



**COLORADO**

**Department of Health Care  
Policy & Financing**

Regional Accountable Entities (RAEs)  
for the Colorado Accountable Care Collaborative

**Fiscal Year 2022–2023 PIP Validation Report**

*for*

**Health Colorado, Inc. Region 4**

*April 2023*

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



## Table of Contents

<b>1. Executive Summary</b> .....	<b>1-1</b>
PIP Components and Process .....	1-2
Approach to Validation .....	1-3
Validation Scoring.....	1-4
PIP Topic Selection .....	1-5
<b>2. Findings</b> .....	<b>2-1</b>
Module 4: PIP Conclusions .....	2-1
SMART Aim Measure Results.....	2-1
Intervention Testing Results.....	2-2
Lessons Learned .....	2-3
<b>3. Conclusions and Recommendations</b> .....	<b>3-1</b>
Conclusions .....	3-1
Recommendations .....	3-1
<b>Appendix A. Module Submission Form</b> .....	<b>A-1</b>
<b>Appendix B. Module Validation Tool</b> .....	<b>B-1</b>

## 1. Executive Summary

The Code of Federal Regulations at 42 CFR Part 438—managed care regulations for the Medicaid program and Children’s Health Insurance Program (CHIP), with revisions released May 6, 2016, effective July 1, 2017, and further revised on November 13, 2020, with an effective date of December 14, 2020—require states that contract with managed care health plans (health plans) to conduct an external quality review (EQR) of each contracting health plan. Health plans include managed care organizations (MCOs), prepaid inpatient health plans (PIHPs), primary care case management entities (PCCM entities), and prepaid ambulatory health plans (PAHPs). The regulations at 42 CFR §438.350 require that the EQR include analysis and evaluation by an external quality review organization (EQRO) of aggregated information related to healthcare quality, timeliness, and access. Health Services Advisory Group, Inc. (HSAG), serves as the EQRO for the State of Colorado, Department of Health Care Policy and Financing (the Department)—the agency responsible for the overall administration and monitoring of Colorado’s Medicaid program. Beginning in fiscal year (FY) 2018–2019, the Department entered into contracts with Regional Accountable Entities (RAEs) in seven regions throughout Colorado. Each Colorado RAE meets the federal definition of a PCCM entity.

Pursuant to 42 CFR §438.350, which requires states’ Medicaid managed care programs to participate in EQR, the Department required its RAEs to conduct and submit performance improvement projects (PIPs) annually for validation by the State’s EQRO. **Health Colorado, Inc. Region 4**, referred to in this report as **HCI R4**, holds a contract with the State of Colorado for provision of healthcare services for Health First Colorado, Colorado’s Medicaid program.

For fiscal year (FY) 2022–2023, the Department required health plans to conduct PIPs in accordance with 42 CFR §438.330(b)(1). In accordance with §438.330 (d), MCOs, PIHPs, PAHPs, and PCCM entities are required to have a quality program that (1) includes ongoing PIPs designed to have a favorable effect on health outcomes and beneficiary satisfaction and (2) focuses on clinical and/or nonclinical areas that involve the following:



Measuring performance using objective quality indicators



Implementing system interventions to achieve improvement in quality



Evaluating effectiveness of the interventions



Planning and initiating of activities for increasing or sustaining improvement

As one of the mandatory EQR activities required by 42 CFR §438.358(b)(1)(i), HSAG, as the State’s EQRO, validated the PIPs through an independent review process. In its PIP evaluation and validation, HSAG used the Department of Health and Human Services, Centers for Medicare & Medicaid Services

(CMS) publication, *Protocol 1. Validation of Performance Improvement Projects: A Mandatory EQR-Related Activity*, October 2019.<sup>1-1</sup>

In July 2014, HSAG developed a new PIP framework based on a modified version of the Model for Improvement developed by Associates in Process Improvement and modified by the Institute for Healthcare Improvement.<sup>1-2</sup> The redesigned PIP methodology is intended to improve processes and outcomes of healthcare by way of continuous quality improvement (CQI). The redesigned framework redirects MCOs to focus on small tests of change to determine which interventions have the greatest impact and can bring about real improvement. CMS agreed that given the pace of CQI science development and the prolific use of Plan-Do-Study-Act (PDSA) cycles in modern improvement projects within healthcare settings, a new approach was needed and provided HSAG with approval to use this approach in all requesting states.



## PIP Components and Process

The key concepts of the rapid-cycle PIP framework include forming a PIP team, setting aims, establishing a measure, determining interventions, testing interventions, and spreading successful changes. The core component of the approach involves testing changes on a small scale—using a series of PDSA cycles and applying rapid-cycle learning principles over the course of the improvement project to adjust intervention strategies—so that improvement can occur more efficiently and lead to long-term sustainability. The duration of rapid-cycle PIPs is approximately 18 months, from the initial Module 1 submission date to the end of intervention testing.

There are four modules with an accompanying reference guide for the MCOs to use to document their PIPs. Prior to issuing each module, HSAG held module-specific trainings with the MCOs to educate them about the documentation requirements and use of specific CQI tools for each of the modules. The four modules are defined below:

- **Module 1—PIP Initiation:** Module 1 outlines the framework for the project. The framework includes building a PIP team, describing the PIP topic, and narrowed focus, and providing the rationale and supporting data for the selected narrowed focus. In Module 1, the narrowed focus baseline data collection specifications and methodology are defined, and the MCO sets aims (Global and SMART), completes a key driver diagram, and sets up the SMART Aim run chart for objectively tracking progress toward improvement for the duration of the project.

---

<sup>1-1</sup> Department of Health and Human Services, Centers for Medicare & Medicaid Services. *Protocol 1. Validation of Performance Improvement Projects (PIPs): A Mandatory EQR-Related Activity*, October 2019. Available at: <https://www.medicaid.gov/medicaid/quality-of-care/downloads/2019-eqr-protocols.pdf>. Accessed on: Feb 27, 2023.

<sup>1-2</sup> Langley GL, Moen R, Nolan KM, Nolan TW, Norman CL, Provost LP. *The Improvement Guide: A Practical Approach to Enhancing Organizational Performance* (2nd edition). San Francisco: Jossey-Bass Publishers; 2009. Available at: <http://www.ihl.org/resources/Pages/HowtoImprove/default.aspx>. Accessed on: Feb 27, 2023.

- **Module 2—Intervention Determination:** In Module 2, there is increased focus on the QI activities reasonably expected to impact the SMART Aim. The MCO updates the key driver diagram from Module 1 after completing process mapping, failure modes and effects analysis (FMEA), and failure mode priority ranking, for a more in-depth understanding of the improvement strategies that are most likely to support achievement of the SMART Aim goal.
- **Module 3—Intervention Testing:** In Module 3, the MCO defines the intervention plan for the intervention to be tested, and the intervention effectiveness measure and data collection process are defined. The MCO will test interventions using thoughtful incremental PDSA cycles and complete PDSA worksheets.
- **Module 4—PIP Conclusions:** In Module 4, the MCO summarizes key findings, compares successful and unsuccessful interventions, and reports outcomes achieved. The MCO will synthesize data collection results, information gathered, and lessons learned to document the impact of the PIP and to consider how demonstrated improvement can be shared and used as a foundation for further improvement after the project ends.



