

Colorado Medicaid  
Community Mental Health Services Program

# FY 07–08 PIP VALIDATION REPORT

Access To Initial Medication Evaluations

*for*  
Behavioral HealthCare, Inc.

May 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

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### 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 consumers 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

The validation was performed on a PIP by **Behavioral HealthCare, Inc. (BHI)**. This year, **BHI** progressed through Activity X, with baseline and two remeasurement results reported. The study indicators evaluated: (1) whether **BHI** Medicaid consumers were offered an initial routine medication evaluation within 30 days from the time they sought service and (2) clinician satisfaction with consumer appointment scheduling for new medication evaluations.

Improvement strategies that were used for this PIP included:

- ◆ The implementation of an electronic scheduling program.
- ◆ Continuous appointment-tracking data collection.
- ◆ Comparative data reported to centers.

- ♦ The requirement of corrective action plans for centers performing below benchmark.
- ♦ Root cause analysis by nurse expert teams.
- ♦ Surveys of clinicians.

Study Indicators 1 and 4 did not demonstrate statistically significant improvement from the first remeasurement to the second remeasurement. HSAG suggests that a causal/barrier analysis by the nurse expert team, and a change or addition of intervention strategies may be helpful.

## Study Topic

The study topic, *Access to Initial Medication Evaluations*, was selected by **BHI** and addressed CMS' requirement related to access to care and services. The study addressed initial medication evaluations for a high-volume, high-cost, and high-risk population. Clinician satisfaction was also evaluated.

**BHI's** study questions was, "Will improvement in Mental Health Center Medication Services Clinic practices reduce wait times for appointments for initial routine medication evaluations with a mental health prescriber?"

## Study Methodology

For this validation cycle, **BHI** collected data for two study indicators:

- ♦ "Timely consumer access to initial routine medication evaluation."
- ♦ "Clinician Satisfaction with appointment scheduling for New Medication Evaluations."

The study population included all eligible **BHI** Medicaid and private Medicaid consumers who requested an initial (new) routine, outpatient medication evaluation at a **BHI** mental health center. Data were collected from a unique database that captured medication evaluation appointments offered and survey data on clinician satisfaction with appointment scheduling for new medication evaluations. The survey was Internet-based.

## Study Results

For the fiscal year (FY) 07–08, **BHI** completed baseline, and the first and second remeasurements for the two study indicators during this validation cycle. Overall, Study Indicators 1 and 4 demonstrated nonstatistically significant declines from the first remeasurement to the second remeasurement. For Study Indicator 1, the rate fell from 89 percent to 86 percent, and for Study Indicator 4, the rate fell from 40 percent to 36 percent. Improvement may have taken place for individual centers or for the adult or adolescent age groups. Table 1-1 illustrates results for both study indicators.

Table 1-1—Study Indicator Results

| Study Indicators  | Baseline Results | Remeasurement 1 Results | Remeasurement 2 Results |
|---|------------------|-------------------------|-------------------------|
| Study Indicator 1: “Timely consumer access to initial routine medication evaluation.”                   | 87%              | 89%                     | 86%                     |
| Study Indicator 4: “Clinician Satisfaction with appointment scheduling for New Medication Evaluations.” | 45%              | 40%                     | 36%                     |

## 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 (BHO) may take up to three years to complete all 10 activities. Each activity consists of 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 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, 10 activities with a total of 53 elements were validated. Of this number:
  - 38 evaluation elements were *Met*.
  - 1 evaluation element was *Partially Met*.
  - 3 evaluation elements were *Not Met*.
  - 11 evaluation elements were *Not Applicable (NA)*.
- ♦ The total number of critical elements that were evaluated equaled 11. Of this number:
  - 9 critical elements were *Met*.
  - 0 critical elements were *Partially Met*.
  - 0 critical elements were *Not Met*.
  - 2 critical elements were *NA*.

The final validation finding for **BHI’s** PIP showed an overall score of 90 percent, a critical element score of 100 percent, and *Met* validation status.

## Conclusions

This study addressed the need to improve the rates of clinician satisfaction and access to initial medication evaluation for the BHO's Medicaid consumers. Interventions were implemented at each of the three centers—centers A, B, and C—based on each center's needs. A corrective action plan was required if the center's data were below the benchmark. **BHI** completed baseline and the first and second remeasurements for two study indicators. For FY 07–08 validation cycle, **BHI** progressed through Activity X and received scores of 90 percent for evaluation elements *Met*, 100 percent for critical elements *Met*, and a *Met* validation status. Study Indicators 1 and 4 did not demonstrate statistically significant improvement from the first remeasurement to the second remeasurement. HSAG suggests that a causal/barrier analysis by the nurse expert team, and a change or addition of intervention strategies may be helpful.

## Requirements

There were no requirements identified during this review.

## Recommendations

Study Indicators 1 and 4 did not demonstrate statistically significant improvement from the first remeasurement to the second remeasurement. HSAG suggests that a causal/barrier analysis by the nurse expert team, and a change or addition of intervention strategies may be helpful.

## Comparison of Years 1 Through 3

**BHI** completed Activity I through Activity X for the FY 05–06 validation cycle. **BHI** received scores of 58 percent for evaluation elements *Met*, 64 percent for critical elements *Met*, and a *Partially Met* validation status. In FY 05–06, **BHI** determined that Study Indicators 2 and 3 were invalid measures. Study Indicator 2 used the Mental Health Statistics Improvement Program (MHSIP) Satisfaction Survey to determine the respondents who chose “agree or strongly agree” with the statement, “I was able to see a psychologist when I wanted to.” Study Indicator 3 used the Mental Health Corporation of America's (MHCA) consumer satisfaction survey to determine the respondents who chose “good, very good, or excellent” to the statement “length of time between making an appointment and seeing a psychiatrist.” Study Indicators 2 and 3 were dropped from the study at that time.

For the FY 06–07 validation cycle, **BHI** progressed through Activity IX and received scores of 90 percent for evaluation elements *Met*, 100 percent for critical elements *Met*, and a *Met* validation status. During this period, baseline and first remeasurement results were reported. **BHI** reported baseline and first remeasurement results for the two study indicators. For Study Indicator 1, there was improvement in initial medication evaluation appointment availability within 30 days; however, the improvement was not statistically significant. The rate increased from 87 to 89 percent. For Study Indicator 4, **BHI's** overall clinician satisfaction with access to initial medication evaluations decreased from 45 to 40 percent in the first remeasurement period.

For the FY 07–08 validation cycle, **BHI** progressed through Activity X and received scores of 90 percent for evaluation elements *Met*, 100 percent for critical elements *Met*, and a *Met* validation status. During this period, baseline and the first and second remeasurements were reported. Overall, Study Indicators 1 and 4 demonstrated nonstatistically significant declines from the first remeasurement to the second remeasurement. For Study Indicator 1, the rate fell from 89 percent to 86 percent, and for Study Indicator 4, the rate fell from 40 percent to 36 percent.

## 2. Scoring Methodology

for Behavioral HealthCare, Inc.

Validating PIPs involves 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>           | <p>(1) All critical elements were <i>Met</i></p> <p style="text-align: center;"><b>and</b></p> <p>(2) 80 percent to 100 percent of all critical and noncritical elements were <i>Met</i>. No action required.</p>  |
| <i>Partially Met</i> | <p>(1) All critical elements were <i>Met</i> and 60 percent to 79 percent of all critical and noncritical elements were <i>Met</i></p> <p style="text-align: center;"><b>or</b></p> <p>(2) One critical element or more was <i>Partially Met</i>. Requires revision and resubmission of the PIP.</p> |
| <i>Not Met</i>       | <p>(1) All critical elements were <i>Met</i> and less than 60 percent of all critical and noncritical elements were <i>Met</i></p> <p style="text-align: center;"><b>or</b></p> <p>(2) One critical element or more was <i>Not Met</i>. Requires revision and resubmission of the PIP.</p>           |
| <i>NA</i>            | Not Applicable elements (including critical elements if they were not assessed) were removed from all scoring.   |



## PIP Scores

For this PIP, HSAG reviewed all Activities. Table 2-1 and Table 2-2 show **BHI's** scores based on HSAG's PIP evaluation of *Access To Initial Medication Evaluations*. Each activity has been reviewed and scored according to HSAG's validation methodology.

