

Colorado Medicaid  
Community Mental Health Services Program

FISCAL YEAR 2015–2016 COLORADO  
PIP VALIDATION REPORT

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

*for*  
Access Behavioral Care—Denver

April 2016  
*for*  
Validation Year 2

*This report was produced by Health Services Advisory Group, Inc. for the  
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.

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 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) 2015–2016, **Access Behavioral Care—Denver (ABC-D)** 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 2015–2016 validation cycle, the PIP received an overall validation score of 100 percent and a *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 **ABC-D** 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
<i>Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider</i>	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

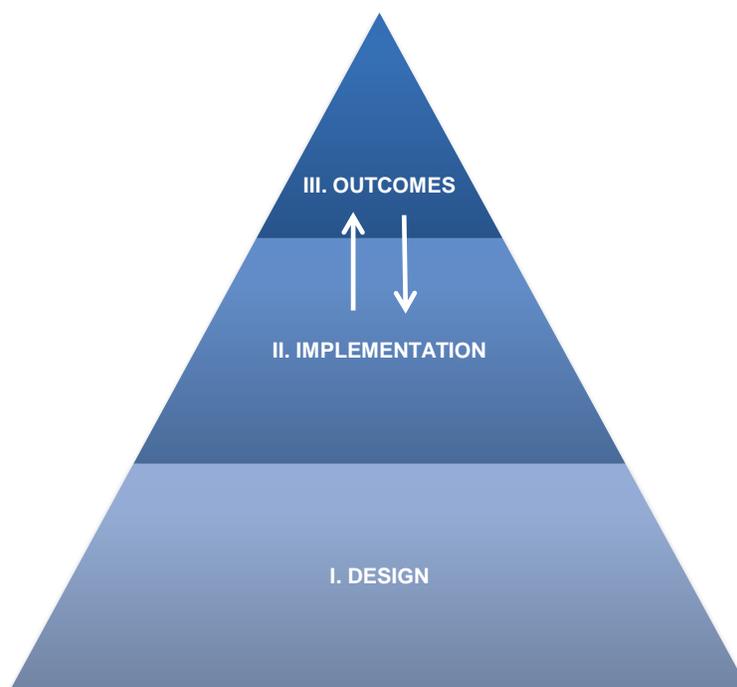
HSAG obtained the information needed to conduct the PIP validation from **ABC-D**'s PIP Summary Form. This form provided detailed information about the BHO's PIP related to the activities completed and HSAG evaluated for the FY 2015–2016 validation cycle.

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.

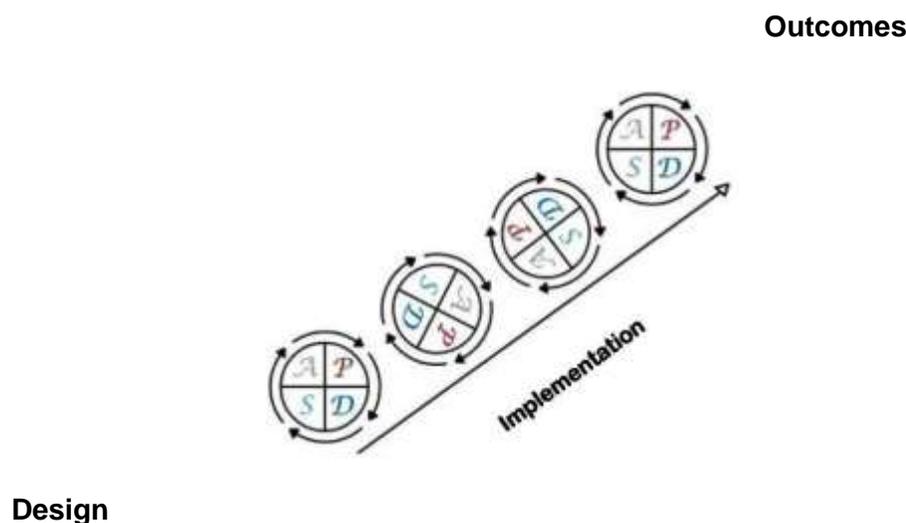
**Figure 1–1—PIP Stages**



Once **ABC-D** 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.

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. Based on its 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 *Partially Met* overall validation status when originally submitted. The BHO had the opportunity to receive technical assistance, incorporate HSAG’s recommendations, and resubmit the PIP. After resubmission, the PIP received a *Met* score for 100 percent of the evaluation elements and a *Met* overall validation status.

**Table 2–1—FY 2015–2016 Performance Improvement Project Validation Activity for Access Behavioral Care—Denver**

Name of Project	Type of Annual Review <sup>1</sup>	Percentage Score of Evaluation Elements <i>Met</i> <sup>2</sup>	Percentage Score of Critical Elements <i>Met</i> <sup>3</sup>	Overall Validation Status <sup>4</sup>
<i>Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider</i>	Submission	94	89	<i>Partially Met</i>
	Resubmission	100	100	<i>Met</i>
<p><sup>1</sup> <b>Type of Review</b>—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 <i>Met</i> validation status.</p> <p><sup>2</sup> <b>Percentage Score of Evaluation Elements <i>Met</i></b>—The percentage score is calculated by dividing the total elements <i>Met</i> (critical and non-critical) by the sum of the total elements of all categories (<i>Met</i>, <i>Partially Met</i>, and <i>Not Met</i>).</p> <p><sup>3</sup> <b>Percentage Score of Critical Elements <i>Met</i></b>—The percentage score of critical elements <i>Met</i> is calculated by dividing the total critical elements <i>Met</i> by the sum of the critical elements <i>Met</i>, <i>Partially Met</i>, and <i>Not Met</i>.</p> <p><sup>4</sup> <b>Overall Validation Status</b>—Populated from the PIP Validation Tool and based on the percentage scores.</p>				

## Validation Findings

Table 2–2 displays the validation results for the **ABC-D** PIP validated during FY 2015–2016. This table illustrates the BHO’s overall application of the PIP process and achieved success in implementing the studies. 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 second validation year for the PIP, with the BHO completing Activities I through VIII.

**Table 2–2—Performance Improvement Project Validation Results  
for Access Behavioral Care—Denver**

Stage	Activity		Percentage of Applicable Elements		
			<i>Met</i>	<i>Partially Met</i>	<i>Not Met</i>
Design	I.	Review the Selected Study Topic	100% (2/2)	0% (0/2)	0% (0/2)
	II.	Review the Study Question(s)	100% (1/1)	0% (0/1)	0% (0/1)
	III.	Review the Identified Study Population	100% (1/1)	0% (0/1)	0% (0/1)
	IV.	Review the Selected Study Indicator(s)	100% (2/2)	0% (0/2)	0% (0/2)
	V.	Review Sampling Methods (if sampling was used)	<i>Not Applicable</i>		
	VI.	Review the Data Collection Procedures	100% (3/3)	0% (0/3)	0% (0/3)
<b>Design Total</b>			<b>100%</b> <b>(9/9)</b>	<b>0%</b> <b>(0/9)</b>	<b>0%</b> <b>(0/9)</b>
Implementation	VII.	Review the Data Analysis and Interpretation of Results	100% (3/3)	0% (0/3)	0% (0/3)
	VIII.	Assess the Improvement Strategies	100% (5/5)	0% (0/5)	0% (0/5)
<b>Implementation Total</b>			<b>100%</b> <b>(8/8)</b>	<b>0%</b> <b>(0/8)</b>	<b>0%</b> <b>(0/8)</b>
Outcomes	IX.	Assess for Real Improvement Achieved	<i>Not Assessed</i>		
	X.	Assess for Sustained Improvement	<i>Not Assessed</i>		
<b>Outcomes Total</b>			<i>Not Assessed</i>		
<b>Percentage Score of Applicable Evaluation Elements <i>Met</i></b>			<b>100%</b> <b>(17/17)</b>	<b>0%</b> <b>(0/17)</b>	<b>0%</b> <b>(0/17)</b>

Overall, 100 percent of all applicable evaluation elements validated received a score of *Met*. For this year's submission, the Design stage (Activities I through VI) and the Implementation stage (Activities VII through VIII) were validated. Activity IX in the Outcomes stage will be validated next year, when the BHO reports Remeasurement 1 results.

