. Discuss the successfulness of the study and indicate follow-up activities. Identify any factors that could influence the measurement or validity of the findings.

INTERVENTION 2 (January 1, 2007 to December 31, 2007)

Denver Health vs. Outside pharmacy scripts and costs **(Measures 1, 8, and 9).**

To help control costs of prescriptions and improve coordination of care with medication management one of our interventions is to increase the # of members filling their prescriptions internally. For 2007 we had the biggest improvement in the percentage of members filling internally versus externally. For the first time we had more members (57.63%) fill prescriptions internally versus externally (42.37%) compared to previous years. With more members filling internally our Per Member Per Quarter (PMPQ) cost significantly increased, but was still lower ($103.00) than those filling externally ($124.46) or those utilizing both internal and external pharmacies ($275.45). Looking at members that utilized both internal and external pharmacies to fill their prescriptions there were no significant changes in the PMPQ average number of scripts or in the PMPQ average cost of prescriptions for 2007 compared to 2006. For members using only external pharmacies to fill prescriptions, a slight statistically significant increase was noted.

(p=.05) in the average cost PMPQ for prescriptions in 2007 compared to 2006.

2008 CAHPS Survey review of results (Measures 2 through 7):

The 2008 CAHPs results regarding Member Satisfaction with Access to Pharmacy Services had no significant changes from the previous year. Generally our members (94%) can get prescriptions filled within 24-48 hours. Satisfaction rates continue to be higher for those that fill at an outside pharmacy. Since3% of our population responded to the survey, the results may not be applicable to our entire Medicaid population.

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Quantifiable Measure 1: Percentage of prescriptions filled **by members 18+ years of age** at: a) Denver Health, b) contracted pharmacies outside of Denver Health?

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test Significance and *p* value
a) Denver Health only						
January 1, 2005 to December 31, 2005	*Baseline:*	71,546 (n = 3,097)	155,336	46.06%		Chi Sq.: Significant P value <0.0001
January 1, 2006 to December 31, 2006	**Remeasurement 1:**	52,794 (n = 4,144)	110,888	47.61%		
January 1, 2007 to December 31, 2007	**Remeasurement 2:**	**90,500 (n = 5,992)**	**157,031**	**57.63%**		
January 1, 2008 to December 31, 2008	**Remeasurement 3:**					
b) Pharmacies Outside DH						
January 1, 2005 to December 31, 2005	*Baseline:*	83,790 (n = 3,045)	155,336	53.94%		Chi Sq.: Significant P value <0.0001
January 1, 2006 to December 31, 2006	**Remeasurement 1:**	58,094 (n = 5,069)	110,888	52.39%		
January 1, 2007 to December 31, 2007	**Remeasurement 2:**	**66,531 (n=5,657)**	**157,031**	**42,37%**		
January 1, 2008 to December 31, 2008	**Remeasurement 3:**					

Describe any demonstration of meaningful change in performance observed from Baseline and each measurement period (e.g., Baseline to Remeasurement 1, Remeasurement 1 to Remeasurement 2, or Baseline to final remeasurement):

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Quantifiable Measure 2: Percentage of members completing the ~~2007~~ Adult CAHPS 4.0H* Member Satisfaction survey who responded yes to obtaining prescriptions at Denver Health **[question 44a]**. [Changed for #2 to #7, 12/13/06]

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test Significance and *p* value
January 1, 2005 to December 31, 2005	*Baseline:*	225	386	58.29%		Chi Sq.: Not Significant P value = 0.76
January 1, 2006 to December 31, 2006	**Remeasurement 1:**	140	245	57.10%		
January 1, 2007 to December 31, 2007	**Remeasurement 2:**	**152**	**260**	**58.46%**		
January 1, 2008 to December 31, 2008	**Remeasurement 3:**					

Describe any demonstration of meaningful change in performance observed from Baseline and each measurement period (e.g., Baseline to Remeasurement 1, Remeasurement 1 to Remeasurement 2, or Baseline to final remeasurement):

Quantifiable Measure 3: Percentage of members completing the ~~2007~~ Adult CAHPS 4.0H* Member Satisfaction survey who responded yes to obtaining prescriptions at Denver Health and responded that it was "not a problem" **[question 44b]**.