## Approach to Validation

The goal of HSAG’s PIP validation and scoring methodology is to ensure that the Department and key stakeholders can have confidence that the health plan executed a methodologically sound improvement project, and any reported improvement can be reasonably linked to the QI strategies and activities conducted by the health plan during the PIP. HSAG obtained the data needed to conduct the PIP validation from **HCI R4**’s module submission forms. In FY 2022–2023, these forms provided detailed information about **HCI R4**’s PIP and the activities completed in Module 4. (See Appendix A. Module Submission Form.) Following HSAG’s rapid-cycle PIP process, each health plan submitted Module 4 according to the approved timeline. HSAG provided scores and feedback and assigned a level of confidence to the PIP in the Module 4 validation tool. If a PIP received less than *High Confidence* on initial review, the health plan had an opportunity to receive technical assistance from HSAG and to complete a single Module 4 resubmission to address the initial validation findings.

## PIP Terms

**SMART** (Specific, Measurable, Attainable, Relevant, Time-bound) Aim directly measures the PIP’s outcome by answering the following: *How much improvement, to what, for whom, and by when?*

**Key Driver Diagram** is a tool used to conceptualize a shared vision of the theory of change in the system. It enables the MCO’s team to focus on the influences in cause-and-effect relationships in complex systems.

**FMEA** (Failure Modes and Effects Analysis) is a systematic, proactive method for evaluating processes that helps to identify where and how a process is failing or might fail in the future. FMEA is useful to pinpoint specific steps most likely to affect the overall process, so that interventions may have the desired impact on PIP outcomes.

**PDSA** (Plan-Do-Study-Act) cycle follows a systematic series of steps for gaining knowledge about how to improve a process or an outcome.



## Validation Scoring

During validation, HSAG determines if criteria for each module are *Met*. Any validation criteria not applicable (*N/A*) were not scored. At the completion of Module 4, HSAG uses the validation findings from modules 1 through 4 to determine a level of confidence representing the validity and reliability of the PIP. Using a standardized scoring methodology, HSAG will assign a level of confidence.

- **High confidence** = The PIP was methodologically sound; the SMART Aim goals, statistically significant, clinically significant, or programmatically significant improvements were achieved for both measures; at least one tested intervention for each measure could reasonably result in the demonstrated improvement; and the MCO accurately summarized the key findings and conclusions.
- **Moderate confidence** = The PIP was methodologically sound, at least one tested intervention could reasonably result in the demonstrated improvement, and at least one of the following occurred:
  - The SMART Aim goal, statistically significant, clinically significant, or programmatically significant improvement was achieved *for only one measure*, and the MCO accurately summarized the key findings and conclusions.
  - Non-statistically significant improvement in the SMART Aim measure was achieved *for at least one measure*, and the MCO accurately summarized the key findings and conclusions.
  - The SMART Aim goal, statistically significant, non-statistically significant, clinically significant, or programmatically significant improvement was achieved *for at least one measure*; however, the MCO *did not* accurately summarize the key findings and conclusions.
- **Low confidence** = One of the following occurred:
  - The PIP was methodologically sound. However, no improvement was achieved for either measure during the PIP. The SMART Aim goals *were not* met, statistically significant improvement *was not* demonstrated, non-statistically significant improvement *was not* demonstrated, significant clinical improvement *was not* demonstrated, and significant programmatic improvement *was not* demonstrated.
  - The PIP was methodologically sound. The SMART Aim goal, statistically significant, non-statistically significant, clinically significant, or programmatically significant improvement was achieved *for at least one measure*; however, *none* of the tested interventions could reasonably result in the demonstrated improvement.
  - The rolling 12-month data collection methodology was followed for only one of two SMART Aim measures for the duration of the PIP.
- **No confidence** = The SMART Aim measure methodology and/or approved rapid-cycle PIP methodology/process *was not* followed through the SMART Aim end date.



## PIP Topic Selection

In FY 2022–2023, **HCI R4** submitted the following PIP topic for validation: *Depression Screening and Follow-Up After a Positive Depression Screen*.

**HCI R4** defined a Global Aim and SMART Aim for the PIP. The SMART Aim statement includes the narrowed population, the baseline rate, a set goal for the project, and the end date. HSAG provided the following parameters to the health plan for establishing the SMART Aim for the PIP:

- **Specific**: The goal of the project: What is to be accomplished? Who will be involved or affected? Where will it take place?
- **Measurable**: The indicator to measure the goal: What measure will be used? What current data (i.e., count, percent, or rate) are available for that measure? How much increase or decrease in the indicator will demonstrate improvement?
- **Attainable**: Rationale for setting the goal: Is the desired achievement based on a particular best practice/average score/benchmark? Is the goal attainable (not too low or too high)?
- **Relevant**: The goal addresses the problem to be improved.
- **Time-bound**: The timeline for achieving the goal.

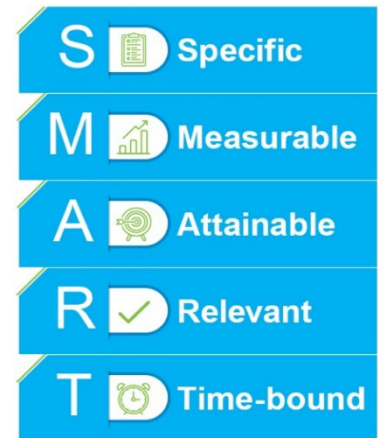


Table 1-1 includes the SMART Aim statements established by **HCI R4**.

**Table 1-1—PIP Measures and SMART Aim Statements**

PIP Measures	SMART Aim Statements
<i>Depression Screening</i>	By 6/30/2022, use key driver diagram interventions to increase the percentage of depression screens completed during well visits for members attributed to Valley-Wide ages 12 years and older, from 11.21% to 15.00%.
<i>Follow-Up After a Positive Depression Screen</i>	By 6/30/2022, use key driver diagram interventions to increase the percentage of behavioral health (BH) follow-ups within 30 days of a positive depression screen completed for members attributed to Valley-Wide ages 12 years and older, from 25.15% to 30.00%.



### Module 4: PIP Conclusions

In FY 2022–2023, **HCI R4** continued the *Depression Screening and Follow-Up After a Positive Depression Screen* PIP. The health plan completed Module 4, the final module of the rapid-cycle PIP process, during FY 2022–2023. HSAG reviewed and conducted the final validation on the initial Module 4 submission form.

The health plan’s final Module 4 submission met all validation criteria. The PIP was methodologically sound, the PIP results demonstrated significant improvement, at least one of the interventions could reasonably result in the demonstrated improvement, and the health plan accurately summarized key findings and conclusions. Based on the validation findings, HSAG assigned the *Depression Screening and Follow-Up After a Positive Depression Screen* PIP a level of *High Confidence*. Below are summaries of key Module 4 validation findings. Complete validation criteria, scores, and feedback from HSAG are provided in Appendix B. Module Validation Tool.



### SMART Aim Measure Results

HSAG analyzed **HCI R4**’s PIP data to draw conclusions about the health plan’s QI efforts. Based on its review, HSAG determined the methodological validity of the PIP, and evaluated **HCI R4**’s success in achieving the SMART Aim goal and in demonstrating statistically, clinically, or programmatically significant improvement.

The final SMART Aim measure results for **HCI R4**’s PIP are presented in Table 2-1. HSAG used the reported SMART Aim measure data to determine whether the SMART Aim goal was achieved and whether statistically significant improvement over baseline results was demonstrated.

