COLORADO
Department of Health Care Policy & Financing

Colorado Accountable Care Collaborative

Fiscal Year 2017–2018 PIP Validation Report

Medical Respite Care for Homeless RCCO Members Discharged from Hospital Inpatient Stay

for

Community Health Partnership (Region 7)

April 2018

For Validation Year 4

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

HSAG HEALTH SERVICES ADVISORY GROUP

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1. Background

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

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

As one of the mandatory external quality review activities under the BBA, the Department is required to validate the PIPs. To meet this validation requirement, the Department contracted with Health Services Advisory Group, Inc. (HSAG), as the external quality review organization. The primary objective of the PIP validation is to determine compliance with requirements set forth in the Code of Federal Regulations (CFR) at 42 CFR 438.330(d), including:

- Measurement of performance using objective quality indicators.
- Implementation of system interventions to achieve improvement in quality.
- Evaluation of the effectiveness of the interventions.
- Planning and initiation of activities to increase or sustain improvement.

In its PIP evaluation and validation, HSAG used the Department of Health and Human Services, Centers for Medicare & Medicaid Services (CMS) publication, *EQR Protocol 3: Validating Performance Improvement Projects (PIPs): A Mandatory Protocol for External Quality Review (EQR)*, Version 2.0, September 2012.[1-1]

[1-1] Department of Health and Human Services, Centers for Medicare & Medicaid Services. *EQR Protocol 3: Validating Performance Improvement Projects (PIPs): A Mandatory Protocol for External Quality Review (EQR)*, Version 2.0, September 2012. Available at: https://www.medicaid.gov/medicaid/quality-of-care/medicaid-managed-care/external-quality-review/index.html. Accessed on: Jul 18, 2017.

HSAG evaluates the following components of the quality improvement process:

1. The technical structure of the PIPs to ensure the RCCO designed, conducted, and reported PIPs using sound methodology consistent with the CMS protocol for conducting PIPs. HSAG's review determined whether a PIP could reliably measure outcomes. Successful execution of this component ensures that reported PIP results are accurate and capable of measuring real and sustained improvement.
2. The outcomes of the PIPs. Once designed, a PIP's effectiveness in improving outcomes depends on the systematic identification of barriers and the subsequent development of relevant interventions. Evaluation of each PIP's outcomes determined whether the RCCO improved its rates through the implementation of effective processes (i.e., barrier analyses, intervention design, and evaluation of results) and, through these processes, achieved statistically significant improvement over the baseline rate. Once statistically significant improvement is achieved across all study indicators, HSAG evaluates whether the RCCO was successful in sustaining the improvement. The goal of HSAG's PIP validation is to ensure that the Department and key stakeholders can have confidence that reported improvement in study indicator outcomes is supported by statistically significant change and the RCCO's improvement strategies.

PIP Rationale

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

For fiscal year (FY) 2017–2018, **Community Health Partnership** (**CHP**) continued its ***Medical Respite Care for Homeless RCCO Members Discharged from Hospital Inpatient Stay*** PIP. The topic selected addressed CMS' requirements related to quality outcomes—specifically, access to care and services.

PIP Summary

For the FY 2017–2018 validation cycle, the PIP received an overall validation score of 95 percent and a *Not Met* validation status. The focus of the PIP is to reduce all-cause readmissions within 90 days of inpatient discharge among homeless members. The PIP had one study question that **CHP** stated: "Does providing medical respite care to homeless RCCO Medicaid clients decrease the percentage of all-cause readmissions within 90 days of inpatient discharge?" The following table describes the study indicator for this PIP.

Table 1–1—Study Indicator

PIP Topic	Study Indicator
Medical Respite Care for Homeless RCCO Members Discharged from Hospital Inpatient Stay	The total number of all-cause readmissions within 90 days of hospital discharge to a medical respite program among homeless members.

Validation Overview

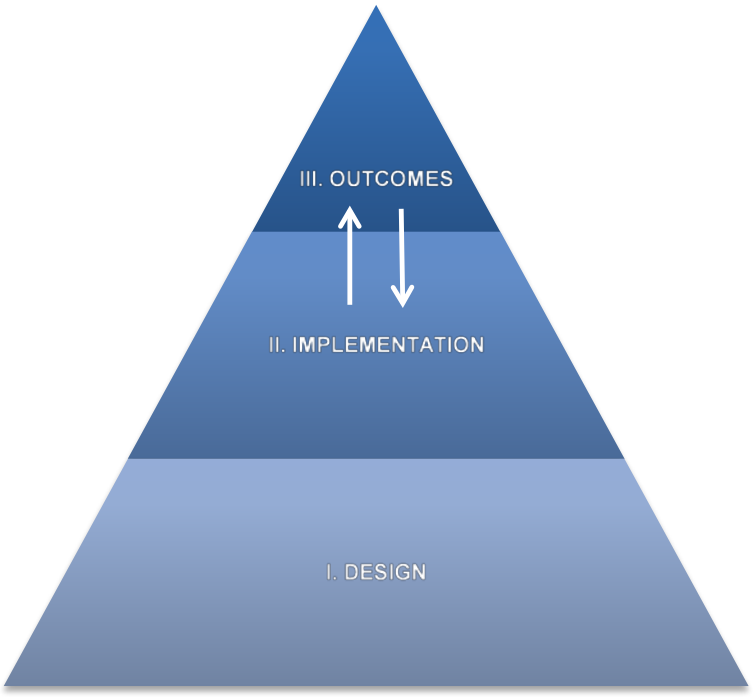
HSAG obtained the information needed to conduct the PIP validation from **CHP**'s PIP Summary Form. This form provided detailed information about the RCCO's PIP related to the activities completed and HSAG evaluated for the FY 2017–2018 validation cycle.

