



**Medicaid Managed Care Organization  
Performance Improvement Project Validation  
Annual Report  
Measurement Year 2021**

Submitted January 2023

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## Performance Improvement Project Validation

### 2022 Maryland HealthChoice Annual Report

#### Introduction and Overview

The Maryland Department of Health (MDH) is responsible for the evaluation of the quality of care provided to Medical Assistance enrollees in the HealthChoice program. To ensure the services provided meet acceptable standards for quality, access, and timeliness of care, MDH contracts with Qlarant to serve as the external quality review organization (EQRO). As part of the external quality review (EQR), Qlarant completes an annual evaluation of Performance Improvement Projects (PIPs) conducted by the Managed Care Organizations (MCOs).

PIPs are designed to achieve significant improvement, sustained over time, in clinical care and non-clinical care areas. Projects are expected to have a favorable effect on health outcomes and enrollee satisfaction. PIPs must be designed, conducted, and reported in a methodologically sound manner. Qlarant uses the *Centers for Medicare & Medicaid Services (CMS) Protocol 1, Validation of Performance Improvement Projects*, as a guideline in PIP review activities<sup>1</sup>.

HealthChoice MCOs conduct two PIPs annually. As designated by MDH, the MCOs continued the Asthma Medication Ratio (AMR) PIP and the Lead Screening PIP that replaced the Controlling High Blood Pressure PIP in 2018. Calendar year (CY) 2022 is the final measurement year (MY) for the AMR PIP and Lead Screening PIP. AMR and Lead PIPs were continued from 2018 through 2021 due to low performance improvements and minimal effects on AMR and Lead Screening rates from MCOs in repeat measurement years. This report summarizes the findings from the validation of both PIPs. The MCOs who conducted PIPs in 2022 are identified below.

- Aetna Better Health (ABH)
- AMERIGROUP Community Care (ACC)
- Jai Medical Systems, Inc. (JMS)
- CareFirst Community Health Plan (CFCHP)
- Kaiser Permanente of the Mid-Atlantic States, Inc. (KPMAS)
- Maryland Physicians Care (MPC)
- MedStar Family Choice, Inc. (MSFC)
- Priority Partners (PPMCO)
- UnitedHealthcare Community Plan (UHC)

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<sup>1</sup> [CMS EQRO Protocols](#)

## PIP Validation Methodology

Qlarant reviews each PIP to assess the MCO's PIP methodology and perform an overall validation of PIP results. Qlarant completes these activities in a manner consistent with the *CMS EQR Protocol 1 – Validation of Performance Improvement Projects*. The nine PIP review steps and Qlarant's approach are described in Table 1:

**Table 1. Nine–Step Review Process**

Step 1. Topic	
The study topic selected must be appropriate and relevant to the MCO's population.	Qlarant determines if the PIP topic targets an opportunity for improvement and is relevant to the MCO's population. This includes reviewing the study topic/project rationale and looking for demographic characteristics, prevalence of disease, and potential consequences (risks) of disease. MCO-specific data must support the study topic and demonstrate the need for the PIP. MDH selects the topic for the PIP.
Step 2. Aim Statement	
The aim statement must be clear, concise, measurable, and answerable.	Qlarant evaluates the adequacy of the PIP aim statement, which should frame the project and define the improvement strategy, population, and time period. MDH selects the aim statement for the PIP.
Step 3. Identified Population	
The study population must reflect all individuals to whom the study questions and indicators are relevant.	Qlarant determines whether the MCO identifies the PIP population in relation to the aim statement.
Step 4. Sampling Method	
The sampling method must be valid and protect against bias.	If the MCO studied a sample of the population rather than the entire population, Qlarant assesses the appropriateness of the MCO's sampling technique. When the MCO studies the entire population, this step is not necessary.
Step 5. Performance Measures and Population	
The performance measures should be appropriate, measurable, and relative to the study population.	Qlarant assesses whether the selected PIP variables are appropriate for measuring and tracking improvement. Performance measures should be objective and measurable, clearly defined, based on current clinical knowledge or research, and focused on member outcomes.