**Table 2-1—SMART Aim Measure Results**

SMART Aim Measure	Baseline Rate	SMART Aim Goal Rate	Highest Rate Achieved	Statistically Significant Improvement Achieved (Y/N)
<i>Depression Screening</i>				
The percentage of depression screens completed during well visits for members attributed to Valley-Wide ages 12 years and older.	11.21%	15.00%	10.10%	No



SMART Aim Measure	Baseline Rate	SMART Aim Goal Rate	Highest Rate Achieved	Statistically Significant Improvement Achieved (Y/N)
<i>Follow-Up After a Positive Depression Screen</i>				
The percentage of behavioral health (BH) follow-ups within 30 days of a positive depression screen completed for members attributed to Valley-Wide ages 12 years and older.	25.15%	30.00%	58.20%	Yes

To guide the project, **HCI R4** established goals of increasing the percentage of members 12 years of age and older, attributed to Valley-Wide Health Systems, who received a depression screening during a well visit, from 11.21 percent to 15.00 percent, and increasing the percentage of those members who received BH services within 30 days of screening positive for depression from 25.15 percent to 30.00 percent, through the SMART Aim end date of June 30, 2022. **HCI R4**'s reported SMART Aim measure results for the *Depression Screening* measure demonstrated that the SMART Aim goal was not achieved; the highest rate achieved, 10.10 percent, represented a decline from the baseline rate. The reported results for the *Follow-Up After a Positive Depression Screen* measure demonstrated that the SMART Aim goal was exceeded, and the highest rate achieved, 58.20 percent, represented a statistically significant increase of 33.05 percentage points above the baseline rate. The health plan's final SMART Aim run chart and SMART Aim measure data are provided in Appendix A. Module Submission Form.



### Intervention Testing Results

In addition to evaluating the SMART Aim measure results, HSAG also evaluated the PIP intervention testing results for demonstrating significant clinical and programmatic improvement. In Module 4, **HCI R4** completed and submitted PDSA worksheets to report final intervention testing results for the PIP. HSAG evaluated PDSA worksheet documentation for each intervention to determine whether the intervention evaluation results demonstrated significant clinical or programmatic improvement. Table 2-2 summarizes **HCI R4**'s interventions described in the Module 4 PDSA worksheets, any improvement demonstrated by the intervention evaluation results, and the final status of the intervention at the end of the project.

**Table 2-2—Final Intervention Testing Results**

Intervention Description	Type of Improvement Demonstrated by Intervention Evaluation Results	Final Intervention Status
Staff feedback on depression screening performance and education on depression screening procedures	Significant <i>programmatic</i> improvement for <i>Depression Screening</i>	Abandoned

Intervention Description	Type of Improvement Demonstrated by Intervention Evaluation Results	Final Intervention Status
Provide training to coding auditors on the correct criteria for entering G-codes for positive and negative depression screening results in the electronic health record (EHR)	No improvement reported	Abandoned
Provider education on clinical policy and procedure for integrated care delivery after and BH follow-up care following a positive depression screen	Significant <i>clinical</i> and <i>programmatic</i> improvement for <i>Follow-Up After a Positive Depression Screen</i>	Adopted

**HCI R4** tested three provider/staff-focused interventions for the project: Two interventions focused on *Depression Screening*, and one intervention focused on *Follow-Up After a Positive Depression Screen*. Regarding staff feedback and education on depression screening intervention, the health plan reported intervention testing results that demonstrated significant programmatic improvement in staff attention to depression screening; the intervention resulted in the adoption of a new clinical policy on timing and pre-visit planning for depression screening. Although programmatic improvement was demonstrated, the health plan reported that the intervention will be abandoned because of the implementation of a new EHR system that will incorporate workflows and automated reminders for depression screening. **HCI R4** reported that the second depression screening intervention, focused on coding training, did not demonstrate significant clinical or programmatic improvement and will also be abandoned as a result of the transition to a new EHR system. The health plan reported greater success with the provider education on integrated care delivery intervention, focusing on the *Follow-Up After a Positive Depression Screen* measure. The health plan reported intervention testing results that demonstrated significant clinical improvement in BH follow-up rates and significant programmatic improvement in the provider partner’s approval of a new BH referral policy. The *Follow-Up After a Positive Depression Screen* focused intervention will be adopted in response to the strong intervention testing results.

### Lessons Learned

An important part of the QI process is to consider how the information gathered and lessons learned during the PIP can be applied in future improvement efforts. **HCI R4** reported successes, challenges, and lessons learned as part of the Module 4 submission.

**HCI R4** documented the following lessons learned from the *Depression Screening and Follow-Up After a Positive Depression Screen* PIP:

- The impact of prioritizing one failure mode, “MA skips PHQ-2 [Patient Health Questionnaire-2] during check-in process without medical rationale,” over another failure mode, “Incorrect code used for screening.” This choice resulted in a failure to see and compare the potential impact of

interventions on the *Depression Screening* outcome measure and a delay in implementing an intervention to precisely target this claims-based outcome measure.

- Not including a coder/business operation representative on the PIP team prevented the team from adequately mapping the process of having the appropriate G-codes applied for the claims-based *Depression Screening* SMART Aim measure. If process mapping had been informed by a coding specialist, the team may have identified different priority failure modes and emphasized different interventions for a potentially greater impact on improvement.
- The value of an engaged PIP team and practice leadership, despite shifting roles and responsibilities and the concurrent public health emergency, contributed to project successes.

## 3. Conclusions and Recommendations



### Conclusions

**HCI R4** developed a methodologically sound improvement project that met both State and federal requirements. The health plan tested three interventions using the required QI processes and tools. At the conclusion of the PIP, the health plan accurately reported results that demonstrated achievement of the SMART Aim goal and statistically significant improvement over baseline performance for the *Follow-Up After a Positive Depression Screen* measure. The health plan's intervention testing results also demonstrated programmatically significant improvement in *Depression Screening* and clinically and programmatically significant improvement in *Follow-Up After a Positive Depression Screen* linked to the tested interventions. Based on the validation findings, HSAG assigned a level of *High Confidence* to the *Depression Screening and Follow-Up After a Positive Depression Screen* PIP.



### Recommendations

HSAG has the following recommendations:

- **HCI R4** should apply lessons learned and knowledge gained from its efforts and HSAG's feedback throughout the PIP to future PIPs and other QI activities.
- **HCI R4** should ensure all roles and perspectives relevant to the PIP topic are represented on the PIP team and involved in barrier analyses and intervention development.
- **HCI R4** should continue improvement efforts in the PIP topic areas, and for the successful interventions, consider spreading beyond the narrowed focus. The conclusion of a project should be used as a springboard for sustaining the improvement achieved and attaining new improvements.

## Appendix A. Module Submission Form

Appendix A contains the Module Submission Form provided by the health plan.



State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
*for Health Colorado, Inc. (RAE 4)*



Managed Care Organization (MCO) Information	
MCO Name	Health Colorado, Inc. (HCI)
PIP Title	<i>Depression Screening and Follow-up After a Positive Depression Screen</i>
Contact Name	Edward Arnold
Title	Performance Improvement Analyst
Email Address	<a href="mailto:Edward.Arnold@beaconhealthoptions.com">Edward.Arnold@beaconhealthoptions.com</a>
Telephone Number	719-244-9758
Submission Date	10/20/2022
Resubmission Date (if applicable)	

**Provide the following final documents with the Module 4 Submission**

- ◆ Completed PDSA Worksheets- Included with submission



State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
for Health Colorado, Inc. (RAE 4)



### Final SMART Aim Run Chart – Depression Screening

**Instructions:** In the space below, insert or attach the final SMART Aim run chart. Include the following:

- ◆ SMART Aim goal.
- ◆ Narrowed focus baseline percentage.
- ◆ Rolling 12-month measure data points for the duration of the PIP.
- ◆ Intervention markers to display how the timing of the interventions coincided with changes in the SMART Aim measure.

