COLORADO
Department of Health Care Policy & Financing

Colorado Accountable Care Collaborative

Fiscal Year 2017–2018 PIP Validation Report

Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider

for

Colorado Access (Region 3)

April 2018

For Validation Year 4

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

HSAG HEALTH SERVICES ADVISORY GROUP

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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.

The Colorado Department of Health Care Policy & Financing (the Department) introduced the Accountable Care Collaborative (ACC) Program in spring 2011 as a central part of its plan for Medicaid reform. The ACC Program was designed to improve the client and family experience, improve access to care, and transform incentives and the health care delivery process to a system that rewards accountability for health outcomes. Central goals for the program are (1) improvement in health outcomes through a coordinated, client-centered system of care, and (2) cost control by reducing avoidable, duplicative, variable, and inappropriate use of health care resources. A key component of the ACC Program was the selection of a Regional Care Collaborative Organization (RCCO) for each of seven regions within the State. The RCCOs provide medical management for medically and behaviorally complex clients; care coordination among providers; and provider support such as assistance with care coordination, referrals, clinical performance, and practice improvement and redesign.

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 438.330(d), 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]

[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: https://www.medicaid.gov/medicaid/quality-of-care/medicaid-managed-care/external-quality-review/index.html. Accessed on: Jul 18, 2017.

HSAG evaluates the following components of the quality improvement process:

1. The technical structure of the PIPs to ensure the RCCO 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 RCCO improved its rates through the implementation of effective processes (i.e., barrier analyses, intervention design, and evaluation of 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 RCCO 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 RCCO'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) 2017–2018, **Colorado Access** continued its ***Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider*** 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 2017–2018 validation cycle, the PIP received an overall validation score of 76 percent and a *Not Met* validation status. The focus of the PIP is to improve the percentage of adolescent members who complete a follow-up visit with a behavioral health provider within 30 days of screening positive for depression with a medical provider. The PIP had one study question that **Colorado Access** stated: "Do targeted interventions increase the percentage of adolescents who screened positive for depression with a medical provider and who completed a follow-up visit with a behavioral health provider within 30 days?" The following table describes the study indicator for this PIP.

Table 1–1—Study Indicator

PIP Topic	Study Indicator
Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider	The percentage of eligible adolescent members who screened positive for depression with a medical health provider and completed a follow-up visit with a behavioral health provider within 30 days.

Validation Overview

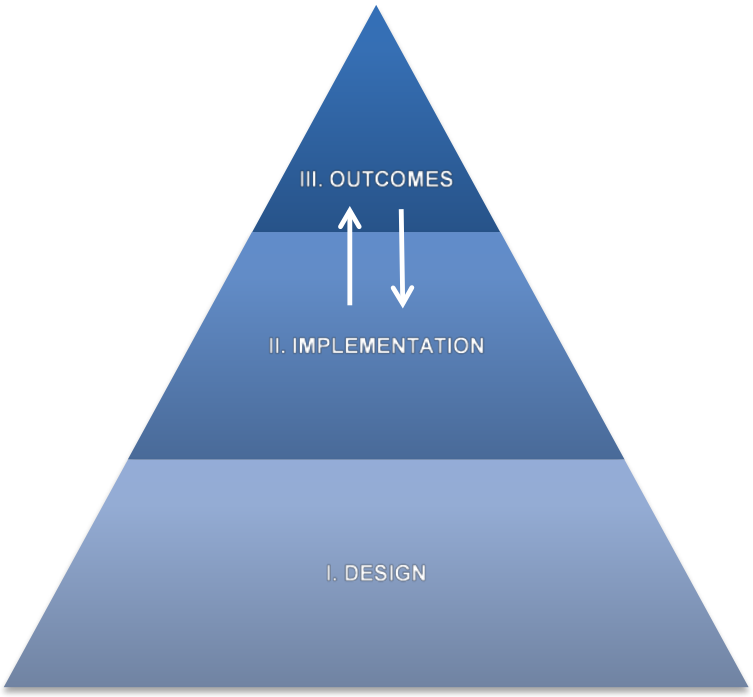
HSAG obtained the information needed to conduct the PIP validation from **Colorado Access**'s PIP Summary Form. This form provided detailed information about the RCCO's PIP related to the activities completed and HSAG evaluated for the FY 2017–2018 validation cycle.

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 RCCO 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*.

