

FY 07-08 COLORADO PIP VALIDATION REPORT

Member Satisfaction With Access to Pharmacy
Services Within Denver Health

for
Denver Health Medicaid Choice

March 2008

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



1600 East Northern Avenue, Suite 100 • Phoenix, AZ 85020
Phone 602.264.6382 • Fax 602.241.0757

1. Executive Summary	1-1
Overview.....	1-1
Summary of Study	1-1
Study Topic	1-2
Study Methodology	1-2
Study Results	1-3
Scoring	1-5
Summary of Validation Findings.....	1-5
Conclusions	1-5
Requirements	1-5
Recommendations.....	1-6
Comparison of Years 1 through 3.....	1-6
2. Scoring Methodology	2-1
PIP Scores.....	2-2
3. Validation and Findings Summary.....	3-1
Validations and Findings Summary	3-1
Activity I. Appropriate Study Topic	3-1
Activity II. Clearly Defined, Answerable Study Question	3-2
Activity III. Clearly Defined Study Indicator(s)	3-2
Activity IV. Use a Representative and Generalizable Study Population.....	3-4
Activity V. Valid Sampling Techniques	3-4
Activity VI. Accurate/Complete Data Collection	3-5
Activity VII. Appropriate Improvement Strategies.....	3-5
Activity VIII. Sufficient Data Analysis and Interpretation.....	3-6
Activity IX. Real Improvement Achieved	3-8
Activity X. Sustained Improvement Achieved.....	3-8
4. FY 07–08 PIP Validation Tool	4-1

Appendices

Introduction	Appendices Cover Page
Appendix A: Summary Form: Denver Health Medicaid Choice’s <i>Member Satisfaction With Access to Pharmacy Services Within Denver Health</i>	A-1
Appendix B: CMS Rationale by Activity	B-1
Appendix C: Definitions and Explanations by Activity.....	C-1

Overview

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.

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, was used in the evaluation and validation of the PIPs.

Summary of Study

Denver Health Medicaid Choice's (DHMC) nonclinical PIP topic for the fiscal year (FY) 07–08 validation cycle continues with *Member Satisfaction With Access to Pharmacy Services Within Denver Health*. The PIP evaluated Medicaid member reports of satisfaction and timeliness of pharmacy services received from **DHMC** and from other contracted pharmacies. More specifically, the study measured:

- ◆ Pharmacy utilization rates for **DHMC** and other contracted pharmacies.
- ◆ The average prescription cost at **DHMC** and other contracted pharmacies.
- ◆ The percentage of members who reported that receiving their prescriptions at **DHMC** or other contracted pharmacies was “not a problem.”

- ◆ The percentage of members who reported having their new prescriptions filled within 45 minutes at **DHMC**.
- ◆ The percentage of members who reported having their prescriptions refilled within 24 to 48 hours at **DHMC**.

Several planned interventions directed toward members, practitioners, and the **DHMC** health care system were implemented in 2006. **DHMC** reviewed member satisfaction with pharmacy use by adding pharmacy service-related supplemental questions to the annual CAHPS survey.

Study Topic

The topic addressed CMS' requirements related to quality outcomes (member satisfaction), timeliness, and access to and availability of care and services. The topic addressed pharmacy services within **DHMC** pharmacies versus those provided by outside pharmacies, and overall member satisfaction with the services received. The study topic, *Member Satisfaction With Access to Pharmacy Services Within Denver Health*, reflected a high volume of the plan's Medicaid population, including members with special health care needs.

The study question presented by **DHMC** was: "Will implementing enhancements for pharmacy services and benefits improve member satisfaction and increase the use of pharmacy services at **DHMC** for members 18 years of age and older?"

Study Methodology

Nine study indicators were developed to collect data that would answer the study question. **DHMC** added customized questions to the 2006 CAHPS Adult Medicaid Member Satisfaction Survey to obtain data for six of the indicators. Data for the other three indicators were obtained from data provided by **DHMC's** pharmacy vendor, Caremark. The survey was administered to a sample of **DHMC** members according to National Committee for Quality Assurance (NCQA) requirements. Data were collected and reported on the quality and timeliness of, and overall satisfaction with, services provided by **DHMC** pharmacies compared with pharmacies outside of **DHMC**.

The study reported the following nine indicators:

- ◆ Indicator 1: "The percentage of prescriptions filled by members: a) at a **DHMC** pharmacy, b) outside of **DHMC** at a contracted pharmacy."
- ◆ Indicator 2: "The percentage of members completing the 2007 CAHPS Adult Medicaid Member Satisfaction Survey."
- ◆ Indicator 3: "The percentage of members completing the 2007 CAHPS Adult Medicaid Member Satisfaction Survey who responded 'Yes' to obtaining prescriptions at a **DHMC** pharmacy and stated it was 'not a problem.'"

- ◆ Indicator 4: “The percentage of members completing the 2007 CAHPS Adult Medicaid Member Satisfaction Survey who responded ‘Yes’ to obtaining prescriptions at a contracted pharmacy outside of **DHMC**.”
- ◆ Indicator 5: “The percentage of members completing the 2007 CAHPS Adult Medicaid Member Satisfaction Survey who responded ‘Yes’ to obtaining prescriptions at a contracted pharmacy outside of **DHMC** and stated it was ‘not a problem.’”
- ◆ Indicator 6: “The percentage of members completing the 2007 CAHPS Adult Medicaid Member Satisfaction Survey who responded ‘Yes’ to filling a new prescription and receiving it within 45 minutes at a **DHMC** pharmacy.”
- ◆ Indicator 7: “The percentage of members completing the 2007 CAHPS Adult Medicaid Member Satisfaction Survey who responded ‘Yes’ to refilling a prescription and receiving it within 24 to 48 hours at a **DHMC** pharmacy.”
- ◆ Indicator 8: “Based on data provided by Caremark, the quarterly average member utilization rate for pharmacy by number of prescriptions filled per study period for: a) members 18+ years of age utilizing only **DHMC** pharmacies, b) members 18+ years of age utilizing only pharmacies outside of **DHMC**, and c) members 18+ years of age utilizing both internal and external pharmacies.”
- ◆ Indicator 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 per quarter (PMPQ) for members 18+ years of age who utilize: a) only **DHMC** pharmacies, b) only pharmacies outside of **DHMC**, and c) both internal and external pharmacies.”

Study Results

Baseline measurement took place January 1, 2005 to December 31, 2005. The first remeasurement occurred January 1, 2006 to December 31, 2006. The second remeasurement will take place January 1, 2007 to December 31, 2007. Since the last PIP submission, baseline results were corrected for indicators 9a, 9b, and 9c. The baseline and first remeasurement rates for each of the study indicators as reported by **DHMC** are illustrated in Table 1-1 below.

Study Indicators	Baseline Results	Remeasurement 1
1a. The percentage of prescriptions filled by members at DHMC pharmacies.	46.06%	47.61%
1b. The percentage of prescriptions filled by members outside of DHMC at a contracted pharmacy.	53.94%	52.39%
2. The percentage of members completing the CAHPS Adult Medicaid Member Satisfaction Survey.	58.29%	57.10%
3. The percentage of members completing the CAHPS Adult Medicaid Member Satisfaction Survey who responded “Yes” to obtaining prescriptions at a DHMC pharmacy and stated it was “not a problem.”	62.33%	74.10%

Table 1-1

Study Indicators	Baseline Results	Remeasurement 1
4. The percentage of members completing the CAHPS Adult Medicaid Member Satisfaction Survey who responded “Yes” to obtaining prescriptions at a contracted pharmacy outside of DHMC .	54.62%	58.50%
5. The percentage of members completing the CAHPS Adult Medicaid Member Satisfaction Survey who responded “Yes” to obtaining prescriptions at a contracted pharmacy outside of DHMC and stated it was “not a problem.”	77.36%	86.00%
6. The percentage of members completing the CAHPS Adult Medicaid Member Satisfaction Survey who responded “Yes” to filling a new prescription and receiving it within 45 minutes at a DHMC pharmacy.	54.50%	60.00%
7. The percentage of members completing the CAHPS Adult Medicaid Member Satisfaction Survey who responded “Yes” to refilling a new prescription and receiving it within 24 to 48 hours at a DHMC pharmacy.	89.35%	92.00%
8a. Based on data provided by Caremark, the quarterly average member utilization rate for pharmacy by number of prescriptions filled per study period for members 18 years of age and older utilizing only DHMC pharmacies.	6.91 average prescriptions PMPQ at \$23.87 per prescription	3.06 average prescriptions PMPQ at \$23.43 per prescription
8b. Based on data provided by Caremark, the quarterly average member utilization rate for pharmacy by number of prescriptions filled per study period for members 18 years of age and older utilizing only pharmacies outside of DHMC .	6.86 average prescriptions PMPQ at \$47.93 per prescription	2.23 average prescriptions PMPQ at \$49.22 per prescription
8c. Based on data provided by Caremark, the quarterly average member utilization rate for pharmacy by number of prescriptions filled per study period for members 18 years of age and older utilizing both internal and external pharmacies.	11.63 average prescriptions PMPQ at \$33.80 per prescription	7.92 average prescriptions PMPQ at \$35.34 per prescription
9a. Based on data provided by Caremark, the quarterly average amount paid for prescription derived from amounts paid for number of prescriptions filled PMPQ for members 18+ years of age who utilized only DHMC pharmacies.	\$165.05	\$71.68
9b. Based on data provided by Caremark, the quarterly average amount paid for prescription derived from amounts paid for number of prescriptions filled PMPQ for members 18+ years of age who utilized only pharmacies outside of DHMC .	\$329.37	\$109.53
9c. Based on data provided by Caremark, the quarterly average amount paid for prescription derived from amounts paid for number of prescriptions filled PMPQ for members 18+ years of age who utilized both internal and external pharmacies.	\$392.97	\$279.82

Scoring

HSAG validates a total of 10 activities for each PIP. PIP validation takes place annually and reflects activities that have been completed. A health plan (MCO) may take up to three years to complete all 10 activities. Each activity consists of evaluation elements necessary for the successful completion of a valid PIP. Evaluation elements are the key CMS Protocol components for each activity that reflect the intent of what is being measured and evaluated. Some of the evaluation elements are critical elements and must be scored as *Met* to produce an accurate and reliable PIP. Given the importance of critical elements, any critical element that receives a *Not Met* score results in an overall PIP validation status of *Not Met*. If one or more critical elements are *Partially Met*, but none is *Not Met*, the PIP will be considered valid with low confidence. Revisions and resubmission of the PIP would be required.

Summary of Validation Findings

- ◆ For this review, 9 activities with a total of 52 elements were validated. Of this number:
 - 42 evaluation elements were *Met*.
 - 2 evaluation elements were *Partially Met*.
 - 0 evaluation elements were *Not Met*.
 - 8 evaluation elements were *Not Applicable (NA)*.
- ◆ The total number of critical elements that were evaluated equaled 11. Of this number:
 - 10 critical elements were *Met*.
 - 0 critical elements were *Partially Met*.
 - 0 critical elements were *Not Met*.
 - 1 critical element was *NA*.

The final validation finding of **DHMC's** PIP showed an overall score of 95 percent, a critical element score of 100 percent, and *Met* validation status.