### ***Design***

**ABC-D** 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***

**ABC-D** reported and interpreted its baseline study indicator results accurately. The BHO used appropriate quality improvement tools to conduct its causal/barrier analysis, prioritized barriers, and implemented interventions that have the potential to have a positive impact on the study indicator outcomes. The BHO implemented some passive interventions, such as newsletters and flyers, in addition to more active interventions; however, the passive interventions are being evaluated for effectiveness by the BHO and the intervention evaluation results can be used to refine improvement strategies throughout the life of the PIP.

### ***Outcomes***

The PIP had not progressed to the Outcomes stage during this validation cycle.

### ***Analysis of Results***

Table 2–3 displays baseline data for **ABC-D's *Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider*** PIP. **ABC-D'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 by 50 percentage points, from 0 percent at baseline to 50 percent at Remeasurement 1.

**Table 2–3—Performance Improvement Project Outcomes  
for Access Behavioral Care—Denver**

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%			

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 percent. The BHO set a goal of 50 percent for the Remeasurement 1 period.

### ***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 ***Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider*** PIP, **ABC-D** identified barriers to a successful transition of care including incorrect provider coding and billing practices for depression screening, provider challenges in navigating the behavioral health system, and lack of an established workflow process following a positive depression screen. To address these barriers, **ABC-D** implemented the following interventions:

- ◆ A provider training on proper billing and coding for depression screening. A “how to” flyer for providers was distributed as part of the training.
- ◆ Online provider newsletters providing information on available behavioral health resources and crisis centers.
- ◆ Creation and distribution of 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.
- ◆ A webinar on Colorado Crisis Services hosted by with the collaborating Regional Care Collaborative Organization (RCCO).
- ◆ 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.

## Conclusions

**ABC-D** designed a methodologically sound project. The sound PIP study design allowed the BHO to progress to baseline data collection and intervention development. The BHO accurately reported and analyzed the baseline study indicator results, completed a causal/barrier analysis, and set a goal for the Remeasurement 1 period. For the baseline causal/barrier analysis process, the BHO involved internal and external stakeholders in identifying and prioritizing barriers to improvement, using quality improvement processes such as interdisciplinary brainstorming, analysis of survey data, and use of a key driver diagram.

## Recommendations

As the PIP progresses, HSAG recommends that the BHO:

- ◆ Continue to collect supplemental self-report data from federally qualified health center (FQHC) partners to monitor whether providers are consistently submitting claims for depression screening and behavioral health visits. While **ABC-D** should maintain consistent administrative data collection methods for each annual measurement of the study indicator rate, the BHO can incorporate supplemental data analysis into the narrative interpretation of its study indicator results.
- ◆ Evaluate the effectiveness of each implemented intervention. Obtaining evaluation results for each intervention will allow the BHO to make data-driven decisions about which interventions have the greatest impact on the study indicator and how best to direct resources to achieve optimal improvement.
- ◆ Use quality improvement science techniques such as the Plan-Do-Study-Act (PDSA) model to evaluate and refine its improvement strategies. Interventions can be tested on a small scale, evaluated, and then expanded to full implementation, if deemed successful.
- ◆ Seek technical assistance from HSAG as needed.

**APPENDIX A. PIP-SPECIFIC VALIDATION TOOL**  
for **Access Behavioral Care—Denver**

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The following contains the PIP-specific validation tool for **ABC-D**.



*Appendix A: Colorado FY 15-16 PIP Validation Tool:*  
**Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider  
 for Access Behavioral Care-Denver**

**DEMOGRAPHIC INFORMATION**

Plan Name: Access Behavioral Care-Denver

Project Leader Name: Melissa Kulasekere Title: Quality Improvement Project Manager

Telephone Number: (720) 744-5244 E-mail Address: melissa.kulasekere@coaccess.com

Name of Project/Study: Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider

Type of Project (for HSAG's internal tracking):

- Clinical       Nonclinical  
 Collaborative       HEDIS

Date of Project: 1/1/2014 to 12/31/2014

Type of Delivery System: BHO

Submission Date: 1/8/2016

**Section to be completed by HSAG**

9/24/2014	Year 1 Validation	9/15/2014	Annual Submission
11/5/2015	Year 2 Validation	10/29/2015	Annual Submission
1/22/2016	Year 2 Validation	1/8/2016	Resubmission

- X Pre-Baseline  
X Baseline

Year 1 validated through Activity: VI  
 Year 2 validated through Activity: VIII



*Appendix A: Colorado FY 15-16 PIP Validation Tool:  
Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider  
for Access Behavioral Care-Denver*

EVALUATION ELEMENTS		SCORING	COMMENTS
<b>Performance Improvement Project/Health Care Study Evaluation</b>			
I.	<b>Select the Study Topic: The study topic should be selected based on data that identify an opportunity for improvement. The goal of the project should be to improve processes and outcomes of health care. The topic may be specified by the State. The study topic:</b>		
C*	1. Is selected following collection and analysis of data.  NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Selection of the PIP topic followed the collection and analysis of data specific to the health plan.
	2. Has the potential to affect member health, functional status, or satisfaction.  The score for this element will be Met or Not Met.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The PIP has the potential to affect member health, functional status, or satisfaction.

**Results for Activity I**

Total Evaluation Elements**	# of Total Evaluation Elements				Critical Elements***	# of Critical Elements			
	Met	Partially Met	Not Met	Not Applicable		Met	Partially Met	Not Met	Not Applicable
2	2	0	0	0	1	1	0	0	0

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

\*\* Total Evaluation Elements includes critical elements.

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

*Appendix A: Colorado FY 15-16 PIP Validation Tool:  
Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider  
for Access Behavioral Care-Denver*

EVALUATION ELEMENTS		SCORING	COMMENTS
<b>Performance Improvement Project/Health Care Study Evaluation</b>			
II.	<b>Define the Study Question(s): Stating the study question(s) helps maintain the focus of the PIP and sets the framework for data collection, analysis, and interpretation. The study question:</b>		
C*	1. States the problem to be studied in simple terms and is in the recommended X/Y format.  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 clear and stated in simple terms using the recommended X/Y format.

**Results for Activity II**

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

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

\*\* Total Evaluation Elements includes critical elements.

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



*Appendix A: Colorado FY 15-16 PIP Validation Tool:  
Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider  
for Access Behavioral Care-Denver*

EVALUATION ELEMENTS		SCORING	COMMENTS
<b>Performance Improvement Project/Health Care Study Evaluation</b>			
III.	<b>Define the Study Population: The study population should be clearly defined to represent the population to which the study question and indicators apply, without excluding consumers with special health care needs. The study population:</b>		
C*	1. Is accurately and completely defined and captures all members to whom the study question(s) applies.  NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The health plan accurately and completely defined the study population, providing correct codes for the denominators, when applicable.

Results for Activity III									
# of Total Evaluation Elements					# of Critical Elements				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
1	1	0	0	0	1	1	0	0	0

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

\*\* Total Evaluation Elements includes critical elements.

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

*Appendix A: Colorado FY 15-16 PIP Validation Tool:*  
**Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider  
 for Access Behavioral Care-Denver**

EVALUATION ELEMENTS		SCORING	COMMENTS
<b>Performance Improvement Project/Health Care Study Evaluation</b>			
<b>IV. Select the Study Indicator(s): A study indicator is a quantitative or qualitative characteristic or variable that reflects a discrete event or a status that is to be measured. The selected indicator(s) should track performance or improvement over time. The indicator(s) should be objective, clearly and unambiguously defined, and based on current clinical knowledge or health services research. Study indicator goals should be specific, measurable, attainable, relevant, and time-bound. The study indicator(s):</b>			
C*	1. Are well-defined, objective, and measure changes in health or functional status, member satisfaction, or valid process alternatives.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The study indicator was objective, clear, and unambiguously defined. The health plan provided correct codes, when applicable, for the numerator. The documentation provided a description of the study indicator and the definition for the numerator and denominator.  Re-review January 2016: In the resubmission, the health plan indicated its Remeasurement 1 goal is 50 percent assuming the denominator remains the same. The <i>Point of Clarification</i> has been removed.
	2. Include 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 health plan provided the basis and rationale for the development of the study indicator.