**Table 2-1—FY 07-08 Performance Improvement Project Scores  
for Access To Initial Medication Evaluations  
for Behavioral HealthCare, Inc.**

| 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  | 5         | 0                   | 0             | 2         | 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  | 0         | 0                   | 0             | 6         | 1                                | 0                           | 0                                     | 0                               | 1                          |
| VI. Accurate/Complete Data Collection                       | 11   | 10        | 0                   | 0             | 1         | 1                                | 1                           | 0                                     | 0                               | 0                          |
| VII. Appropriate Improvement Strategies                     | 4  | 3         | 0                   | 0             | 1         | No Critical Elements             |                             |                                       |                                 |                            |
| VIII. Sufficient Data Analysis and Interpretation           | 9  | 8         | 0                   | 0             | 1         | 2                                | 1                           | 0                                     | 0                               | 1                          |
| IX. Real Improvement Achieved                               | 4  | 1         | 0                   | 3             | 0         | No Critical Elements             |                             |                                       |                                 |                            |
| X. Sustained Improvement Achieved                           | 1  | 0         | 1                   | 0             | 0         | No Critical Elements             |                             |                                       |                                 |                            |
| <b>Totals for All Activities</b>                            | <b>53</b>  | <b>38</b> | <b>1</b>            | <b>3</b>      | <b>11</b> | <b>11</b>                        | <b>9</b>                    | <b>0</b>                              | <b>0</b>                        | <b>2</b>                   |

**Table 2-2—FY 07-08 Performance Improvement Project Overall Score  
for Access To Initial Medication Evaluations  
for Behavioral HealthCare, Inc.**

|  |      |
|--|------|
| Percentage Score of Evaluation Elements Met* | 90%  |
| 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 valid.

## 3. Validation and Findings Summary

for Behavioral HealthCare, Inc.

### 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 **Behavioral HealthCare, Inc. (BHI)**. This year, **BHI** progressed through Activity X, with baseline and two remeasurement results reported. The study indicators evaluated: (1) whether **BHI** Medicaid consumers were offered an initial routine medication evaluation within 30 days from the time they sought service and (2) clinician satisfaction with consumer appointment scheduling for new medication evaluations.

Improvement strategies that were used for this PIP included:

- ◆ The implementation of a scheduler program for some mental health centers.
- ◆ Continuous appointment-tracking data collection.
- ◆ Comparative data reported to centers.
- ◆ The requirement of corrective action plans for groups performing below benchmark.
- ◆ Root cause analysis by nurse expert teams.
- ◆ Surveys of clinicians.

Study Indicators 1 and 4 did not demonstrate statistically significant improvement from the first remeasurement to the second remeasurement. HSAG suggests that a causal/barrier analysis by the nurse expert team, and a change or addition of intervention strategies may be helpful.

#### Activity I. Appropriate Study Topic

##### Study Topic

The study topic, *Access to Initial Medication Evaluations*, was selected by **BHI** and addressed CMS' requirement related to access to care and services. The study addressed initial medication evaluations for a high-volume, high-cost, and high-risk population. Clinician satisfaction was also evaluated.

##### Finding(s)

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

**Strength(s)**

The study topic reflected high-risk conditions and a broad spectrum of care and services over time. All eligible consumers who met the study criteria were included, and consumers with special health care needs were not excluded. The study topic had the potential to affect consumer health and functional status.

**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)**

**BHI's** study question was: "Will improvement in Mental Health Center Medication Services Clinic practices reduce wait times for appointments for initial routine medication evaluations with a mental health prescriber?"

**Finding(s)**

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

**Strength(s)**

The study question was answerable and was stated in clear, simple terms.

**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)**

For this validation cycle, **BHI** collected data for two study indicators:

- ◆ “Timely consumer access to initial routine medication evaluation.”
- ◆ “Clinician Satisfaction with appointment scheduling for New Medication Evaluations.”

**Finding(s)**

Five of the seven evaluation elements were *Met* for this activity, including three critical elements. Two elements were *Not Applicable* because the study indicators were not nationally recognized measures and were not based on current, evidence-based practice guidelines, pertinent peer review literature, or consensus expert panels

**Strength(s)**

The study indicators were well-defined, objective, and measurable. They allowed the study question to be answered, and measured changes (outcomes) in consumer health and functional status.

**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 included all eligible **BHI** Medicaid and private Medicaid consumers who request an initial (new) routine, outpatient medication evaluation at a **BHI** mental health center.

**Finding(s)**

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

**Strength(s)**

The method for identifying the eligible populations was accurately and completely defined, and captured all consumers to whom the study question applied. The method specified that consumers

had to be eligible for services at the time of the request, and specifies that gaps in enrollment were allowed.

**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)**

Sampling techniques were not used in this PIP.

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

Data were collected from a unique database that captured medication evaluation appointments offered and survey data on clinician satisfaction with appointment scheduling for new medication evaluations. The survey was Internet-based.

**Finding(s)**

Ten of the 11 evaluation elements were *Met* for this activity, including one critical element. One element was *Not Applicable* because the data collection tool was a survey.

**Strength(s)**

A defined and systematic data collection process for the collection of baseline and remeasurement data was discussed in the PIP. The sources for data collection were specified, the data elements collected were clearly identified, the survey tool questions were based on the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) questionnaire, and the written instructions for completing the survey were clear and concise.

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

Improvement strategies that were used for this PIP included:

- ◆ The implementation of an electronic scheduling program.
- ◆ Continuous appointment-tracking data collection.
- ◆ Comparative data reported to centers.
- ◆ The requirement of corrective action plans for centers performing below benchmark.
- ◆ Root cause analysis by nurse expert teams.
- ◆ Surveys of clinicians.

**Finding(s)**

Three of the four evaluation elements for this activity were *Met*. One evaluation element was *Not Applicable* because interventions could not be standardized at the time of the review due to declining rates for both study indicators from the first remeasurement to the second remeasurement.

**Strength(s)**

The interventions were related to causes/barriers identified through data analysis and quality improvement processes. The system changes noted in the PIP were 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

**BHI** completed baseline and the first and second remeasurements for two study indicators during this validation cycle. Table 3-1 shows results from baseline, the first remeasurement, and the second remeasurement for Study Indicators 1 and 2.

| Table 3-1—Study Indicator Results   |                  |                         |                         |
|---|------------------|-------------------------|-------------------------|
| Study Indicators  | Baseline Results | Remeasurement 1 Results | Remeasurement 2 Results |
| <u>Study Indicator 1</u> : “Timely consumer access to initial routine medication evaluation.”                   | 87%              | 89%                     | 86%                     |
| <u>Study Indicator 4</u> : “Clinician Satisfaction with appointment scheduling for New Medication Evaluations.” | 45%              | 40%                     | 36%                     |

### Finding(s)

Eight of the nine evaluation elements for this activity were *Met*, including one critical element. One critical element was *Not Applicable* because sampling techniques were not used in this PIP.

### Strength(s)

The data findings were presented in an accurate, clear, and easily understood format. **BHI** identified factors that threatened the internal and external validity of the findings, and factors that affected the ability to compare measurement periods were discussed in the PIP.

### 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 IX. Real Improvement Achieved****Real Improvement Achieved**

Overall, Study Indicators 1 and 4 demonstrated nonstatistically significant declines from the first remeasurement to the second remeasurement. For Study Indicator 1, the rate fell from 89 percent to 86 percent, and for Study Indicator 4, the rate fell from 40 percent to 36 percent. Individual improvement may have taken place for certain centers or for certain age groups.

**Finding(s)**

One evaluation element for this activity was *Met*. Three evaluation elements were *Not Met*.

**Strength(s)**

The remeasurement methodology was the same as the baseline methodology.

**Requirement(s) (for Critical Elements)**

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

**Recommendation(s) (for Noncritical Elements)**

From the first remeasurement to the second remeasurement, there was no documented improvement in the processes for Study Indicators 1 and 4. A causal/barrier analysis with a potential change or addition of interventions strategies is recommended.