Conclusions

For the FY 07–08 validation cycle, the study successfully addressed access, timeliness, and quality. The study topic and question were clearly and accurately stated to set and maintain the focus of the study. Baseline and the first remeasurement results were reported with improvement in most of the study indicators. **DHMC** completed Activities I through IX, receiving scores of 95 percent for evaluation elements *Met*, 100 percent for critical elements *Met*, and a *Met* validation status. Several interventions are underway by **DHMC**, including activities directed toward members, practitioners, and the **DHMC** care delivery system.

Requirements

No requirements were identified during this review.

Recommendations

Most of the study indicators showed improvement from baseline to the first remeasurement, while some study indicators showed a decline. **DHMC** should re-evaluate the interventions for the declining indicators and perform a causal/barrier analysis in order to assess for necessary changes that could be made to existing interventions or implementation of new interventions. These changes may help **DHMC** achieve its desired goals and outcomes.

Comparison of Years 1 through 3

DHMC completed Activities I through III for the FY 05–06 validation cycle, receiving scores of 92 percent for evaluation elements *Met*, 80 percent for critical elements *Met*, and a *Partially Met* validation status. For the FY 06–07 validation cycle, **DHMC** reported on baseline results and progressed through Activity VIII, improving its scores to 100 percent for evaluation elements *Met*, 100 percent for critical elements *Met*, and a *Met* validation status. In FY 07–08, the third year for this PIP, **DHMC** progressed through Activity IX, receiving scores of 95 percent for evaluation elements *Met*, 100 percent for critical elements *Met*, and a *Met* validation status. During this period, first remeasurement results were reported and compared to baseline.

DHMC demonstrated statistically significant improvement for members getting prescriptions filled at **DHMC** pharmacies and stating that it was “not a problem” on the conducted survey. **DHMC** also demonstrated statistically significant improvement in members getting prescriptions filled and stating that it was “not a problem” at contracted pharmacies outside **DHMC**. Additionally, **DHMC** demonstrated statistically significant improvement for indicators measuring the quarterly average amount paid for prescriptions deriving from **DHMC** pharmacies, contracted pharmacies outside **DHMC**, and members using both internal and external pharmacies combined. For the indicators that did not demonstrate improvement, **DHMC** plans to continue its interventions and make necessary revisions where necessary in order to achieve its desired outcomes across all study indicators.

2. Scoring Methodology

for Denver Health Medicaid Choice

Validating PIPs involved a review of the following 10 activities:

- ◆ Activity I. Appropriate Study Topic
- ◆ Activity II. Clearly Defined, Answerable Study Question
- ◆ Activity III. Clearly Defined Study Indicator(s)
- ◆ Activity IV. Use a Representative and Generalizable Study Population
- ◆ Activity V. Valid Sampling Techniques (If Sampling Was Used)
- ◆ Activity VI. Accurate/Complete Data Collection
- ◆ Activity VII. Appropriate Improvement Strategies
- ◆ Activity VIII. Sufficient Data Analysis and Interpretation
- ◆ Activity IX. Real Improvement Achieved
- ◆ Activity X. Sustained Improvement Achieved

All PIPs are scored as follows:

<i>Met</i>	(1) All critical elements were <i>Met</i> and (2) 80 percent to 100 percent of all critical and noncritical elements were <i>Met</i> . No action required.
<i>Partially Met</i>	(1) All critical elements were <i>Met</i> and 60 percent to 79 percent of all critical and noncritical elements were <i>Met</i> or (2) One critical element or more was <i>Partially Met</i> . Requires revision and resubmission of the PIP.
<i>Not Met</i>	(1) All critical elements were <i>Met</i> and less than 60 percent of all critical and noncritical elements were <i>Met</i> or (2) One critical element or more was <i>Not Met</i> . Requires revision and resubmission of the PIP.
<i>NA</i>	Not applicable elements (including critical elements if they were not assessed) were removed from all scoring.

For fiscal year (FY) 07–08, the MCOs were provided the opportunity to resubmit additional information and/or documentation. The health plans were required to take action on any evaluation element receiving a point of clarification or a score of *Partially Met* or *Not Met*. The action could include resubmission of additional PIP documentation prior to final scoring. Future annual PIP submissions should include all information pertinent to the PIP study to achieve a *Met* validation status.

PIP Scores

For this PIP, HSAG reviewed Activities I through IX. Table 2-1 and Table 2-2 show **DHMC’s** scores based on HSAG’s PIP evaluation of *Member Satisfaction With Access to Pharmacy Services Within Denver Health*. Each activity has been reviewed and scored according to HSAG’s validation methodology.

**Table 2-1—FY 07-08 Performance Improvement Project Scores
for Member Satisfaction With Access to Pharmacy Services Within Denver Health
for Denver Health Medicaid Choice**

Review Activity	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. Appropriate Study Topic	6	6	0	0	0	1	1	0	0	0
II. Clearly Defined, Answerable Study Question	2	2	0	0	0	1	1	0	0	0
III. Clearly Defined Study Indicator(s)	7	6	0	0	1	3	3	0	0	0
IV. Use a Representative and Generalizable Study Population	3	3	0	0	0	2	2	0	0	0
V. Valid Sampling Techniques	6	6	0	0	0	1	1	0	0	0
VI. Accurate/Complete Data Collection	11	6	0	0	5	1	0	0	0	1
VII. Appropriate Improvement Strategies	4	2	0	0	2	No Critical Elements				
VIII. Sufficient Data Analysis and Interpretation	9	9	0	0	0	2	2	0	0	0
IX. Real Improvement Achieved	4	2	2	0	0	No Critical Elements				
X. Sustained Improvement Achieved	1	Not Assessed				No Critical Elements				
Totals for All Activities	53	42	2	0	8	11	10	0	0	1

**Table 2-2—FY 07-08 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 <i>Met</i> *	95%
Percentage Score of Critical Elements <i>Met</i> **	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 valid.

3. Validation and Findings Summary

for Denver Health Medicaid Choice

Validations and Findings Summary

This section summarizes the evaluation of the activities validated for the PIP. A description of the findings, strengths, requirements, and recommendations is outlined under each activity section. See Appendix B for a complete description of the CMS rationale for each activity.

The validation was performed on a PIP by **Denver Health Medicaid Choice (DHMC)**. The PIP evaluated Medicaid member reports of satisfaction and timeliness of pharmacy services received from **DHMC** and from other contracted pharmacies. More specifically, the study measured:

- ◆ Pharmacy utilization rates for **DHMC** and other contracted pharmacies.
- ◆ The average prescription cost at **DHMC** and other contracted pharmacies.
- ◆ The percentage of members who reported that receiving their prescriptions at **DHMC** or other contracted pharmacies was “not a problem.”
- ◆ The percentage of members who reported having their new prescriptions filled within 45 minutes at **DHMC**.
- ◆ The percentage of members who reported having their prescriptions refilled within 24 to 48 hours at **DHMC**.

Activity I. Appropriate Study Topic

Study Topic

DHMC continues with *Member Satisfaction With Access to Pharmacy Services Within Denver Health* as its nonclinical PIP topic for the fiscal year (FY) 07–08 validation cycle.

Finding(s)

All of the six evaluation elements, including one critical element, were *Met* for this activity.

Strength(s)

The study topic assessed access to services, timeliness, and member satisfaction. The study topic reflected a high-volume service and addressed a broad spectrum of care and services.

Requirement(s) (for Critical Elements)

There were no requirements identified for this activity during this review.

Recommendation(s) (for Noncritical Elements)

There were no recommendations identified for this activity during this review.

Activity II. Clearly Defined, Answerable Study Question

Study Question(s)

DHMC's study question was: "Will planning enhancements for pharmacy services and benefits improve member satisfaction and increase the use of pharmacy services at **DHMC** for members 18 years of age and older?"

Finding(s)

All evaluation elements for this activity, including one critical element, were *Met*.

Strength(s)

The study question stated the problem in simple terms and set the focus of the study, which was to evaluate access to pharmacy services, timeliness of services received, and overall member satisfaction with **DHMC** pharmacies versus contracted pharmacies.

Requirement(s) (for Critical Elements)

There were no requirements identified for this activity during this review.

Recommendation(s) (for Noncritical Elements)

There were no recommendations identified for this activity during this review.

Activity III. Clearly Defined Study Indicator(s)

Study Indicator(s)

DHMC's PIP had nine study indicators:

- ◆ Indicator 1: "The percentage of prescriptions filled by members: a) at a **DHMC** pharmacy, b) outside of **DHMC** at a contracted pharmacy."
- ◆ Indicator 2: "The percentage of members completing the 2007 CAHPS Adult Medicaid Member Satisfaction Survey."
- ◆ Indicator 3: "The percentage of members completing the 2007 CAHPS Adult Medicaid Member Satisfaction Survey who responded 'Yes' to obtaining prescriptions at a **DHMC** pharmacy and stated it was 'not a problem.'"

- ◆ Indicator 4: “The percentage of members completing the 2007 CAHPS Adult Medicaid Member Satisfaction Survey who responded ‘Yes’ to obtaining prescriptions at a contracted pharmacy outside of **DHMC**.”
- ◆ Indicator 5: “The percentage of members completing the 2007 CAHPS Adult Medicaid Member Satisfaction Survey who responded ‘Yes’ to obtaining prescriptions at a contracted pharmacy outside of **DHMC** and stated it was ‘not a problem.’”
- ◆ Indicator 6: “The percentage of members completing the 2007 CAHPS Adult Medicaid Member Satisfaction Survey who responded ‘Yes’ to filling a new prescription and receiving it within 45 minutes at a **DHMC** pharmacy.”
- ◆ Indicator 7: “The percentage of members completing the 2007 CAHPS Adult Medicaid Member Satisfaction Survey who responded ‘Yes’ to refilling a prescription and receiving it within 24 to 48 hours at a **DHMC** pharmacy.”
- ◆ Indicator 8: “Based on data provided by Caremark, the quarterly average member utilization rate for pharmacy by number of prescriptions filled per study period for: a) members 18+ years of age utilizing only **DHMC** pharmacies, b) members 18+ years of age utilizing only pharmacies outside of **DHMC**, and c) members 18+ years of age utilizing both internal and external pharmacies.”
- ◆ Indicator 9: “Based on data provided by Caremark, the quarterly average amount paid for a prescription derived from amounts paid for number of prescriptions filled PMPQ for members 18+ years of age who utilize: a) only **DHMC** pharmacies, b) only pharmacies outside of **DHMC**, and c) both internal and external pharmacies.”

Finding(s)

Six of seven evaluation elements, including three critical elements, were *Met*. One evaluation element was *Not Applicable* because the indicators were not nationally recognized measures.

Strength(s)

The study indicators were developed to answer the study question and measure changes in member satisfaction and timeliness of services received. The study indicators were well-designed to address CMS requirements for evaluating access to services, timeliness, and quality of, or satisfaction with, services.

Requirement(s) (for Critical Elements)

There were no requirements identified for this activity during this review.

Recommendation(s) (for Noncritical Elements)

There were no recommendations identified for this activity during this review.

Activity IV. Use a Representative and Generalizable Study Population

Study Population

The study population was defined as:

- ◆ Members of the adult Medicaid Choice population between 18 and 99 years of age or older who were enrolled in the program at any time during the measurement year.

Finding(s)

All evaluation elements, including two critical elements, were *Met* for this activity.

Strength(s)

The study population was completely and accurately defined. The population captured all members to whom the study question applied.