Step 6. Data Collection Procedures	
The data collection procedures must use a systematic method of collecting valid and reliable data.	Qlarant evaluates the validity and reliability of MCO procedures used to collect the data informing PIP measurements.
Step 7. Data Analysis and Interpretation of Results	
The study findings, or results, must be accurately and clearly stated.	Qlarant assesses the quality of data analysis and interpretation of PIP results. The review determines whether appropriate techniques were used and if the MCO’s analysis and interpretation were accurate. A comprehensive quantitative and qualitative analysis is required for each project indicator. In the quantitative analysis, current performance compared to baseline and previous measurements are assessed. Performance is also evaluated against goals/benchmarks. The qualitative analysis focuses more on the project’s level of success and identified barriers, and provides an assessment of interventions. Each intervention utilizes the continuous quality improvement process using Plan-Do-Study-Act (PDSA) analysis to determine whether the intervention is achieving the desired outcome. This analysis reflects the study findings and includes a description of the rationale to continue, discontinue, or alter the planned activity.
Step 8. Improvement Strategies (Interventions)	
The improvement strategies, or interventions, must be reasonable and address barriers on a system level.	Qlarant assesses the appropriateness of interventions for achieving improvement. Each intervention is assessed to ensure that barriers are addressed. Interventions are expected to be multi-faceted and produce permanent change. Effective interventions are tailored using specific, measurable, achievable, relevant, and time-oriented (SMART) objectives designed for the priority population. Interventions use upstream approaches, such as policy reforms, workflow changes, and resource investments.

Step 9. Significant and Sustained Improvement	
The project results must demonstrate real improvement.	Qlarant evaluates improvement by validating statistical significance testing results and evaluating improvement compared to baseline performance. Improvement should also be linked to interventions and based on desired outcomes, as opposed to an unrelated occurrence or solely a participation tally. This assessment is correlated to Step 8, Improvement Strategies. If interventions are assessed as reasonable and expected to improve outcomes, then the improvement is correlated to the project's interventions. Sustained improvement is assessed after the second remeasurement has been reported. Results are compared to baseline to confirm consistent and sustained improvement.

## Rapid Cycle PIP Process

Beginning with the Lead Screening PIP, any new PIPs will use the Rapid Cycle PIP Process to provide MCOs with a quality improvement method that identifies, implements, and measures changes over short periods. This PIP process aligns with the CMS EQR PIP Validation Protocol. Qlarant assists the MCOs in the Rapid Cycle PIP process and breaks down the process into manageable steps based on the PIP development and implementation requirements:

1. **Develop an appropriate project rationale** based on supporting MCO data.
2. **Develop clear and measurable study questions/aim statements.**
3. **Identify performance measures** that address the project rationale and reflect the study question/aim statement. Our performance measurement and performance improvement team works collaboratively to ensure MCOs have the right performance measures and data collection methodologies in place to facilitate accurate and valid performance measure reporting.
4. **Identify barriers**, including enrollee, provider, and MCO barriers.
5. **Develop sustainable improvement strategies** or interventions that include key stakeholders and address the identified barriers.
6. **Measure, assess, and analyze the impact of the interventions.** MCOs must measure performance frequently (such as on a monthly or quarterly basis). Using performance measure results, it is critical to study intervention outcomes to determine which interventions may be effective and which interventions may need to be modified, replaced, or eliminated. Ultimately, the MCO should be able to assess how the intervention impacts the study indicator(s).

The Rapid Cycle PIP approach is continuous and allows the MCOs to monitor their improvement efforts over short time periods (monthly or quarterly). Frequent monitoring allows for quick modifications when necessary. The ultimate goal is for MCOs to improve performance in a short amount of time and sustain improvement resulting in a long-term, positive impact on enrollee health outcomes.

## PIP Scoring Methodology

Qlarant rates each component within a step as *Met (M)*, *Partially Met (PM)*, *Unmet (UM)*, or *Not Applicable (N/A)*, which results in an assigned score as defined in Table 2 below. A final assessment is made for all nine steps, with numeric scores provided for each component and step of the validation process. Each component assessed within each step is of equal value. A description of the rating and the associated score follows:

**Table 2. Rating Scale for PIP Validation**

Rating	Criteria	Score
Met (M)	All required components are present	100%
Partially Met (PM)	At least one, but not all components are present	50%
Unmet (UM)	None of the required components are present	0%
Not Applicable (N/A)	None of the components are applicable	N/A

Qlarant PIP reviewers evaluate the results of each step in the review process by answering a series of applicable questions, consistent with protocol requirements. Reviewers seek additional information and/or corrections from MCOs when needed during the evaluation.

Each component assessed within each step is of equal value. The total of all steps provide the PIP validation score that is used to evaluate whether the PIP is designed, conducted, and reported in a sound manner and determine the degree of confidence a state agency can have in reported results. Qlarant evaluates confidence levels based on the PIP Validation scores as follows in Table 3.

