



CO L O R A D O

**Department of Health Care
Policy & Financing**

Health First Colorado
Community Mental Health Services Program

Fiscal Year 2016–2017 PIP Validation Report

Improving Transition from Jail to Community-Based Behavioral Health Treatment

for

Foothills Behavioral Health Partners

April 2017

For Validation Year 3

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Colorado Department of Health Care Policy & Financing.*



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1. Background

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

As one of the mandatory external quality review activities under the BBA, the Department is required to validate the PIPs. To meet this validation requirement, the Department contracted with Health Services Advisory Group, Inc. (HSAG), as the 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 to increase or sustain improvement.

In its PIP evaluation and validation, HSAG used the Department of Health and Human Services, Centers for Medicare & Medicaid Services (CMS) publication, *EQR Protocol 3: Validating Performance Improvement Projects (PIPs): A Mandatory Protocol for External Quality Review (EQR)*, Version 2.0, September 2012.¹⁻¹

HSAG evaluates the following components of the quality improvement process:

1. The technical structure of the PIPs to ensure the BHO designed, conducted, and reported PIPs using sound methodology consistent with the CMS protocol for conducting PIPs. HSAG's review determined whether a PIP could reliably measure outcomes. Successful execution of this component ensures that reported PIP results are accurate and capable of measuring real and sustained improvement.
2. The outcomes of the PIPs. Once designed, a PIP's effectiveness in improving outcomes depends on the systematic identification of barriers and the subsequent development of relevant interventions. Evaluation of each PIP's outcomes determined whether the BHO improved its rates through the implementation of effective processes (i.e., barrier analyses, intervention design, and evaluation of

¹⁻¹ Department of Health and Human Services, Centers for Medicare & Medicaid Services. *EQR Protocol 3: Validating Performance Improvement Projects (PIPs): A Mandatory Protocol for External Quality Review (EQR)*, Version 2.0, September 2012. Available at: <http://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Quality-of-Care/Quality-of-Care-External-Quality-Review.html>. Accessed on: Feb 19, 2013.

results) and, through these processes, achieved statistically significant improvement over the baseline rate. Once statistically significant improvement is achieved across all study indicators, HSAG evaluates whether the BHO was successful in sustaining the improvement. The goal of HSAG’s PIP validation is to ensure that the Department and key stakeholders can have confidence that reported improvement in study indicator outcomes is supported by statistically significant change and the BHO’s improvement strategies.

PIP Rationale

The purpose of a PIP is to achieve, through ongoing measurements and interventions, significant improvement sustained over time in clinical or nonclinical areas.

For fiscal year (FY) 2016–2017, **Foothills Behavioral Health Partners, LLC (FBHP)** continued its *Improving Transition from Jail to Community-Based Behavioral Health Treatment* PIP. The topic selected addressed CMS’ requirements related to quality outcomes—specifically, the timeliness of, and access to, care and services.

PIP Summary

For the FY 2016–2017 validation cycle, the PIP received an overall validation score of 90 percent and a *Not Met* validation status. The focus of the PIP is to improve the percentage of eligible members released from jail, with an identified behavioral health issue, who attend a behavioral health appointment within seven days of release. The PIP had one study question that **FBHP** stated: “Do focused interventions aimed at improving the transition care process from jail to community-based treatment significantly increase the percent of the study population released from Jefferson and Boulder county jails that have an attended behavioral health appointment within 30 days of release?” The following table describes the study indicator for this PIP. The following table outlines the study indicators for the PIP.

Table 1–1—Study Indicator

PIP Topic	Study Indicator
<i>Improving Transition from Jail to Community-Based Behavioral Health Treatment</i>	The percentage of eligible members released from selected jails, with an identified behavioral health issue, who receive a specified covered outpatient behavioral health service within 30 business days of release.