Requirement(s) (for Critical Elements)

There were no requirements identified for this activity during this review.

Recommendation(s) (for Noncritical Elements)

There were no recommendations identified for this activity during this review.

Activity V. Valid Sampling Techniques

Sampling Technique(s)

The sampling technique used was performed by Synovate and followed the National Committee for Quality Assurance (NCQA) protocol.

Finding(s)

All of the six evaluation elements were *Met*, including one critical element.

Strength(s)

The sampling technique ensured a representative sample of the eligible population, the frequency of occurrence was specified, the confidence level and acceptable margin of error were specified, and were in accordance with generally accepted principles of research design and statistical analysis.

Requirement(s) (for Critical Elements)

There were no requirements identified for this activity during this review.

Recommendation(s) (for Noncritical Elements)

There were no recommendations identified for this activity during this review.

Activity VI. Accurate/Complete Data Collection**Data Collection**

Administrative data from Caremark's pharmacy database and CAHPS results were used for data collection. The Caremark data and the CAHPS data were collected annually.

Finding(s)

Six of the 11 evaluation elements were *Met* for this activity. Five evaluation elements were *Not Applicable*, including one critical element, because manual data collection was not used for this study.

Strength(s)

The data elements, timeline, and sources for data collection were clearly defined. The process for data collection was a systematic process and included how baseline and remeasurement data would be collected.

Requirement(s) (for Critical Elements)

There were no requirements identified for this activity during this review.

Recommendation(s) (for Noncritical Elements)

Data completeness was thoroughly discussed in the PIP study. However, future submissions of the PIP should include the actual percentage for the estimated degree of administrative data completeness.

Activity VII. Appropriate Improvement Strategies**Improvement Strategies**

DHMC has several planned interventions that are directed toward members, practitioners, and the **DHMC** health care system. As a result of data analysis, **DHMC** began implementation of interventions in 2006, including interventions for system changes and provider education.

Finding(s)

Two of the four evaluation elements were *Met*. Two elements were *Not Applicable* because **DHMC** was not to the point of revising, standardizing, and monitoring interventions at the time of the PIP submission.

Strength(s)

Interventions were related to causes/barriers identified through data analysis and quality improvement processes. The possible system-related interventions reported are likely to induce permanent change.

Requirement(s) (for Critical Elements)

There were no requirements identified for this activity during this review.

Recommendation(s) (for Noncritical Elements)

There were no recommendations identified for this activity during this review.

Activity VIII. Sufficient Data Analysis and Interpretation

Data Analysis and Interpretation

DHMC completed data analysis on the baseline and remeasurement 1 data for each of the nine study indicators and provided a detailed interpretation of these results. As **DHMC** progresses with the study, remeasurement 2 data will be analyzed and reported. Table 3-1 illustrates the study indicator results. Indicators that demonstrated statistically significant improvement have been bolded.

Table 3-1		
Study Indicators	Baseline Results	Remeasurement 1 Results
1a. The percentage of prescriptions filled by members at DHMC pharmacies.	46.06%	47.61%
1b. The percentage of prescriptions filled by members outside of DHMC at a contracted pharmacy.	53.94%	52.39%
2. The percentage of members completing the CAHPS Adult Medicaid Member Satisfaction Survey.	58.29%	57.10%
3. The percentage of members completing the CAHPS Adult Medicaid Member Satisfaction Survey who responded “Yes” to obtaining prescriptions at a DHMC pharmacy and stated it was “not a problem.”	62.33%	74.10%
4. The percentage of members completing the CAHPS Adult Medicaid Member Satisfaction Survey who responded “Yes” to obtaining prescriptions at a contracted pharmacy outside of DHMC .	54.62%	58.50%

Table 3-1

Study Indicators	Baseline Results	Remeasurement 1 Results
5. The percentage of members completing the CAHPS Adult Medicaid Member Satisfaction Survey who responded “Yes” to obtaining prescriptions at a contracted pharmacy outside of DHMC and stated it was “not a problem.”	77.36%	86.00%
6. The percentage of members completing the CAHPS Adult Medicaid Member Satisfaction Survey who responded “Yes” to filling a new prescription and receiving it within 45 minutes at a DHMC pharmacy.	54.50%	60.00%
7. The percentage of members completing the CAHPS Adult Medicaid Member Satisfaction Survey who responded “Yes” to refilling a new prescription and receiving it within 24 to 48 hours at a DHMC pharmacy.	89.35%	92.00%
8a. Based on data provided by Caremark, the quarterly average member utilization rate for pharmacy by number of prescriptions filled per study period for members 18 years of age and older utilizing only DHMC pharmacies.	6.91 average prescriptions PMPQ at \$23.87 per prescription	3.06 average prescriptions PMPQ at \$23.43 per prescription
8b. Based on data provided by Caremark, the quarterly average member utilization rate for pharmacy by number of prescriptions filled per study period for members 18 years of age and older utilizing only pharmacies outside of DHMC .	6.86 average prescriptions PMPQ at \$47.93 per prescription	2.23 average prescriptions PMPQ at \$49.22 per prescription
8c. Based on data provided by Caremark, the quarterly average member utilization rate for pharmacy by number of prescriptions filled per study period for members 18 years of age and older utilizing both internal and external pharmacies.	11.63 average prescriptions PMPQ at \$33.80 per prescription	7.92 average prescriptions PMPQ at \$35.34 per prescription
9a. Based on data provided by Caremark, the quarterly average amount paid for prescription derived from amounts paid for number of prescriptions filled PMPQ for members 18 years of age and older who utilized only DHMC pharmacies.	\$165.05	\$71.68
9b. Based on data provided by Caremark, the quarterly average amount paid for prescription derived from amounts paid for number of prescriptions filled PMPQ for members 18 years of age and older who utilized only pharmacies outside of DHMC .	\$329.37	\$109.53
9c. Based on data provided by Caremark, the quarterly average amount paid for prescription derived from amounts paid for number of prescriptions filled PMPQ for members 18 years of age and older who utilized both internal and external pharmacies.	\$392.97	\$279.82

Finding(s)

All nine evaluation elements were *Met*, including two critical elements.

Strength(s)

The data analysis was conducted according to the analysis plan in the study. The data analysis allowed for the generalization of results to the study population. Factors that threatened the internal/external validity of the data analysis findings were identified and reported. The data was presented in a clear and easily understood format.

Requirement(s) (for Critical Elements)

There were no requirements identified for this activity during this review.

Requirement(s) (for Noncritical Elements)

There were no recommendations identified for this activity during this review.

Activity IX. Real Improvement Achieved**Real Improvement Achieved**

Of the 14 distinct indicators in table 1-2 in Activity VIII, **DHMC** achieved statistically significant improvement for 6 of the 9 indicators from baseline to the first remeasurement.

Finding(s)

Two of the four evaluation elements were *Met* for this activity. Two evaluation elements were *Partially Met* because some of the study indicators demonstrated improvement from baseline to the first remeasurement, while others demonstrated declines.

Strength(s)

The same methodology was used for baseline and remeasurement.

Requirement(s) (for Critical Elements)

There were no requirements identified for this activity during this review.

Recommendation(s) (for Noncritical Elements)

Two evaluation elements were *Partially Met* because some of the study indicators demonstrated improvement from baseline to the first remeasurement, while others demonstrated declines. **DHMC** should reevaluate the interventions for the declining indicators and perform a causal/barrier analysis to determine if changes or modifications need to occur in order to achieve its desired outcomes across all study indicators.

Activity X. Sustained Improvement Achieved

Activity X was not assessed for the FY 07–08 submission of this PIP because **DHMC** had not progressed to a point of assessing for sustained improvement.

Section 4: Colorado FY 07-08 PIP Validation Tool:
**Member Satisfaction With Access to Pharmacy Services Within Denver Health
 for Denver Health Medicaid Choice**

DEMOGRAPHIC INFORMATION

Health Plan Name:	Denver Health Medicaid Choice		
Study Leader Name:	Mary Pinkney, RN, BS	Title:	Director of QI for DHMC
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		
Date of Study:	1/1/2006 to 12/31/2006		
Type of Delivery System:	MCO	Number of Medicaid Members in MCO:	35,321
		Number of Medicaid Members in Study:	9,134
Year 3 Validation:	Resubmission		
Results:	Remeasurement 1		

Section 4: Colorado FY 07-08 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			
I. Appropriate Study Topic: Topics selected for the study should reflect the Medicaid enrollment in terms of demographic characteristics, prevalence of disease, and the potential consequences (risks) of the 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 on the basis of Medicaid member input.			
1.	Reflects high-volume or high-risk conditions (or was selected by the State). NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study topic reflected a high volume of the Denver Health Medicaid Choice (DHMC) population.
2.	Is selected following collection and analysis of data. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study topic was selected following collection and analysis of data.
3.	Addresses a broad spectrum of care and services (or was selected by the State). The score for this element will be Met or Not Met.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study topic addressed a broad spectrum of care and services.
4.	Includes all eligible populations that meet the study criteria. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study topic included all eligible populations that met the study criteria.
5.	Does not exclude members with special health care needs. The score for this element will be Met or Not Met.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Members with special health care needs were not excluded.
C*	6. Has the potential to affect member health, functional status, or satisfaction. The score for this element will be Met or Not Met.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study topic had the potential to affect member satisfaction and health status.

Results for Activity I				
# of Elements				
Critical Elements**	Met	Partially Met	Not Met	Not Applicable
1	6	0	0	0

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

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

Section 4: Colorado FY 07-08 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			
II.	Clearly Defined, Answerable Study Question: Stating the study question(s) helps maintain the focus of the PIP and sets the framework for data collection, analysis, and interpretation.		
	1. States the problem to be studied in simple terms. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study question stated the problem to be studied in simple terms.
C*	2. Is answerable. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study question was answerable.

Results for Activity II				
# of Elements				
Critical Elements**	Met	Partially Met	Not Met	Not Applicable
1	2	0	0	0

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

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

Section 4: Colorado FY 07-08 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			
III. Clearly Defined 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 a flu shot 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.			
C*	1. Are well-defined, objective, and measurable. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study indicators were well-defined, objective, and measurable.
	2. Are based on current, evidence-based practice guidelines, pertinent peer review literature, or consensus expert panels.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Standards for pharmacy prescriptions were established at DHMC and the study indicators were based on these requirements.
C*	3. Allow for the study question to be answered. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> 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.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> 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.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Data were available to be collected on each study indicator.
	6. Are nationally recognized measures such as HEDIS specifications, when appropriate. The scoring for this element will be Met or NA.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input checked="" type="checkbox"/> NA	The study indicators were not nationally recognized measures.
	7. Includes the basis on which the indicator(s) was adopted, if internally developed.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The basis on which the study indicators were adopted was included.

Results for Activity III				
# of Elements				
Critical Elements**	Met	Partially Met	Not Met	Not Applicable
3	6	0	0	1

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

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



Section 4: Colorado FY 07-08 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			
IV. Use a representative and generalizable study population: The selected topic should represent the entire eligible Medicaid enrollment population with systemwide measurement and improvement efforts to which the PIP study indicators apply.			
C*	1. Is accurately and completely defined. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The method for identifying the study population was accurately and completely defined.
	2. Includes requirements for the length of a member's enrollment in the health plan.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Requirements for length of members' enrollment in DHMC were included.
C*	3. Captures all members to whom the study question applies. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The method for identifying the study population captured all members to whom the study question applied.