**Table 3. Confidence Levels**

MCO Reported Results	PIP Validation Score
High Confidence	90%-100%
Confidence	75%-89%
Low Confidence	60%-74%
Not Credible	59% or lower

## PIP Data Overview

PIP validation activities conducted by the EQRO included a detailed review of completed MCO questionnaires submitted for each PIP. Each PIP-specific questionnaire was developed by the EQRO based upon the nine steps required by the CMS EQR PIP Validation Protocol. Since both PIPs were selected by MDH, Steps 1-5 were pre-populated in the questionnaire. Completion of all questions related to Steps 6 through 9, as described above in Table 1, were required of each MCO.

## PIP Validation Results

This section presents an overview of the findings from the validation activities completed for each PIP submitted by the MCOs. Each MCO's PIP was reviewed against all applicable components contained within the nine steps. Recommendations for each step that did not receive a *Met* rating follow each MCO's results in this report.

### AMR PIPs

All AMR PIPs focused on increasing the percentage of enrollees 5-64 years of age who were identified as having persistent asthma and had a ratio of controller medications to total asthma medications of 0.50 or greater during the measurement year, according to HEDIS<sup>®2</sup> technical specifications.

### AMR PIP Interventions Implemented

It is important to note, many interventions were placed on hold during MY 2020 and 2021 due to the COVID-19 public health emergency and are therefore not included in the lists below.

Although there was an absence or limited analysis of the effectiveness of interventions, the MCOs determined the following interventions were effective:

- Distribution of Provider HEDIS Gaps in Care Reports to providers
- Enhanced pharmacy benefits

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<sup>2</sup> HEDIS<sup>®</sup> is a registered trademark of the National Committee for Quality Assurance (NCQA).

- Provider outreach of 90-Day Controller Conversion Program where members are offered asthma controller medications at a 90-Day supply
- Health education on long term medication adherence
- Vendor administered Health video-based medication adherence program
- Outreach education from both pharmacists and technicians
- Biweekly review of Controller Medication Refills- feedback review
- Controlling excessive fills for Albuterol
- Outreach to non-compliant members, their providers, and pharmacies to coordinate controller medication refills
- COVID-19 Vaccinations for AMR members

The MCOs provided some examples of interventions determined to be ineffective in achieving goals/improvement:

- Vendor administered pharmacy program “syncing” medications to avoid multiple monthly pick-ups
- Multi-Dose Pack Program through MCO pharmacy vendor
- Clinical Outreach Programs
- Targeted telephonic health coaching
- Pharmacy point of service edit for contacting prescribers when a member was filling a rescue inhaler without a controller medication
- Disease management program
- Asthma Action Plan outreach
- Provider lists of members who were eligible but did not meet the AMR measure criteria

Below are examples of interventions implemented by the MCOs that were not specifically evaluated for effectiveness or were not specifically attributed to improvement for the AMR PIPs:

- Albuterol Safety Program- encouraging providers to develop an asthma action plan for members receiving too little controller therapy
- Provider care opportunity report
- Health education and outreach, addressing enrollees who meet specific criteria
- Health coaches
- Provider education
- Monthly texting campaign with reminders to adhere to controller medication regimens and schedule follow-up appointments with their primary care provider (PCP)
- Medication Adherence Alerts
- Transportation for office appointments and prescription needs

## AMR PIP Identified Barriers

Annually, the HealthChoice MCOs perform a barrier analysis to identify root causes, barriers to optimal performance, and potential opportunities for improvement. The annual analysis identifies barriers to care for enrollees, providers, and the MCOs. Common barriers across all or the majority of MCOs for the AMR PIP were identified as follows.

### Enrollee Barriers:

- Knowledge deficits
- Lack of medication adherence
- Lack of follow-up with PCP or asthma specialist after emergency department visit or inpatient stay
- Cultural practices, beliefs, and values
- Lack of transportation for office appointments and prescription needs
- Cost associated with multiple medications

### Provider Barriers:

- Lack of awareness of patient emergency department visits for asthma
- Lack of resources to provide member education and outreach
- Lack of awareness of medication usage patterns and controller adherence
- Inconsistent application of clinical practice guidelines
- Lack of knowledge of the MCO formulary
- Knowledge deficit of MCO resources/initiatives to assist with enrollee compliance
- Knowledge deficits relating to appropriate asthma treatment
- COVID-19 staffing shortages and office closures