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test Significance and *p* value
January 1, 2005 to December 31, 2005	*Baseline:*	139	223	62.33%		Chi Sq.: Not Significant P value = 0.68
January 1, 2006 to December 31, 2006	**Remeasurement 1:**	100	135	74.10%		
January 1, 2007 to December 31, 2007	**Remeasurement 2:**	**115**	**151**	**76.16%**		
January 1, 2008 to December 31, 2008	**Remeasurement 3:**					

Describe any demonstration of meaningful change in performance observed from Baseline and each measurement period (e.g., Baseline to Remeasurement 1, Remeasurement 1 to Remeasurement 2, or Baseline to final remeasurement):

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Quantifiable Measure 4: Percentage of members completing the ~~2007~~ Adult CAHPS 4.0H*Member Satisfaction survey who responded yes to obtaining prescriptions at a contracted pharmacy outside of Denver Health **[question 44e]**.

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test Significance and *p* value
January 1, 2005 to December 31, 2005	*Baseline:*	213	390	54.62%		Chi Sq.: Not Significant P value = 1.0
January 1, 2006 to December 31, 2006	**Remeasurement 1:**	145	248	58.50%		
January 1, 2007 to December 31, 2007	**Remeasurement 2:**	**152**	**260**	**58.46%**		
January 1, 2008 to December 31, 2008	**Remeasurement 3:**					

Describe any demonstration of meaningful change in performance observed from Baseline and each measurement period (e.g., Baseline to Remeasurement 1, Remeasurement 1 to Remeasurement 2, or Baseline to final remeasurement):

Quantifiable Measure 5: Percentage of members completing the ~~2007~~ Adult CAHPS 4.0H* Member Satisfaction survey who responded yes to obtaining prescriptions at a contracted pharmacy outside of Denver Health and responded that it was "not a problem" **[question 44f]**.

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test Significance and *p* value
January 1, 2005 to December 31, 2005	*Baseline:*	164	212	77..36%		Chi Sq.: Not Significant P value = 0.63
January 1, 2006 to December 31, 2006	**Remeasurement 1:**	119	138	86.00%		
January 1, 2007 to December 31, 2007	**Remeasurement 2:**	**128**	**152**	**84.21%**		
January 1, 2008 to December 31, 2008	**Remeasurement 3:**					

Describe any demonstration of meaningful change in performance observed from Baseline and each measurement period (e.g., Baseline to Remeasurement 1, Remeasurement 1 to Remeasurement 2, or Baseline to final remeasurement):

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Quantifiable Measure 6: Percentage of members completing the ~~2007~~ Adult CAHPS 4.0H* Member Satisfaction Survey who responded yes to filling a new prescription and receiving it within 45 minutes at Denver Health **[question 44c].** [Result changed 12-13-06.]

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test Significance and *p* value
January 1, 2005 to December 31, 2005	**Baseline:**	121	222	[54.50%]		Chi Sq.: Not Significant P value = 0.42
January 1, 2006 to December 31, 2006	**Remeasurement 1:**	78	113	69.03%		
January 1, 2007 to December 31, 2007	**Remeasurement 2:**	**82**	**128**	**64.06%**		
January 1, 2008 to December 31, 2008	**Remeasurement 3:**					

Describe any demonstration of meaningful change in performance observed from Baseline and each measurement period (e.g., Baseline to Remeasurement 1, Remeasurement 1 to Remeasurement 2, or Baseline to final remeasurement):

Quantifiable Measure 7: Percentage of members completing the **~~2007~~ Adult CAHPS 4.0H*** Member Satisfaction Survey who responded yes to refilling a prescription and to receiving it within 24 to 48 hours at Denver Health **[question 44d].**

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test Significance and *p* value
January 1, 2005 to December 31, 2005	**Baseline:**	193	216	89.35%		Chi Sq.: Not Significant P value = 0.35
January 1, 2006 to December 31, 2006	**Remeasurement 1:**	113	123	92.00%		
January 1, 2007 to December 31, 2007	**Remeasurement 2:**	**127**	**134**	**94.78%**		
January 1, 2008 to December 31, 2008	**Remeasurement 3:**					

Describe any demonstration of meaningful change in performance observed from Baseline and each measurement period (e.g., Baseline to Remeasurement 1, Remeasurement 1 to Remeasurement 2, or Baseline to final remeasurement):

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Quantifiable Measure 8: Based on data provided by CareMark, the quarterly average member utilization rate for pharmacy by number of prescriptions filled per member per month **for members 18+ years of age who use: a) only internal pharmacies Denver Health, b) only external pharmacies outside of Denver Health, C) both internal and external pharmacies.**