**Results for Activity IV**

# of Total Evaluation Elements					# of Critical Elements				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
2	2	0	0	0	1	1	0	0	0

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

\*\* Total Evaluation Elements includes critical elements.

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

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EVALUATION ELEMENTS		SCORING		COMMENTS		
<b>Performance Improvement Project/Health Care Study Evaluation</b>						
V.	<b>Use Sound Sampling Techniques: (If sampling is not used, each evaluation element is scored NA.) If sampling is used to select consumers in the study, proper sampling techniques are necessary to provide valid and reliable information on the quality of care provided. Sampling methods:</b>					
	1. Include the measurement period for the sampling methods used (e.g., baseline, Remeasurement 1, etc.).	<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 PIP.
	2. Include the title of the applicable study indicator(s).	<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 PIP.
	3. Identify the population 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 PIP.
C*	4. 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 PIP.
	5. Specify the margin of error and 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 PIP.
	6. Describe in detail the methods used to select the sample.	<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 PIP.
C*	7. Allow for the generalization of results to the study 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 PIP.

**Results for Activity V**

Total Evaluation Elements**	# of Total Evaluation Elements				Critical Elements***	# of Critical Elements			
	Met	Partially Met	Not Met	Not Applicable		Met	Partially Met	Not Met	Not Applicable
7	0	0	0	7	2	0	0	0	2

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

\*\* Total Evaluation Elements includes critical elements.

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

*Appendix A: Colorado FY 15-16 PIP Validation Tool:  
Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider  
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EVALUATION ELEMENTS		SCORING	COMMENTS
<b>Performance Improvement Project/Health Care Study Evaluation</b>			
VI. <b>Reliably Collect Data: Data collection must ensure that the data collected on the study indicators are valid and reliable. Validity is an indication of the accuracy of the information obtained. Reliability is an indication of the repeatability or reproducibility of a measurement. Data collection procedures include:</b>			
1.	Clearly defined sources of data and data elements to be collected.  NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The data elements to be collected and the source(s) for data collection were provided.
C*	2. Clearly defined and systematic process for collecting data that includes how baseline and remeasurement data will be collected.  NA is not applicable to this element for scoring.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The health plan specified a systematic method for collecting baseline and remeasurement data.
C*	3. A manual data collection tool that ensures consistent and accurate collection of data according to indicator specifications.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input checked="" type="checkbox"/> NA	The health plan did not use manual data collection.
	4. An estimated degree of administrative data completeness. Met = 80 - 100 percent Partially Met = 50 - 79 percent Not Met = <50 percent 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 between 80 percent and 100 percent, and the documentation included how the health plan determined the administrative data completeness percentage.

**Results for Activity VI**

# of Total Evaluation Elements					# of Critical Elements				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
4	3	0	0	1	2	1	0	0	1

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

\*\* Total Evaluation Elements includes critical elements.

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

*Appendix A: Colorado FY 15-16 PIP Validation Tool:  
Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider  
for Access Behavioral Care-Denver*

EVALUATION ELEMENTS		SCORING	COMMENTS
<b>Performance Improvement Project/Health Care Study Evaluation</b>			
VII.	<b>Analyze Data and Interpret Study Results: Clearly present the results for each study indicator(s). Describe the data analysis performed and the results of the statistical analysis, if applicable, and interpret the findings. Through data analysis and interpretation, real improvement as well as sustained improvement can be determined. The data analysis and interpretation of the study indicator outcomes:</b>		
C*	1. Include accurate, clear, consistent, and easily understood information in the data table.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The health plan presented results in a clear, accurate, and easily understood format.
	2. Include a narrative interpretation that addresses all required components of data analysis and statistical testing.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The health plan provided an accurate interpretation of its baseline rate.
	3. Identify factors that threaten the validity of the data reported and ability to compare the initial measurement with the remeasurement.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The health plan identified and discussed potential factors that threatened the internal or external validity of the findings and included the impact and resolution of these factors.  Re-review January 2016: In the resubmission, the health plan addressed how it will capture the required data, and the use of supplemental data. In the next annual submission, the health plan will need to include an update on its data collection process. The <i>Point of Clarification</i> has been removed.

**Results for Activity VII**

# of Total Evaluation Elements					# of Critical Elements				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
3	3	0	0	0	1	1	0	0	0

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

\*\* Total Evaluation Elements includes critical elements.

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

*Appendix A: Colorado FY 15-16 PIP Validation Tool:*  
**Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider  
 for Access Behavioral Care-Denver**

EVALUATION ELEMENTS	SCORING	COMMENTS
<b>Performance Improvement Project/Health Care Study Evaluation</b>		
<b>VIII. Improvement Strategies (interventions for improvement as a result of analysis): Interventions are developed to address causes/barriers identified through a continuous cycle of data measurement and data analysis. Describe the barriers/interventions and provide quantitative details on the processes used to identify the barriers/interventions and to evaluate the effectiveness of each intervention. The improvement strategies are developed from an ongoing quality improvement process that includes:</b>		
C* 1. A causal/barrier analysis with a clearly documented team, process/steps, and quality improvement tools.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The health plan completed a causal/barrier analysis and used improvement strategies related to the causes/barriers identified through data analysis and a quality improvement process.
2. Barriers that are identified and prioritized based on results of data analysis and/or other quality improvement processes.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The health plan identified and prioritized its barriers using quality improvement tools and processes.
C* 3. Interventions that are logically linked to identified barriers and will directly impact study indicator outcomes.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	<p>The interventions implemented in 2015 were logically linked to the identified barriers. However, some but not all interventions were interventions active and likely to impact the study indicator outcomes. Newsletters and flyers are passive interventions that typically do not have an impact on outcomes and are difficult to measure for effectiveness. Do health plan staff members presume that a newsletter and flyer will change providers' behavior and provide them the necessary skills to navigate the behavioral health system and conduct accurate billing/coding? The health plan should develop and test more active system interventions that will have a long-term effect on outcomes.</p> <p>Re-review January 2016:          In the resubmission, the interventions remained the same; however, the health plan revised its evaluation plan for the flyers and newflash. Based on the outcomes of the evaluation results, the health plan will determine the success of these passive interventions. The health plan does have active intervention strategies in place. The score for this evaluation element has been changed to <i>Met</i>.</p>

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

\*\* Total Evaluation Elements includes critical elements.

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*Appendix A: Colorado FY 15-16 PIP Validation Tool:  
Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider  
for Access Behavioral Care-Denver*

EVALUATION ELEMENTS		SCORING	COMMENTS
<b>Performance Improvement Project/Health Care Study Evaluation</b>			
VIII.	<b>Improvement Strategies (interventions for improvement as a result of analysis): Interventions are developed to address causes/barriers identified through a continuous cycle of data measurement and data analysis. Describe the barriers/interventions and provide quantitative details on the processes used to identify the barriers/interventions and to evaluate the effectiveness of each intervention. The improvement strategies are developed from an ongoing quality improvement process that includes:</b>		
	4. Interventions that were implemented in a timely manner to allow for impact of study indicator outcomes.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The interventions implemented in 2015 were put into place in a timely manner to allow for impact of the study indicator outcomes.
C*	5. Evaluation of individual interventions for effectiveness.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	The PIP has not progressed to the point of evaluating the effectiveness of its interventions; however, the health plan has an evaluation plan for each of its interventions.
	6. Interventions continued, revised, or discontinued based on evaluation results.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input checked="" type="checkbox"/> NA	The PIP has not progressed to the point of evaluating the effectiveness of its interventions and making decisions based on the evaluation outcomes.

Results for Activity VIII									
# of Total Evaluation Elements					# of Critical Elements				
Total Evaluation Elements**	Met	Partially Met	Not Met	Not Applicable	Critical Elements***	Met	Partially Met	Not Met	Not Applicable
6	5	0	0	1	3	3	0	0	0

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

\*\* Total Evaluation Elements includes critical elements.