**Activity X. Sustained Improvement Achieved****Sustained Improvement Achieved**

Study Indicator 1 demonstrated improvement from baseline to the first remeasurement and had a nonstatistically significant decline from the first remeasurement to the second remeasurement. Study Indicator 4 did not demonstrate improvement from baseline to the first remeasurement, or from the first remeasurement to the second.

**Finding(s)**

The evaluation element for this activity will remain *Partially Met*.

**Strength(s)**

Study Indicator 1 demonstrated improvement from baseline to the first remeasurement.



**Requirement(s) (for Critical Elements)**

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

**Recommendation(s) (for Noncritical Elements)**

From the first remeasurement to the second remeasurement, there was no documented improvement in the processes for Study Indicators 1 and 4. A causal/barrier analysis with a potential change or addition of intervention strategies is recommended.

*Section 4: Colorado FY 07-08 PIP Validation Tool:*  
**Access to Initial Medication Evaluations  
 for Behavioral HealthCare, Inc.**

| DEMOGRAPHIC INFORMATION  |  |  |                               |
|--------------------------|--|--|-------------------------------|
| Health Plan Name:        | Behavioral HealthCare, Inc.              |  |                               |
| Study Leader Name:       | Ann Terrill Torrez                       | Title:                                 | Director, Quality Improvement |
| Phone Number:            | (303) 617-2815                           | E-mail Address:                        | ann_torrez@bhiinc.org         |
| Name of Project/Study:   | Access to Initial Medication Evaluations |  |                               |
| Type of Study:           | Nonclinical                              |  |                               |
| Date of Study:           | 11/1/2005 to 11/30/2007                  |  |                               |
| Type of Delivery System: | BHO                                      | Number of Medicaid Consumers in BHO:   | 8,243                         |
|                          |  | Number of Medicaid Consumers in Study: | 4,593                         |
| Year 3 Validation:       | Resubmission                             |  |                               |
| Results:                 | Remeasurement 3                          |  |                               |

**Section 4: Colorado FY 07-08 PIP Validation Tool:  
Access to Initial Medication Evaluations  
for Behavioral HealthCare, Inc.**

| EVALUATION ELEMENTS   |  | SCORING   | COMMENTS  |
|---|--|---|---|
| <b>Performance Improvement Project/Health Care Study Evaluation</b> |  |   |   |
| I.  | <b>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 consumer input.</b> |   |   |
|   | 1. Reflects high-volume or high-risk conditions (or was selected by the State).<br><br>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 and high-risk condition.                                  |
|   | 2. Is selected following collection and analysis of data.<br><br>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 the collection and analysis of data.                       |
|   | 3. Addresses a broad spectrum of care and services (or was selected by the State).<br><br>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.<br><br>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 | All eligible populations that met the study criteria were included.                               |
|   | 5. Does not exclude consumers with special health care needs.<br><br>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 | Consumers with special health care needs were not excluded.                                       |
| C*  | 6. Has the potential to affect consumer health, functional status, or satisfaction.<br><br>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 consumer health, functional status, and satisfaction. |

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

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| EVALUATION ELEMENTS   |  | SCORING   | COMMENTS   |
|---|--|---|--|
| <b>Performance Improvement Project/Health Care Study Evaluation</b> |  |   |  |
| II.   | <b>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.</b> |   |  |
|   | 1. States the problem to be studied in simple terms.<br><br>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 stated in simple terms and was in the correct format to meet CMS Protocols. |
| C*  | 2. Is answerable.<br><br>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              |

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| EVALUATION ELEMENTS   |  | SCORING   | COMMENTS  |
|---|--|---|---|
| <b>Performance Improvement Project/Health Care Study Evaluation</b> |  |   |   |
| III.  | <b>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 consumer'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.</b> |   |   |
| C*  | 1. Are well-defined, objective, and measurable.<br><br>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 type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input checked="" type="checkbox"/> NA | The study indicators were not based on current, evidence-based practice guidelines, pertinent peer review literature, or consensus expert panels. |
| C*  | 3. Allow for the study question to be answered.<br><br>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, consumer satisfaction, or valid process alternatives.<br><br>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 outcomes using valid process alternatives and in clinician satisfaction.  |
| C*  | 5. Have available data that can be collected on each indicator.<br><br>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.<br><br>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 provided in the PIP documentation.   |

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| EVALUATION ELEMENTS   | SCORING | COMMENTS |
|---|---------|----------|
| <b>Performance Improvement Project/Health Care Study Evaluation</b> |         |          |

| Results for Activity III |     |               |         |                |
|--------------------------|-----|---------------|---------|----------------|
| # of Elements            |     |               |         |                |
| Critical Elements**      | Met | Partially Met | Not Met | Not Applicable |
| 3                        | 5   | 0             | 0       | 2              |

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| EVALUATION ELEMENTS   |   | SCORING   | COMMENTS   |
|---|---|---|--|
| <b>Performance Improvement Project/Health Care Study Evaluation</b> |   |   |  |
| IV.   | <b>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.</b> |   |  |
| C*  | 1. Is accurately and completely defined.<br><br>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 completely and accurately defined.   |
|   | 2. Includes requirements for the length of a consumer's enrollment in the BHO.  | <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 specifies that consumers had to be eligible for services at the time of the request, and that gaps in enrollment were allowed. |
| C*  | 3. Captures all consumers to whom the study question applies.<br><br>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 consumers 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              |

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| 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 consumers 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 type="checkbox"/> Met | <input type="checkbox"/> Partially Met | <input type="checkbox"/> Not Met | <input checked="" type="checkbox"/> NA | Sampling techniques were not used in this study. |
|  | 2. Identify the sample size.  | <input type="checkbox"/> Met | <input type="checkbox"/> Partially Met | <input type="checkbox"/> Not Met | <input checked="" type="checkbox"/> NA | Sampling techniques were not used in this study. |
|  | 3. Specify the confidence level.  | <input type="checkbox"/> Met | <input type="checkbox"/> Partially Met | <input type="checkbox"/> Not Met | <input checked="" type="checkbox"/> NA | Sampling techniques were not used in this study. |
|  | 4. Specify the acceptable margin of error.  | <input type="checkbox"/> Met | <input type="checkbox"/> Partially Met | <input type="checkbox"/> Not Met | <input checked="" type="checkbox"/> NA | Sampling techniques were not used in this study. |
| C*   | 5. Ensure a representative sample of the eligible population.   | <input type="checkbox"/> Met | <input type="checkbox"/> Partially Met | <input type="checkbox"/> Not Met | <input checked="" type="checkbox"/> NA | Sampling techniques were not used in this study. |
|  | 6. Are in accordance with generally accepted principles of research design and statistical analysis.  | <input type="checkbox"/> Met | <input type="checkbox"/> Partially Met | <input type="checkbox"/> Not Met | <input checked="" type="checkbox"/> NA | Sampling techniques were not used in this study. |

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

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|---|---|---|--|
| <b>Performance Improvement Project/Health Care Study Evaluation</b> |   |   |  |
| VI.   | <b>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.</b> |   |  |
|   | 1. Clearly defined data elements to be collected.<br><br>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 clearly identified in the PIP documentation.  |
|   | 2. Clearly identified sources of data.<br><br>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 for data collection were specified in the PIP documentation.   |
|   | 3. A clearly defined and systematic process for collecting data that includes how baseline and remeasurement data will be collected.<br><br>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 defined and systematic process for collecting baseline and remeasurement data was discussed in the PIP.              |
|   | 4. A timeline for the collection of baseline and remeasurement data.<br><br>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 both baseline and remeasurement data was provided.                                    |
|   | 5. Qualified staff and personnel to abstract manual data.   | <input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA | The PIP documentation provided information on manual data collection personnel, including training and qualifications. |
| C*  | 6. A manual data collection tool that ensures consistent and accurate collection of data according to indicator specifications.   | <input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA | The survey tool questions were based on the CAHPS questionnaire.   |
|   | 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 | The data collection tool was a survey, making this evaluation element Not Applicable.                                  |
|   | 8. Clear and concise written instructions for completing the manual data collection tool.   | <input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA | The written instructions for completing the survey were clear and concise.   |
|   | 9. An overview of the study in written instructions.  | <input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA | An overview (purpose) of the survey was included in the instructions.  |
|   | 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 | A flow chart of the administrative data collection process was included.   |