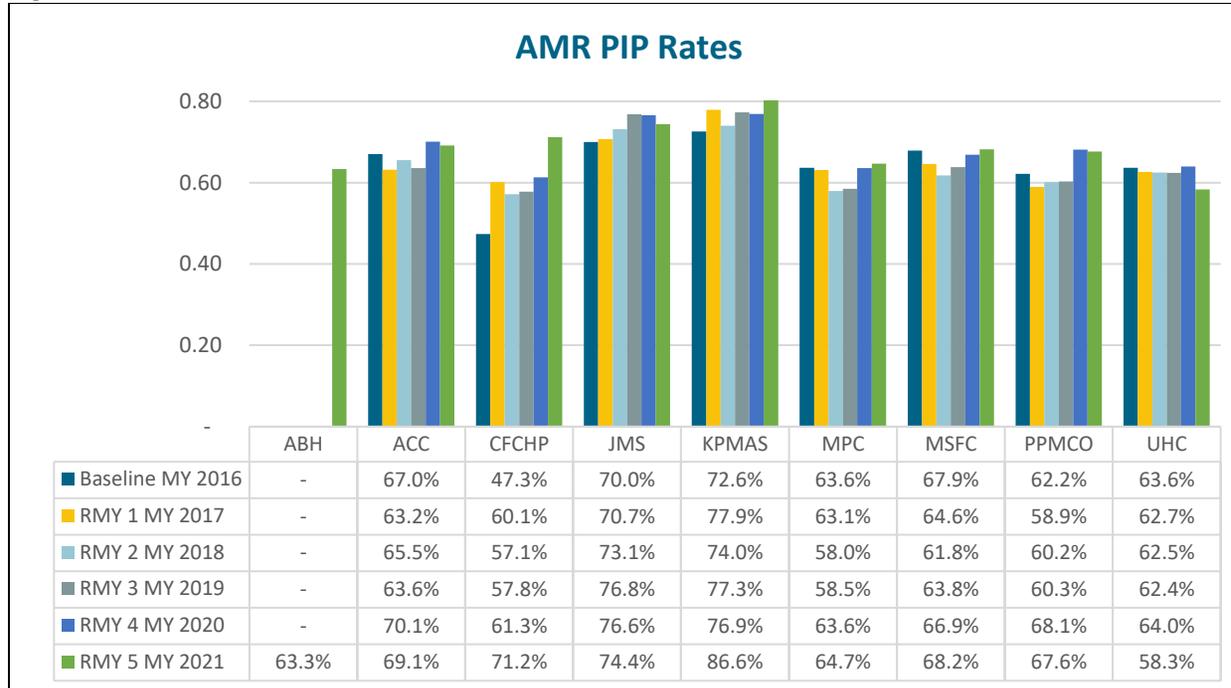
### MCO Barriers:

- Inaccurate enrollee demographic information negatively impacting enrollee outreach
- Lack of resources to provide effective care coordination and outreach members
- Inability to evaluate impact of interventions in real-time
- Insufficient data sources and reporting abilities
- Lack of knowledge regarding the health inequities affecting the disparate population

## AMR PIP Indicator Results

MY 2021 is the final measurement year of data collection for the AMR PIP. Figure 1 represents the AMR PIP indicator rates for all MCOs. Table 5 compares the MCO indicator rates to the HEDIS® 2021 NCQA Quality Compass Medicaid benchmarks.

Figure 1. MY 2016 - MY 2021 AMR Rates



Note: Remeasurement Year (RMY)  
 RMY 2021 is a Baseline Study for ABH (Dash marker indicates years ABH was not required to report).

ABH’s participation was not previously required as the MCO did not initiate operations until October 2017. MY 2021 is considered a baseline study for ABH. Improvement in the AMR rate from baseline to MY 2021 was demonstrated by seven of the remaining eight MCOs. UHC’s rate decreased by 5.3 percentage points from baseline to MY 2021. ACC’s rate declined one percentage point from MY 2020 to MY 2021, but is still 2.1 percentage points above baseline.