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator (# scripts)	Denominator (# members)	Rate or Results (#scripts -- Avg PMPQ)	Industry Benchmark	Statistical Test Significance and *p* value
a) Denver Health pharmacies only						
January 1, 2005 to December 31, 2005	*Baseline:*	43,060	1557/ 4602 (33.83%)	6.91 Avg PMPQ at $23.87 cost per prescription	N/A	**2 sample t-test: significant** **P <.0001**
January 1, 2006 to December 31, 2006	**Remeasurement 1:**	33,227	2715/7784 (34.82%)	3.06 Avg PMPQ at $23.43 cost per prescription	NA	
January 1, 2007 to December 31, 2007	**Remeasurement 2:**	**56,361**	**3803/9460 (40.2%)**	**3.71 Avg PMPQ at $27.80 cost per prescription**		
January 1, 2008 to December 31, 2008	**Remeasurement 3:**					
b) Pharmacies outside of DH only						
January 1, 2005 to December 31, 2005	*Baseline:*	42,284	1540 (33.46%)	6.86 Avg PMPQ at $47.93 cost/Rx	N/A	**2 sample t-test: significant** **P = 0.01**
January 1, 2006 to December 31, 2006	**Remeasurement 1:**	32,397	3640 (46.76%)	2.23 Avg PMPQ at $49.22 cost per prescription	NA	
January 1, 2007 to December 31, 2007	**Remeasurement 2:**	**34,592**	**3468 (36.65%)**	**2.49 Avg PMPQ at $49.91 cost per prescription**		
January 1, 2008 to December 31, 2008	**Remeasurement 3:**					
c) BOTH Internal and External						

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January 1, 2005 to December 31, 2005	*Baseline:*	69,992	1505 (32.70%)	11.63 Avg PMPQ at $33.80 cost/Rx	N/A	**2 sample t-test: not significant** **P = 0.23**
January 1, 2006 to December 31, 2006	**Remeasurement 1:**	45,264	1429 (18.36%)	7.92 Avg PMPQ at $35.34 cost/Rx	NA	
January 1, 2007 to December 31, 2007	**Remeasurement 2:**	**66,078**	**2189 (23.14%)**	**7.55 Avg PMPQ at $36.50 cost per prescription**		
January 1, 2008 to December 31, 2008	**Remeasurement 3:**					

Describe any demonstration of meaningful change in performance observed from Baseline and each measurement period (e.g., Baseline to Remeasurement 1, Remeasurement 1 to Remeasurement 2, or Baseline to final remeasurement):

Quantifiable Measure 9: Based on data provided by CareMark, the quarterly average amount paid for a prescription derived from amounts paid for number of prescriptions filled per member **for members 18+ years of age who use: a) only internal pharmacies Denver Health, b) only external pharmacies outside of Denver Health, C) both internal and external pharmacies.**

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results (Avg $ spent PQ by each member for the year)	Industry Benchmark	Statistical Test Significance and *p* value
a) Denver Health pharmacies only						
January 1, 2005 to December 31, 2005	*Baseline:*	$1,027,938.25	1557/4602	$165.05 $200.45 Avg PMPQ		**2 sample t-test: significant** **P =.0001**
January 1, 2006 to December 31, 2006	**Remeasurement 1:**	$778,478.73	2715/7784	$71.68		
January 1, 2007 to December 31, 2007	**Remeasurement 2:**	**$1,567,029.58**	**3803/9460**	**$103.00**		
January 1, 2008 to December 31, 2008	**Remeasurement 3:**					

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b) Pharmacies outside of DH only						
January 1, 2005 to December 31, 2005	*Baseline:*	$2,026,815.28	1540	$329.037 $391.71 Avg PMPQ		**2 sample t-test: borderline significant** **P = 0.05**
January 1, 2006 to December 31, 2006	**Remeasurement 1:**	$1,594,685.18	3640	$279.82 109.53		
January 1, 2007 to December 31, 2007	**Remeasurement 2:**	**$1,726,395.98**	**3468/9460**	**$124.46**		
January 1, 2008 to December 31, 2008	**Remeasurement 3:**					
c) BOTH						
January 1, 2005 to December 31, 2005	*Baseline:*	$2,365,691.47	1505	$329.03 $424.52 392.97 Avg PMPQ		**2 sample t-test :not significant** **P =0.81**
January 1, 2006 to December 31, 2006	**Remeasurement 1:**	$1,599,463.31	1429	$127.59 $279.82		
January 1, 2007 to December 31, 2007	**Remeasurement 2:**	**$2,411,718.60**	**2189/9460**	**$275.45**		
January 1, 2008 to December 31, 2008	**Remeasurement 3:**					
Describe any demonstration of meaningful change in performance observed from Baseline and each measurement period (e.g., Baseline to Remeasurement 1, Remeasurement 1 to Remeasurement 2, or Baseline to final remeasurement):						

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J. Activity X: Describe sustained improvement. Describe any demonstrated improvement through repeated measurements over comparable time periods. Discuss any random, year-to-year variations, population changes, sampling errors, or statistically significant declines that may have occurred during the remeasurement process.