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



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EVALUATION ELEMENTS		SCORING	COMMENTS
<b>Performance Improvement Project/Health Care Study Evaluation</b>			
IX.	<b>Assess for Real Improvement: Real improvement or meaningful change in performance is evaluated based on study indicator(s) results.</b>		
	1. The remeasurement methodology is the same as the baseline methodology.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Not assessed. The PIP had not progressed to the point of being assessed for real improvement.
C*	2. The documented improvement meets the State- or health plan-specific goal.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Not assessed. The PIP had not progressed to the point of being assessed for real improvement.
C*	3. There is statistically significant improvement over baseline.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Not assessed. The PIP had not progressed to the point of being assessed for real improvement.

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

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

\*\* Total Evaluation Elements includes critical elements.

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



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EVALUATION ELEMENTS		SCORING	COMMENTS
<b>Performance Improvement Project/Health Care Study Evaluation</b>			
X. C*	<b>Assess for Sustained Improvement: Sustained improvement is demonstrated through repeated measurements over comparable time periods.</b>		
	1. Repeated measurements over comparable time periods demonstrate sustained improvement over baseline.	<input type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> NA	Not assessed. Sustained improvement cannot be assessed until the study indicator has achieved statistically significant improvement over baseline and sustained the improvement for a subsequent measurement period.

**Results for Activity X**

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

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

\*\* Total Evaluation Elements includes critical elements.

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

*Appendix A: Colorado FY 15-16 PIP Validation Tool:  
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Table A-1—FY 15-16 PIP Validation Report Scores: Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider for Access Behavioral Care-Denver											
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. Select the Study Topic	2	2	0	0	0	1	1	0	0	0	
II. Define the Study Question(s)	1	1	0	0	0	1	1	0	0	0	
III. Define the Study Population	1	1	0	0	0	1	1	0	0	0	
IV. Select the Study Indicator(s)	2	2	0	0	0	1	1	0	0	0	
V. Use Sound Sampling Techniques	7	0	0	0	7	2	0	0	0	2	
VI. Reliably Collect Data	4	3	0	0	1	2	1	0	0	1	
VII. Analyze Data and Interpret Study Results	3	3	0	0	0	1	1	0	0	0	
VIII. Improvement Strategies (interventions for improvement as a result of analysis)	6	5	0	0	1	3	3	0	0	0	
IX. Assess for Real Improvement	3		Not Assessed			2	Not Assessed				
X. Assess for Sustained Improvement	1		Not Assessed			1	Not Assessed				
<b>Totals for All Activities</b>	<b>30</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>9</b>	<b>15</b>	<b>9</b>	<b>0</b>	<b>0</b>	<b>3</b>	

Table A-2—FY 15-16 PIP Validation Report Overall Scores: Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider for Access Behavioral Care-Denver	
Percentage Score of Evaluation Elements Met*	<b>100%</b>
Percentage Score of Critical Elements Met**	<b>100%</b>
Validation Status***	<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.

*Appendix A: Colorado FY 15-16 PIP Validation Tool:*  
**Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider  
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**EVALUATION OF THE OVERALL VALIDITY AND RELIABILITY OF PIP RESULTS**

HSAG assessed the implications of the study's findings on the likely validity and reliability of the results based on CMS Validating protocols. HSAG also assessed whether the State should have confidence in the reported PIP findings.

**\*Met** = Confidence/high confidence in reported PIP results

**\*\*Partially Met** = Low confidence in reported PIP results

**\*\*\*Not Met** = Reported PIP results not credible

**Summary of Aggregate Validation Findings**

\*  **Met**

\*\*  **Partially Met**

\*\*\*  **Not Met**

**Summary statement on the validation findings:**

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

**APPENDIX B. PIP-SPECIFIC SUMMARY FORM**  
for **Access Behavioral Care—Denver**

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The following contains the PIP-specific summary form for **ABC-D**.



*Appendix B: State of Colorado State Fiscal Year (SFY) 2015-16 PIP Summary Form:  
Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider  
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**DEMOGRAPHIC INFORMATION**

Plan Name: Colorado Access - Access Behavioral Care (ABC) Denver

Project Leader Name: Melissa Kulasekere Title: Quality Improvement Project Manager

Telephone Number: 720-744-5244 E-mail Address: Melissa.Kulasekere@coaccess.com

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

Type of Project (for HSAG's internal tracking):

- |   |                                      |
|---|--------------------------------------|
| <input checked="" type="checkbox"/> Clinical      | <input type="checkbox"/> Nonclinical |
| <input checked="" type="checkbox"/> Collaborative | <input type="checkbox"/> HEDIS       |

Type of Delivery System: BHO and RCCO

Submission Date: 9/15/2014 for Activities I-VI

10/30/2015 for Activities VII-VIII; **01/08/2016 for Resubmitting Activities VII-VIII**

**Section to be completed by HSAG**

____ Year 1 Validation	____ Initial Submission
<u>X</u> Year 2 Validation	<u>10/29/15</u> Initial Submission
____ Year 3 Validation	____ Initial Submission

<u>X</u> Baseline Assessment	____ Remeasurement 1
____ Remeasurement 2	____ Remeasurement 3

Year 1 validated through Activity VI  
 Year 2 validated through Activity VIII  
 Year 3 validated through Activity \_\_\_\_\_

## Appendix B: State of Colorado State Fiscal Year (SFY) 2015-16 PIP Summary Form: Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider for Access Behavioral Care—Denver

**Activity I: Select the Study Topic.** The study topic should be selected based on data that identify an opportunity for improvement. The goal of the project should be to improve processes and outcomes of health care. The topic may be specified by the State.

**Study Topic:** Adolescent Depression Screening and Transition of care to a Behavioral Health Provider

### **Provide health plan-specific data:**

The project will collect the number of shared BHO and RCCO members between the ages of 12-17 whose medical provider screened the members for depression. The members who code positive (V40.9 with 99420 CPT code) on the depression screening will be followed to determine if they attended a follow-up visit with a behavioral health provider. This topic lacks historic rates for reference which is the impetus for examining these particular rates of transition of care within the stated population. Ultimately, it is the goal of this study to encourage Medicaid members in Colorado to be screened for depression and to transition to a behavioral health provider with the cooperation of medical providers who can facilitate this transition, if clinically appropriate.

### **Describe how the study topic has the potential to improve consumer health, functional status, or satisfaction:**

Suicide is a public health issue of particular significance in Colorado as the rates of completed suicide reached a “historic high” in 2012 after steadily increasing for the past ten years. [1] Colorado consistently ranks within the ten states with the highest rates of suicides, in 2010 (the most recent ranking available) Colorado was ranked eighth for completed suicides. [2] The significance of this problem is further highlighted by the fact that suicide in Colorado is the leading cause of death for people between the ages of 10-34. [2] Depression is often linked to suicide (gestures, attempts and completion), and provides the opportunity for intervention and prevention. Adolescents who screen positive for depression face additional challenges beyond what is typically experienced by their peers. Depression in this age group can manifest as difficulty in school with academic performance, conduct, and attendance, difficulty at work, peer and family relationships, household responsibilities, illicit drug and/or alcohol abuse, increased risk for self-harm or suicide, early pregnancy [3], poor dietary habits and/or sedentary behaviors which may include eating disorders. In the 2011 Healthy Kids Colorado Survey, approximately 22% of high school students stated that they felt sad or hopeless almost every day for two or more weeks; approximately 15% stated that they seriously considered suicide within the past 12 months. [2]

Despite the prevalence of depression in adolescents, research has shown that the “majority” do not get treatment. [3] Although many primary care providers believe that identifying depression in their young patients is their responsibility, “as many as 2 in 3 depressed youth are not identified” by their primary care clinicians; “only 50% of depressed adolescents are diagnosed before reaching adulthood,” and of those who are diagnosed “only half of those patients are treated appropriately.” [4] There are recommendations in place regarding screening for adolescent depression from The American Academy of Pediatrics’ Task Force on Mental Health and the US Preventative Services Task Force (USPSTF), as well as mandates from the 2010 Patient Protection and Affordable Care Act for depression screening in commercial health plans and required mental health assessments on all children covered through Medicaid’s Early and Periodic, Screening, Diagnosis, and Testing (EPSDT). “Screening remains far from universal, and mental health service follow-up rates after a positive result are reported

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to be low.” [5] Within the gap between undiagnosed adolescent depression and suicide lies opportunity for improvement.