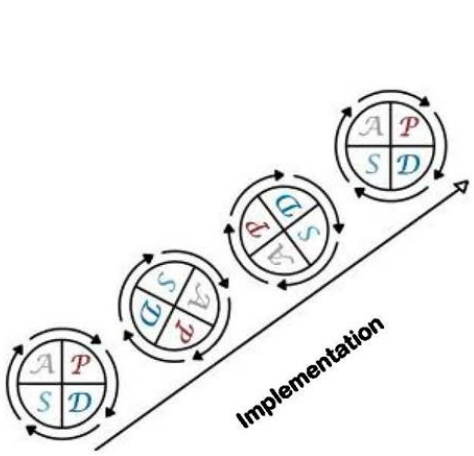
Figure 1–1 illustrates the three study stages of the PIP process—i.e., Design, Implementation, and Outcomes. Each sequential stage provides the foundation for the next stage. The Design stage establishes the methodological framework for the PIP. The activities in this section include development of the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

Figure 1–1—PIP Study Stages



Once **Colorado Access** establishes its study design, the PIP process moves into the Implementation stage. This stage includes data analysis and interventions. During this stage, the RCCOs analyze data, identify barriers to performance, and develop interventions targeted to improve outcomes. The RCCOs 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:

- **P**lan—conduct barrier analyses; prioritize barriers; develop targeted intervention(s) to address barriers; and develop an intervention evaluation plan for each intervention
- **D**o—implement intervention; track and monitor the intervention; and record the data
- **S**tudy—analyze the data; compare results; and evaluate the intervention's effectiveness
- **A**ct—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 RCCO should regularly evaluate interventions to ensure they are having the desired effect. A concurrent review of the data is encouraged. If the RCCO's evaluation of the interventions, and/or review of the data, indicates that the interventions are not having the desired effect, the RCCO 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), as well as the implementation of quality improvement activities, and the PIP outcomes at the first annual remeasurement. Based on its technical review, HSAG determined the overall methodological validity of the PIP and evaluated whether there was statistically significant improvement in the study indicator outcomes.

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 RCCO's update of a previously submitted PIP with modified/additional documentation.

RCCOs have the opportunity to resubmit the PIP after HSAG's initial validation to address any deficiencies identified. The PIP received a *Met* score for 76 percent of applicable evaluation elements and a *Not Met* overall validation status when originally submitted. The RCCO chose not to resubmit the PIP.

Table 2–1—FY 2017–2018 Performance Improvement Project Validation for Colorado Access—Region 3

Name of Project	Type of Annual Review[1]	Percentage Score of Evaluation Elements *Met*[2]	Percentage Score of Critical Elements *Met*[3]	Overall Validation Status[4]
Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider	Submission	76%	73%	*Not Met*

[1] **Type of Review**—Designates the PIP review as an annual submission, or resubmission. A resubmission means the RCCO 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 **Colorado Access** PIP validated during FY 2017–2018. This table illustrates the RCCO's overall application of the PIP process and achieved success in improving 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 fourth validation year for the PIP, with the RCCO completing Activities I through IX.

Table 2–2—Performance Improvement Project Validation Results for Colorado Access—Region 3

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)	*Not Applicable*	*Not Applicable*	*Not Applicable*
	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	33% (1/3)	67% (2/3)	0% (0/3)
	VIII.	Appropriate Improvement Strategies	67% (4/6)	33% (2/6)	0% (0/6)
Implementation Total			**56% (5/9)**	**44% (4/9)**	**0% (0/9)**
Outcomes	IX.	Real Improvement Achieved	67% (2/3)	0% (0/3)	33% (1/3)
	X.	Sustained Improvement Achieved	*Not Assessed*	*Not Assessed*	*Not Assessed*
Outcomes Total			**67% (2/3)**	**0% (0/3)**	**33% (1/3)**
Percentage Score of Applicable Evaluation Elements *Met*			**76% (16/21)**	**19% (4/21)**	**5% (1/21)**

* Percentage totals may not equal 100 due to rounding.

Overall, 76 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 in the Outcomes stage were validated.

Design

Colorado Access designed a scientifically sound project supported by 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

Colorado Access reported Remeasurement 2 study indicator results for this year's validation. The RCCO reported accurate statistical testing results comparing the baseline and Remeasurement 2 results; however, the RCCO did not correct the Remeasurement 1 *p* value in response to HSAG's feedback from last year's validation. The RCCO used appropriate quality improvement tools to conduct its causal/barrier analysis, and to prioritize identified barriers. The RCCO used appropriate quality improvement tools to conduct its causal/barrier analysis, and prioritized barriers, reporting the same barriers for Remeasurement 1 as were identified for baseline. The RCCO reported intervention-specific evaluation results for some interventions but not others. Going forward, the RCCO should ensure that each intervention is evaluated for effectiveness and ensure that decisions about continuing or discontinuing interventions are based on the evaluation results.