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| EVALUATION ELEMENTS   |   | SCORING   | COMMENTS   |
|---|---|---|--|
| <b>Performance Improvement Project/Health Care Study Evaluation</b> |   |   |  |
| VI.   | <b>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.</b> |   |  |
| 11.   | An estimated degree of administrative data completeness.<br>Met = 80 - 100%<br>Partially Met = 50 - 79%<br>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 | The estimated degree of administrative data completeness was reported as 100 percent for this year's submission, with supporting documentation on how the percentage was calculated. |

| Results for Activity VI |     |               |         |                |
|-------------------------|-----|---------------|---------|----------------|
| # of Elements           |     |               |         |                |
| Critical Elements**     | Met | Partially Met | Not Met | Not Applicable |
| 1                       | 10  | 0             | 0       | 1              |

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| EVALUATION ELEMENTS   |   | SCORING   | COMMENTS   |
|---|---|---|--|
| <b>Performance Improvement Project/Health Care Study Evaluation</b> |   |   |  |
| VII.  | <b>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 consumer level.</b> |   |  |
|   | 1. Related to causes/barriers identified through data analysis and quality improvement processes.<br><br>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 improvement strategies were related to causes/barriers identified through data analysis.   |
|   | 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 improvement strategies noted in the PIP were likely to induce permanent change.  |
|   | 3. Revised if the original interventions were not successful.   | <input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA | In November 2007, the clinicians were resurveyed; however, Study Indicator 4 did not demonstrate improvement and it was not evident in the PIP that interventions were revised to address the declining rates for Study Indicator 4.<br><br>Re-review March 2008:<br>After review of the resubmitted PIP documentation, the score for this evaluation element has been changed from Not Met to Met. The resubmitted documentation addressed interventions that were directed toward Study Indicator 4. |
|   | 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 | Interventions could not be standardized at this time due to the declining rates for both study indicators from remeasurement 1 to remeasurement 2.   |

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| EVALUATION ELEMENTS   | SCORING | COMMENTS |
|---|---------|----------|
| <b>Performance Improvement Project/Health Care Study Evaluation</b> |         |          |

| Results for Activity VII |     |               |         |                |
|--------------------------|-----|---------------|---------|----------------|
| # of Elements            |     |               |         |                |
| Critical Elements**      | Met | Partially Met | Not Met | Not Applicable |
| 0                        | 3   | 0             | 0       | 1              |

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

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| EVALUATION ELEMENTS   |  | SCORING   | COMMENTS   |
|---|--|---|--|
| <b>Performance Improvement Project/Health Care Study Evaluation</b> |  |   |  |
| VIII.   | <b>Sufficient Data Analysis and Interpretation: Describe the data analysis process on the selected clinical or nonclinical study indicators. Include the statistical analysis techniques used.</b> |   |  |
| C*  | 1. Is conducted according to the data analysis plan in the study design.<br><br>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 performed 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.<br><br>If no sampling was performed, this element is scored NA.                                      | <input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input checked="" type="checkbox"/> NA | Sampling techniques were not used in the PIP.  |
|   | 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 threaten the internal or external validity of findings were discussed in the PIP. |
|   | 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 provided in the PIP.                                     |
|   | 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 was presented in an accurate, clear, and easily understood format.                    |
|   | 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 | The initial measurement and remeasurement of the study indicators were identified.             |

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|--|---|---|----------|
| <b>Performance Improvement Project/Health Care Study Evaluation</b>  |   |   |          |
| <b>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.</b> |   |   |          |
| 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 | <p>Statistical testing was performed and statistical differences were identified for each study indicator for each remeasurement period; however, HSAG could not replicate the p values for both study indicators for the last measurement period. For Study Indicator 1, HSAG calculated a Chi-square value of 2.884 with a p value of 0.089. For Study Indicator 4, HSAG calculated a Chi-square value of 0.479 with a p value of 0.488.</p> <p>Re-review March 2008:<br/>           After review of the resubmitted PIP documentation, the score for this evaluation element has been changed from Partially Met to Met. The p values reported in the resubmitted PIP could be replicated by HSAG.</p> |          |
| 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 could affect the ability to compare measurement periods were discussed in the PIP.   |          |
| 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 provided.   |          |

| Results for Activity VIII |     |               |         |                |
|---------------------------|-----|---------------|---------|----------------|
| # of Elements             |     |               |         |                |
| Critical Elements**       | Met | Partially Met | Not Met | Not Applicable |
| 2                         | 8   | 0             | 0       | 1              |

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| EVALUATION ELEMENTS   |   | SCORING   | COMMENTS   |
|---|---|---|--|
| <b>Performance Improvement Project/Health Care Study Evaluation</b> |   |   |  |
| IX.   | <b>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.</b> |   |  |
|   | 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 | The remeasurement methodology was the same as the baseline methodology.  |
|   | 2. There is documented improvement in processes or outcomes of care.  | <input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input checked="" type="checkbox"/> Not Met <input type="checkbox"/> NA | <p>From the first remeasurement to the second remeasurement, there were no documented improvements in the processes for both study indicators. For Study Indicator 1, the rate fell from 89 percent to 86 percent, and for Study Indicator 4, the rate fell from 40 percent to 36 percent. Individual improvement may have taken place for certain centers or for age groups; however, both study indicators declined from remeasurement 1 to remeasurement 2 overall.</p> <p>Re-review March 2008:<br/>         After review of the resubmitted documentation, the score for this evaluation element will remain Not Met. Overall Study Indicators 1 and 4 demonstrated nonstatistically significant declines from the first remeasurement to the second remeasurement.</p> |

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| EVALUATION ELEMENTS   |  | SCORING   | COMMENTS   |
|---|--|---|--|
| <b>Performance Improvement Project/Health Care Study Evaluation</b>   |  |   |  |
| IX. <b>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.</b> |  |   |  |
| 3.  | The improvement appears to be the result of planned intervention(s).         | <input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input checked="" type="checkbox"/> Not Met <input type="checkbox"/> NA | <p>Both study indicators did not demonstrate improvement from the first remeasurement to the second remeasurement.</p> <p>Re-review March 2008:<br/>           After review of the resubmitted documentation, the score for this evaluation element will remain Not Met. Study Indicators 1 and 4 did not demonstrate improvement from the first remeasurement to the second remeasurement.</p>  |
| 4.  | There is statistical evidence that observed improvement is true improvement. | <input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input checked="" type="checkbox"/> Not Met <input type="checkbox"/> NA | <p>There was no statistical evidence that demonstrated improvement for either study indicator from the first remeasurement to the second remeasurement.</p> <p>Re-review March 2008:<br/>           After review of the resubmitted documentation, the score for this evaluation element will remain Not Met. Study Indicators 1 and 4 did not demonstrate statistically significant improvement from the first remeasurement to the second remeasurement.</p> |

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| EVALUATION ELEMENTS   | SCORING | COMMENTS |
|---|---------|----------|
| <b>Performance Improvement Project/Health Care Study Evaluation</b> |         |          |

| Results for Activity IX |     |               |         |                |
|-------------------------|-----|---------------|---------|----------------|
| # of Elements           |     |               |         |                |
| Critical Elements**     | Met | Partially Met | Not Met | Not Applicable |
| 0                       | 1   | 0             | 3       | 0              |