Depression screenings can be conducted within the primary care setting, and referrals can be made to behavioral health specialists for further evaluation and treatment if necessary. Although primary care providers are not typically mental health specialists, they “treat the majority of patients with symptoms of depression.” [6] It is well documented that primary care providers with a focus on comprehensive care that receive training in the identification and management of depression in adolescents are able to successfully treat and connect these patients with additional mental health services. [4] Potential barriers that could negatively impact screening for adolescent depression and successful treatment for depression extend beyond physician identification and treatment. Primary care clinicians may experience challenges with implementing the screening within the current clinic workflow, difficulties related to time constraints, payment, skillset, consultation with mental health experts, knowledge of available mental health resources, and delays when referrals to mental health specialists are made.

Research suggests that there are a limited number of pediatric medical providers that universally assess for adolescent depression. Clinicians most often rely on adolescent and parental “chief complaints” and “physician interview” to identify adolescent depression, however studies found that these particular methods under identify patients with depression. [4] Adolescents with depression appear to be most accurately identified when a systematic assessment of depression-specific questions are asked in conjunction with a “direct interview” by a clinician in addition to collateral information from the adolescents’ parent/guardian. [4] In multiple studies, when depression screening was framed as universal, confidential, and a means to increase the focus on individual patient concerns, the acceptability and value of the screening increased in both the adolescents as well as their parents/guardians. [5] Following the depression screening the rate of referrals for mental health services increased following a positive screening as anticipated. Many negative screenings were also referred for mental health services, due to “parental concerns apparently not reflected by screen results, but possibly stemming from screen-prompted discussions.” [5] One study found a relationship between parental concerns, screening results, and referrals for mental health; “the overall referral rate for children who were [Pediatric Symptom Checklist] PSC positive was 75% versus 5% for children who were negative. However, among children whose parents said they had mental health concerns about their child, referral rates for PSC-positive and –negative children were very similar (94% and 72%, respectively).” [5] In a study on adolescents, 16% of those who screened positive attended at least one mental health appointment within the study period, in comparison to 5% of those who screened negative for depression. [5] Although only 5% of youth who screened negative accessed mental health services this rate was higher than youth who had not been screened which suggests that screening can provide more than just a gauge to assess depression in adolescents. Screening can open the door for adolescents to engage in treatment that might not have otherwise been an option.

The goal for this performance improvement project is to increase the number of adolescents who are screened for depression within the medical setting as well as increasing the number of adolescents who attend a behavioral health appointment following a positive depression screening. It is believed that youth who receive timely behavioral health treatment as soon as possible after a positive depression screening will fare better with their overall health outcomes and

## Appendix B: State of Colorado State Fiscal Year (SFY) 2015-16 PIP Summary Form: Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider for Access Behavioral Care—Denver

**Activity I: Select the Study Topic.** The study topic should be selected based on data that identify an opportunity for improvement. The goal of the project should be to improve processes and outcomes of health care. The topic may be specified by the State.

ultimately will be at lesser risk for the complications arising from depression mentioned previously. It is also believed that it is in the best interest of children and adolescents to identify and treat depression as early in the course of the disease as possible. By focusing on identifying adolescent depression within the medical system and the transition to the behavioral health system for treatment and intervention, Medical professionals can use the strengths of the medical home model to improve the lives of the youth while accessing the knowledge of the experts in the behavioral health field. Research has shown children “without a medical home were twice as likely to delay or forego needed care and to have unmet health care service needs.” [4] As Medical Homes continue to develop clinicians can use this opportunity to ensure that these mental health needs are assessed and properly treated while harnessing the relationships that exist within those medical communities. This performance improvement project places an emphasis on the primary care setting because the “majority” of “depressed youth identified in primary care...seem to start treatment.” [3] By systematically assessing the adolescent population for depression it is likely that more individuals with depression would be identified, that those with depression would be diagnosed and treated earlier than they would have been otherwise. By increasing assessment, identification, and treatment of adolescents with depression, the ultimate goal is to improve their health and level of functioning by improving symptoms, thus mitigating the negative downstream effects of untreated depression. For this Performance Improvement Project, Access Behavioral Care Denver will be collaborating with RCCO Regions 2, 3, and 5 where members are shared. RCCO Claims will be used to identify the depression screens performed in a primary care setting, and ABC-D claims will be used to identify the numerator, where members were transitioned to BH follow-up within 30 days of a positive depression screen.

### References:

- [1] D. Brendsel, "Aug. 19: Colorado suicide rate reaches historic high (News Release)," Office of Communications (Colorado Department of Public Health & Environment), Denver, 2013.
- [2] J. Hindman, MS and S. A. Breitzman, MA, "Office of Suicide Prevention Suicide Prevention in Colorado Annual Report 2012-2013," Denver, 2013.
- [3] M. M. S. B. Williams, E. A. O'Connor, PhD, M. Eder, PhD and E. P. Whitlock, MD, MPH, "Screening for Child and Adolescent Depression in Primary Care Settings: A Systematic Evidence Review for the US Preventative Services Task Force," *Pediatrics - Official Journal of The American Academy of Pediatrics*, vol. 123, pp. e716-e735, 2009.
- [4] R. A. Zuckerbrot, MD, A. H. Cheung, MD, P. S. Jensen, MD, R. E. Stein, MD, D. Laraque, MD and GLAD-PC Steering Group, "Guidelines for Adolescent Depression in Primary Care (GLAD-PC): I. Identification, Assessment, and Initial Management," *Pediatrics - Official Journal of The American Academy of Pediatrics*, vol. 120, no. 5, pp. e1299-e1312, 2007.
- [5] L. S. Wissow, MD, MPH, J. Brown, PhD, K. E. Fothergill, PhD, MPH, A. Gadomski, MD, MPH, K. Hacker, MD, P. Salmon, PhD and R. Zelkowitz, MHS, "Universal Mental Health Screening in Pediatric Primary Care: A Systematic Review," *Journal of the American Academy of Child & Adolescent Psychiatry*, vol. 52, no. 11, pp. 1134-1147.e23, 2013.



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**Activity I: Select the Study Topic.** The study topic should be selected based on data that identify an opportunity for improvement. The goal of the project should be to improve processes and outcomes of health care. The topic may be specified by the State.

[6] L. K. Sharp, PhD and M. S. Lipsky, MD, "Screening for Depression Across the Lifespan: A Review of Measures for Use in Primary Care Settings," *American Family Physician*, vol. 66, no. 6, pp. 1001-1008, 2002.

## *Appendix B: State of Colorado State Fiscal Year (SFY) 2015-16 PIP Summary Form: Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider for Access Behavioral Care—Denver*

**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.

**The Study Question(s) should:**

- ◆ Be structured in the recommended X/Y format: “Does doing X result in Y?”
- ◆ State the problem in clear and simple terms.
- ◆ Be answerable based on the data collection methodology and study indicator(s) provided.

**Study Question(s):**

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?

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**Activity III: Define the Study Population.** The study population should be clearly defined to represent the population to which the study question and indicators apply, without excluding consumers with special health care needs.

**The study population definition should:**

- ◆ Include the requirements for the length of enrollment, defining continuous enrollment, new enrollment, and allowable gaps in enrollment.
- ◆ Include the complete age range of the study population and the anchor dates used to identify age criteria, if applicable.
- ◆ Clearly define the inclusion, exclusion, and diagnosis criteria.
- ◆ Include a list of diagnosis/procedure/pharmacy/billing codes used to identify consumers, if applicable.
- ◆ Capture all consumers to whom the study question(s) applies.
- ◆ Include how race/ethnicity will be identified, if applicable.

**Study Population:**

The proposed study population for ABC Denver is Medicaid members between the ages of 12-17 who screen positive for depression by a medical provider who are ABC Denver and RCCO Regions 2, 3, or 5 members.

**Enrollment requirements (if applicable):**

Members must be continuously enrolled for at least 90 days prior to and 30 days following the date of the positive depression screen

**Consumer age criteria (if applicable):**

Members must be between the ages of twelve (12) and seventeen (17) years old on the date of the depression screening

**Inclusion, exclusion, and diagnosis criteria:**

Members included in the study will be adolescents between the ages of 12-17 who code positive for depression.