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

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

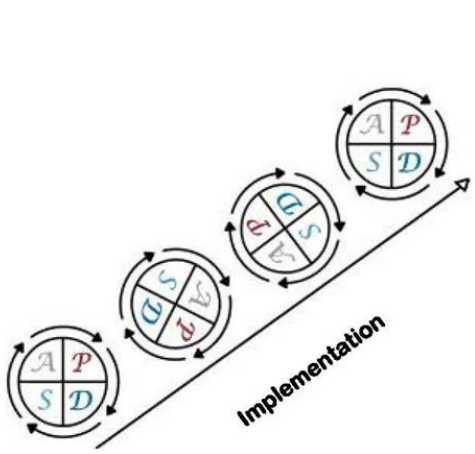
Figure 1–1 illustrates the three study stages of the PIP process—i.e., Design, Implementation, and Outcomes. Each sequential stage provides the foundation for the next stage. The Design stage establishes the methodological framework for the PIP. The activities in this section include development of the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

Figure 1–1—PIP Stages



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

Figure 1–2—PIP Stages Incorporating the PDSA Cycle



The PDSA cycle includes the following actions:

- **P**lan—conduct barrier analyses; prioritize barriers; develop targeted intervention(s) to address barriers; and develop an intervention evaluation plan for each intervention
- **D**o—implement intervention; track and monitor the intervention; and record the data
- **S**tudy—analyze the data; compare results; and evaluate the intervention's effectiveness
- **A**ct—based on the evaluation results, standardize, modify, or discontinue the intervention

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

2. Findings

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

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

RCCOs have the opportunity to resubmit the PIP after HSAG's initial validation to address any deficiencies identified. The PIP received a *Met* score for 81 percent of the applicable evaluation elements and received a *Not Met* overall validation status when originally submitted. The RCCO had the opportunity to receive technical assistance, incorporate HSAG's recommendations, and resubmit the PIP. After resubmission, the RCCO improved the validation percentages; however, due to the lack of statistically significant improvement, the overall validation status remained *Not Met*.

Table 2–1—FY 2017–2018 Performance Improvement Project Validation for Community Health Partnership—Region 7

Name of Project	Type of Annual Review[1]	Percentage Score of Evaluation Elements *Met*[2]	Percentage Score of Critical Elements *Met*[3]	Overall Validation Status[4]
Medical Respite Care for Homeless RCCO Members Discharged from Hospital Inpatient Stay	Submission	81%	82%	*Not Met*
	Resubmission	95%	91%	*Not Met*

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

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

[3] **Percentage Score of Critical Elements *Met***—The percentage score of critical elements *Met* is calculated by dividing the total critical elements *Met* by the sum of the critical elements *Met*, *Partially Met*, and *Not Met*.

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

Validation Findings

Table 2–2 displays the validation results for the **CHP** PIP validated during FY 2017–2018. This table illustrates the RCCO'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 fourth validation year for the PIP with HSAG validating Activities I through IX.

Table 2–2—Performance Improvement Project Validation Results for Community Health Partnership—Region 7

Stage	Activity		Percentage of Applicable Elements		
			Met	*Partially Met*	*Not Met*
Design	I.	Appropriate Study Topic	100% (2/2)	0% (0/2)	0% (0/2)
	II.	Clearly Defined, Answerable Study Question(s)	100% (1/1)	0% (0/1)	0% (0/1)
	III.	Correctly Identified Study Population	100% (1/1)	0% (0/1)	0% (0/1)
	IV.	Clearly Defined Study Indicator(s)	100% (2/2)	0% (0/2)	0% (0/2)
	V.	Valid Sampling Techniques (if sampling was used)	*Not Applicable*	*Not Applicable*	*Not Applicable*
	VI.	Accurate/Complete Data Collection	100% (3/3)	0% (0/3)	0% (0/3)
Design Total			**100% (9/9)**	**0% (0/9)**	**0% (0/9)**
Implementation	VII.	Sufficient Data Analysis and Interpretation	100% (3/3)	0% (0/3)	0% (0/3)
	VIII.	Appropriate Improvement Strategies	100% (6/6)	0% (0/6)	0% (0/6)
Implementation Total			**100% (9/9)**	**0% (0/9)**	**0% (0/9)**
Outcomes	IX.	Real Improvement Achieved	67% (2/3)	0% (0/3)	33% (1/3)
	X.	Sustained Improvement Achieved	*Not Assessed*	*Not Assessed*	*Not Assessed*
Outcomes Total			**67% (2/3)**	**0% (0/3)**	**33% (1/3)**
Percentage Score of Applicable Evaluation Elements *Met*			**95% (20/21)**	**0% (0/21)**	**5% (1/21)**

Overall, 95 percent of all applicable evaluation elements validated received a score of *Met*.