Results for Activity IV				
# of Elements				
Critical Elements**	Met	Partially Met	Not Met	Not Applicable
2	3	0	0	0

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

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

Section 4: Colorado FY 07-08 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			
V.	Valid Sampling Techniques: (This activity is only scored if sampling was used.) If sampling is to be 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.		
	1. Consider and specify the true or estimated frequency of occurrence.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The frequency of occurrence was specified.
	2. Identify the sample size.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	For Study Indicators 1, 8, and 9, no sampling was done. For Study Indicators 2 through 7, the sample size was identified as 1,350 members.
	3. Specify the confidence level.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The confidence level was specified as 95 percent.
	4. Specify the acceptable margin of error.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The acceptable margin of error was specified as 2.7 percent.
C*	5. Ensure a representative sample of the eligible population.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The sampling techniques used for Study Indicators 2 through 7 ensured a representative sample of the eligible population. The sample size of 1,350 out of approximately 13,599 members 18 years of age and older represented 10 percent of the total members in the appropriate age group.
	6. Are in accordance with generally accepted principles of research design and statistical analysis.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Sampling was performed by Synovate following the NCQA protocol.

Results for Activity V				
# of Elements				
Critical Elements**	Met	Partially Met	Not Met	Not Applicable
1	6	0	0	0

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

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

Section 4: Colorado FY 07-08 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		
VI. Accurate/Complete Data Collection: Data collection must ensure that the data collected on the PIP 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.		
1. Clearly defined data elements to be collected. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The data elements collected were identified.
2. Clearly identified sources of data. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The sources of data were identified as Caremark pharmacy data and Consumer Assessment of Healthcare Providers and Systems (CAHPS) survey results.
3. A clearly defined and systematic process for collecting data that includes how baseline and remeasurement data will be collected. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The process for collecting data was defined and systematic.
4. A timeline for the collection of baseline and remeasurement data. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	A timeline for the collection of data was included.
5. Qualified staff and personnel to abstract manual data.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input checked="" type="checkbox"/> 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.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input checked="" type="checkbox"/> NA	Manual data collection was not used for this study.
7. A manual data collection tool that supports interrater reliability.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input checked="" type="checkbox"/> NA	Manual data collection was not used for this study.
8. Clear and concise written instructions for completing the manual data collection tool.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input checked="" type="checkbox"/> NA	Manual data collection was not used for this study.
9. An overview of the study in written instructions.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input checked="" type="checkbox"/> NA	Manual data collection was not used for this study.
10. Administrative data collection algorithms/flow charts that show activities in the production of indicators.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The narrative included a description of the administrative data collection process that showed the activities used to produce the study indicators.

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

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



Section 4: Colorado FY 07-08 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		
VI. Accurate/Complete Data Collection: Data collection must ensure that the data collected on the PIP 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.		
11. An estimated degree of administrative data completeness. Met = 80 - 100% Partially Met = 50 - 79% Not Met = <50% or not provided	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Data completeness was thoroughly discussed in the PIP study, accounting for the Met score. Point of clarification: Future submissions should include the actual percentage of the estimated degree of administrative data completeness.

Results for Activity VI				
# of Elements				
Critical Elements**	Met	Partially Met	Not Met	Not Applicable
1	6	0	0	5

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

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

Section 4: Colorado FY 07-08 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		
VII. Appropriate Improvement Strategies: Real, sustained improvements in care result from a continuous cycle of measuring and analyzing performance, and developing and implementing systemwide improvements in care. Interventions are designed to change behavior at an institutional, practitioner, or member level.		
1. Related to causes/barriers identified through data analysis and quality improvement processes. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	<p>The focus group to identify causes/barriers was not conducted until March 9, 2007, after first remeasurement data had already been collected. DHMC provided several possible interventions; however, it was not clear what interventions were implemented as a result of the causes/barriers identified by the focus group. Additionally, it was noted that only three members were involved in the focus group. DHMC might want to consider having another focus group involving more members to identify causes/barriers.</p> <p>Re-review January 2008: Denver Health's resubmission included interventions implemented in 2006 as a result of data analysis. The score for this evaluation element was changed from Partially Met to Met.</p>

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

Section 4: Colorado FY 07-08 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			
VII. Appropriate Improvement Strategies: Real, sustained improvements in care result from a continuous cycle of measuring and analyzing performance, and developing and implementing systemwide improvements in care. Interventions are designed to change behavior at an institutional, practitioner, or member level.			
2.	System changes that are likely to induce permanent change.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The PIP documentation included several possible interventions that included system changes; however, it was not clear what interventions were implemented between baseline and the first remeasurement. Baseline data were collected from calendar year (CY) 2005 and first remeasurement data from CY 2006. Interventions should have been implemented after the baseline data were collected and before the first remeasurement data were collected. Re-review January 2008: Denver Health's resubmission included interventions implemented in 2006 as a result of data analysis. The interventions included system changes. The score for this evaluation element was changed from Partially Met to Met.
3.	Revised if the original interventions were not successful.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input checked="" type="checkbox"/> NA	DHMC was not to the point of revising interventions at the time of this PIP submission.
4.	Standardized and monitored if interventions were successful.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input checked="" type="checkbox"/> NA	DHMC was not to the point of standardizing and monitoring interventions at the time of this PIP submission.

Results for Activity VII				
# of Elements				
Critical Elements**	Met	Partially Met	Not Met	Not Applicable
0	2	0	0	2

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

Section 4: Colorado FY 07-08 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			
VIII. Sufficient Data Analysis and Interpretation: Describe the data analysis process on the selected clinical or nonclinical study indicators. Include the statistical analysis techniques used.			
C*	1. Is conducted according to the data analysis plan in the study design. NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The data analysis was conducted according to the analysis plan in the study.
C*	2. Allows for the generalization of results to the study population if a sample was selected. If no sampling was performed, this element is scored NA.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The data analysis allowed for generalization of the results for Study Indicators 2 through 7. A sample was not selected for Study Indicators 1, 8, and 9.
	3. Identifies factors that threaten internal or external validity of findings.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Factors that threatened internal or external validity of the findings were identified.
	4. Includes an interpretation of findings.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	An interpretation of the findings was included.
	5. Is presented in a way that provides accurate, clear, and easily understood information.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The data were presented in an accurate, clear, and easily understood way.
	6. Identifies initial measurement and remeasurement of study indicators.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Initial measurement and remeasurement of the study indicators were identified.
	7. Identifies statistical differences between initial measurement and remeasurement.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Statistical test results were not provided for Study Indicators 1, 8, and 9. Re-review January 2008: Denver Health's resubmission included statistical test results for all study indicators. The score for this evaluation element was changed from Partially Met to Met.
	8. Identifies factors that affect the ability to compare initial measurement with remeasurement.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Factors that affected the ability to compare measurements were identified.
	9. Includes interpretation of the extent to which the study was successful.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	An interpretation of the extent to which the study was successful was included.

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

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

Section 4: Colorado FY 07-08 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		

Results for Activity VIII				
# of Elements				
Critical Elements**	Met	Partially Met	Not Met	Not Applicable
2	9	0	0	0

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

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

Section 4: Colorado FY 07-08 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		
IX. Real Improvement Achieved: Describe any meaningful change in performance observed and demonstrated during baseline measurement. Discuss any random, year-to-year variation, population changes, and sampling error that may have occurred during the measurement process.		
1. Remeasurement methodology is the same as baseline methodology.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Remeasurement methodology was the same as baseline methodology.
2. There is documented improvement in processes or outcomes of care.	<input type="checkbox"/> Met <input checked="" type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Some of the study indicators showed improvement from baseline to the first remeasurement while some study indicators showed a decline. Re-review January 2008: The score for this evaluation element did not change. Some of the study indicators showed improvement from baseline to the first remeasurement while some study indicators showed a decline.
3. The improvement appears to be the result of planned intervention(s).	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	It was not clear what interventions were implemented between baseline and the first remeasurement. The focus group was not conducted until March 9, 2007, and it also was not clear what interventions were implemented as a result of the causes/barriers identified by the focus group. Re-review January 2008: Denver Health's resubmission included interventions implemented in 2006, and the improvement appeared to be the result of the interventions. The score for this evaluation element was changed from Partially Met to Met.

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

Section 4: Colorado FY 07-08 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		
IX. Real Improvement Achieved: Describe any meaningful change in performance observed and demonstrated during baseline measurement. Discuss any random, year-to-year variation, population changes, and sampling error that may have occurred during the measurement process.		
4. There is statistical evidence that observed improvement is true improvement.	<input type="checkbox"/> Met <input checked="" type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	<p>Study Indicators 3 and 5 showed statistically significant improvement; however, Study Indicators 2, 4, 6, and 7 did not. Statistical test results were not provided for Study Indicators 1, 8, and 9.</p> <p>Re-review January 2008: The score for this evaluation element did not change. Denver Health's resubmission included statistical test results for all study indicators; however, some of the study indicators showed improvement from baseline to the first remeasurement while some study indicators showed a decline.</p>

Results for Activity IX				
# of Elements				
Critical Elements**	Met	Partially Met	Not Met	Not Applicable
0	2	2	0	0

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

Section 4: Colorado FY 07-08 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.	Sustained Improvement Achieved: Describe any demonstrated improvement through repeated measurements over comparable time periods. Discuss any random, year-to-year variation, population changes, and 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.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Not assessed. Sustained improvement cannot be assessed until the study has had a baseline and a minimum of two annual remeasurement periods of data.

Results for Activity X				
# of Elements				
Critical Elements**	Met	Partially Met	Not Met	Not Applicable
0	0	0	0	0

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

Section 4: Colorado FY 07-08 PIP Validation Tool:
**Member Satisfaction With Access to Pharmacy Services Within Denver Health
 for Denver Health Medicaid Choice**

**Table 4-1—FY 07-08 PIP Validation Report Scores:
 Member Satisfaction With Access to Pharmacy Services Within Denver Health
 for Denver Health Medicaid Choice**

Review Activity		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.	Appropriate Study Topic	6	6	0	0	0	1	1	0	0	0
II.	Clearly Defined, Answerable Study Question	2	2	0	0	0	1	1	0	0	0
III.	Clearly Defined Study Indicator(s)	7	6	0	0	1	3	3	0	0	0
IV.	Use a representative and generalizable study population	3	3	0	0	0	2	2	0	0	0
V.	Valid Sampling Techniques	6	6	0	0	0	1	1	0	0	0
VI.	Accurate/Complete Data Collection	11	6	0	0	5	1	0	0	0	1
VII.	Appropriate Improvement Strategies	4	2	0	0	2	0	No Critical Elements			
VIII.	Sufficient Data Analysis and Interpretation	9	9	0	0	0	2	2	0	0	0
IX.	Real Improvement Achieved	4	2	2	0	0	0	No Critical Elements			
X.	Sustained Improvement Achieved	1		Not Assessed			0	No Critical Elements			
Totals for All Activities		53	42	2	0	8	11	10	0	0	1

**Table 4-2—FY 07-08 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*	95%
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.