Members excluded from the study will include:

- Members who do not fall within the specified age ranges
- Member who are not continuously enrolled in Medicaid for at least 90 days prior to and at least 30 days following the depression screening claim date
- Members who have received a previous depression diagnosis in the past 90 days (except when the member received the depression diagnosis in the Emergency Department (ED) up to one day prior to the date of screening.
- Members who are receiving treatment from a behavioral health provider 90 days up to one day prior to the screening date, excluding those who have received behavioral health claim(s) in the ED.
- For members who have more than one positive screening during the measurement period, only the first screening date will be included in the denominator.
- Identifying Race/Ethnicity is not applicable for eligible population identification

## *Appendix B: State of Colorado State Fiscal Year (SFY) 2015-16 PIP Summary Form: Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider for Access Behavioral Care—Denver*

**Activity III: Define the Study Population.** The study population should be clearly defined to represent the population to which the study question and indicators apply, without excluding consumers with special health care needs.

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- ◆ Include the complete age range of the study population and the anchor dates used to identify age criteria, if applicable.
- ◆ Clearly define the inclusion, exclusion, and diagnosis criteria.
- ◆ Include a list of diagnosis/procedure/pharmacy/billing codes used to identify consumers, if applicable.
- ◆ Capture all consumers to whom the study question(s) applies.
- ◆ Include how race/ethnicity will be identified, if applicable.

**Diagnosis/procedure/pharmacy/billing codes (if applicable):**

CPT 99420 code with diagnosis code of V40.9 will be used to identify those members in the denominator. Diagnosis codes used to identify members with a previous diagnosis of depression within 90 days prior to the screening date will be DSM-IV diagnosis codes: 296.20-296.25; 296.30-296.35; 298.0; 311. Follow-up visits with a behavioral health provider can occur on the same day as the positive depression screening.

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**Activity IV: Select the Study Indicator(s).** A study indicator is a quantitative or qualitative characteristic or variable that reflects a discrete event or a status that is to be measured. The selected indicator(s) should track performance or improvement over time. The indicator(s) should be objective, clearly and unambiguously defined, and based on current clinical knowledge or health services research. Study indicator goals should be specific, measurable, attainable, relevant, and time-bound.

**The description of the study Indicator(s) should:**

- ◆ Include the complete title of the study indicator(s).
- ◆ Include complete descriptions of the numerators and denominators, defining the terms used.
- ◆ Include the rationale for selecting the study indicator(s).
- ◆ If indicators are based on nationally recognized measures (e.g., HEDIS), include the year of the HEDIS technical specifications used for the applicable measurement year and update the year annually, as appropriate.
- ◆ Include complete dates for all measurement periods (with the day, month, and year).
- ◆ Include health plan-specific goals for the remeasurement periods that are specific, measurable, attainable, relevant, and time-bound.
- ◆ Include the State-designated goal, if applicable.

***Study Indicator 1: Percentage of unique members who screen positive for depression by a medical provider and follow-up with a behavioral health provider***

**Provide a narrative description and the rationale for selection of the study indicator. Describe the basis on which the indicator was adopted, if internally developed.**

Study Indicator one is the total percentage of unique adolescent members ages 12-17 who screen positive for depression in a medical care setting who have followed-up with a behavioral health provider within 30 days of the screening date. This study indicator was selected in order to increase (if clinically appropriate) and improve the transition of care experienced by this population from medical care to specialized behavioral health care.

**Numerator: (no numeric value)**

Total number of members in the eligible population (per the previously identified inclusion and exclusion criteria) with a behavioral health visit within 30 days of a positive depression screening conducted by a medical provider. Codes used to identify the behavioral health visit are listed above.

Codes to identify the behavioral health follow-up visit are:

CPT Codes	HCPCS Codes
90791; 90792; 99201-99205; 90839; 90840	H0002, H0004, H0031; H0023; H0025; H2011; T1016; T1017

**Denominator: (no numeric value)**

Total number of unique members in the eligible population (per the previously identified inclusion and exclusion criteria) with a positive depression screening completed by a medical provider billed as a 99420 CPT service code with a diagnosis code of V40.9.



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- ◆ Include complete dates for all measurement periods (with the day, month, and year).
- ◆ Include health plan-specific goals for the remeasurement periods that are specific, measurable, attainable, relevant, and time-bound.
- ◆ Include the State-designated goal, if applicable.

<b>Baseline Measurement Period (include date range) MM/DD/YYYY to MM/DD/YYYY</b>	01/01/2014 to 12/31/2014 (for depression screening claim dates) 01/01/2014-1/31/2015 (for behavioral health provider follow-up visit claim dates)
<b>Remeasurement 1 Period (include date range) MM/DD/YYYY to MM/DD/YYYY</b>	01/01/2015 to 12/31/2015 (for depression screening claim dates) 01/01/2015-1/31/2016 (for behavioral health provider follow-up visit claim dates)
<b>Remeasurement 1 Period Goal</b>	5% <b>Assuming denominator remains the same, 50 percentage point</b> increase in BH follow-up within 30 days of a positive screen.
<b>Remeasurement 2 Period (include date range) MM/DD/YYYY to MM/DD/YYYY</b>	01/01/2016 to 12/31/2016 (for depression screening claim dates) 01/01/2016-1/31/2017 (for behavioral health provider follow-up visit claim dates)
<b>Remeasurement 2 Period Goal</b>	To be determined after Remeasurement 1 data has been compiled
<b>State-Designated Goal or Benchmark</b>	None identified to date.
<b>Source of Benchmark</b>	N/A

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**Activity V: Use Sound Sampling Techniques.** 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. Sampling techniques should be in accordance with generally accepted principles of research design and statistical analysis. Representative sampling techniques should be used to ensure generalizable information.

**The description of the sampling methods should:**

- ◆ Include components identified in the table below.
- ◆ Be updated annually for each measurement period and for each study indicator.
- ◆ Include a detailed narrative description of the methods used to select the sample; ensure sampling techniques support generalizable results.

Measurement Period	Study Indicator	Population Size	Sample Size	Margin of Error and Confidence Level

**Describe in detail the methods used to select the sample:** No sampling will be used during the course of this performance improvement project.



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**Activity VI: Reliably Collect Data.** Data collection must ensure that data collected on study indicators are valid and reliable.

**Data collection methodology should include the following:**

- ◆ Identification of data elements and data sources.
- ◆ When and how data are collected.
- ◆ How data are used to calculate the study indicators.
- ◆ A copy of the manual data collection tool, if applicable.
- ◆ An estimate of administrative data completeness and the process used to determine completeness.

**Data Sources (Select all that apply)**

Hybrid—Both medical/treatment records (manual data collection) and administrative data collection processes are used

<p><input type="checkbox"/> Medical/Treatment Record Abstraction</p> <p>Record Type</p> <p><input type="checkbox"/> Outpatient</p> <p><input type="checkbox"/> Inpatient</p> <p><input type="checkbox"/> Other</p> <hr/> <p>Other Requirements</p> <p><input type="checkbox"/> Data collection tool attached</p> <p><input type="checkbox"/> Other Data</p> <hr/>	<p><input checked="" type="checkbox"/> Administrative Data</p> <p>Data Source</p> <p><input checked="" type="checkbox"/> Programmed pull from claims/encounters</p> <p><input type="checkbox"/> Complaint/appeal</p> <p><input type="checkbox"/> Pharmacy data</p> <p><input type="checkbox"/> Telephone service data/call center data</p> <p><input type="checkbox"/> Appointment/access data</p> <p><input type="checkbox"/> Delegated entity/vendor data _____</p> <p><input type="checkbox"/> Other _____</p> <p>Other Requirements</p> <p><input checked="" type="checkbox"/> Codes used to identify data elements (e.g., ICD-9/ICD-10, CPT codes) See Activity III for list of codes</p> <p>_____</p> <p><input checked="" type="checkbox"/> Data completeness assessment attached</p> <p align="center">Will be submitted with baseline data* (See Attachment B)</p>	<p><input type="checkbox"/> Survey Data</p> <p>Fielding Method</p> <p><input type="checkbox"/> Personal interview</p> <p><input type="checkbox"/> Mail</p> <p><input type="checkbox"/> Phone with CATI script</p> <p><input type="checkbox"/> Phone with IVR</p> <p><input type="checkbox"/> Internet</p> <p><input type="checkbox"/> Other</p> <hr/> <p>Other Requirements</p> <p><input type="checkbox"/> Number of waves _____</p> <p><input type="checkbox"/> Response rate _____</p> <p><input type="checkbox"/> Incentives used _____</p>
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- ◆ Identification of data elements and data sources.
- ◆ When and how data are collected.
- ◆ How data are used to calculate the study indicators.
- ◆ A copy of the manual data collection tool, if applicable.
- ◆ An estimate of administrative data completeness and the process used to determine completeness.