Remeasurement of the patient satisfaction survey from the baseline measurement year (2005) to remeasurement year 1 (2006) has shown improvement in patients' ability to get prescriptions filled without a problem at DHMP pharmacies and receive the prescription within 45 minutes which show an statistical significance increase compared to previous year. In 2005 and 2006 we focused our efforts on improving patient satisfaction with enhancements to several large clinic pharmacies to make it easier to obtain prescriptions for our members. Renovations at the Eastside pharmacy were completed in 2006 to allow for more convenient drop off and pick up. The Webb building opened a new outpatient pharmacy for members with an expanded pharmacy staff and expanded week day and weekend hours... As a result,patient satisfaction continued to increase for the 2007 remeasurement year. We saw statistically significant improvement in member satisfaction for the question of "not a problem" obtaining a prescription at Denver Health. Satisfaction rates also improved for filling a new prescription within 45 minutes and getting refills within 24-48 hours. In 2008 the satisfaction improved slightly, but was not statistically significantly. We also did not see any statistically significant declines in satisfaction for the 2008 measurement year suggesting the enhancements made to clinic pharmacies have resulted in sustained member satisfaction.

In 2007, managed care focused efforts on getting more Medicaid members to fill their prescriptions at Denver Health and not utilize outside pharmacies to help control costs and improve coordiantioncare. If members fill internally doctors can see what medications a patient is on and their last fill date for better medical management and coordination of care.. From 2005 through 2008 we were successfully able to statistically improve our rates of internal fills. Due to these efforts in 2007 we saw the biggest jump in the 2008 measurement year where more members fill prescriptions internally at a Denver Health pharmacy compared to external pharmacy prescription fills...

When looking at prescription spending over a 3 year period internal Denver Health costs remained the lowest compared to costs associated with outside pharmacy utilizatione or combined utilization of both internal and external pharmacies. From 2005 to 2006 overall costs of prescriptions declined for each group. This may be due to increased use of generic prescriptions that are cheaper. Costs for 2007 remained generally the same compared to 2006 with the exception of internal which increased significantly from an average of $71.68 PMPQ to $103.00 in 2007. This correlates with the increase of members filling internally.
Variations in the population are expected as members will drop or lose coverage throughout the year and new members are continuously being enrolled. This could have an impact on the remeasurement process as the prescriptions needs of the populations could vary from year to year. The survey population demographics could also impact the remeasurement process depending on response rate, age, and health of the survey respondents. Each year our Medicaid population increased in size, iwith 4,833 members in the study of 2005 compared tothe 2008 measurement year with over 13,000 member in the study group.. Sinceour sample represents a small percentage of our population, the pharmacy satisfaction rates may not be a true representation of our entire adult Medicaid members.

See page 14-15 for a discussion of sampling error.

DISCUSSION

Deleted 10/23/08A preliminary review of the results for the 2005 PIP is attached (ATT 8), including a comparison of Medicaid Choice CAHPS 3.0H results with DHMP, Inc. CAHPS 3.0H results.

The Internal and External validity issues related to this study are discussed in Step 6 (esp. pages 17-18 of this document).

Intervention Processes Underway.

The results of this study may be related to the following planned intervention activities (see related note in Step 7).

A Focus Group project targeting users of outside pharmacies and both internal and outside pharmacies users should provide insight into the reasons for many of the external pharmacy –related activities.

Implementation of appropriate Care Management activities should have the benefit of drawing members into the Denver Health pharmacy system, a result especially beneficial when it comes to managing high cost members across the continuum of care improved coordination of care.

Since the average cost per script and total cost per member noted for each of the three groups is directly related to internal versus external pharmacy utilization behavior, goals of this program might include:

1) converting members who use both internal and external services to members who use just Denver Health pharmacy,

2) converting high cost/high risk members who use outside services to members who utilize primarily internal pharmacy services.