Design

CHP 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. The RCCO performed well in this stage of the PIP as evidenced by the 100 percent of evaluation elements *Met.*

Implementation

CHP reported and interpreted its first remeasurement data accurately. The RCCO completed a causal/barrier analysis using appropriate quality improvement tools and prioritized its barriers, which led to the implementation of interventions that had a positive impact on the study indicator outcomes. The RCCO also performed well in this stage of the PIP as evidenced by the 100 percent of evaluation elements *Met.*

Outcomes

CHP progressed to reporting Remeasurement 1 data. The study indicator results demonstrated improvement over the baseline; however, this improvement was not statistically significant. **CHP** was successful at exceeding its set goal.

Analysis of Results

Table 2–3 displays Remeasurement 1 for **CHP**'s ***Medical Respite Care for Homeless RCCO Members Discharged from Hospital Inpatient Stay*** PIP. **CHP** set a Remeasurement 2 goal to reduce the 90-day all-cause hospital readmission rate by 3 percentage points to a rate of 23.0 percent.

Table 2–3—Performance Improvement Project Outcomes for Community Health Partnership—Region 7

PIP Study Indicator	Baseline Period (7/1/2015–6/30/2016)	Remeasurement 1 (7/1/2016–6/30/2017)	Remeasurement 2 (7/1/2017–6/30/2018)	Sustained Improvement
The rate of all-cause readmissions within 90 days of hospital discharge to a medical respite program among homeless members.	42.5%	26.0%	*Not Assessed*	*Not Assessed*

The baseline 90-day all-cause readmission rate for homeless members who were discharged from a hospital inpatient stay to a medical respite program was 42.5 percent. The RCCO set a goal for the

Remeasurement 1 period to decrease the readmission rate by 3 percentage points to 39.5 percent. This is an inverse study indicator; therefore, a lower rate is better.

The first remeasurement rate for the 90-day all-cause readmission rate for homeless members who were discharged from a hospital inpatient stay to a medical respite program was 26.0 percent. This rate was 16.5 percentage points below the baseline and exceeded the goal of 39.5 percent. The improvement over the baseline was not statistically significant, as evidenced by a *p* value of 0.1185. The RCCO set a goal of decreasing the readmission rate by 3 percentage points, to 23.0 percent.

Barriers/Interventions

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

For the ***Medical Respite Care for Homeless RCCO Members Discharged from Hospital Inpatient Stay*** PIP, **CHP** used a fishbone diagram and failure modes and effects analysis (FMEA) to identify and prioritize barriers related to reducing readmissions among homeless members. Identified barriers include:

- Members' insufficient length of stay in Ascending to Health Respite Care (ATHRC).
- Lack of comprehensive, detailed ATHRC policies and procedures and documentation.
- Social determinants affecting the members.
- Lack of proper documentation in the electronic record platform.
- Lack of coordination of care delegation between Peak Vista and Community Care.
- Lack of partnership with appropriate agencies.

To address these barriers, **CHP** implemented the following interventions:

- Amended the contract with ATHRC to remove the limitation of a 14-day respite care stay to RCCO homeless members discharged from an inpatient hospital stay. Emphasis is no longer on bed days, but rather on each individual member served monthly.
- Added evening/overnight staff members to support and monitor referrals and member discharges during afterhours.
- Assigned a primary care coordinator or manager to each member.
- Developed individualized health and wellness goals for members toward completion of the program.
- Provided several paths for electronic documentation and health integration with the RCCO's care coordination platform.
- Collaborated with ATHRC and the local federally qualified health center (FQHC) to provide homeless primary medical care, and developed a referral plan to avoid duplication of services.

- Monthly outreach is conducted by a care coordinator with the ATHRC founder and CEO at the homeless day centers and homeless community campsites to support and educate on the importance of primary medical care, behavioral health care, and other outpatient care supports.
- Provided resources to ATRHC of local non-emergent medical transportation companies to assist members enrolled in ATHRC with transportation to primary care and specialty care appointments.
- ATHRC staff members complete CAGE questionnaire with every member admitted at intake to evaluate for substance abuse and set up needed support services and goal setting.
- ATHRC developed a community housing referral process with local housing agencies to assess using the VI-SPDAT housing vulnerability index to successfully connect ATHRC enrolled members to housing agencies and waiting lists.

3. Conclusions and Recommendations

Conclusions

CHP designed a methodologically sound project and performed well in the design and implementation stages of the project meeting all documentation requirements. **CHP** accurately reported and summarized the study indicator results and used appropriate quality improvement methods and processes to identify and prioritize barriers. The interventions implemented were logically linked to the barriers and had a positive impact on the study indicator.

Recommendations

HSAG recommends the following:

- **CHP** should continue to evaluate the effectiveness of each individual intervention and make changes, as necessary.
- **CHP** should develop a plan to spread and sustain the improvement achieved during the PIP process.