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| EVALUATION ELEMENTS   |   | SCORING   | COMMENTS  |
|---|---|---|---|
| <b>Performance Improvement Project/Health Care Study Evaluation</b> |   |   |   |
| X.  | <b>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.</b> |   |   |
|   | 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 checked="" type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA | <p>Study Indicator 1 demonstrated improvement from baseline to the first remeasurement and had a non-statistically significant decline from the first remeasurement to the second remeasurement. Study Indicator 4 did not demonstrate improvement from baseline to the first remeasurement, nor from the first remeasurement to the second.</p> <p>Re-review March 2008:<br/>           After review of the resubmitted documentation, the score for this evaluation element will remain Partially Met. Study Indicator 1 demonstrated improvement from baseline to the first remeasurement, and had a nonstatistically significant decline from the first remeasurement to the second remeasurement. Study Indicator 4 did not demonstrate improvement from baseline to the first remeasurement, or from the first remeasurement to the second.</p> |

| Results for Activity X |     |               |         |                |
|------------------------|-----|---------------|---------|----------------|
| # of Elements          |     |               |         |                |
| Critical Elements**    | Met | Partially Met | Not Met | Not Applicable |
| 0                      | 0   | 1             | 0       | 0              |

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**Table 4-1—FY 07-08 PIP Validation Report Scores:  
Access to Initial Medication Evaluations  
for Behavioral HealthCare, Inc.**

| Review Activity                  |   | Total Possible<br>Evaluation<br>Elements<br>(Including Critical<br>Elements) | Total<br>Met | Total<br>Partially<br>Met | Total<br>Not<br>Met | Total<br>NA | Total<br>Possible<br>Critical<br>Elements | Total<br>Critical<br>Elements<br>Met | Total<br>Critical<br>Elements<br>Partially<br>Met | Total<br>Critical<br>Elements<br>Not Met | Total<br>Critical<br>Elements<br>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  | 5            | 0                         | 0                   | 2           | 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  | 0            | 0                         | 0                   | 6           | 1   | 0                                    | 0   | 0  | 1                                   |
| VI.                              | Accurate/Complete Data Collection                       | 11   | 10           | 0                         | 0                   | 1           | 1   | 1                                    | 0   | 0  | 0                                   |
| VII.                             | Appropriate Improvement Strategies                      | 4  | 3            | 0                         | 0                   | 1           | 0   | No Critical Elements                 |   |  |                                     |
| VIII.                            | Sufficient Data Analysis and Interpretation             | 9  | 8            | 0                         | 0                   | 1           | 2   | 1                                    | 0   | 0  | 1                                   |
| IX.                              | Real Improvement Achieved                               | 4  | 1            | 0                         | 3                   | 0           | 0   | No Critical Elements                 |   |  |                                     |
| X.                               | Sustained Improvement Achieved                          | 1  | 0            | 1                         | 0                   | 0           | 0   | No Critical Elements                 |   |  |                                     |
| <b>Totals for All Activities</b> |   | <b>53</b>  | <b>38</b>    | <b>1</b>                  | <b>3</b>            | <b>11</b>   | <b>11</b>                                 | <b>9</b>                             | <b>0</b>  | <b>0</b>                                 | <b>2</b>                            |

**Table 4-2—FY 07-08 PIP Validation Report Overall Scores:  
Access to Initial Medication Evaluations  
for Behavioral HealthCare, Inc.**

|   |             |
|---|-------------|
| <b>Percentage Score of Evaluation Elements Met*</b> | <b>90%</b>  |
| <b>Percentage Score of Critical Elements Met**</b>  | <b>100%</b> |
| <b>Validation Status***</b>                         | <b>Met</b>  |

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

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

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

### EVALUATION OF THE OVERALL VALIDITY AND RELIABILITY OF PIP RESULTS

HSAG assessed the implications of the study's findings on the likely validity and reliability of the results based on CMS 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 X were assessed for this PIP Validation Report. Based on the validation of this PIP, HSAG's assessment determined 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 *BHI* submitted to HSAG for review, Appendix B is the CMS rationale for each activity, and Appendix C includes PIP definitions and explanations.

- ♦ Appendix A: **Behavioral HealthCare, Inc.**'s PIP Study: *Access To Initial Medication Evaluations*
- ♦ Appendix B: CMS Rationale by Activity
- ♦ Appendix C: Definitions and Explanations by Activity

## Appendix A: PIP Summary Form: Access To Initial Medication Evaluations for Behavioral Health Care, Inc.

### DEMOGRAPHIC INFORMATION

|   |   |
|---|---|
| BHO Name or ID: <u>Behavioral Health Care, Inc.</u>   |   |
| Study Leader Name: <del>Ann Terrill Torrez</del> <u>Melissa Kulasekere</u>  | Title: <del>Director, Quality Improvement</del> <u>Program Evaluator</u>  |
| Telephone Number: <del>(303) 617-2815</del> <u>(303) 627-2015</u>   | E-Mail Address: <del>Ann-torrez@bhiinc.org</del> <u>melissa_kulasekere@bhiinc.org</u>   |
| Name of Project/Study: <u>Access To Initial Medication Evaluations</u>  |   |
| Type of Study: <input type="checkbox"/> Clinical <input checked="" type="checkbox"/> Nonclinical  |   |
| <del>9,869,838</del> <u>8243</u> Number of Medicaid Consumers<br><br><del>1,333</del> <u>4593</u> Number of Medicaid Consumers in Study | <b>Section to be completed by HSAG</b><br><br>____ Year 1 Validation    ____ Initial Submission    ____ Resubmission<br><br>____ Year 2 Validation    ____ Initial Submission    ____ Resubmission<br><br><u>X</u> Year 3 Validation    ____ Initial Submission <u>X</u> Resubmission |
|   | <b>Section to be completed by HSAG</b><br><br>____ Baseline Assessment                      ____ Remeasurement 1<br><br>____ Remeasurement 2 <u>X</u> Remeasurement 3   |

## **Appendix A: PIP Summary Form: Access To Initial Medication Evaluations for Behavioral Health Care, Inc.**

**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; state 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; consumer 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 consumer health, functional status, or satisfaction. The topic may be specified by the State Medicaid agency or CMS and be based on input from consumers. Over time, topics must cover a broad spectrum of key aspects of consumer care and services, including clinical and nonclinical areas, and should include all enrolled populations (i.e., certain subsets of consumers should not be consistently excluded from studies).

**Study Topic:** This study topic addresses the high volume, high cost, and high risk issue of improving access for consumers to initial psychiatric/medication evaluations in a timely fashion. Initial Medication evaluations are a critical step in evaluating and treating consumers with potential and serious illness. Medication management is considered first line treatment of choice for the major mental illnesses of Schizophrenia, Bipolar disorder, Schizoaffective disorder, Major Depression and ADHD, diseases which accounted for 65.5% of units of service and 65.5% of dollars spent in FY 05 by BHI. Currently 19% of BHI consumers seeking services received medication evaluations and the number increases each year. Initial evaluations with prescribers last at least one hour. Prescribers are also the most expensive providers in the Mental Health field and thus these visit types are one of the more expensive outpatient services in community mental health.

Recommended ratios of mental health prescribers to consumers vary nationally from

- 1/1200 members in Hawaii, 1/1500 members in Nevada (BHI = .5/1200 Eligible and 1.8/1000 active consumers) to
- 1 FTE prescribers /10,000 members-- Rhode Island (BHI = 2 FTE prescribers /10000) to
- .30 MDs /1000 members—Value Options national standard- (BHI =.40 MDs/1000 members)

Current BHI network adequacy data suggests that the BHI network of prescribers meets or exceeds the standards for an adequate number of prescribers, answering the question of sufficiency of providers.

A survey of MHC clinician satisfaction with access to initial medication evals in 1999 and 2000 revealed generally high levels of satisfaction with access to care for ongoing medication management but **high levels of dissatisfaction with accessing medication evaluations in the first place.**

Medication evaluations are provided to BHI consumers at several different points in the care continuum including, but not limited to:

- 1) New consumers seeking symptom relief, diagnostic clarification and medication treatment
- 2) Consumers new to BHI or a mental health center who will need ongoing medication management
- 3) Consumers needing post hospitalization evaluation for ongoing outpatient medication management and

## Appendix A: PIP Summary Form: Access To Initial Medication Evaluations *for* Behavioral Health Care, Inc.

**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; state 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; consumer 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 consumer health, functional status, or satisfaction. The topic may be specified by the State Medicaid agency or CMS and be based on input from consumers. Over time, topics must cover a broad spectrum of key aspects of consumer care and services, including clinical and nonclinical areas, and should include all enrolled populations (i.e., certain subsets of consumers should not be consistently excluded from studies).