Final Depression Screening run chart is available at Attachment 2.

To confirm that the MCO used the 12-month methodology as required, check the box below.

#### ROLLING 12-MONTH ATTESTATION

The MCO confirms that the reported SMART Aim run chart data are based on rolling 12-month measurements.



State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
*for Health Colorado, Inc. (RAE 4)*



**Final Monthly SMART Aim Measure Data – Depression Screening**

**Instructions:**

- ◆ In Table 1a, provide the monthly numerator, denominator, and percentage for each SMART Aim rolling 12-month measurement period.
- ◆ The reporting month is the last month of each rolling 12-month measurement period.
- ◆ Add additional rows to the table as needed.

Table 1a—SMART Aim Measure Monthly Data - Depression Screening				
SMART Aim rolling 12-Month Measurement Period (MM/DD/YYYY-MM/DD/YYYY)	Reporting Month	Numerator	Denominator	Percentage
02/01/20 – 01/31/21	January	51	941	5.4%
03/01/20 – 02/28/21	February	48	949	5.1%
04/01/20 – 03/31/21	March	56	972	5.8%
05/01/20 – 04/30/21	April	65	1087	6.0%
06/01/20 – 05/31/21	May	73	1195	6.1%
07/01/20 – 06/30/21	June	79	1191	6.6%
08/01/20 – 07/31/21	July	90	1196	7.5%
09/01/20 – 08/31/21	August	100	1145	8.7%
10/01/20 – 09/30/21	September	111	1255	8.8%
11/01/20 – 10/31/21	October	129	1390	9.3%
12/01/20 – 11/30/21	November	126	1329	9.5%
01/01/21 – 12/31/21	December	158	1726	9.2%
02/01/21 – 01/31/22	January	151	1598	9.45%





State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
*for Health Colorado, Inc. (RAE 4)*



03/01/21 – 02/28/22	February	153	1593	9.6%
04/01/21 – 03/31/22	March	152	1564	9.7%
05/01/21 – 04/30/22	April	154	1540	10.0%
06/01/21 – 05/31/22	May	157	1562	10.1%
07/01/21 – 06/30/22	June	Not Available	Not Available	Not Available

**Final SMART Aim Run Chart – Follow-up After a Positive Depression Screen**

**Instructions:** In the space below, insert or attach the final SMART Aim run chart. Include the following:

- ◆ SMART Aim goal.
- ◆ Narrowed focus baseline percentage.
- ◆ Rolling 12-month measure data points for the duration of the PIP.
- ◆ Intervention markers to display how the timing of the interventions coincided with changes in the SMART Aim measure.

Final Follow-up After a Positive Depression Screening run chart is available at Attachment 3.

To confirm that the MCO used the 12-month methodology as required, check the box below.

ROLLING 12-MONTH ATTESTATION
<input checked="" type="checkbox"/> <b>The MCO confirms that the reported SMART Aim run chart data are based on rolling 12-month measurements.</b>



**State of Colorado**  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
*for Health Colorado, Inc. (RAE 4)*



**Final Monthly SMART Aim Measure Data – Follow-up After a Positive Depression Screen**

**Instructions:**

- ◆ In Table 1b, provide the monthly numerator, denominator, and percentage for each SMART Aim rolling 12-month measurement period.
- ◆ The reporting month is the last month of each rolling 12-month measurement period.
- ◆ Add additional rows to the table as needed.

<b>Table 1b—SMART Aim Measure Monthly Data - Follow-up After a Positive Depression Screen</b>				
<b>SMART Aim rolling 12-Month Measurement Period (MM/DD/YYYY-MM/DD/YYYY)</b>	<b>Reporting Month</b>	<b>Numerator</b>	<b>Denominator</b>	<b>Percentage</b>
02/01/20 – 01/31/21	January	35	304	11.5%
03/01/20 – 02/28/21	February	38	310	12.3%
04/01/20 – 03/31/21	March	40	348	11.5%
05/01/20 – 04/30/21	April	42	397	10.6%
06/01/20 – 05/31/21	May	94	503	18.7%
07/01/20 – 06/30/21	June	199	642	31.0%
08/01/20 – 07/31/21	July	290	758	38.3%
09/01/20 – 08/31/21	August	384	907	42.3%
10/01/20 – 09/30/21	September	469	1078	43.5%
11/01/20 – 10/31/21	October	598	1263	47.3%
12/01/20 – 11/30/21	November	898	1750	51.3%
01/01/21 – 12/31/21	December	850	1648	51.6%



State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
*for Health Colorado, Inc. (RAE 4)*



02/01/21 – 01/31/22	January	915	1756	52.1%
03/01/21 – 02/28/22	February	982	1863	52.7%
04/01/21 – 03/31/22	March	1096	1929	56.8%
05/01/21 – 04/30/22	April	1161	1996	58.2%
06/01/21 – 05/31/22	May	1121	1983	56.5%
07/01/21 – 06/30/22	June	Not Available	Not Available	Not Available



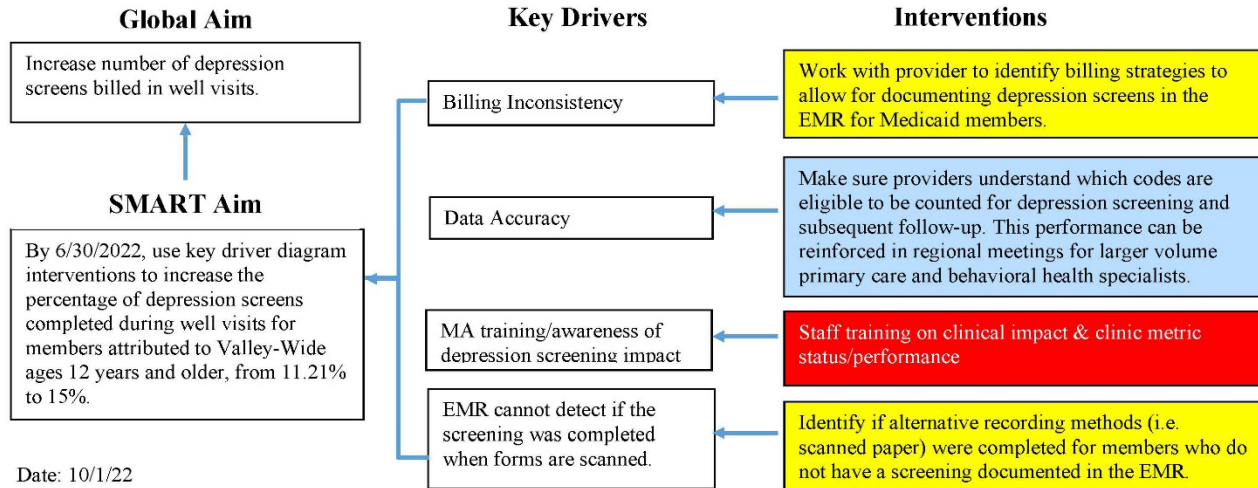
State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
 for Health Colorado, Inc. (RAE 4)