[X] Coding verification process attached (See Attachment C)

Estimated percentage of administrative data completeness: To be determined after the baseline data is generated. 98.25 percent for Baseline measurement.

**Describe the process used to determine data completeness:**

The Incurred but Not Received (IBNR) is an estimate of the liability for claim-generating events that have taken place but have not yet been reported. Decision Support runs a lag table of paid claims for a two (2) year period and inserts the data into a template designed by an outside actuary. The template generates an estimate of claims liability.

\*N/A for RCCO Claims, since these are paid and provided by HCPF.



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Activity VI: Determine the Data Collection Cycle.	Determine the Data Analysis Cycle.
<input checked="" type="checkbox"/> Once a year <input type="checkbox"/> Twice a year <input type="checkbox"/> Once a season <input type="checkbox"/> Once a quarter <input type="checkbox"/> Once a month <input type="checkbox"/> Once a week <input type="checkbox"/> Once a day <input type="checkbox"/> Continuous <input type="checkbox"/> Other (list and describe): <hr/> <hr/> <hr/>	<input checked="" type="checkbox"/> Once a year <input type="checkbox"/> Once a season <input type="checkbox"/> Once a quarter <input type="checkbox"/> Once a month <input type="checkbox"/> Continuous <input type="checkbox"/> Other (list and describe): <hr/> <hr/> <hr/> <hr/>

**Describe the data collection process:**

RCCO Regions 2, 3, and 5 will pull paid and denied claims on members who screen positive for depression using CPT 99420 with diagnosis code of V40.9 during calendar year 2014 and apply appropriate exclusions. The BHO with shared members in RCCO Regions 2, 3, and 5 (ABC Denver) will run both paid and denied claims to exclude appropriate members (exclusion criteria mentioned previously). Claims will then be pulled from those members who meet all inclusion criteria in the denominator to determine which members who screened positive for depression had an appropriate follow-up with a behavioral health provider within thirty (30) days of the date of the positive depression screen. Please see Attachment A: Data Collection Process for more detailed information (updated for Baseline submission).



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**Activity VII: Study Indicator Results.** Clearly present the results of the study indicator(s) in the table below. For HEDIS-based PIPs, the data reported in the PIP Summary Form should match the data reported in the validated performance measure rate(s).

**Enter results for each study indicator—including the goals, statistical testing with complete *p* values, and the statistical significance—in the table provided.**

**Study Indicator 1 Title: Enter title of study indicator**

Time Period Measurement Covers	Indicator Measurement	Numerator	Denominator	Rate or Results	Goal	Statistical Test, Statistical Significance, and <i>p</i> Value
01/01/2014 – 12/31/2014	Baseline	0	6	0%	N/A	N/A
	Remeasurement 1					
	Remeasurement 2					
	Remeasurement 3					

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**Activity VII: Data Analysis and Interpretation of Study Results.** Clearly present the results for each of the study indicator(s). Describe the data analysis performed and the results of the statistical analysis, and interpret the findings. Through data analysis and interpretation, real improvement as well as sustained improvement can be determined.

**The data analysis and interpretation of study indicator results should include the following for each measurement period:**

- ◆ Data and results presented clearly, accurately, and consistently in both table and narrative format.
- ◆ A clear and comprehensive narrative description of the data analysis process, including a comparison of the findings to the goal and the type of statistical test completed, if applicable, with resulting *p* values calculated to four decimal places (e.g., 0.0235).
- ◆ Discussion of any random, year-to-year variations; population changes; sampling errors; or statistically significant increases or decreases that occurred during the remeasurement process.
- ◆ A statement that identifies any factors that could threaten (a) the validity of the findings for each measurement period and/or (b) the comparability of measurement periods. If no factors are identified, the lack of threats to validity and comparability should be clearly stated.

**Describe the data analysis process and provide an interpretation of the results for each measurement period.**

### **Baseline Measurement:**

Data Analysis Process: In accordance with the data analysis plan for Baseline measurement, COA and BHI calculated and analyzed the study indicator for this PIP for RCCO Regions 2, 3, and 5 and BHOs ABC Denver, ABC Northeast, and BHI where members were shared with the RCCO regions. Colorado Access pulled (RCCO 2, 3 and 5) paid and denied claims on members who screen positive for depression using CPT 99420 with diagnosis code of V40.9 during calendar year 2014 and applied appropriate exclusions based on Attachment A. Data was pulled from the RCCO data management system. This data pull decided the denominator for Indicator 1, which is six (6). Colorado Access ran both paid and denied claims for any members who screened positive for the numerator. This data pull for the numerator was from the BHO encounter/claims data system to identify any members who screened positive who had a BH follow-up visit within 30 days of the screening date, which resulted in zero (0) of the six (6) members had a BH follow-up within 30 days.

Data Analysis Results: For the baseline measurement period, 1/1/2014-12/31/2014, six (6) members within the identified study population screened positive for depression. Zero (0) members received a follow-up behavioral health visit within 30 days after the screening (See Study Indicator 1 table on previous page). This indicates that 0% of members who screened positive for depression received a follow-up visit within 30 days. The denominator for the baseline period is expected to increase in the coming years due to integrated care efforts and interventions discussed in the next section. With the increase in the denominator, ABC Denver is hoping to be able to better assess transitions from primary care to specialized behavioral healthcare.

Discussion of Data Analysis of Results: The overall number of depression screens captured through claims is very low for Baseline measurement (CY2014). There could be several reasons for this. Some of the barriers identified by providers are that they are screening for depression but not billing for the screens, or more often, not screening for depression at all because they do not know how to refer patients to BH or navigate the BH system. So we just aren't able to

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capture all the data through claims to know how frequently depression screens are being conducted. Interventions for this barrier will focus on how to bill and code for depression screens. Secondly, for the providers who do not screen, interventions will focus on improving understanding the referral process and BH system navigation.

As mentioned above, several factors could threaten the validity of these findings, although the extent of these threats is still unknown at this time. Several providers during the barrier analysis discussions voiced concerns about conducting screens at their practice but not routinely billing for the screens, threatening the validity of the denominator. ~~COA and BHI are currently working on getting screening counts from partnering FQHCs to get an estimate of how many screens, at least at some of the high-volume providers, are not being billed for.~~ Another concern is that some of the RCCO providers have had issues billing the BHOs for BH services rendered at their facilities so have treated some members with positive screens without billing at all, threatening the validity of the numerator. Again, we do not fully know the extent this is happening. One provider has noted that the billing issues have or are being resolved which should increase the number of BH follow-up services found in claims data, but it is unclear how often this is happening at other provider practices. **COA and BHI are currently working on getting supplemental data to allow us to understand the extent of services that are not captured in the administrative data used for this study indicator. We are asking the Federal Qualified Health Centers (FQHCs) in the area to self-report data of count of depression screenings completed, the number of positive screenings, and how many of those who screened positive saw a Behavioral Health Provider within the next 30 days after the screening. FQHCs are the providers who served the highest volume of our members and this supplemental data will help us estimate how many screenings are not being billed for and are not captured in the administrative data used for this study indicator.**

Since this the baseline measurement period, there were no identified goals nor was a statistical test completed. ABC Denver has set a goal to increase the percentage of members receiving a follow-up visit after a positive screening for depression by ~~5%~~ **50 percentage points** from Baseline to Remeasurement 1.

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Currently, there have been no year-to-year variations or population changes.