- 4) Adult consumers admitted to intensive residential programs and consumers who had discontinued treatment and wish to restart medication management of their illness. For purposes of this study, BHI chose to focus on improving access for all its Medicaid consumers new to the mental health center who were requesting a new or initial medication evaluation. Please see Activity IV for further detail regarding population.

Community standards for timely access to initial psychiatric medication evaluations have not been established. The community standard for a routine PCP office visit is 30 days and for an acute care visit, 48 hours.



**Appendix A: PIP Summary Form:  
Access To Initial Medication Evaluations  
*for* Behavioral Health Care, Inc.**

**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:**

- 1. Will improvement in Mental Health Center Medication Services Clinic practices reduce wait times for appointments for initial routine medication evaluations with a mental health prescriber?**

## Appendix A: PIP Summary Form: Access To Initial Medication Evaluations *for* Behavioral Health Care, Inc.

**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 consumer'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.

|  |  |
|--|--|
| <b>Study Indicator #1:</b>             | <b>Timely consumer access to initial routine medication evaluation</b>   |
| <b>Numerator:</b>                      | BHI Consumers offered a medication evaluation within 30 days   |
| <b>Denominator:</b>                    | Requests for a routine initial medication evaluation   |
| <b>First Measurement Period Dates:</b> | September 2001   |
| <b>Baseline Benchmark:</b>             | <b>90%</b>   |
| <b>Source of Benchmark:</b>            | <b>Standards of Practice Committee Determination</b>   |
| <b>Baseline Goal:</b>                  |  |
| <b>Study Indicator #4:</b>             | <b>Clinician Satisfaction with appointment scheduling for New Medication Evaluations</b>   |
| <b>Numerator:</b>                      | Respondents choosing "always" or "usually" to the following survey question: Q3 "In the last month, how often did you get an appointment for a routine <u>initial</u> medication evaluation <u>as soon as your clients wanted</u> ?" |
| <b>Denominator:</b>                    | All Respondents who responded yes to Q2 "In the last month, did you make any appointments for your clients with one of your Mental Health Center's prescribers for a routine <u>initial</u> medication evaluation?"                  |
| <b>First Measurement Period Dates:</b> | February 1999 and August 2000  |
| <b>Benchmark:</b>                      | <b>45%(2000)</b>   |
| <b>Source of Benchmark:</b>            | <b>2000 survey results</b>   |
| <b>Baseline Goal:</b>                  | 90%  |

## **Appendix A: PIP Summary Form: Access To Initial Medication Evaluations** *for* **Behavioral Health Care, Inc.**

**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 consumer's enrollment needs to be defined in order to meet the study population criteria.

**Identified Study Population:** Our study concerns reducing wait times for individuals new to receiving medications at our core provider sites.

**Inclusion Criteria:**

Payer Source: BHI Medicaid and Private/Medicaid Consumers

Age: All ages

Eligibility: Eligible for services at time of request

Enrollment: Gaps in enrollment allowable

Requesting an initial (new) routine, outpatient medication evaluation at a BHI mental health center

**Exclusion:**

Consumers who seek initial routine outpatient medication evaluations outside BHI's core providers (E.P.N. or External Provider Network)

Medicare/Medicaid consumers are excluded from the study because Medicare is primary payer for medication services.

Type of Med Evals: Consumer

- Admitted to a Mental Health Center residential program
- Transferred to a specialty service and the consumer will be followed by a new prescriber
- Had gaps in service and is returning to medications
- Experiencing the onset of new psychiatric symptoms

**NOTE:** *Consumers do not access psychiatry directly. Once they are "opened" to a mental health center, they receive an intake by a clinician. Based on diagnosis and/or symptoms, the clinician may recommend or the consumer may request a medication evaluation. The clinician then refers the consumer for an initial medication evaluation. The clinician may assist the consumer in making the appointment, or the consumer may call or visit the mental health center medication clinic to make the appointment.*

## Appendix A: PIP Summary Form: Access To Initial Medication Evaluations *for* Behavioral Health Care, Inc.

**E. Activity V: Use sound sampling methods.** If sampling is to be used to select consumers 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 ( <i>describe</i> ) | Sampling Method ( <i>describe</i> ) |
|------------------------------|-----------------------------------|-------------|------------|---|-------------------------------------|
| See Attachment (Step E5.xls) |                                   |             |            |   |                                     |

## Appendix A: PIP Summary Form: Access To Initial Medication Evaluations for Behavioral Health Care, Inc.

**F. Activity VIa: Data Collection Procedures.** 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.

|   |  |
|---|--|
| <p><b>Data Sources</b></p> <p><input type="checkbox"/> Hybrid (medical/treatment records and administrative)</p> <p><input type="checkbox"/> Medical/treatment record abstraction</p> <p style="margin-left: 20px;">Record Type</p> <p style="margin-left: 40px;"><input type="checkbox"/> Outpatient</p> <p style="margin-left: 40px;"><input type="checkbox"/> Inpatient</p> <p style="margin-left: 40px;"><input type="checkbox"/> Other _____</p> <p style="margin-left: 20px;">Other Requirements</p> <p style="margin-left: 40px;"><input type="checkbox"/> Data collection tool attached</p> <p style="margin-left: 40px;"><input type="checkbox"/> Data collection instructions attached</p> <p style="margin-left: 40px;"><input type="checkbox"/> Summary of data collection training attached</p> <p style="margin-left: 40px;"><input type="checkbox"/> IRR process and results attached</p> <p><input type="checkbox"/> Other data _____</p> <p><b>Description of Data Collection Staff</b></p> <p>Indicator #1. Front Desk staff trained in each center's appointment system as well as Access to Med Eval database, and initial med eval Access to Standards (30 days). At Center B, Clinicians were also trained to tell front desk staff to enter appt requests in tracking system. (attachment StepF6.ppt and StepF6B.ppt)</p> <p>Indicator #4: N/A</p> | <p><input type="checkbox"/> Administrative data</p> <p style="margin-left: 20px;">Data Source</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> Other AME Database</p> <p>Each center developed a unique database to capture data on Med evals offered. Front desk staff, after entering appointments made in their appointment systems, then opened this database and entered the following data: SEE (StepF6.ppt). At Center B, clinicians give appt information to Front desk staff to enter into this database (StepF6B.ppt).</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> MHC ID/payer status* or Medicaid Number</li> <li><input type="checkbox"/> BirthDate/Age</li> <li><input type="checkbox"/> DateScheduled/Contacted</li> <li><input type="checkbox"/> DateOffered</li> <li><input type="checkbox"/> DateAccepted</li> <li><input type="checkbox"/> Team</li> </ul> <p>*Only records of Medicaid Capitated consumer requests analyzed for purposes of BHI study</p> <p style="margin-left: 20px;">Other Requirements</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> Data completeness assessment attached- see (Step I9.xls, Captured/Expected column)</p> <p><input checked="" type="checkbox"/> Survey Data</p> <p style="margin-left: 20px;">Fielding Method</p> <p style="margin-left: 40px;"><input type="checkbox"/> Personal interview <b>person to person</b></p> <p style="margin-left: 40px;"><input type="checkbox"/> Mail</p> <p style="margin-left: 40px;"><input type="checkbox"/> Phone with CATI script</p> <p style="margin-left: 40px;"><input type="checkbox"/> Phone with IVR</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> Internet ( distribution of survey)</p> |
|---|--|

## Appendix A: PIP Summary Form: Access To Initial Medication Evaluations *for* Behavioral Health Care, Inc.

**F. Activity VIa: Data Collection Procedures.** 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.

☒ Other ☐ Distributed to staff at team meetings

Other Requirements

☒ Number of waves 1 \_\_\_\_\_

☐ Response rate \_\_\_\_ See E. Activity V \_\_\_\_\_

☐ Incentives used -

**Internally Developed Tool: (Activity-VI Step F6 Clinician Survey Tool.doc)** Validity: Survey tool questions based on CAHPS questionnaire format. Survey tool submitted to MHC QI directors for review and additional input. Clinicians were instructed to complete this tool by each of their MHC QI directors based on their practice.