**Final Key Driver Diagrams**

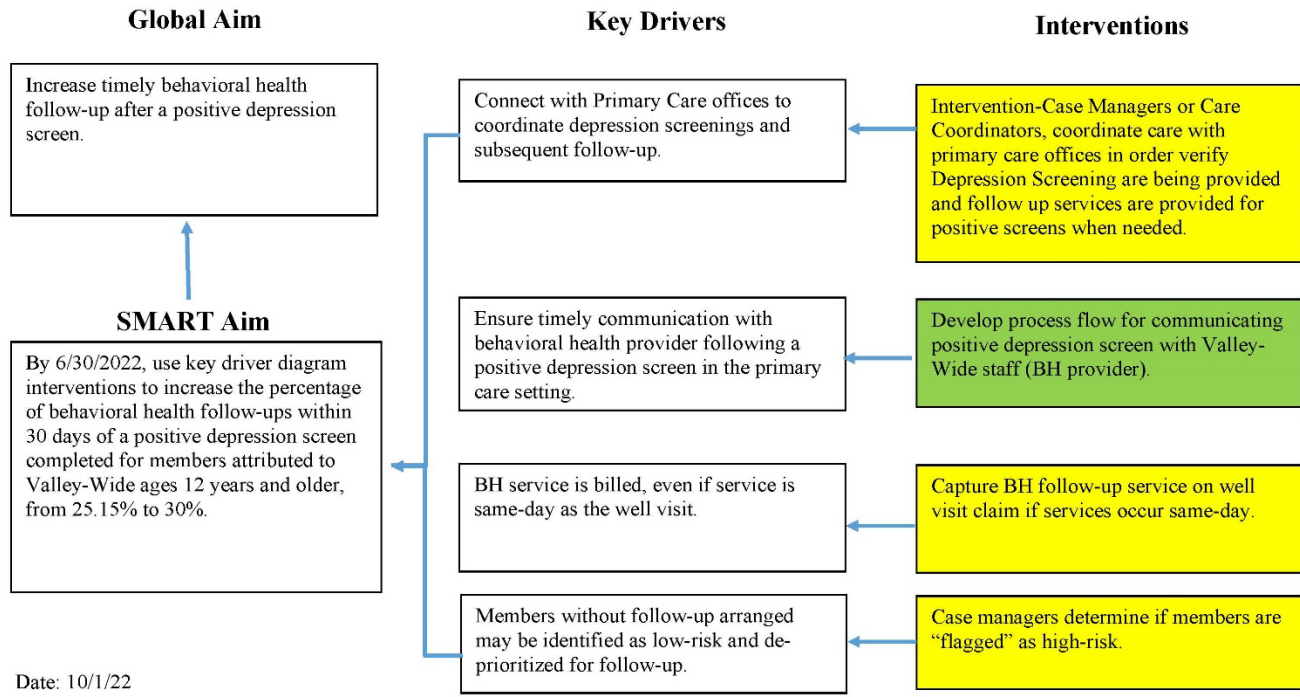
**Instructions:** In the space below, provide the updated final key driver diagrams. The MCO must use the following color-coding system in the final key driver diagrams. The MCO should ensure that one key driver diagram is provided for each outcome:  
*Depression Screening and Follow-up After a Positive Depression Screen.*

- ◆ **Green highlight** for successful adopted interventions.
- ◆ **Yellow highlight** for interventions that were adapted or not tested.
- ◆ **Red highlight** for interventions that were abandoned.
- ◆ **Blue highlight** for interventions that require continued testing.





**State of Colorado**  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
*for Health Colorado, Inc. (RAE 4)*



Date: 10/1/22



State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
for Health Colorado, Inc. (RAE 4)



### Project Conclusions

**Instructions:** In Table 2a, for *Depression Screening*, and in Table 2b, for *Follow-up After a Positive Depression Screen*, provide a description of the following:

- ◆ **Project Conclusions:** The narrative should include whether the SMART Aim goal, statistically significant, clinically significant, or programmatically significant improvement was achieved and what led to the success of the project. If the SMART Aim goal was not achieved and statistically significant improvement in the SMART Aim measure was not achieved, the narrative should describe if there was any non-statistically significant improvement demonstrated by the SMART Aim measure. If the SMART Aim goal or significant improvement was *not* achieved, the narrative should explain why improvement was not achieved and include planned changes to address the lack of improvement in future improvement projects.
- ◆ **Intervention Testing Conclusions:** Describe the intervention(s) that had the greatest impact on the SMART Aim, why the MCO came to these conclusions, and how the timing of the intervention(s) related to changes in the SMART Aim measure rate. This narrative should align with the results of the PDSA cycle(s) detailed in the PDSA worksheet(s).
- ◆ **Spread of Successful Intervention(s):** For successful intervention(s), the MCO will describe its plan for spreading the intervention(s) beyond the selected narrowed focus of the PIP.
- ◆ **Challenges Encountered:** Describe any challenges or barriers that occurred during the project and the MCO's actions to overcome or address the challenge(s) and/or barrier(s).
- ◆ **Lessons Learned/Information Gained:** Describe the knowledge and experience gained from the project. This information can prove to be highly valuable and be applied to future projects.
- ◆ **Sustainability of Improvement:** Below each table, provide a narrative description of plans for sustaining any improvement achieved beyond the SMART Aim end date.



State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
*for Health Colorado, Inc. (RAE 4)*



**Table 2a—Project Conclusions – Depression Screening**

<b>Project Conclusions</b>	<p>The SMART Aim goal was not achieved during this PIP. The data does not reveal any clinical improvement from baseline at this point in the PIP, but clinical improvements occurred. Performance has steadily returned to baseline levels from prior to the PHE. This increase may be consistent with the Valley-Wide team’s perception that increased screenings are being performed. This increase in screening rates over the past twelve (12) months should not be ignored as they indicate more screenings and opportunities to identify potential needs for intervention that could be clinically significant. In addition, the active dialog of the Behavioral Health lead at Valley-Wide regarding depression screening produced a change in clinic protocol such that depression screening would be performed at least every six (6) months rather than annually, as previously noted on Pre-visit Planning forms. This provides increased opportunities for clinical assessment of depression and potential intervention.</p> <p>Although the SMART Aim was not achieved by this PIP due to multiple challenges and operational priorities described later in this submission, programmatic improvement may have been achieved by the attention this project directed toward depression screening as demonstrated by the shift in policy to recommend screening every six (6) months. The unprecedented effects of the PHE could not be anticipated during the earliest phases of the PIP, nor could the eventual workforce challenges and Valley-Wide’s decision to implement a new EHR in late 2022 that may have resulted in the coding education intervention not being fully adopted into practice due to the imminent change to the coding workflow.</p> <p>The final month of the PIP evaluation period (June 2022) does not have data available due to it being a claims-based measure subject to a 90-day claims lag as was discussed during the Technical Assistance (TA) call with HSAG on 7/25/22.</p>
----------------------------	---



State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
 for **Health Colorado, Inc. (RAE 4)**