Section 4: Colorado FY 07-08 PIP Validation Tool:
**Member Satisfaction With Access to Pharmacy Services Within Denver Health
 for Denver Health Medicaid Choice**

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 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

* **Met**

** **Partially Met**

*** **Not Met**

Summary statement on the validation findings:

Activities I through IX were assessed for this PIP Validation Report. Based on the validation of this PIP, HSAG's assessment determined high confidence in the results.

Introduction

The appendices consist of documentation supporting the validation process conducted by HSAG using the CMS Protocol for validating PIPs. Appendix A is the study *DHMC* submitted to HSAG for review, Appendix B is the CMS rationale for each activity, and Appendix C includes PIP definitions and explanations.

- ◆ Appendix A: **Denver Health Medicaid Choice's** PIP Study: *Member Satisfaction With Access to Pharmacy Services Within Denver Health*
- ◆ Appendix B: CMS Rationale by Activity
- ◆ Appendix C: Definitions and Explanations by Activity

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

DEMOGRAPHIC INFORMATION			
MCO Name and ID:		<u>Denver Health Medicaid Choice (DHMC)</u>	
Study Leader Name:		<u>Mary Pinkney, RN, BS</u> Title: <u>Director of QI for DHMC</u>	
Telephone Number:		<u>720-956-2356</u> E-mail Address: <u>Mary.Pinkney@dhha.org</u>	
Name of Project/Study: <u>Member Satisfaction with Access to Pharmacy Services within Denver Health</u>			
Type of Study: <input type="checkbox"/> Clinical <input checked="" type="checkbox"/> Nonclinical			
Date of Study Period: 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)			
<u>11,351</u> <u>9,696</u> <u>35,321</u> <u>1350 sample for 2006 NCQA Adult Medicaid CAHPS 3.0H (Indicators 2-7)</u> <u>4,602 members, with 155,336 prescriptions filled during 2005 (Indicators 1, 8, 9)</u>	Number of Medicaid Consumers served by MCO as of <u>June 30, 2005</u> Number of Medicaid Consumers served by MCO as of <u>December 31, 2005</u> Number of Medicaid Consumers served by MCO as of <u>December 31, 2006</u> Number of Medicaid Consumers 18+ y/o in Project/Study Number of Medicaid Consumers 18+ y/o in Project/Study	<u>1350 sample for 2007 NCQA Adult Medicaid CAHPS 4.0H (Indicators 2-7)</u> <u>7,784 members with 110,888 prescriptions filled during 2006 (Indicators 1, 8, 9)</u>	Number of Medicaid Consumers 18+ y/o in Project/Study Number of Medicaid Consumers 18+ y/o in Project/Study
Section to be completed by HSAG			
_____ Year 1 Validation _____ Initial Submission _____ Resubmission			
_____ Year 2 Validation _____ Initial Submission _____ Resubmission			
<u>X</u> Year 3 Validation _____ Initial Submission <u>X</u> Resubmission			



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

DEMOGRAPHIC INFORMATION

Section to be completed by HSAG

Baseline Assessment Remeasurement 1

Remeasurement 2 Remeasurement 3

Appendix A: 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)
	<u>Section</u>	<u>Page</u>	<u>Title or Description</u>
	A	5	Activity I: Rationale for Selection of Study Topic.
	B	7	Activity II: The Study Question.
	C	8	Activity III: Selected Study Indicators
			1-Caremark, #prescriptions, 2 to 3--CAHPS, DH utilization, 4 to 5—CAHPS, non-DH use, 6 to 7—DH satisfaction, 8 to 9—Caremark, utilization rate, prescription cost
√	D	17	Activity IV: Identified Study Population
√	E	19	Activity V: Sampling Methods
√	F	21	Activity VIa: Data Collection Procedures
		22	Activity VIb. Data Collection Cycle. Data Analysis Cycle.
√		22	Activity VIc Other Pertinent Methodological Features. Population Size.
		23	Who will collect the data and how.
		24	Data Completeness.
√		25	Activity VIc. Internal Validity. CAHPS Survey. External Validity.
√		29	List of Attachments
√	G	31	Activity VII. Improvement Strategies.
√	H	36	Activity VIIIa. Data analysis and interpretation of study results

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

<i>√ = changed or updated since 2005 review</i>		Table of Contents (Bookmarks)	
√		36	Activity VIIIb. Analysis Notes. Results.
			Summary
	I	39	Activity IX. Reported Improvement
	J	46	Activity X. Sustained improvement
		47	Discussion and Graphed Results
√		49	Abbreviations in Use
√		51	Attachments

Appendix A: 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 the 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; local or national data related to Medicaid risk populations; etc. The goal of the project should be to improve processes and outcomes of health care or services in order 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 and 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.

Appendix A: 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 the 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; local or national data related to Medicaid risk populations; etc. The goal of the project should be to improve processes and outcomes of health care or services in order 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 and 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.

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

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.



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

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 twelve 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 Dates:	January 1, 2005 to December 31, 2005
Current Measurement Period:	January 1, 2006 to December 31, 2006
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)

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

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 twelve 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 #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 CAHPS Adult Medicaid 4.0H Member Survey, for surveys considered complete by Synovate. [Changed 12-13-06.]
First Measurement Period Dates:	January 1, 2005 to December 31, 2005
Current Measurement Period	January 1, 2006 to December 31, 2006
Benchmark:	
Source of Benchmark:	
Baseline Goal:	55% DH pharmacy use; 45%outside pharmacy use(goal established at MMC meeting on Sept.11,07)

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

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

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 twelve 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 #3:	Percentage of members completing the 2007 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 Dates:	January 1, 2005 to December 31, 2005
Current Measurement Period:	January 1, 2006 to December 31, 2006
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)

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

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 twelve 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 #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 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 Dates:	January 1, 2005 to December 31, 2005
Current Measurement Period:	January 1, 2006 to December 31, 2006
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)

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

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 twelve 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 #5:	Percentage of members completing the 2007 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 Adult CAHPS 4.0H Member Satisfaction Survey [question 44g].
Denominator:	[Total] Number of members who responded to [question 44g in] the 2006 CAHPS Adult Medicaid Member Survey, for surveys considered complete by Synovate. [Changed 12-13-06.]
First Measurement Period Dates:	January 1, 2005 to December 31, 2005
Current Measurement Period:	January 1, 2006 to December 31, 2006
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)

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

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 twelve 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 #6:	Percentage of members completing the 2007 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 CAHPS Adult Medicaid 4.0H Member Survey, for surveys considered complete by Synovate. [Changed 12-13-06.]
First Measurement Period Dates:	January 1, 2005 to December 31, 2005
Current Measurement Period:	January 1, 2006 to December 31, 2006
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)

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

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 twelve 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 CAHPS* Adult Medicaid Member Survey, with surveys considered complete by Synovate. [Changed 12-13-06.]
First Measurement Period Dates:	January 1, 2005 to December 31, 2005
Current Measurement Period:	January 1, 2006 to December 31, 2006
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)

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

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 twelve 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 #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 Dates:	January 1, 2005 to December 31, 2005
Current Measurement Period:	January 1, 2006 to December 31, 2006
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)

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

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 twelve 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 #9:	
Numerator:	The total dollars spent for prescriptions filled during the measurement period, based on quarterly dollar amounts for <i>Amount Paid Per Member Per Quarter</i> , 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 Dates:	January 1, 2005 to December 31, 2005
Current Measurement Period	January 1, 2006 to December 31, 2006
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 for the provision of additional information:

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

D. Activity IV: Use a representative and generalizable study population. The selected topic should represent the entire Medicaid enrolled population, with system wide measurement and improvement efforts to which the study indicators apply. Once the population is identified, a decision must be made whether to review data for the entire population or a sample of that population. The length of a member's enrollment needs to be defined in order 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.

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

D. Activity IV: Use a representative and generalizable study population. The selected topic should represent the entire Medicaid enrolled population, with system wide measurement and improvement efforts to which the study indicators apply. Once the population is identified, a decision must be made whether to review data for the entire population or a sample of that population. The length of a member's enrollment needs to be defined in order to meet the study population criteria.

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/™ 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.

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

E. Activity V: Use sound sampling methods. If sampling is to be 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)
	2006/7 PIP. 7,784 represents 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)
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	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%	N = 1350 members, selected from a population of approximately 4,833 members 18 years of age or older. This represents a selection of	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		See related Synovate attachments.

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

E. Activity V: Use sound sampling methods. If sampling is to be 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)
mail and/or by phone if no response to mail.	response rate, this sampling error increases to 3.5% for the same CI; a 33% reply rate produces 4.5% error.	27.9% of the total members in the appropriate age group.	based on ethnicity, cultural background, language spoken, disability or age.		
The CAHPS sampling and surveying method remains unchanged for 2007.					
2 - 7. A sampling of the Medicaid population for the 2007 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 .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.

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

F. Activity VIa: Use valid and reliable data collection procedures. Data collection must ensure that the 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

Data collection tool attached

Data collection instructions attached

Summary of data collection training attached

IRR process and results attached

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

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

Administrative data

Data Source

Programmed pull from claims/encounters

Complaint/appeal

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

Survey Data (Baseline: for Synovate's 2007 CAHPS* 4.0h Adult Medicaid Survey, measures 2 through 7); Intervention 1: 2007 CAHPS* 4.0h Adult Medicaid Survey.

Fielding Method

Personal interview

Mail

Phone with CATI script

Phone with IVR

Internet

Other _____

Other Requirements

Number of waves _____

Response rate (See **CAHPS 4.0H** Survey Tool attachments)

Incentives used _NONE_

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

F. Activity VIb: Determine the data collection cycle.	Determine the data analysis cycle.
<p><input checked="" type="checkbox"/> Once a year (CAHPS 4.0H Survey)</p> <p><input type="checkbox"/> Twice a year</p> <p><input type="checkbox"/> Once a season</p> <p><input checked="" type="checkbox"/> Once a quarter (CareMark Prescription data)</p> <p><input type="checkbox"/> Once a month</p> <p><input type="checkbox"/> Once a week</p> <p><input type="checkbox"/> Once a day</p> <p><input type="checkbox"/> Continuous</p> <p><input type="checkbox"/> Other (list and describe):</p> <p>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.</p> <hr/> <p>The CAHPS* Adult Medicaid Member Survey is done annually, and focuses on experiences for the past six months of the year prior to administration.</p>	<p><input checked="" type="checkbox"/> Once a year (for CAHPS and CareMark data analysis)</p> <p><input type="checkbox"/> Once a season</p> <p><input type="checkbox"/> Once a quarter</p> <p><input type="checkbox"/> Once a month</p> <p><input type="checkbox"/> Continuous</p> <p><input type="checkbox"/> Other (list and describe):</p> <hr/> <hr/> <hr/> <hr/>

F. Activity VIc. Data analysis plan and other pertinent methodological features. Complete only if needed.

**Modified verbiage for Indicators 1, 8 and 9.

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.

Data to be collected

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

Data sources, collection period(s), methods

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

F. Activity VIc. Data analysis plan and other pertinent methodological features. Complete only if needed.

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.

A review of this information performed to assess it for validity and accuracy. (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	10 years Managed Care experience. Experienced project manager, with 8 years HEDIS/CAHPS experience. DH training includes Medical Records Imaging and Diamond utilization. Tiermed training includes the use of the 2006 Compass Navigator tool for data entry, analysis and auditing/quality control functions. HEDIS 2007 Training.

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

F. Activity VIc. Data analysis plan and other pertinent methodological features. Complete only if needed.

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 Paradigm 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.