Completed surveys entered into database by BHI staff. November 2006 Survey tool modified Q1. Added "intensive treatment" to treatment site selections.

## Appendix A: PIP Summary Form: Access To Initial Medication Evaluations *for* Behavioral Health Care, Inc.

| F. Activity VIb: Determine the data collection cycle.   | Determine the data analysis cycle.  |
|---|---|
| <p><input checked="" type="checkbox"/> <b>Once a year- Clinician Satisfaction Survey</b></p> <p><input type="checkbox"/> Twice a year</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"/> Once a week</p> <p><input type="checkbox"/> Once a day</p> <p><input checked="" type="checkbox"/> <b>Continuous- Access to Med Eval Data</b></p> <p><input type="checkbox"/> Other (list and describe):</p> | <p><input checked="" type="checkbox"/> Once a year- Clinician Sat Survey, Access Data</p> <p><input type="checkbox"/> Once a season</p> <p><input checked="" type="checkbox"/> Once a quarter- Access Data- trended</p> <p><input type="checkbox"/> Once a month</p> <p><input type="checkbox"/> Continuous</p> <p><input type="checkbox"/> Other (list and describe): Data is analyzed when collected.</p> <p>2006 - Quarterly analysis of change could not be conducted as team level inadequate for chi square analysis of change.</p> <hr/> <hr/> <hr/> |

## **Appendix A: PIP Summary Form: Access To Initial Medication Evaluations for Behavioral Health Care, Inc.**

### **F. Activity VIc. Data Analysis Plan and Other Pertinent Methodological Features**

#### **Data analysis**

##### **Measure #1:** Access data

Analysis of data completeness- annual comparison of expected vs. completed evals by team, age group and overall.

Inferential analysis: Chi square analysis of change. Compare year 1 teams, aggregate age groups and BHI, overall to year 2 (Step I9.xls).

Compare year 2 teams, aggregate age groups and BHI, overall to year 3 (Step I9.xls).

Descriptive analysis: Compare team level interventions against team level scores chronologically (Step G707.doc).

##### Additional Analysis:

Trended quarterly data on access to med evals at 14 days and 21 days (amecharts.xls).

Prescriber FTE compliment at Centers, evals/FTE (Step H8A.doc page 6).

Cause/Effect analysis of reasons for delays in appointments (Attachment C) (2005).

##### **Measure # 4** Clinician Satisfaction

Evaluation of representativeness of sample (Step E5.xls).

Perception of timeliness: Performance on Question #3 by age group and MHC (Step H8A.doc, page 7-14).

##### Additional Analysis:

Distribution of respondents (Step H8A.doc, page 11), age group served and treatment setting, 2005 to 2006 2007

Perception of difficulty of appointment process by MHC and Age group served, 2006 -2007– Survey Question #4 (Step H8A.doc page 11-13)

Top barriers to Access 2006 -2007– Survey Question #5 (Step H8A.doc, page 13-14)

**Estimated percentage degree of administrative data completeness:** \_\_\_\_\_ percent.

**Supporting documentation:**





## **Appendix A: PIP Summary Form: Access To Initial Medication Evaluations** *for* **Behavioral Health Care, Inc.**

**H. Activity VIIIa. Data analysis:** Describe the data analysis process in accordance with the analysis plan and any ad-hoc analysis done on the selected clinical or non-clinical study indicators. Include the statistical analysis techniques utilized and *p* values.

**Study Measure #1:**

Analysis of data completeness (Step I 9.xls and AMEfy072ndqtr.doc). Annual number evals captured / Average number of actual encounters in FY06 (expected) by team, age group, and overall

Described performance, intervention and clinician satisfaction by team for last 6 quarters Step G706.doc (2006)

Trended team level performance data at 14 days, 21 days and 30 days (amecharts.xls)

Compared FTE complement, number of clinical sites, actual evals captured by MHC (Step H8A.doc, page 3)

**Study Measure # 4:**

Evaluation of representativeness of sample, (Step E5.xls),

Perception of timeliness: Performance on Question #3 by age group and MHC (Step H8A.doc, page 4–5)

Additional analysis:

Distribution of respondents (Step H8A.doc, page 4), age group served and treatment setting, 2005 to 2006

Perception of difficulty of appointment process by MHC and Age group served, 2005-2006– Survey Question #4 (Step H8A.doc page 6)

Top barriers to Access 2005-2006– Survey Question #5-- (Step H8A.doc, page 6)

**Study Measure #1:**

Analysis of data completeness (Step I 9.xls and AMEcharts.xls). Annual number evals captured / Average number of actual encounters in FY06 (expected) by team, age group, and overall.

Described performance, intervention and clinician satisfaction by team for last 4 quarters Step G707.doc (2007)

Trended team level performance data at 14 days, 21 days and 30 days (AMEcharts.xls)

Compared FTE complement, number of clinical sites, actual evals captured by MHC (Step H8A.doc, page 6)

**Study Measure # 4:**

Evaluation of representativeness of sample, (Step E5.xls),

Perception of timeliness: Performance on Question #3 by age group and MHC (Step H8A.doc, page 11-13)

Additional analysis:

Distribution of respondents (Step H8A.doc, page 11), age group served and treatment setting, 2006 to 2007

Perception of difficulty of appointment process by MHC and Age group served, 2005-2006– Survey Question #4 (Step H8A.doc page 11-13)

Top barriers to Access 2005-2006– Survey Question #5-- (Step H8A.doc, page 14)

## **Appendix A: PIP Summary Form: Access To Initial Medication Evaluations *for* Behavioral Health Care, Inc.**

**. Activity VIIb: Implement intervention and 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. Describe interventions designed to change behavior at an institutional, practitioner, or consumer level.

**Describe interventions:**

**Baseline to Remeasurement 1:**

**Remeasurement 1 to Remeasurement 2:**

**Remeasurement 2 to Remeasurement 3:**

**Appendix A: PIP Summary Form:**  
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**H. Activity VIIIa. Data analysis:** Describe the data analysis process in accordance with the analysis plan and any ad hoc analysis done on the selected clinical or nonclinical study indicators. Include the statistical analysis techniques used and *p* values.

**Data analysis process:**

**Baseline Measurement:**

**Remeasurement 1:**

**Remeasurement 2:**

**Remeasurement 3:**

**Appendix A: PIP Summary Form:  
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**H. Activity VIIIb. Interpretation of study results:** Describe the results of the statistical analysis, interpret the findings, discuss the successfulness of the study, and indicate follow-up activities. Also, identify any factors that could influence the measurement or validity of the findings.

See **Step H8B.doc**

## Appendix A: PIP Summary Form: Access To Initial Medication Evaluations *for* Behavioral Health Care, Inc.

**I. Activity IX: Report improvement.** Describe any meaningful change in performance observed and demonstrated during baseline measurement.

### #1 Quantifiable Measure: Appointment Availability in 30 days

| Time Period<br>Measurement Covers | Baseline<br>Project<br>Indicator<br>Measurement | Numerator | Denominator | Rate or<br>Results | Internal<br>Benchmark | Statistical Test and Significance* |
|-----------------------------------|---|-----------|-------------|--------------------|-----------------------|------------------------------------|
| See attachment (Step I9.xls)      |   |           |             |                    |                       |                                    |

**Appendix A: PIP Summary Form:  
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**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.

**See Step J10.doc**

## Appendix B. CMS Rationale by Activity for Behavioral HealthCare, Inc.

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

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 BHOs 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 BHO'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 BHO 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 consumer'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 consumer outcomes, such as health status, functional status, or consumer 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 BHO 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 BHO uses a sample to select consumers 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 BHO 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 BHO 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 BHO 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 consumer level. The effectiveness of the intervention activity or activities can be determined by measuring the BHO'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 BHO 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 the BHO data analysis begins with examining the BHO's calculated plan performance on the selected clinical or nonclinical indicators. The review examines the appropriateness of, and the BHO's adherence to, the statistical analysis techniques defined in the data analysis plan (CMS PIP Protocol, page 17).