Outcomes

For this year's PIP validation, the RCCO reported a Remeasurement 2 study indicator rate that was an increase over Remeasurement 1 and baseline; however, the increase was not statistically significant.

Analysis of Results

Table 2–3 displays baseline, Remeasurement 1, and Remeasurement 2 data for **Colorado Access**'s ***Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider*** PIP. **Colorado Access**'s goal is to increase the percentage of eligible adolescent members who receive a behavioral health follow-up visit within 30 days of a positive depression screening completed by a medical provider.

Table 2–3—Performance Improvement Project Outcomes for Colorado Access—Region 3

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 adolescent members who screened positive for depression with a medical health provider and completed a follow-up visit with a behavioral health provider within 30 days.	0.0%	19.2%	43.3%	*Not Assessed*

The baseline rate of adolescent members who screened positive for depression with a medical provider and received a follow-up visit with a behavioral health provider within 30 days was 0.0 percent. The RCCO set a goal of 15.0 percent for the Remeasurement 1 period.

At the first remeasurement, the rate of adolescent members who screened positive for depression with a medical provider and received a follow-up visit with a behavioral health provider within 30 days was 19.2 percent. The Remeasurement 1 rate represented an increase of 19.2 percentage points from the baseline rate. The Remeasurement 1 rate exceeded the goal of 15.0 percent by 4.2 percentage points. The improvement from baseline to Remeasurement 1 was not statistically significant ($p = 0.5951$).

At the second remeasurement, the rate of adolescent members who screened positive for depression with a medical provider and received a follow-up visit with a behavioral health provider within 30 days was 43.3 percent. The Remeasurement 2 rate was an increase of 24.1 percentage points over Remeasurement 1 and an increase of 43.3 percentage points above baseline; however, the improvement over baseline was not statistically significant. The Remeasurement 2 rate exceeded the goal of 30.0 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 RCCO'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 ***Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider*** PIP, **Colorado Access** reported the same barriers for the Remeasurement 2 period as were identified for Remeasurement 1. The health plan addressed the following barriers to a successful transition of care:

- Incorrect coding and billing practices for depression screening by behavioral health and primary care providers.
- Provider challenges in navigating the behavioral health system.
- Lack of an established workflow process following a positive depression screen.
- Reduced likelihood of receiving claims for transition of care services from an increasing number of co-located medical and behavioral providers.

To address these barriers, **Colorado Access** implemented the following interventions:

- For primary care providers and practice managers, initiated a provider training on proper billing and coding for depression screening. A "how to" flyer for providers was distributed as part of the training.
- Distributed a Depression Screening Clinic Workflow tool that medical clinics could adopt to standardize and refine the process for responding to positive depression screenings and referring to behavioral health providers. The workflow tool was distributed to stakeholder groups as a resource for improving the depression screening and care transition process.
- Initiated a provider and community forum providing organizations and stakeholders with information on Colorado Medicaid behavioral health systems, best practices and current efforts to integrate care, and a behavioral health panel discussion.

3. Conclusions and Recommendations

Conclusions

Colorado Access designed a methodologically sound project. The sound PIP study design allowed the RCCO to measure and evaluate study indicator outcomes. The RCCO reported Remeasurement 2 study indicator results for the current validation cycle. For the causal/barrier analysis, the RCCO conducted discussions and brainstorming with key stakeholders, and used a key driver diagram to illustrate the anticipated impact of interventions. The RCCO documented several challenges related to the PIP topic that had impacted the ability to achieve statistically significant improvement over the baseline. For example, an ongoing concern that the current coding and billing processes related to depression screening and follow-up behavioral health services impeded the identification of some members who successfully completed the transition of care. The RCCO also reported that the statewide promotion of integrated care and co-located physical and behavioral health providers may make it more difficult to demonstrate improvement in completion rates for behavioral health follow-up appointments. Because co-located providers appear to be conducting the follow-up visit immediately following a positive depression screen, some visits may occur concurrently and may not be billed for or may be difficult to identify through claims. Finally, the RCCO reported that qualitative data analyzed by the organization suggests that depression screenings are being performed and referrals for behavioral health care are being completed, as needed.

Recommendations

HSAG recommends the following:

- **Colorado Access** should conduct methodologically sound analyses of study indicator outcomes and accurately report all results.
- **Colorado Access** should consider using a different approach to causal/barrier analysis, such as process mapping, to uncover previously unidentified barriers that may be inhibiting improvement.
- **Colorado Access** should continue to evaluate each intervention for effectiveness and use intervention-specific evaluation results to guide decisions about future improvement strategies.