Melissa Cook

Database development

Experienced Database technician x3 years **DH training including Enterprise Document Management Diamond and Paradigm, CareMark and HEDIS 2007 training.**

Jennifer Kikla MSPH

Intervention Manager

Experienced researcher x4 years with DH training including **Enterprise Document Management Diamond and Paradigm,,**

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

Data Collection Process [Process unchanged for Intervention 1 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:

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.*

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

F. Activity VIc. Data analysis plan and other pertinent methodological features. Complete only if needed.

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 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.

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

F. Activity VIc. Data analysis plan and other pertinent methodological features. Complete only if needed.

Data Sources [Process unchanged for Intervention 1 year, study of 2006 data performed May 2007]

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.**

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

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.

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

F. Activity VIc. Data analysis plan and other pertinent methodological features. Complete only if needed.

2. Prescriptions that are provided to members by AccessHealth [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 AccessHealth 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 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**.

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 AccessHealth 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 in that a variety of well-being and disease prevention activities are ongoing at this facility, leaving open the possibility that interventions not produced by the Quality

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

F. Activity VIc. Data analysis plan and other pertinent methodological features. Complete only if needed.

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

For CAPHS 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 the generalizability of the survey population to the entire Medicaid population. Out of the entire population only 4% of the population 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

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.

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

F. Activity VIc. Data analysis plan and other pertinent methodological features. Complete only if needed.

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.

[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**

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

F. Activity VIc. Data analysis plan and other pertinent methodological features. Complete only if needed.

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**
 - 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

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

G. Activity VII. Improvement Strategies. Real, sustained improvements in care result from a continuous cycle of measuring and analyzing performance, and developing and implementing system wide improvements in care. Interventions should be related to causes/barriers identified through data analysis and QI process. Describe interventions designed to change behavior at an institutional, practitioner, or member level. If interventions are not successful discuss how they are revised and if they are successful discuss how they are standardized and monitored.

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]

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].

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

G. Activity VII. Improvement Strategies. Real, sustained improvements in care result from a continuous cycle of measuring and analyzing performance, and developing and implementing system wide improvements in care. Interventions should be related to causes/barriers identified through data analysis and QI process. Describe interventions designed to change behavior at an institutional, practitioner, or member level. If interventions are not successful discuss how they are revised and if they are successful discuss how they are standardized and monitored.

Intervention 1 to Intervention 2

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.

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

G. Activity VII. Improvement Strategies. Real, sustained improvements in care result from a continuous cycle of measuring and analyzing performance, and developing and implementing system wide improvements in care. Interventions should be related to causes/barriers identified through data analysis and QI process. Describe interventions designed to change behavior at an institutional, practitioner, or member level. If interventions are not successful discuss how they are revised and if they are successful discuss how they are standardized and monitored.

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

Denver Health vs. Outside pharmacy scripts and costs (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 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.

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

G. Activity VII. Improvement Strategies. Real, sustained improvements in care result from a continuous cycle of measuring and analyzing performance, and developing and implementing system wide improvements in care. Interventions should be related to causes/barriers identified through data analysis and QI process. Describe interventions designed to change behavior at an institutional, practitioner, or member level. If interventions are not successful discuss how they are revised and if they are successful discuss how they are standardized and monitored.

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

Denver Health pharmacy users (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; [69%] 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.

Outside Pharmacy users. (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.

Discussion. 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.

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

H. Activity VIIIb. Interpretation of study results: Describe the results of the statistical analysis, interpret the findings, and discuss the successfulness of the study and indicate follow-up activities. Data should be presented clearly and the results from each measurement period should be identified. Statistical significance should be tested between measurement periods and *p* values should be reported. Also, identify any factors that could influence the measurement or validity of the findings. Internal validity would be any factors related to data collection processes or other factors that would impact the outcome of the study. External validity would be factors related to sampling techniques and the study population. The report should address any factors that affect the ability to compare initial measurement with remeasurement and should also include the extent to which the study was successful.

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

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.

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

H. Activity VIIIb. Interpretation of study results: Describe the results of the statistical analysis, interpret the findings, and discuss the successfulness of the study and indicate follow-up activities. Data should be presented clearly and the results from each measurement period should be identified. Statistical significance should be tested between measurement periods and *p* values should be reported. Also, identify any factors that could influence the measurement or validity of the findings. Internal validity would be any factors related to data collection processes or other factors that would impact the outcome of the study. External validity would be factors related to sampling techniques and the study population. The report should address any factors that affect the ability to compare initial measurement with remeasurement and should also include the extent to which the study was successful.

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.**

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

H. Activity VIIIb. Interpretation of study results: Describe the results of the statistical analysis, interpret the findings, and discuss the successfulness of the study and indicate follow-up activities. Data should be presented clearly and the results from each measurement period should be identified. Statistical significance should be tested between measurement periods and *p* values should be reported. Also, identify any factors that could influence the measurement or validity of the findings. Internal validity would be any factors related to data collection processes or other factors that would impact the outcome of the study. External validity would be factors related to sampling techniques and the study population. The report should address any factors that affect the ability to compare initial measurement with remeasurement and should also include the extent to which the study was successful.

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

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

I. Activity IX. Study Results Summary and Improvement: Describe any meaningful change in performance observed during baseline measurement that was demonstrated.

#1 Quantifiable Measure: 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 and Significance (for $p = 0.05$)***
a) Denver Health only						
January 1, 2005 to December 31, 2005	Baseline:	71,546 (n = 3,097)	155,336	46.06%		
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:					
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%		
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:					
January 1, 2008 to December 31, 2008	Remeasurement 3:					

*** If used, specify the test, p value, and specific measurements (e.g., baseline to remeasurement #1, remeasurement #1 to remeasurement #2, etc., or baseline to final remeasurement) included in the calculations.

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

I. Activity IX. Study Results Summary and Improvement: Describe any meaningful change in performance observed during baseline measurement that was demonstrated.

#2 Quantifiable Measure: 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 and Significance (for $p = 0.05$)***
January 1, 2005 to December 31, 2005	Baseline:	225	386	58.29%		Chi Sq.: Not Significant P value = 0.77
January 1, 2006 to December 31, 2006	Remeasurement 1:	140	245	57.10%		
January 1, 2007 to December 31, 2007	Remeasurement 2:					
January 1, 2008 to December 31, 2008	Remeasurement 3:					

#3 Quantifiable Measure: 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 and Significance***
January 1, 2005 to December 31, 2005	Baseline:	139	223	62.33%		Chi Sq.: Significant P value = 0.02
January 1, 2006 to December 31, 2006	Remeasurement 1:	100	135	74.10%		
January 1, 2007 to December 31, 2007	Remeasurement 2:					
January 1, 2008 to December 31, 2008	Remeasurement 3:					

*** If used, specify the test, p value, and specific measurements (e.g., baseline to remeasurement #1, remeasurement #1 to remeasurement #2, etc., or baseline to final remeasurement) included in the calculations.

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

I. Activity IX. Study Results Summary and Improvement: Describe any meaningful change in performance observed during baseline measurement that was demonstrated.

#4 Quantifiable Measure: 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 44f].

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test and Significance (for $p = 0.05$)***
January 1, 2005 to December 31, 2005	<u>Baseline:</u>	213	390	54.62%		Chi Sq.: Not Significant P value = 0.34
January 1, 2006 to December 31, 2006	Remeasurement 1:	145	248	58.50%		
January 1, 2007 to December 31, 2007	Remeasurement 2:					
January 1, 2008 to December 31, 2008	Remeasurement 3:					

#5 Quantifiable Measure: 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 44g].

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test and Significance***
January 1, 2005 to December 31, 2005	<u>Baseline:</u>	164	212	77.36%		Chi Sq.: Significant P value = 0.04
January 1, 2006 to December 31, 2006	Remeasurement 1:	119	138	86.00%		
January 1, 2007 to December 31, 2007	Remeasurement 2:					
January 1, 2008 to December 31, 2008	Remeasurement 3:					

*** If used, specify the test, p value, and specific measurements (e.g., baseline to remeasurement #1, remeasurement #1 to remeasurement #2, etc., or baseline to final remeasurement) included in the calculations.

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

I. Activity IX. Study Results Summary and Improvement: Describe any meaningful change in performance observed during baseline measurement that was demonstrated.

#6 Quantifiable Measure: 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 44d]. [Result changed 12-13-06.]

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test and Significance (for $p = 0.05$)***
January 1, 2005 to December 31, 2005	<u>Baseline:</u>	121	222	[54.50%]		Chi Sq.: Not Significant P value = 0.31
January 1, 2006 to December 31, 2006	Remeasurement 1:	78	130	60.00%		
January 1, 2007 to December 31, 2007	Remeasurement 2:					
January 1, 2008 to December 31, 2008	Remeasurement 3:					

#7 Quantifiable Measure: Percentage of members completing the 2006 Adult CAHPS* Member Satisfaction Survey who responded yes to refilling a prescription and to receiving it within 24 to 48 hours at Denver Health [question 44e].

Time Period Measurement Covers	Baseline Project Indicator Measurement	Numerator	Denominator	Rate or Results	Industry Benchmark	Statistical Test and Significance***
January 1, 2005 to December 31, 2005	<u>Baseline:</u>	193	216	89.35%		Chi Sq.: Not Significant P value = 0.45
January 1, 2006 to December 31, 2006	Remeasurement 1:	113	123	92.00%		
January 1, 2007 to December 31, 2007	Remeasurement 2:					
January 1, 2008 to December 31, 2008	Remeasurement 3:					

*** If used, specify the test, p value, and specific measurements (e.g., baseline to remeasurement #1, remeasurement #1 to remeasurement #2, etc., or baseline to final remeasurement) included in the calculations.

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

I. Activity IX. Study Results Summary and Improvement: Describe any meaningful change in performance observed during baseline measurement that was demonstrated.

#8 Quantifiable Measure: 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 and Significance (for $p = 0.05$)***
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	
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:					
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	
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:					
January 1, 2008 to December 31, 2008	Remeasurement 3:					
c) BOTH Internal and External						
January 1, 2005 to December 31, 2005	Baseline:	69,992	1505 (32.70%)	11.63 Avg PMPQ at \$33.80 cost/Rx	N/A	

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

I. Activity IX. Study Results Summary and Improvement: Describe any meaningful change in performance observed during baseline measurement that was demonstrated.

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:				
January 1, 2008 to December 31, 2008	Remeasurement 3:				

#9 Quantifiable Measure: 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 and Significance (for p = 0.05)***
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		
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:					
January 1, 2008 to December 31, 2008	Remeasurement 3:					
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		
January 1, 2006 to December 31, 2006	Remeasurement 1:	\$1,594,685.18	3640	\$279.82		
January 1, 2007 to December 31, 2007	Remeasurement 2:					
January 1, 2008 to December 31, 2008	Remeasurement 3:					



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

I. Activity IX. Study Results Summary and Improvement: Describe any meaningful change in performance observed during baseline measurement that was demonstrated.

c) BOTH						
January 1, 2005 to December 31, 2005	<u>Baseline:</u>	\$2,365,691.47	1505	\$329.03 \$424.52 Avg PMPQ		
January 1, 2006 to December 31, 2006	Remeasurement 1:	\$1,599,463.31	1429	\$127.59		
January 1, 2007 to December 31, 2007	Remeasurement 2:					
January 1, 2008 to December 31, 2008	Remeasurement 3:					



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

J. Activity X. Sustained improvement: Describe any demonstrated improvement through repeated measurements over comparable time periods. Discuss any random year-to-year variation, population changes, and sampling error 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.