<p><b>Intervention Testing Conclusions</b></p>	<p>The major conclusion from intervention testing was related to the first intervention, “Staff Education and Feedback on Depression Screening Procedures.” This intervention was selected based on the team’s prioritization of the failure modes as documented in Module 2. The rationale for the intervention was supported by the team’s analysis and understanding of the process. When the intervention failed to make any impact on the Intervention Effectiveness Measure, nor any impact on the actual PIP measure, a detailed record review based on member-level reporting identified many depression screens were being performed and documented in the EHR without any G-code applied. This revealed that the failure mode, “Incorrect code used for screening,” was far more critical to target as an initial intervention to impact the outcome measure that is claims-based. Bypassing this failure mode created a situation where the potential efficacy of the intervention was not apparent in the SMART Aim performance nor the EHR-based Intervention Effectiveness measure that was reviewed.</p> <p>Following the creation of an intervention designed to target the failure mode focused on coding accuracy, initial review of the Intervention Effectiveness Measure (i.e., chart coding audit) did not reveal much impact. This was possibly due to the coders still adopting the new content into practice and the sample potentially reviewing records prior to the intervention. Subsequent performance on these audits may have revealed slight improvements in coding accuracy, but a definitive conclusion is limited by the absence of an audit baseline. In addition, the workforce challenges that were documented throughout the PDSA worksheets impacted the coding staff and that portion of the workflow will be revised and is anticipated to be built into the pending upgrade to the Valley-Wide EHR later this year. This may impact the portion of the workflow related to the Pre-visit Planning document targeted by the first intervention and will significantly revise the workflow related to flow the application of G-codes for depression screening. As a result of Valley-Wide’s preparations for the upcoming EHR transition, the team cannot conclude that either intervention was programmatically effective, yet valuable insights into the process and programmatic improvements resulted from this project.</p>
--	---





State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
*for Health Colorado, Inc. (RAE 4)*



<b>Spread of Successful Interventions</b>	<p>There is no plan to spread the intervention at this time, but there is a plan to spread the lessons from the PIP. The lessons learned as described later in this submission will be presented to the monthly HCI Quality Improvement/Utilization Management (QIUM) meeting. This interdisciplinary group from throughout the region focuses on multiple Quality Improvement activities as well as provides feedback for ongoing and future PIP efforts.</p>
<b>Challenges Encountered During Project</b>	<p>The most notable challenge during this PIP effort was the ongoing impact of the PHE. The shifting clinical demands as COVID surged and waned caused increases in walk-in encounters that strained available appointments. These same surges also caused unpredictable staff absences that forced available staff to cover additional member appointments. In a larger context, the PHE coincided with significant workforce changes (i.e., “The Great Resignation”) that reshaped the manpower available to provide care at all levels. The response to the increase in patient volume was primarily in the judgment of the clinicians providing the care as they prioritized clinical needs per their scope of practice (i.e., screenings may be deferred to address pressing presenting complaints.) The impact of episodic staff absences due to COVID that may force cross-coverage of patient loads was addressed similarly, but with active engagement and support from management to adjust available staff.</p> <p>Another challenge faced by the Valley-Wide team was the implementation of the use of tablets during patient intake screening. This new process was implemented during the PIP cycles and altered the workflows in place during the process mapping and failure mode analysis documented in Module 2. The implementation of the tablets was also nearly initiated, then put on hold due to equipment issues, and then finally implemented. These fluctuations in expectations could certainly disrupt performance as well, but clinical leaders strived to make the transition as smooth as possible through open communication. The team also adapted when there were questions regarding the potential disparities in measure specifications (e.g., dual-eligible beneficiaries). Although this group is likely small compared to the total denominator, the team’s research helped to validate the member-level data that was reviewed.</p>



State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
*for Health Colorado, Inc. (RAE 4)*



	<p>A final challenge faced by the PIP team was the difficulty of correlating the PIP measure that was claims-based with EHR reporting. Failing to locate an appropriate proxy measure to serve as an appropriate Intervention Effectiveness measure caused delays in potentially adapting the intervention sooner.</p>
<p><b>Lessons Learned/Information Gained Throughout the Project</b></p>	<p>The major lessons learned during this PIP revolved around decisions early in the process. As described above, the team’s decision to prioritize the failure mode of “MA skips PHQ-2 during check-in process without medical rationale” over “Incorrect code used for screening” resulted in a failure to see the potential impact of the intervention on the outcome measure and a delay in implementing an intervention to precisely target this claims-based outcome measure.</p> <p>Another lesson learned through this PIP concerned team composition. As the initial interdisciplinary team identified the Narrowed Focus and determined the SMART Aim goal, it was determined to be an Administrative (claims-based) measure. Despite the reliance on claims to report measure performance, the team did not fully break down the steps in the process map that result in the claim having the appropriate G-codes applied. Although there was awareness for a potential for a failure mode impacting this measure, a coder/business operations representative was not included in the active team. Including this role could have been useful during process mapping and early intervention development.</p> <p>Another lesson learned was the potential benefit of establishing a baseline for Intervention Effectiveness Measures. The final Intervention Effectiveness Measure was a manual audit and there was not available manpower to review the volume of charts required to establish baselines for the period prior to the second intervention. This made early assessment of the second intervention more challenging.</p>



State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
for Health Colorado, Inc. (RAE 4)



### **Sustainability of Improvement – Depression Screening**

**Instructions:** In the space below, describe the MCO’s plan for sustaining improvement achieved for *Depression Screening* beyond the SMART Aim end date.

The successes and gains that were realized during this PIP will be sustained through continued engagement of leadership with the Quality process and feedback. The specific interventions that were tested did not produce statistically significant improvements on the Smart AIM goal, but operational insights were achieved as the limitations of measure collection and the workforce issues altering the workflow have been described in this Module. Clinically important changes were realized as the clinic-wide policy on depression screening that was approved during this PIP will propel continued attention to the importance of depression screening and the benefits of integrated behavioral health. This policy will be reviewed per organization standards to sustain these gains. Later this year, the Valley-Wide team embarks on an upgrade to their EHR that will alter several areas of the workflows analyzed in the early stages of this PIP. Armed with the insights gained from this PIP, the team will be informed as they review both operational and quality performance measures to prioritize action and consider future process improvements projects. A final element to fuel sustainment is the annual reporting of Uniform Data Set (UDS) measures that Valley-Wide must comply with as a Federally Qualified Health Center (FQHC). Depression screening is one of the UDS measures included in these annual reports and visibility for performance is a major factor in maintaining improvements.