Validation Overview

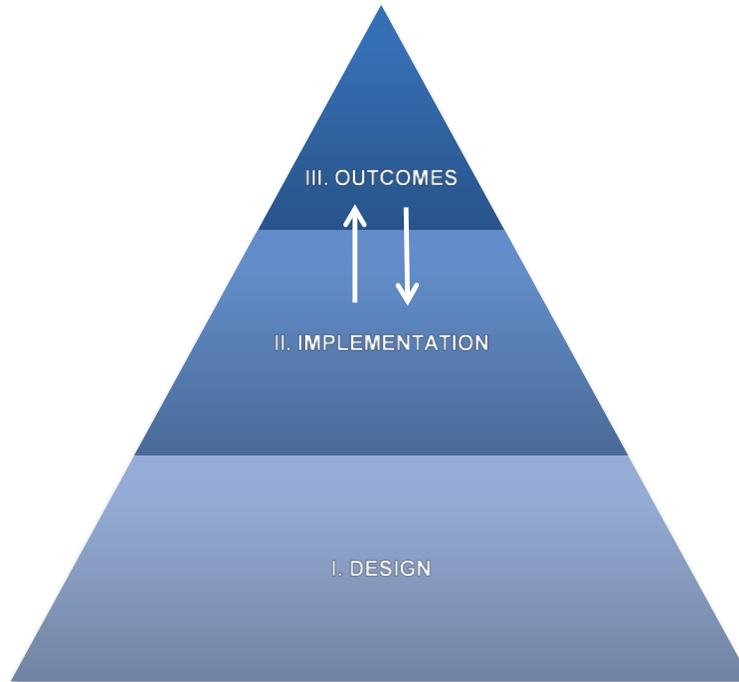
HSAG obtained the information needed to conduct the PIP validation from **FBHP**'s PIP Summary Form. This form provided detailed information about the BHO's PIP related to the activities completed and HSAG evaluated for the FY 2016–2017 validation cycle.

Each required activity was evaluated on one or more elements that form a valid PIP. The HSAG PIP Review Team scored each evaluation element within a given activity as *Met*, *Partially Met*, *Not Met*, *Not Applicable*, or *Not Assessed (NA)*. HSAG designated some of the evaluation elements pivotal to the PIP process as critical elements. For a PIP to produce valid and reliable results, all critical elements had to be *Met*. Given the importance of critical elements to the scoring methodology, any critical element that received a *Not Met* score resulted in an overall validation rating for the PIP of *Not Met*. A BHO would be given a *Partially Met* score if 60 percent to 79 percent of all evaluation elements were *Met* or one or more critical elements were *Partially Met*. HSAG provided a *Point of Clarification* when enhanced documentation would have demonstrated a stronger understanding and application of the PIP activities and evaluation elements.

In addition to the validation status (e.g., *Met*), HSAG gave each PIP an overall percentage score for all evaluation elements (including critical elements). HSAG calculated the overall percentage score by dividing the total number of elements scored as *Met* by the total number of elements scored as *Met*, *Partially Met*, and *Not Met*. HSAG also calculated a critical element percentage score by dividing the total number of critical elements scored as *Met* by the sum of the critical elements scored as *Met*, *Partially Met*, and *Not Met*.

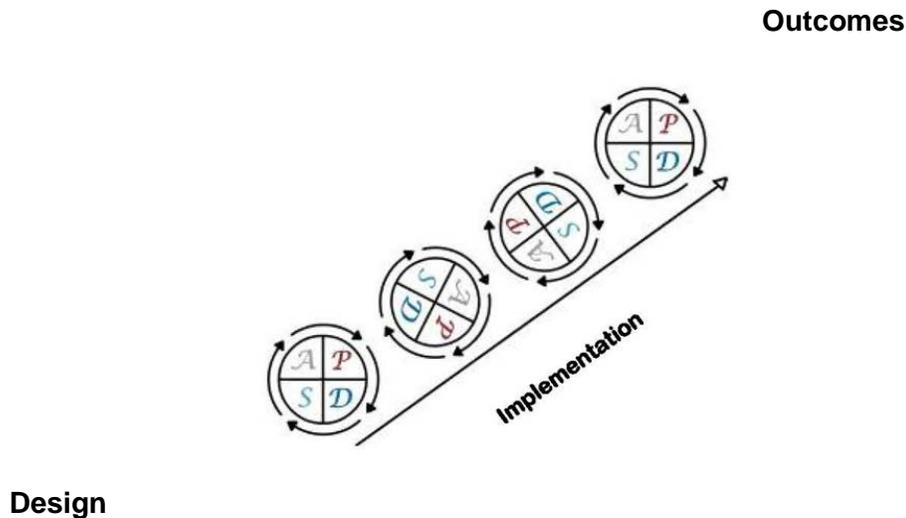
Figure 1–1 illustrates the three study stages of the PIP process—i.e., Design, Implementation, and Outcomes. Each sequential stage provides the foundation for the next stage. The Design stage establishes the methodological framework for the PIP. The activities in this section include development of the study topic, question, indicators, population, sampling, and data collection. To implement successful improvement strategies, a strong study design is necessary.