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

When a BHO 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 a BHO 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 BHO should be able to document sustained improvement (CMS PIP Protocol, page 19).

## Appendix C. Definitions and Explanations by Activity for Behavioral HealthCare, Inc.

This document was developed by HSAG as a resource to assist BHOs 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  |
|--|---|
| <b>Activity I. Appropriate Study Topic</b>                     |   |
| <b>Broad spectrum of care</b>                                  | <ul style="list-style-type: none"> <li>◆ 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).</li> <li>◆ 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).</li> </ul>   |
| <b>Eligible population</b>                                     | <ul style="list-style-type: none"> <li>◆ May be defined as consumers who meet the study population parameters.</li> </ul>   |
| <b>Selected by the State</b>                                   | <ul style="list-style-type: none"> <li>◆ 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.</li> </ul>  |
| <b>Activity II. Clearly Defined, Answerable Study Question</b> |   |
| <b>Study question</b>  | <ul style="list-style-type: none"> <li>◆ 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.</li> <li>◆ Examples: <ol style="list-style-type: none"> <li>1. Does educational outreach about immunizations increase the rates of immunizations for children 0–2 years of age?</li> <li>2. Does increasing flu immunizations for consumers with chronic asthma impact overall health status?</li> <li>3. Will increased planning and attention to follow-up after inpatient discharge improve the rate of mental health follow-up services?</li> </ol> </li> </ul> |

| Concepts  | Definitions and Explanations   |
|---|--|
| <b>Activity III. Clearly Defined Study Indicator(s)</b>                     |  |
| <b>Study indicator</b>  | <ul style="list-style-type: none"> <li>◆ 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.</li> <li>◆ Example: The percentage of enrolled consumers 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.</li> </ul> |
| <b>Sources identified</b>   | <ul style="list-style-type: none"> <li>◆ Documentation/background information that supports the rationale for the study topic, study question, and indicators.</li> <li>◆ Examples: HEDIS<sup>®1</sup> measures, medical community practice guidelines, evidence-based practices, or provider agreements.</li> <li>◆ Practice guideline examples: American Academy of Pediatrics and American Diabetes Association.</li> </ul>   |
| <b>Activity IV. Use a Representative and Generalizable Study Population</b> |  |
| <b>Eligible population</b>  | <ul style="list-style-type: none"> <li>◆ Refers to consumers who are included in the study.</li> <li>◆ Includes age, conditions, enrollment criteria, and measurement periods.</li> <li>◆ 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.</li> </ul>   |
| <b>Activity V. Valid Sampling Techniques</b>                                |  |
| <b>True or estimated frequency of occurrence</b>                            | <ul style="list-style-type: none"> <li>◆ This may not be known the first time a topic is studied. In this case, the BHO should assume the need for a maximum sample size to establish a statistically valid baseline for the study. HSAG will review whether the BHO defined the impact the topic has on the population or the number of eligible consumers in the population.</li> </ul>  |
| <b>Sample size</b>  | <ul style="list-style-type: none"> <li>◆ Indicates the size of the sample to be used.</li> </ul>   |
| <b>Representative sample</b>  | <ul style="list-style-type: none"> <li>◆ Refers to the sample reflecting the entire population.</li> </ul>   |
| <b>Confidence level</b>   | <ul style="list-style-type: none"> <li>◆ 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).</li> </ul>  |

<sup>1</sup> HEDIS<sup>®</sup> is a registered trademark of the National Committee for Quality Assurance (NCQA).

| Concepts  | Definitions and Explanations  |
|---|---|
| <b>Activity VI. Accurate/Complete Data Collection</b> |   |
| <b>Data elements</b>                                  | <ul style="list-style-type: none"> <li>Identification of data elements includes unambiguous definitions of data that will be collected (e.g., the numerator/denominator, laboratory values).</li> </ul>   |
| <b>Interrater reliability (IRR)</b>                   | <ul style="list-style-type: none"> <li>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?</li> <li>Examples: A policy that includes how IRR is tested, documentation of training, and instruments and tools used.</li> </ul>  |
| <b>Algorithms</b>                                     | <ul style="list-style-type: none"> <li>The development of any systematic process that consists of an ordered sequence of steps. Each step depends on the outcome of the previous step.</li> <li>The HSAG review team expects for the BHO to describe the process used in data collection. What are the criteria (e.g., what Current Procedural Terminology and/or source codes were used)?</li> </ul>   |
| <b>Data completeness</b>                              | <ul style="list-style-type: none"> <li>For the purposes of PIP scoring, data completeness refers to the degree of complete administrative data (e.g., encounter data or claims data). BHOs 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.</li> <li>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.</li> </ul> |

| Concepts   | Definitions and Explanations  |
|--|---|
| <b>Activity VII. Appropriate Improvement Strategies</b>                              |   |
| <b>Causes and barriers</b>   | <ul style="list-style-type: none"> <li>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?</li> <li>It is expected that interventions associated with improvement of quality indicators will be system interventions.</li> </ul>            |
| <b>Standardized</b>  | <ul style="list-style-type: none"> <li>If the interventions result in successful outcomes, the interventions should continue and the BHO should monitor them to ensure that the outcomes remain.</li> <li>Examples: If an intervention is the use of practice guidelines, then the BHO continues to use them. If mailers are a successful intervention, then the BHO continues the mailings and monitors the outcomes.</li> </ul> |
| <b>Activity VIII. Sufficient Data Analysis and Interpretation</b>                    |   |
| <b>Analysis plan</b>   | <ul style="list-style-type: none"> <li>Each study should have a plan for how data analysis will occur.</li> <li>The HSAG review team will ensure that this plan was followed.</li> </ul>  |
| <b>Generalization to the study population</b>  | <ul style="list-style-type: none"> <li>Study results can be applied to the general population with the premise that comparable results will occur.</li> </ul>   |
| <b>Factors that threaten internal and external validity</b>                          | <ul style="list-style-type: none"> <li>Did the analysis identify any factors (internal or external) that would threaten the validity of study results?</li> <li>Example: There was a change in record extraction (e.g., a vendor was hired or there were changes in HEDIS methodology).</li> </ul>  |
| <b>Presentation of the data analysis</b>   | <ul style="list-style-type: none"> <li>Results should be presented in tables or graphs with measurement periods, results, and benchmarks clearly identified.</li> </ul>   |
| <b>Identification of initial measurement and remeasurement of study indicators</b>   | <ul style="list-style-type: none"> <li>Clearly identify in the report which measurement period the indicator results reflect.</li> </ul>  |
| <b>Statistical differences between initial measurement and remeasurement periods</b> | <ul style="list-style-type: none"> <li>The HSAG review team looks for evidence of a statistical test (e.g., a <i>t</i> test or Chi-square test).</li> </ul>   |
| <b>Identification of the extent to which the study was successful</b>                | <ul style="list-style-type: none"> <li>The HSAG review team looks for improvement over several measurement periods.</li> <li>Both interpretation and analysis should be based on continuous improvement philosophies, with the BHO documenting data results and the follow-up steps that will be taken for improvement.</li> </ul>  |



| Concepts   | Definitions and Explanations  |
|--|---|
| <b>Activity IX. Real Improvement Achieved</b>                  |   |
| <b>Remeasurement methodology is the same as baseline</b>       | <ul style="list-style-type: none"> <li>The HSAG review team looks to see that the study methodology remains the same for the entire study.</li> </ul>   |
| <b>Documented improvement in processes or outcomes of care</b> | <ul style="list-style-type: none"> <li>The study should document how interventions were successful in impacting system processes or outcomes.</li> <li>Examples: There was a change in data collection or a rate increase or decrease demonstrated in graphs/tables.</li> </ul> |
| <b>Activity X. Sustained Improvement Achieved</b>              |   |
| <b>Sustained improvement</b>                                   | <ul style="list-style-type: none"> <li>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.</li> </ul>                       |