**State of Colorado**  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
*for Health Colorado, Inc. (RAE 4)*



**Table 2b—Project Conclusions – Follow-up after a Positive Depression Screen**

<b>Project Conclusions</b>	<p>The SMART Aim goal for this measure was achieved with performance far above the target threshold. The performance of this intervention was both statistically significant and programmatically significant. The improvement is primarily the product of engaged leadership supporting the integrated behavioral health teams and primary care medical provider (PCMP) support for this integrated model. The intervention appears to be sustainable, although potentially vulnerable to workforce challenges. The intervention has been adopted into practice. The focus on this measure also drove Valley-Wide leadership to incorporate performance on the Follow-up after a Positive Depression Screen as an incentive measure for integrated behavioral health providers (Attachment 5). This demonstrates prolonged programmatic impact into the future.</p> <p>The final month of the PIP evaluation period (June 2022) does not have data available due to it being a claims-based measure subject to a 90-day claims lag as was discussed during the Technical Assistance (TA) call with HSAG on 7/25/22. The results will be reported to all PIP team members and organizations when available.</p>
<b>Intervention Testing Conclusions</b>	<p>There was a single intervention utilized to impact the Follow-up after a Positive Depression Screen measure. The impact was outstanding as performance more than doubled the statistically significant goal established at the start of the PIP. The timing of the improvement is complicated by the Public Health Emergency (PHE) that forced a pause in the full PIP process, most notably between Modules 1 and 2. The pause in development of the intervention and testing of the intervention occurred within a clinical space that was most significantly altered by the PHE.</p> <p>The SMART Aim Run Chart shows that performance in early 2021 had fallen below the baseline that had been established from 2019 data. Performance began to improve in May 2021. This is likely reflecting the impact of COVID precautions as the Rolling 12-month methodology reflects performance from June 2020 through May 2021. These months</p>



**State of Colorado**  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
*for Health Colorado, Inc. (RAE 4)*



Table 2b—Project Conclusions – <i>Follow-up after a Positive Depression Screen</i>	
	<p>capture some of the most critical and disorienting periods of the PHE on primary care clinical operations. Routine clinical operations were unable to be conducted and only began to return toward normal in the middle of 2021, though the ongoing challenges created by the PHE are noted throughout the PDSA cycles.</p> <p>It is also noted that engagement with the Valley-Wide Clinic began for this PIP in 2020 prior to the pause. This may have raised awareness regarding a potential focus on performance measures that rely more broadly on a collaborative integrated behavioral health team. This intervention centered on cooperative and engaged interdisciplinary care between primary care and behavioral health and the benefits of that may be realized prior to the specific intervention date. The eventual approval within Cycle 3 of the clinical policy that mandates referral to behavioral health in the event of a positive depression screen will further sustain the improvements demonstrated.</p> <p>Another valuable conclusion from this PIP was understanding the potential value of EHR-based reporting options as proxies for claims-based measures. While the EHR-based reporting is likely capturing the presence of good clinical care, these measures are often not a good proxy for claims-based measures and most importantly, not good proxies for this measure that relies on a completed behavioral health encounter as follow-up. Future PIP efforts should be purposeful in determining if the desired outcome is best assessed by clinical documentation alone (EHR-based) or claims and then a valid Intervention Effectiveness Measures should be selected.</p>
<b>Spread of Successful Interventions</b>	<p>This PIP already was conducted across all clinical sites affiliated with Valley-Wide Health. The policies and workflows established to produce the clinical and programmatic improvements associated with the intervention are in use across those sites. Valley-Wide Health has an organizational structure with a Quality focus that regularly monitors performance. That committee currently is actively monitoring performance on a Uniform</p>



State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
*for Health Colorado, Inc. (RAE 4)*



Table 2b—Project Conclusions – <i>Follow-up after a Positive Depression Screen</i>	
	<p>Data Set (UDS) measure related to depression screening as evidence of the value they place on their integrated care model.</p> <p>The HCI team will be able to utilize the lessons learned from this PIP when working with other clinical sites, specifically Federally Qualified Health Centers (FQHCs), if they have opportunities for improvement within this measure. HCI currently uses a framework called the Performance Measures Action Plan (PMAP) to prioritize measures with the greatest opportunity for improvement and commit resources to the use of Process Improvement (PI) tools such as were used in this PIP to establish best practices and disseminate those interventions and/or workflows.</p> <p>HCI also has initiated a program of Practice Transformation (PT) targeting behavioral health practices. This program specifically works with behavioral health practices to teach them to utilize quality improvement tools and data-driven metrics to achieve individual practice goals. This includes optimizing practice workflows and systems, often through the use of the PDSA process. Through this program, behavioral health practices will have visibility of clinic-level performance data related to the follow-up on positive depression screening and can choose to utilize their transformed Quality Improvement structure to address opportunities.</p>
<b>Challenges Encountered During Project</b>	<p>The most notable challenge during this PIP effort was the ongoing impact of the PHE. The shifting clinical demands as COVID surged and waned caused increases in walk-in encounters that strained available appointments. These same surges also caused unpredictable staff absences that forced available staff to cover additional member appointments. In a larger context, the PHE coincided with significant workforce changes (i.e., “The Great Resignation”) that reshaped the manpower available to provide care at all levels. The data revealed that most behavioral health follow-ups that were completed occurred on the same day as the positive screening result. If staff levels resulted in a delay</p>



State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
*for Health Colorado, Inc. (RAE 4)*



Table 2b—Project Conclusions – <i>Follow-up after a Positive Depression Screen</i>	
	<p>in behavioral health being contacted until after the member departed the clinic or the on-side behavioral health clinician was unavailable, the potential to complete the behavioral health follow-up decreased significantly. The response to the increase in patient volume was primarily in the judgment of the clinicians providing the care as they prioritized clinical needs per their scope of practice (i.e., screenings may be deferred to address pressing presenting complaints.) The impact of episodic staff absences due to COVID that may force cross-coverage of patient loads was addressed similarly, but with active engagement and support from management to adjust available staff. Regarding staff shortages due to position vacancies, leadership increased recruiting efforts.</p> <p>Another challenge encountered during this project related to an upstream cause. As part of the parallel PIP effort focused on Depression Screening, it was determined that the coding for depression screening using the G-code that triggers this Follow-up PIP measure was being applied inconsistently. This resulted in the PIP measure potentially capturing only a subset of members for who behavioral health follow-up may be clinically indicated or possibly expected a follow-up for members that actually screened negative and did not require any follow-up. This challenge created potential inconsistencies in the data but did not require a response outside of the adjustments made to the Depression Screening PIP.</p>
<b>Lessons Learned/Information Gained Throughout the Project</b>	<p>All lessons learned during the period of the PHE must be viewed through the lens of unprecedented challenges. The shifting demands placed on clinicians during this time often forced priorities to be identified to meet the most pressing needs of members' care. Respect and support for those individuals is an important part of the PIP process during this period.</p> <p>Leadership engagement throughout the PIP from project development through ongoing intervention testing is essential. Including the behavioral health lead at Valley-Wide as a key team member was valuable especially given the multiple clinical sites that were</p>



State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
*for Health Colorado, Inc. (RAE 4)*



**Table 2b—Project Conclusions – *Follow-up after a Positive Depression Screen***

	<p>included in our project. Having visibility for the issues across these sites and being in a position to impact policy across all involved sites should be a factor in team composition, when possible. Engaged and supportive leadership also likely was a factor in the efficacy of this intervention as it relied heavily on integration of behavioral health clinicians with the primary care teams and communication between these groups.</p> <p>A final point learned from this PIP intervention is the importance of understanding the potential upstream influences on measure performance. The SMART AIM goal relied on appropriate use of G-codes for depression screening. While a parallel PIP effort was focused on that process and measure, the potential success of that effort directly impacted this measure. The team acknowledged that this measure may be slightly elevated due to some inconsistent coding that was identified. Future PIP efforts will need to be aware of potential upstream impacts on measure performance.</p>
--	---





State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Submission Form**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
for Health Colorado, Inc. (RAE 4)



### **Sustainability of Improvement – Follow-up after a Positive Depression Screen**

**Instructions:** In the space below, describe the MCO's plan for sustaining improvement achieved for *Follow-up After a Positive Depression Screen* beyond the SMART Aim end date.