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.

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

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

DISCUSSION

A 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 an 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.



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

GRAPHED RESULTS (Optional) [<Back to TOC>](#)

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

Abbreviations in Use for PIP

ATT or Att	Attachment (refers to supplementary attachments for PIP)
DH	Denver Health, <i>i.e.</i> 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 (<i>not to be interpreted as a referral to the general or statewide Medicaid program(s)</i>).
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

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

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	
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.

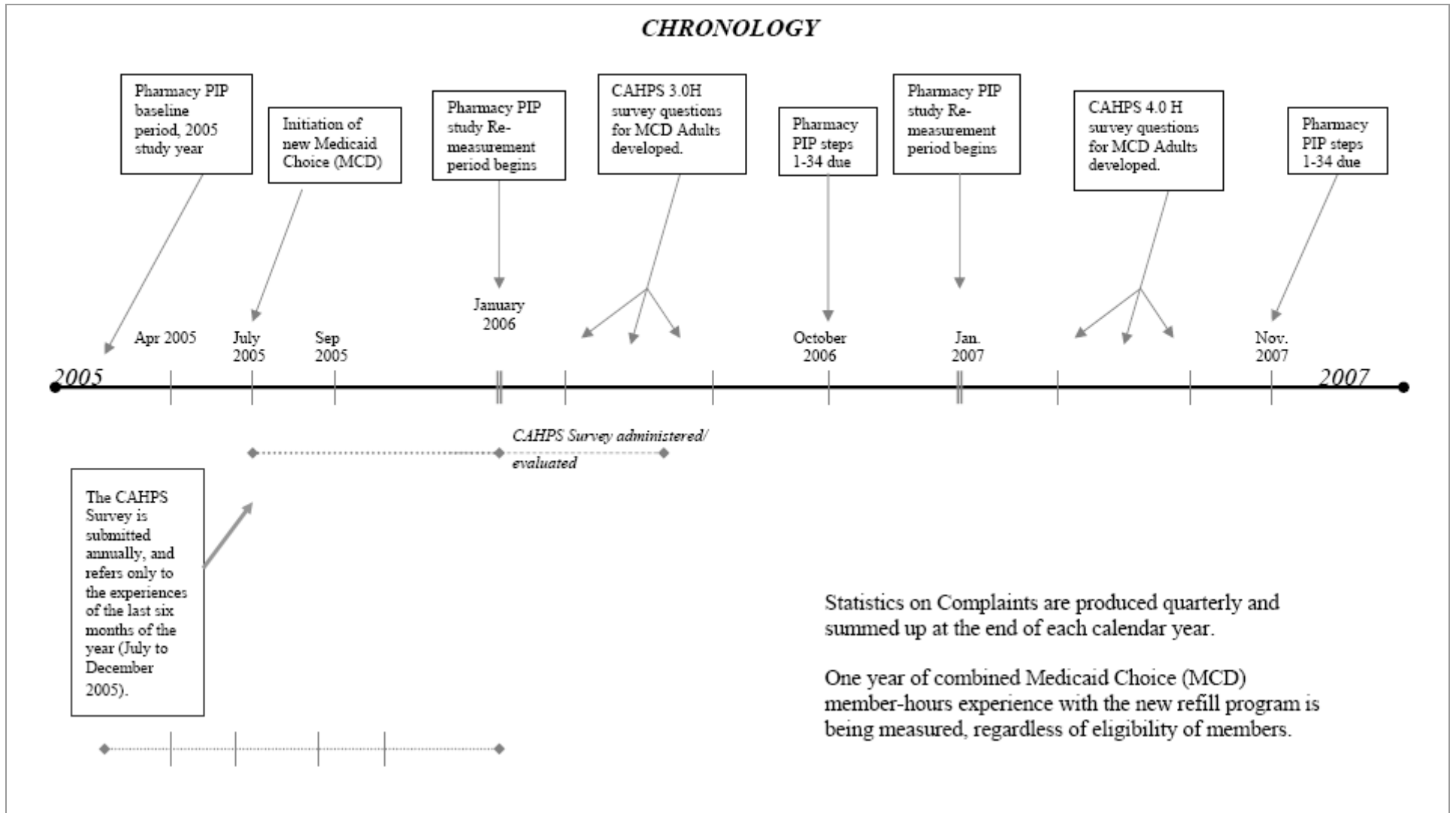
**Appendix A: PIP Summary Form:
Member Satisfaction with Access to Pharmacy Services within Denver Health
for Denver Health Medicaid Choice**

Listing of Added Documents and Attachments

<u>page</u>	<u>PIP Step</u>	
46		Chronology Attachments
48	Att 1	Demography
53	Att 2	CareMark Information and Instructions Product Overview Shared Reports instructions Ad hoc Reports instructions
54	Att 3	Synovate Denver Health Medicaid Choice. 2007 CAPHS 4.0H Adult Medicaid Report
55		DHMC Customized Questions
58		Introduction to CAPHS/Survey Results
63		Response Rates
66		Summary Rates
71		Technical Notes
78		Survey Questions
79	Att 4	Caremark RxNavigator Use Information Flow for Pharmacy PIP Flowchart for Data Extraction Process CareMark RxNavigator Create Report Tool Internal Pharmacy Utilization Report, External Pharmacy Utilization Report, Internal vs. External Pharmacy Use (flowcharts) Exclusions from Pharmacy Utilization Review
80	Att 5	Evaluating Statistical Significance CAHPS Data (Chi-squared)
84	Att 6	Statistical Review of CareMark data (Preliminary review of Intervention findings)
94	Att 7	Inter Rater Reliability (IRR)
95	Att 8	Preliminary Results
118	Att 9	QAC Meeting –Medical Management Meetings Minutes and Activities
119		Goals approved at QAC(Medical Management Meeting)
121		Information presented at QAC (Medical Management Meeting)
176	Att 10	Providers (2nd, 3rd and 4th Quarter 2006, 2nd and 3rd Qtr 2007) and Members (February, May/June, and September 2007) Newsletters

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

CHRONOLOGY





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

ATTACHMENTS FOLLOW

Appendix B. **CMS Rationale by Activity** *for Denver Health Medicaid Choice*

PIPs provide a structured method of assessing and improving the processes, and thereby the outcomes, of care for the population that an MCO serves. This structure facilitates the documentation and evaluation of improvements in care or service. PIPs are conducted by the MCOs to assess and improve the quality of clinical and nonclinical health care services received by members.

The PIP evaluation is based on CMS guidelines as outlined in the 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 (CMS PIP Protocol).

This document highlights the rationale for each activity as established by CMS. The protocols for conducting PIPs can assist the MCOs in complying with requirements.

CMS Rationale

Activity I. Appropriate Study Topic

All PIPs should target improvement in relevant areas of clinical care and nonclinical services. Topics selected for study by Medicaid managed care organizations must reflect the MCO's Medicaid enrollment in terms of demographic characteristics, prevalence of disease, and the potential consequences (risks) of disease (CMS PIP Protocol, page 2).

Activity II. Clearly Defined, Answerable Study Question

It is important for the MCO to clearly state, in writing, the question(s) the study is designed to answer. Stating the question(s) helps maintain the focus of the PIP and sets the framework for data collection, analysis, and interpretation (CMS PIP Protocol, page 5).

Activity III. Clearly Defined Study Indicator(s)

A study indicator is a quantitative or qualitative characteristic (variable) reflecting a discrete event (e.g., an older adult has/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.

Each project should have one or more quality indicators for use in tracking performance and improvement over time. All indicators must be objective, clearly and unambiguously defined, and based on current clinical knowledge or health services research. In addition, all indicators must be capable of objectively measuring either member outcomes, such as health status, functional status, or member satisfaction, or valid proxies of these outcomes.

Indicators can be few and simple, many and complex, or any combination thereof, depending on the study question(s), the complexity of existing practice guidelines for a clinical condition, and the availability of data and resources to gather the data.

Indicator criteria are the set of rules by which the data collector or reviewer determines whether an indicator has been met. Pilot or field testing is helpful in the development of effective indicator criteria. Such testing allows the opportunity to add criteria that might not have been anticipated in the design phase. In addition, criteria are often refined over time based on results of previous studies. However, if criteria are changed significantly, the method for calculating an indicator will not be consistent and performance on indicators will not be comparable over time.

It is important, therefore, for indicator criteria to be developed as fully as possible during the design and field testing of data collection instruments (CMS PIP Protocol, page 5).

Activity IV. Use a Representative and Generalizable Study Population

Once a topic has been selected, measurement and improvement efforts must be systemwide (i.e., each project must represent the entire Medicaid-enrolled population to which the study indicators apply). Once that population is identified, the MCO must decide whether to review data for that entire population or use a sample of that population. Sampling is acceptable as long as the samples are representative of the identified population (CMS PIP Protocol, page 8). (See Activity V. Valid Sampling Techniques.)

Activity V. Valid Sampling Techniques

If the MCO uses a sample to select members for the study, proper sampling techniques are necessary to provide valid and reliable (and, therefore, generalizable) information on the quality of care provided. When conducting a study designed to estimate the rates at which certain events occur, the sample size has a large impact on the level of statistical confidence in the study estimates. Statistical confidence is a numerical statement of the probable degree of certainty or accuracy of an estimate. In some situations, it expresses the probability that a difference could be due to chance alone. In other applications, it expresses the probability of the accuracy of the estimate. For example, a study may report that a disease is estimated to be present in 35 percent of the population. This estimate might have a 95 percent level of confidence, plus or minus 5 percentage points, implying a 95 percent certainty that between 30 percent and 40 percent of the population has the disease.

The true prevalence or incidence rate for the event in the population may not be known the first time a topic is studied. In such situations, the most prudent course of action is to assume that a maximum sample size is needed to establish a statistically valid baseline for the project indicators (CMS PIP Protocol, page 9).

Activity VI. Accurate/Complete Data Collection

Procedures used by the MCO to collect data for its PIP 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. The MCO should employ a data collection plan that includes:

- ◆ Clear identification of the data to be collected.
- ◆ Identification of the data sources and how and when the baseline and repeat indicator data will be collected.
- ◆ Specification of who will collect the data.
- ◆ Identification of instruments used to collect the data.

When data are collected from automated data systems, development of specifications for automated retrieval of the data should be devised. When data are obtained from visual inspection of medical records or other primary source documents, several steps should be taken to ensure the data are consistently extracted and recorded:

1. The key to successful manual data collection is in the selection of the data collection staff. Appropriately qualified personnel with conceptual and organizational skills should be used to abstract the data. However, their specific skills should vary depending on the nature of the data collected and the degree of professional judgment required. For example, if data collection involves searching throughout the medical record to find and abstract information or judge whether clinical criteria were met, experienced clinical staff members, such as registered nurses, should collect the data. However, if the abstraction involves verifying the presence of a diagnostic test report, trained medical assistants or medical records clerks may be used.
2. Clear guidelines for obtaining and recording data should be established, especially if multiple reviewers are used to perform this activity. The MCO should determine the necessary qualifications of the data collection staff before finalizing the data collection instrument. An abstractor would need fewer clinical skills if the data elements within the data source are more clearly defined. Defining a glossary of terms for each project should be part of the training of abstractors to ensure consistent interpretation among project staff members.
3. The number of data collection staff members used for a given project affects the reliability of the data. A smaller number of staff members promote interrater reliability; however, it may also increase the amount of time it takes to complete this task. Intrarater reliability (i.e., reproducibility of judgments by the same abstractor at a different time) should also be considered (CMS PIP Protocol, page 12).