Figure 1-1—PIP Stages



Once **FBHP** establishes its study design, the PIP process moves into the Implementation stage. This stage includes data analysis and interventions. During this stage, the BHOs analyze data, identify barriers to performance, and develop interventions targeted to improve outcomes. The BHOs should incorporate a continuous or rapid cycle improvement model such as the Plan-Do-Study-Act (PDSA) to determine the effectiveness of the implemented interventions. The implementation of effective improvement strategies is necessary to improve PIP outcomes.

Figure 1–2—PIP Stages Incorporating the PDSA Cycle



The PDSA cycle includes the following actions:

- **Plan**—conduct barrier analyses; prioritize barriers; develop targeted intervention(s) to address barriers; and develop an intervention evaluation plan for each intervention
- **Do**—implement intervention; track and monitor the intervention; and record the data
- **Study**—analyze the data; compare results; and evaluate the intervention’s effectiveness
- **Act**—based on the evaluation results, standardize, modify, or discontinue the intervention

The final stage is Outcomes, which involves the evaluation of real and sustained improvement based on reported results and statistical testing. Sustained improvement is achieved when outcomes exhibit statistical improvement over time and multiple measurements. This stage is the culmination of the previous two stages. The BHO should regularly evaluate interventions to ensure they are having the desired effect. A concurrent review of the data is encouraged. If the BHO’s evaluation of the interventions, and/or review of the data, indicates that the interventions are not having the desired effect, the BHO should revisit its causal/barrier analysis process; verify the proper barriers are being addressed; and discontinue, revise, or implement new interventions as needed. This cyclical process should be used throughout the duration of the PIP and revisited as often as needed.

2. Findings

This year, the PIP validation process evaluated the technical methods of the PIP (i.e., the study design). Based on its technical review, HSAG determined the overall methodological validity of the PIP.

Table 2–1 summarizes the PIP validated during the review period with an overall validation status of *Met*, *Partially Met*, or *Not Met*. In addition, Table 2–1 displays the percentage score of evaluation elements that received a *Met* score, as well as the percentage score of critical elements that received a *Met* score. Critical elements are those within the validation tool that HSAG has identified as essential for producing a valid and reliable PIP. All critical elements must receive a *Met* score for a PIP to receive an overall *Met* validation status. A resubmission is a BHO’s update of a previously submitted PIP with modified/additional documentation.

BHOs have the opportunity to resubmit the PIP after HSAG’s initial validation to address any deficiencies identified. The PIP received a *Met* score for 90 percent of the evaluation elements and received a *Not Met* overall validation status when originally submitted. The only evaluation elements that did not receive a *Met* score were related to the study indicator outcomes, which would not have changed if the PIP had been resubmitted; therefore, the BHO did not resubmit the PIP.

Table 2–1—FY 2016–2017 Performance Improvement Project Validation for Foothills Behavioral Health Partners

Name of Project	Type of Annual Review ¹	Percentage Score of Evaluation Elements <i>Met</i> ²	Percentage Score of Critical Elements <i>Met</i> ³	Overall Validation Status ⁴
<i>Improving Transition from Jail to Community-Based Behavioral Health Treatment</i>	Submission	90%	82%	<i>Not Met</i>

¹ **Type of Review**—Designates the PIP review as an annual submission, or resubmission. A resubmission means the BHO was required to resubmit the PIP with updated documentation because it did not meet HSAG’s validation criteria to receive an overall *Met* validation status.

² **Percentage Score of Evaluation Elements *Met***—The percentage score is calculated by dividing the total elements *Met* (critical and non-critical) by the sum of the total elements of all categories (*Met*, *Partially Met*, and *Not Met*).

³ **Percentage Score of Critical Elements *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*.

⁴ **Overall Validation Status**—Populated from the PIP Validation Tool and based on the percentage scores.