It is also important to note that any cost analysis will be limited by the impacts of rising costs for prescription drugs. Due to rising costs, formulary lists change from year to year to help reduce the impact of this inflation process. Implementing a procedure that takes into account only the original cost for a particular medication for the first year of study, which is then continued for all subsequent years of study, may itself be limited by unanticipated additions of new medications (generic or brand name-based) and/or occurrences of events that either directly or indirectly impact drug-related manufacturing and distributing costs. For example, both the introduction of less expensive generic substitutes and the initiation of newer, more costly brand name medications will ultimately impact long term pharmacy costs for some members, reducing the significance of the final measure. For this reason, the quarterly cost indicator (measure 9) serves primarily as a indicator for monitoring overall costs and percent total costs per type of pharmacy utilization practice. This study is designed as a member satisfaction activity, not a cost-saving activity.

GRAPHED RESULTS (Optional) <Back to TOC>

Abbreviations in Use for PIP

ATT or **Att**	Attachment (refers to supplementary attachments for PIP)
DH	Denver Health, *i.e. DH MCD = Denver Health Medicaid Choice*
IM	Information management
IRR	Interrater Reliability Review
IS	Information Systems (internal DH department)
LCR	Lifetime Clinical Records (clinically-accessed internal/DH medical records registry)
MCD	Medicaid Choice *(not to be interpreted as a referral to the general or statewide Medicaid program(s)).*
MMC	**Medical Management Committee implemented on January, 2007**
MRI	Medical Records Imagery (Denver Health's Adobe *.pdf-based electronic library of patients' medical records)
NA or **N/A**	Not Applicable
PCP	Primary Care Provider
pctl	percentile
PIP	Performance Improvement Project
QA	Quality Assurance (primary use). Also: Quality Assessment; Qualitative Analysis.
QAC	Quality Assurance Committee (for DHMC program replaced by Medical Management Committee)
QI	Quality Improvement
QIA	Quality Improvement Activity
/TM	Trademark
TOC	Table of Contents (p.2 of PIP)
y/o, yo	year[s] old

Proprietary Names / Terminology in PIP

AHRQ	Agency for HealthCare Research and Quality, Federal agency/npo (see www.ahrq.gov/about/budgtix.htm).
CAHPS	Consumer Assessment of Healthcare Providers and Systems, refers to a standardized survey administered to members, by AHRQ
CareMark	**Third party pharmacy benefit manager for Denver Health Managed Care**
CDPHE	Colorado Department of Public Health and Environment; source for CIIS database.
CDHCPF	Colorado Dept of Health Care Policy and Financing (a Colorado State program)
CHP or **CHP+**	Child Health Plan or Child Health Plan Plus (a Colorado state program)
Compass Navigator	TierMed's HEDIS interface for data entry related to HEDIS studies; a data entry tool.
Compass Viewer	TierMed final report viewing tool; used to review HEDIS reports and outcomes.
DHHA	Denver Health and Hospital Authority
DHMC	Denver Health Medicaid Choice (internal DH program)
DHMP	Denver Health Medical Plan, Inc.; employees' health care program.
Diamond	Perot Systems/TM electronic data interchange platform; primary source for DH members data (see www.perotsystems.com).
FFS	Fee-For-Service, referring to related Medicaid program compared to DHMC
HCPF	Health Care Policy & Financing (agency)/Colorado Dept of Health Care Policy and Financing.
HEDIS	Health Employer Data Information Set (database); NCQA program.
HSAG	Health Services Advisory Group; special interest group in HCPF
NCQA	National Committee for Quality Assurance (agency/npo)
PCPP	Primary Care Physician Program (a Colorado Medicaid program compared to DHMC)
TierMed	TierMed Systems, LLC; NCQA-certified company contracted for the 2006 and 2007 HEDIS studies for DHMC, results of which were used for the 2005 to 2007 activities associated with Baseline 2 and Intervention PIP studies.

Listing of Added Documents and Attachments

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CHRONOLOGY

Pharmacy PIP baseline period, 2005 study year

Initiation of new Medicaid Choice (MCD)

Pharmacy PIP study Re-measurement period begins

CAHPS 3.0H survey questions for MCD Adults developed.

Pharmacy PIP steps 1-34 due

Pharmacy PIP study Re-measurement period begins

CAHPS 4.0 H survey questions for MCD Adults developed.

Pharmacy PIP steps 1-34 due

January 2006

Apr 2005   July 2005   Sep 2005   October 2006   Jan. 2007   Nov. 2007

2005   2007

CAHPS Survey administered/evaluated

The CAHPS Survey is submitted annually, and refers only to the experiences of the last six months of the year (July to December 2005).

Statistics on Complaints are produced quarterly and summed up at the end of each calendar year.

One year of combined Medicaid Choice (MCD) member-hours experience with the new refill program is being measured, regardless of eligibility of members.