Activity VII. Appropriate Improvement Strategies

Real, sustained improvements in care result from a continuous cycle of measuring and analyzing performance and developing and implementing systemwide improvements in care. Actual improvements in care depend far more on thorough analysis and implementation of appropriate solutions than on any other steps in the process.

An improvement strategy is defined as an intervention designed to change behavior at an institutional, practitioner, or member level. The effectiveness of the intervention activity or activities can be determined by measuring the MCO's change in performance according to predefined quality indicators. Interventions are key to an improvement project's ability to bring about improved health care outcomes. The MCO must identify and develop appropriate interventions for each PIP to ensure the likelihood of measurable change.

If repeated measurements of quality improvement (QI) indicate that QI actions were not successful (i.e., the QI actions did not achieve significant improvement), the problem-solving process begins again with data analysis to identify possible causes, propose and implement solutions, and so forth. If QI actions were successful, the new processes should be standardized and monitored (CMS PIP Protocol, page 16).

Activity VIII. Sufficient Data Analysis and Interpretation

Review of MCO data analysis begins with examining the MCO's calculated plan performance on the selected clinical or nonclinical indicators. The review examines the appropriateness of, and the MCO's adherence to, the statistical analysis techniques defined in the data analysis plan (CMS PIP Protocol, page 17).

Activity IX. Real Improvement Achieved

When an MCO reports a change in its performance, it is important to know whether the reported change represents real change, is an artifact of a short-term event unrelated to the intervention, or is due to random chance. The external quality review organization (EQRO) will need to assess the probability that reported improvement is actually true improvement. This probability can be assessed in several ways, but is most confidently assessed by calculating the degree to which an intervention is statistically significant. While the protocol for this activity does not specify a level of statistical significance that a reported change in performance must meet, it does require that EQROs assess the extent to which any performance changes reported by an MCO can be found to be statistically significant. States may choose to establish their own numerical thresholds for the significance of reported improvements (CMS PIP Protocol, page 18).

Activity X. Sustained Improvement Achieved

Real change results from changes in the fundamental processes of health care delivery. Such changes should result in sustained improvements. In contrast, a spurious, one-time improvement can result from unplanned, accidental occurrences or random chance. If real change has occurred, the MCO should be able to document sustained improvement (CMS PIP Protocol, page 19).

Appendix C. **Definitions and Explanations by Activity**
for **Denver Health Medicaid Choice**

This document was developed by HSAG as a resource to assist MCOs in understanding the broad concepts in each activity related to PIPs. The specific concept is delineated in the left column, and the explanations and examples are provided in the right column.

Concepts	Definitions and Explanations
Activity I. Appropriate Study Topic	
Broad spectrum of care	<ul style="list-style-type: none"> ◆ Clinical focus areas: Includes prevention and care of acute and chronic conditions and high-volume/high-risk services. High-risk procedures may also be targeted (e.g., care received from specialized centers). ◆ Nonclinical areas: Continuity or coordination of care addressed in a manner in which care is provided from multiple providers and across multiple episodes of care (e.g., disease-specific or condition-specific care).
Eligible population	<ul style="list-style-type: none"> ◆ May be defined as members who meet the study population parameters.
Selected by the State	<ul style="list-style-type: none"> ◆ If the study topic was selected by the state Medicaid agency, this information is included as part of the description under Activity I: “Choose the Selected Study Topic” in the PIP Summary Form.
Activity II. Clearly Defined, Answerable Study Question	
Study question	<ul style="list-style-type: none"> ◆ The question(s) directs and maintains the focus of the PIP and sets the framework for data collection, analysis, and interpretation. The question(s) must be measurable and clearly defined. ◆ Examples: <ol style="list-style-type: none"> 1. Does educational outreach about immunizations increase the rates of immunizations for children 0–2 years of age? 2. Does increasing flu immunizations for members with chronic asthma impact overall health status? 3. Will increased planning and attention to follow-up after inpatient discharge improve the rate of mental health follow-up services?

Concepts	Definitions and Explanations
Activity III. Clearly Defined Study Indicator(s)	
Study indicator	<ul style="list-style-type: none"> ◆ A quantitative or qualitative characteristic reflecting a discrete event or status that is to be measured. Indicators are used to track performance and improvement over time. ◆ Example: The percentage of enrolled members who were 12–21 years of age who had at least one comprehensive well-care visit with a primary care practitioner or an obstetrician-gynecologist during the measurement year.
Sources identified	<ul style="list-style-type: none"> ◆ Documentation/background information that supports the rationale for the study topic, study question, and indicators. ◆ Examples: HEDIS^{®1} measures, medical community practice guidelines, evidence-based practices, or provider agreements. ◆ Practice guideline examples: American Academy of Pediatrics and American Diabetes Association.
Activity IV. Use a Representative and Generalizable Study Population	
Eligible population	<ul style="list-style-type: none"> ◆ Refers to members who are included in the study. ◆ Includes age, conditions, enrollment criteria, and measurement periods. ◆ Example: The eligible population includes all children 0–2 years of age as of December 31 of the measurement period, with continuous enrollment and no more than one enrollment gap of 30 days or less.
Activity V. Valid Sampling Techniques	
True or estimated frequency of occurrence	<ul style="list-style-type: none"> ◆ This may not be known the first time a topic is studied. In this case, the MCO should assume the need for a maximum sample size to establish a statistically valid baseline for the study. HSAG will review whether the MCO defined the impact the topic has on the population or the number of eligible members in the population.
Sample size	<ul style="list-style-type: none"> ◆ Indicates the size of the sample to be used.
Representative sample	<ul style="list-style-type: none"> ◆ Refers to the sample reflecting the entire population.
Confidence level	<ul style="list-style-type: none"> ◆ Statistical confidence is a numerical statement of the probable degree of certainty or accuracy of an estimate (e.g., 95 percent level of confidence with a 5 percent margin of error).

¹ HEDIS[®] is a registered trademark of the National Committee for Quality Assurance (NCQA).

Concepts	Definitions and Explanations
Activity VI. Accurate/Complete Data Collection	
Data elements	<ul style="list-style-type: none"> ◆ Identification of data elements includes unambiguous definitions of data that will be collected (e.g., the numerator/denominator, laboratory values).
Interrater reliability (IRR)	<ul style="list-style-type: none"> ◆ The HSAG review team evaluates if there is a tool, policy, and/or process in place to verify the accuracy of the data abstracted. Is there an over-read (IRR) process for the review of a minimum percentage of records? ◆ Examples: A policy that includes how IRR is tested, documentation of training, and instruments and tools used.
Algorithms	<ul style="list-style-type: none"> ◆ The development of any systematic process that consists of an ordered sequence of steps. Each step depends on the outcome of the previous step. ◆ The HSAG review team expects for the MCO to describe the process used in data collection. What are the criteria (e.g., what Current Procedural Terminology and/or source codes were used)?
Data completeness	<ul style="list-style-type: none"> ◆ For the purposes of PIP scoring, data completeness refers to the degree of complete administrative data (e.g., encounter data or claims data). MCOs that compensate their providers on a fee-for-service basis require a submission of claims for reimbursement. However, providers generally have several months before they must submit the claim for reimbursement, and processing claims by the health plan may take several additional months, creating a claims lag. Providers paid on a capitated or salaried basis do not need to submit a claim to be paid, but should provide encounter data for the visit. In this type of arrangement, some encounter data may not be submitted. ◆ PIPs that use administrative data need to ensure that the data has a high degree of completeness prior to its use. Evidence of data completeness levels may include claim processing lag reports, trending of provider submission rates, policies and procedures regarding timeliness requirements for claims and encounter data submission, encounter data submission studies, and comparison reports of claims/encounter data versus medical record review. Discussion in the PIP should focus on evidence at the time the data was collected for use in identifying the population, sampling, and/or calculation of the study indicators. Statements such as, “Data completeness at the time of the data pull was estimated to be 97.8 percent based on claims lag reports (see attached Incurred But Not Reported report),” along with the attachment mentioned, usually (but not always) are sufficient evidence to demonstrate data completeness.

Concepts	Definitions and Explanations
Activity VII. Appropriate Improvement Strategies	
Causes and barriers	<ul style="list-style-type: none"> ◆ Interventions for improvement are identified through evaluation or barrier analysis. If there is no improvement, what problem-solving processes are put in place to identify possible causes and proposed changes to implement solutions? ◆ It is expected that interventions associated with improvement of quality indicators will be system interventions.
Standardized	<ul style="list-style-type: none"> ◆ If the interventions result in successful outcomes, the interventions should continue and the MCO should monitor them to ensure that the outcomes remain. ◆ Examples: If an intervention is the use of practice guidelines, then the MCO continue to use them. If mailers are a successful intervention, then the MCO continues the mailings and monitors the outcomes.
Activity VIII. Sufficient Data Analysis and Interpretation	
Analysis plan	<ul style="list-style-type: none"> ◆ Each study should have a plan for how data analysis will occur. ◆ The HSAG review team will ensure that this plan was followed.
Generalization to the study population	<ul style="list-style-type: none"> ◆ Study results can be applied to the general population with the premise that comparable results will occur.
Factors that threaten internal and external validity	<ul style="list-style-type: none"> ◆ Did the analysis identify any factors (internal or external) that would threaten the validity of study results? ◆ Example: There was a change in record extraction (e.g., a vendor was hired or there were changes in HEDIS methodology).
Presentation of the data analysis	<ul style="list-style-type: none"> ◆ Results should be presented in tables or graphs with measurement periods, results, and benchmarks clearly identified.
Identification of initial measurement and remeasurement of study indicators	<ul style="list-style-type: none"> ◆ Clearly identify in the report which measurement period the indicator results reflect.
Statistical differences between initial measurement and remeasurement periods	<ul style="list-style-type: none"> ◆ The HSAG review team looks for evidence of a statistical test (e.g., a t-test or chi-square test).
Identification of the extent to which the study was successful	<ul style="list-style-type: none"> ◆ The HSAG review team looks for improvement over several measurement periods. ◆ Both interpretation and analysis should be based on continuous improvement philosophies, with the MCO documenting data results and the follow-up steps that will be taken for improvement.

Concepts	Definitions and Explanations
Activity IX. Real Improvement Achieved	
Remeasurement methodology is the same as baseline	<ul style="list-style-type: none"> ◆ The HSAG review team looks to see that the study methodology remains the same for the entire study.
Documented improvement in processes or outcomes of care	<ul style="list-style-type: none"> ◆ The study should document how interventions were successful in impacting system processes or outcomes. ◆ Examples: There was a change in data collection or a rate increase or decrease demonstrated in graphs/tables.
Activity X. Sustained Improvement Achieved	
Sustained improvement	<ul style="list-style-type: none"> ◆ The HSAG review team looks to see if study improvements have been sustained over the course of the study. This needs to be demonstrated over a period of several (more than two) remeasurement periods.