Validation Findings

Table 2–2 displays the validation results for the **FBHP** PIP validated during FY 2016–2017. This table illustrates the BHO’s overall application of the PIP process, implementation of interventions, and achieved success in improving study indicator outcomes. Each activity is composed of individual evaluation elements scored as *Met*, *Partially Met*, or *Not Met*. Elements receiving a *Met* score have satisfied the necessary technical requirements for a specific element. The validation results presented in

Table 2–2 show the percentage of applicable evaluation elements that received each score by activity. Additionally, HSAG calculated a score for each stage and an overall score across all activities. This was the third validation year for the PIP, with the BHO completing Activities I through IX.

Table 2–2—Performance Improvement Project Validation Results for Foothills Behavioral Health Partners

Stage	Activity		Percentage of Applicable Elements		
			Met	Partially Met	Not Met
Design	I.	Appropriate Study Topic	100% (2/2)	0% (0/2)	0% (0/2)
	II.	Clearly Defined, Answerable Study Question(s)	100% (1/1)	0% (0/1)	0% (0/1)
	III.	Correctly Identified Study Population	100% (1/1)	0% (0/1)	0% (0/1)
	IV.	Clearly Defined Study Indicator(s)	100% (2/2)	0% (0/2)	0% (0/2)
	V.	Valid Sampling Techniques (if sampling was used)	<i>Not Applicable</i>	<i>Not Applicable</i>	<i>Not Applicable</i>
	VI.	Accurate/Complete Data Collection	100% (3/3)	0% (0/3)	0% (0/3)
Design Total			100% (9/9)	0% (0/9)	0% (0/9)
Implementation	VII.	Sufficient Data Analysis and Interpretation	100% (3/3)	0% (0/3)	0% (0/3)
	VIII.	Appropriate Improvement Strategies	100% (6/6)	0% (0/6)	0% (0/6)
Implementation Total			100% (9/9)	0% (0/9)	0% (0/9)
Outcomes	IX.	Real Improvement Achieved	33% (1/3)	0% (0/3)	67% (2/3)
	X.	Sustained Improvement Achieved	<i>Not Assessed</i>	<i>Not Assessed</i>	<i>Not Assessed</i>
Outcomes Total			33% (1/3)	0% (0/3)	67% (2/3)
Percentage Score of Applicable Evaluation Elements Met			90% (19/21)	0% (0/21)	10% (2/21)



Overall, 90 percent of all applicable evaluation elements validated received a score of *Met*. For this year's submission, the Design stage (Activities I through VI), the Implementation stage (Activities VII through VIII), and Activity IX of the Outcomes stage were validated.

Design

FBHP designed a scientifically sound project supported by the use of key research principles. The technical design of the PIP was sufficient to measure outcomes, allowing for successful progression to the next stage of the PIP process.

Implementation

FBHP accurately reported and interpreted its baseline and Remeasurement 1 study indicator results. The BHO used appropriate quality improvement strategies, including brainstorming and process mapping, to conduct its causal/barrier analysis; prioritized barriers; and implemented interventions with the potential to have a positive impact on the study indicator outcomes. Additionally, the BHO implemented timely and active interventions, evaluated the effectiveness of each intervention, and described how evaluation results were used to plan next steps for each intervention.

Outcomes

For this year's PIP validation, the **FBHP** PIP was evaluated for improvement of study indicator outcomes for the first time. While there was an increase in the study indicator rate from baseline to Remeasurement 1, the improvement was not statistically significant.

Analysis of Results

Table 2–3 displays baseline and Remeasurement 1 data for **FBHP's** *Improving Transition from Jail to Community-Based Behavioral Health Treatment* PIP. **FBHP's** goal is to increase the percentage of eligible members released from jail, with an identified behavioral health issue, who received a specified covered behavioral health service within 30 days of release.

**Table 2–3—Performance Improvement Project Outcomes
for Foothills Behavioral Health Partners**

PIP Study Indicator	Baseline Period (1/1/2014–12/31/2014)	Remeasurement 1 (1/1/2015–12/31/2015)	Remeasurement 2 (1/1/2016–12/31/2016)	Sustained Improvement
The percentage of eligible members released from selected jails, with an identified behavioral health issue, who receive a specified covered outpatient behavioral health service within 30 business days of release.	32.1%	32.3%		<i>Not Assessed</i>

In the Remeasurement 1 PIP submission, the BHO reported an updated baseline rate to reflect that 32.1 percent of eligible members released from jail, with an identified behavioral health issue, received a specified covered behavioral health service within 30 days. The BHO set a goal for the Remeasurement 1 period of a statistically significant increase over the baseline rate; the BHO estimated that a Remeasurement 1 rate of 35.0 percent would be a statistically significant increase based on the baseline denominator for the study indicator.