**Baseline to Remeasurement 1:**

**Baseline to Remeasurement 2:**

**Baseline to Remeasurement 3:**

**Baseline to Final Remeasurement:**

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**Activity VIII: Improvement Strategies (interventions for improvement as a result of analysis).** Interventions are developed to address causes/barriers identified through a continuous cycle of data measurement and data analysis. Describe the barriers/interventions and provide quantitative details on the processes used to identify the barriers/interventions and to evaluate the effectiveness of each intervention. Do not include intervention planning activities.

**This activity will include the following:**

- ◆ Processes used to identify barriers/interventions.
- ◆ Prioritized list of barriers with corresponding interventions.
- ◆ Processes used to evaluate the effectiveness of the interventions and evaluation results.
- ◆ For remeasurement periods, how evaluation and analysis results guided continuation, revision, or discontinuation of interventions.

Please describe the process used to identify barriers and develop corresponding interventions. Include the team/committee/group that conducted the causal/barrier analysis and any QI tools that were used to identify barriers, such as data mining, fishbone diagram, process-level data, etc. Describe the process used to prioritize the barriers and designate high-priority barriers. Lastly, describe the process used to evaluate the effectiveness of each intervention. The documentation should be dated to identify when steps in the ongoing quality improvement process were visited/revisited.

**Causal/Barrier Analysis and Identification of Interventions Process:** COA, BHI, and RCCO Regions 2, 3, and 5 identified causes/barriers through several processes. The quality management team conducted a causal/barrier analysis discussion in August, 2014 at a Quality and Performance Advisory Committee (QPAC), gathering invaluable feedback from committee members who represent high-volume providers in COA's and BHI's provider network. ABC D, ABC NE, BHI, and RCCO Regions 2, 3, and 5 also formed a core PIP workgroup in the Fall of 2014 with Quality Improvement/Management, provider outreach, and integrated care staff. Members of this team worked collaboratively to organize barrier analysis meetings, which included identification of PCP, BH, and Community stakeholders, creation of project presentations, and a short survey for stakeholders to complete at the end of the sessions. Barrier analysis meetings were conducted in January 2015 for all three RCCO Regions (2, 3, and 5). Interested stakeholders also provided their contact information to be contributing members to ongoing PIP Stakeholder workgroup meetings that took place ongoing throughout CY2015 to discuss ongoing barriers/interventions.

**Quality improvement processes, tools, and/or data analysis results used to identify and prioritized barriers:** BHI used a PIP Barrier Selection Criteria scoring tool to prioritize barriers and interventions (see Attachment E). We also used a Causal/Barrier analysis diagram to identify system, provider, and member driven barriers (see Attachment D). Analysis of findings: The core PIP workgroup analyzed the survey data at several meetings in February 2015 for frequency of Provider, Member, and System barriers. A barrier analysis diagram was created to link barriers to potential interventions (see Attachment D) The core PIP workgroup utilized Barrier Selection Criteria (see Attachment E) to determine potential impact on the member, importance to providers, importance to members, provider, or BHO resources to implement, and ease of implementation.

**Processes and measures used to evaluate the effectiveness of each intervention:** A Driver Diagram was used as a tool to improve process reliability

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and to help in the illustration of the structures, processes, and interventions believed to require change in the system. This tool visually represents a shared theory of changes that could be made and will result in an improvement. It was developed based on beliefs of the team members about needed changes in the system that could lead to improvement (see Attachment F).

After analyzing the level of impact and difficulty of each intervention, the team decided to prioritize the following interventions:

- Educate Primary Care Providers on current available tools specific for Depression Screening in Adolescents
- Educate Behavioral Health and Primary Care Providers on coding, billing and reimbursement for Depression Screening
- Develop a mechanism to facilitate referrals between physical health and behavioral health providers
- Develop and disseminate materials to educate on importance of depression screening

These interventions will also be measured in order to assess their effectiveness. **Some of these interventions will be measured by individual providers** as described in Attachment F.

Some activities related to the above interventions already started during 2015 those activities included provider education, billing, BH resources available, and system navigation as described below. The result of those interventions will be measured at the end of 2015 to determine their effectiveness.

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- ◆ For remeasurement periods, how evaluation and analysis results guided continuation, revision, or discontinuation of interventions.

**Barriers/Interventions Table:**

Use the table below to list barriers, corresponding intervention descriptions, intervention type, target population, and implementation date. For each intervention, select if the intervention was (1) new, continued, or revised, and (2) consumer, provider, or system. Update the table as interventions are added, discontinued, or revised.

Date Implemented (MM/YY)	Select if Continued, New, or Revised	Select if Consumer, Provider, or System Intervention	Priority Ranking	Barrier	Intervention That Addresses the Barrier Listed in the Previous Column
01/15	New	Provider Intervention	1	Coding, Billing, Compliance , and Reimbursement	Presentation on depression screening in adolescence, how to bill/code, and intervention/barrier brainstorming with practice managers from primary care providers in RCCO regions 3 and 5. Distributed flyer on how to bill/code depression screens correctly. There were 48 participants representing 27 providers.
01/15 – 06/15	New	Provider Intervention	2	Navigation of Behavioral Health Systems; Navigation of systems	The online RCCO News Flashes (Community, PCMP, and Hospital/Specialist) get distributed monthly to 661 PCPs, 499 Community Organizations, and 188 Hospitals/Specialists. These newsletters



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**This activity will include the following:**

- ◆ Processes used to identify barriers/interventions.
- ◆ Prioritized list of barriers with corresponding interventions.
- ◆ Processes used to evaluate the effectiveness of the interventions and evaluation results.
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					contain resource information about Integrated Physical and Behavioral health Care, statewide Community Crisis Connection services (Walk-in crisis centers, mobile crisis, and crisis phone line), BHO contact information, and Rocky Mt. Crisis Partners contact info.
02/15	New	Provider Intervention	1	Coding, Billing, Compliance , and Reimbursement	A Coding and Billing flyer was created and has been disseminated to key stakeholder practices in RCCO Regions 2, 3, and 5.
04/15	New	Provider Intervention	3	Workflow	A Depression Screening Clinic Workflow was created and presented to stakeholder groups as a tool that could be used in practices where a clinic workflow hadn't been established or where refined workflow might be needed.
05/15	New	Provider Intervention	2	Navigation of systems	RCCO Webinar 5/19/15 on Colorado Crisis Services - Behavioral Health Support: 85 participants
05/15	New	Provider	2	Navigation of systems	RCCO Provider and Community Forum on



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- ◆ For remeasurement periods, how evaluation and analysis results guided continuation, revision, or discontinuation of interventions.

		Intervention			5/21/15 (Health Neighborhood Meeting) provided information about the Medicaid BH systems in Colorado, Best Practices and current efforts to integrate care, and BH panel discussion. There were 68 attendees representing 40 organizations.
		Click to select status			
		Click to select status			
		Click to select status			
		Click to select status			

Report the evaluation results for each intervention and describe the steps taken based on the evaluation results. Was each intervention successful? How were successful interventions continued or implemented on a larger scale? How were less-successful interventions revised or discontinued?

**Evaluation results for each Intervention:** Available for Remeasurement 1 submission.

*Appendix B: State of Colorado State Fiscal Year (SFY) 2015-16 PIP Summary Form:*  
**Adolescent Depression Screening and Transition of Care to a Behavioral Health Provider  
for Access Behavioral Care—Denver**

**Activity VIII: Improvement Strategies (interventions for improvement as a result of analysis).** Interventions are developed to address causes/barriers identified through a continuous cycle of data measurement and data analysis. Describe the barriers/interventions and provide quantitative details on the processes used to identify the barriers/interventions and to evaluate the effectiveness of each intervention. Do not include intervention planning activities.

**This activity will include the following:**

- ◆ Processes used to identify barriers/interventions.
- ◆ Prioritized list of barriers with corresponding interventions.
- ◆ Processes used to evaluate the effectiveness of the interventions and evaluation results.
- ◆ For remeasurement periods, how evaluation and analysis results guided continuation, revision, or discontinuation of interventions.

**Next steps for each intervention based on evaluation results:** Available for Remeasurement 1 submission.