This PIP already was conducted across all clinical sites affiliated with Valley-Wide Health. The policies and workflows established to produce the clinical and programmatic improvements associated with the intervention are in use across those sites. Valley-Wide Health has an organizational structure with a quality focus that regularly monitors performance. That committee currently is actively monitoring performance on a Uniform Data Set (UDS) measure related to depression as evidence of the value they place on their integrated care model.

The Valley-Wide clinics also have primary care Practice Transformation (PT) coaches that work with them monthly to assist with process improvement (PI) and performance measure issues. These coaches are trained in the methods of PI, including process mapping and Failure Modes and Effects Analysis (FMEA) as was used during this PIP to refine workflows. The primary care PT coaches may focus on the screening and referral workflows, while the behavioral health PT coach may focus more on receipt of referrals and maintaining access to care to accommodate these referrals. A final element for sustainment is the annual reporting of Uniform Data Set (UDS) measures that Valley-Wide must comply with as a Federally Qualified Health Center (FQHC). Follow-up of Positive Depression Screening is one of the UDS measures included in these annual reports and although the specifications for this measure differ slightly from this PIP, Behavioral Health involvement at the time of the positive screen helps meet this measure due to documentation procedures used by Valley-Wide. Visibility for performance is a major factor in maintaining improvements.

Valley-Wide will also continue to partner with Health Colorado (HCI) as monthly performance is monitored specifically on Follow-up After a Positive Depression Screen as part of the Behavioral Health Incentive Program (BHIP) measures. HCI has data visualization tools available to monitor clinic-level performance on this measure and is available for ongoing consultation if adverse trends are identified.



## Appendix B. Module Validation Tool

Appendix B contains the Module Validation Tool provided by HSAG.



State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Validation Tool**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
 for Health Colorado, Inc. – RAE 4



Criteria	Score	HSAG Feedback and Recommendations
1. The rolling 12-month data collection methodology was followed for the SMART Aim measures for the duration of the PIP.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> Not Applicable	
2. The MCO provided evidence to demonstrate at least one of the following: <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> The SMART Aim goal was achieved.</li> <li><input checked="" type="checkbox"/> Statistically significant improvement over the narrowed focus baseline percentage was achieved (95 percent confidence level, <math>p &lt; 0.05</math>.)</li> <li><input type="checkbox"/> Non-statistically significant improvement in the SMART Aim measure.</li> <li><input checked="" type="checkbox"/> Significant <i>clinical</i> improvement in processes and outcomes.</li> <li><input checked="" type="checkbox"/> Significant <i>programmatic</i> improvement in processes and outcomes.</li> </ul>	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> Not Applicable	<p>For <i>Depression Screening</i>:</p> <ul style="list-style-type: none"> <li>Significant <i>programmatic</i> improvement was demonstrated for the <i>Staff Education and Feedback on Depression Screening Procedures</i> intervention.</li> </ul> <p>For <i>Follow-up After a Positive Depression Screen</i>:</p> <ul style="list-style-type: none"> <li>The SMART Aim goal was achieved.</li> <li>Statistically significant improvement over baseline was achieved.</li> <li>Significant <i>programmatic</i> and significant <i>clinical</i> improvement were demonstrated for the <i>Provider Education on Integrated Care Delivery Following Positive Depression Screening</i> intervention.</li> </ul>



State of Colorado  
**Performance Improvement Project (PIP)**  
**Module 4 — PIP Conclusions Validation Tool**  
*Depression Screening and Follow-up After a Positive Depression Screen*  
*for Health Colorado, Inc. – RAE 4*



Criteria	Score	HSAG Feedback and Recommendations
3. If improvement, as outlined for Criterion 2, was demonstrated, at least one of the tested interventions could reasonably result in the demonstrated improvement.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> Not Applicable	
4. The MCO completed the Plan-Do-Study-Act (PDSA) worksheets with accurately reported data and interpretation of testing results.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> Not Applicable	
5. The narrative summaries of the project conclusions were complete and accurate.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> Not Applicable	
6. If improvement, as outlined for Criterion 2, was demonstrated, the MCO documented plans for sustaining improvement beyond the SMART Aim end date.	<input checked="" type="checkbox"/> Met <input type="checkbox"/> Partially Met <input type="checkbox"/> Not Met <input type="checkbox"/> Not Applicable	



State of Colorado  
Performance Improvement Project (PIP)  
Module 4 — PIP Conclusions Validation Tool  
*Depression Screening and Follow-up After a Positive Depression Screen*  
for Health Colorado, Inc. – RAE 4



**Based on the validation findings, HSAG determined the following confidence level for this PIP:**

- High confidence:** The PIP was methodologically sound, the SMART Aim goals, statistically significant, clinically significant, or programmatically significant improvements were achieved for both measures, at least one tested intervention for each measure could reasonably result in the demonstrated improvement, and the MCO accurately summarized the key findings and conclusions.
- Moderate confidence:** The PIP was methodologically sound, at least one tested intervention could reasonably result in the demonstrated improvement, and at least one of the following occurred:
- The SMART Aim goal, statistically significant, clinically significant, or programmatically significant improvement was achieved *for only one measure* and the MCO accurately summarized the key findings and conclusions.
  - Non-statistically significant improvement in the SMART Aim measure was achieved *for at least one measure* and the MCO accurately summarized the key findings and conclusions.
  - The SMART Aim goal, statistically significant, non-statistically significant, clinically significant, or programmatically significant improvement was achieved *for at least one measure*; however, the MCO *did not* accurately summarize the key findings and conclusions.
- Low confidence:** One of the following occurred:
- The PIP was methodologically sound. However, no improvement was achieved for either measure during the PIP. The SMART Aim goals *were not* met, statistically significant improvement *was not* demonstrated, non-statistically significant improvement *was not* demonstrated, significant clinical improvement *was not* demonstrated, and significant programmatic improvement *was not* demonstrated.
  - The PIP was methodologically sound. The SMART Aim goal, statistically significant, non-statistically significant, clinically significant, or programmatically significant improvement was achieved *for at least one measure*; however, *none* of the tested interventions could reasonably result in the demonstrated improvement.
  - The rolling 12-month data collection methodology was followed for only one of two SMART Aim measures for the duration of the PIP.
- No confidence:** The SMART Aim measure methodology and/or approved rapid-cycle PIP methodology/process *was not* followed through the SMART Aim end date.



State of Colorado  
Performance Improvement Project (PIP)  
Module 4 — PIP Conclusions Validation Tool  
*Depression Screening and Follow-up After a Positive Depression Screen*  
for Health Colorado, Inc. – RAE 4



**Summary of Validation Findings:**

HSAG assigned a level of *High Confidence* to the PIP based on the Module 4 submission form and PDSA worksheet documentation. The documentation demonstrated the following:

- Significant improvement achieved for both *Depression Screening* and *Follow-up After a Positive Depression Screen*:
  - While statistically significant improvement was not demonstrated for the *Depression Screening* measure, documented intervention testing results demonstrated significant *programmatic* improvement related to depression screening.
  - Both the SMART Aim goal and statistically significant improvement were achieved for *Follow-up After a Positive Depression Screen*.
  - Documented intervention testing results also demonstrated significant *programmatic* improvement and significant *clinical* improvement related to follow-up care.
- Interventions were carried out and evaluated according to the approved Module 3 plan and the health plan provided accurate intervention testing results, clear rationale for intervention or evaluation revisions, and actionable summaries of lessons learned from intervention testing
- Clear and accurate summaries of key findings and conclusions from the PDSA cycles and from the project, overall.