At Remeasurement 1, the BHO reported that 32.3 percent of eligible members released from jail, with an identified behavioral health issue, received a specified covered behavioral health service within 30 days. The increase of 0.2 percentage point from baseline to Remeasurement 1 was not statistically significant ($p = 0.8647$). The Remeasurement 1 rate did not meet the goal of 35.0 percent.

Barriers/Interventions

The identification of barriers through causal barrier analysis and the subsequent selection of appropriate interventions to address these barriers are necessary steps to improve outcomes. The BHO’s choice of interventions, combination of intervention types, and sequence of implementing the interventions are essential to overall success in improving PIP outcomes.

For the *Improving Transition from Jail to Community-Based Behavioral Health Treatment* PIP, **FBHP** identified the following barriers to a successful jail-to-community transition of care:

- Lack of a key contact and referral process for substance abuse treatment upon jail release.
- Lack of resources to meet members’ basic needs (e.g., housing, transportation, crisis services) upon jail release.
- Insufficient jail-based behavioral health services.



- A mental health center screening and intake process that is not accessible for recently released members.
- Lack of an established outreach process to follow up with members who do not show up for a scheduled behavioral health service after release from jail.

To address these barriers, **FBHP** developed the following interventions:

- Established a key contact for scheduling follow-up appointments with a local substance abuse treatment provider for members being prepared for release from jail.
- Developed educational materials about community resources, to be distributed to inmates being released and to their friends and families.
- Hired a mental health clinician to provide initial intake assessments to inmates in need of behavioral health services.
- Developed a mental health center screening, referral, and follow-up process tailored to the needs of inmates. The process is initiated during incarceration and continues after release to track member attendance at prescheduled intake appointments. The process includes outreach services for those members who do not attend their intake appointment.

3. Conclusions and Recommendations

Conclusions

FBHP designed and implemented a methodologically sound project. The BHO accurately reported and analyzed the baseline and Remeasurement 1 study indicator results, completed a causal/barrier analysis, and implemented timely and active interventions during the Remeasurement 1 period. **FBHP** evaluated the Remeasurement 1 interventions and used the intervention evaluation results to guide next steps for improvement strategies. The BHO received a *Met* score for 100 percent of the applicable evaluation elements in both the Design stage (Activities I through VI) and the Implementation stage (Activities VII and VIII) of the PIP.

In the Outcomes stage of the PIP, **FBHP** reported an increase from baseline to Remeasurement 1 in the rate of eligible members released from jail, with an identified behavioral health issue, who received a specified covered behavioral health service within 30 days; however, the increase was not statistically significant. The BHO summarized some of the process improvements that have been achieved through the PIP despite the lack of statistically significant improvement in outcomes. Specifically, **FBHP** noted that the BHO has fostered partnerships with the county jails and the Department of Human Services to facilitate identification of eligible members. The partnerships developed between local agencies have improved communication to support the transition of care for eligible members. Additionally, improvement strategies have increased awareness of behavioral health resources among members and established a link between jail-based services and community-based services. The BHO initiated several new interventions in the subsequent measurement period (CY 2016) to address the remaining barriers to improving the rate of behavioral health visits among members newly released from jail.

Recommendations

As the PIP progresses, HSAG recommends that the BHO:

- Address all of HSAG’s feedback regarding documentation in the PIP Summary Form as noted in *Points of Clarification* in the PIP Validation Tool.
- Continue to incorporate interventions that directly address identified barriers, actively engage members and/or providers, and are likely to impact the PIP outcomes.
- Continue to use quality improvement science techniques such as the Plan-Do-Study-Act (PDSA) model as part of its improvement strategies.
- Continue ongoing, intervention-specific evaluations of effectiveness and use evaluation results to make data-driven decisions about continuing, revising, or discontinuing interventions in order to achieve optimal improvement of the study indicator outcomes.
- Seek technical assistance from HSAG as needed.