**Table 4. Diamond Rating System Used to Compare MCO Performance to Benchmarks**

Diamond Rating System Used to Compare MCO Performance to Benchmarks	
Diamonds	SHP's Performance Compared to Benchmarks
◆◆◆◆	MCO rate is equal to or exceeds the NCQA Quality Compass 90 <sup>th</sup> Percentile.
◆◆◆	MCO rate is equal to or exceeds the NCQA Quality Compass 75 <sup>th</sup> Percentile, but does not meet the 90 <sup>th</sup> Percentile.
◆◆	MCO rate is equal to or exceeds the NCQA Quality Compass 50 <sup>th</sup> Percentile, but does not meet the 75 <sup>th</sup> Percentile.
◆	MCO rate is below the NCQA Quality Compass 50 <sup>th</sup> Percentile.

**Table 5. AMR MCO Performance Comparison to Benchmarks**

Asthma Medication Ratio (Total)		
MCO	MY 2021 Rate	Qlarant Diamond Rating
ABH	63.3%	◆
ACC	69.1%	◆◆
CFCHP	71.2%	◆◆◆
JMS	74.4%	◆◆◆◆
KPMAS	86.6%	◆◆◆◆
MPC	64.7%	◆◆
MSFC	68.2%	◆◆
PPMCO	67.6%	◆◆
UHC	58.3%	◆

There is wide variation among the MCOs in their performance relative to the HEDIS® 2021 Medicaid 90th Percentile benchmark. JMS and KPMAS met or exceeded the HEDIS® 90<sup>th</sup> percentile. Both MCOs have had multiple and ongoing systematic interventions since the initiation of this PIP. For example, JMS has focused on members regularly refilling asthma controller medications and educating prescribers of albuterol overuse. KPMAS has developed two interventions that provide electronic medical record alerts for AMR patients to guide providers' plan of care. All MCOs, except for UHC (58.3%) and ABH (63.3%), are performing above the HEDIS 50<sup>th</sup> percentile.

## Lead Screening PIPs

All Lead Screening PIPs focused on increasing the percentage of children two years of age who had one or more capillary or venous blood tests for lead poisoning by their second birthday (HEDIS® indicator) and the percentage of children ages 12-23 months (enrolled 90 or more days) who receive a lead test during the current or prior calendar year (VBP indicator).

## Lead Screening PIP Interventions Implemented

It is important to note, many interventions were placed on hold during MY 2020 and 2021 due to the COVID-19 public health emergency and are therefore not included in the lists below.

Although the COVID-19 public health emergency presented an absence or limited analysis of the effectiveness of interventions, the MCOs determined the following interventions were effective:

- Dedicated staff with improved/stratified reports
- Lead testing at community events with transportation provided
- Bi-Directional Data Exchanges with provider EMRs
- Chart alert campaign

The MCOs provided some examples of interventions determined to be ineffective to achieve goals/improvement:

- Outreach to members with lead screening care gaps
- Member gift card incentive
- Targeted outreach in Anne Arundel County due to low testing rates
- Lead Requisition campaign
- Advancing Health Equity (provider education)
- Point-of-Care testing due to product recall

Below are examples of interventions implemented by the MCOs that were not specifically evaluated for effectiveness or were not specifically attributed to improvement for the Lead Screening PIPs:

- Gaps-in-care reports
- Provider Performance Incentive

- Free, same day transportation through Lyft
- Provider feedback on lead screening performance
- MCO staff education on lead screening and available resources
- Educational mailer informing members of lead poisoning hazards
- Provider education regarding lead screening guidelines
- Social Media posts
- Member newsletters
- Vendor outreach for education, appointment scheduling, and transportation

## Lead Screening PIP Identified Barriers

Below are common barriers the majority of HealthChoice MCOs identified for the Lead Screening PIP.

Enrollee Barriers:

- Lack of awareness and knowledge of lead poisoning and lead screening importance/timing
- Lack of transportation for routine care and lead testing
- Reluctance to receive care within the healthcare system during the COVID-19 public health emergency
- Beliefs that only residents of Baltimore City need lead testing
- Difficulty communicating with MCO and providers as a result of language and/or reading preferences or ability

Provider Barriers:

- Proximity of lab locations to PCP office
- Temporary office closures and/or reduced hours due to COVID-19
- Lack of knowledge of clinical guidelines for lead screening for the Medicaid population
- Beliefs that only residents of Baltimore City need lead testing
- Competing priorities during enrollee office visits
- Lead screenings are not considered a priority
- Lack of onsite point of care testing capabilities
- Lack of resources for outreach to members with gaps in care, including lead testing
- Lack of information on which members have a gap for lead screening
- Provider office closures or reduced hours due to COVID-19 significantly limiting access for members

- Lack of knowledge regarding differences between the HEDIS® and VBP lead testing requirements

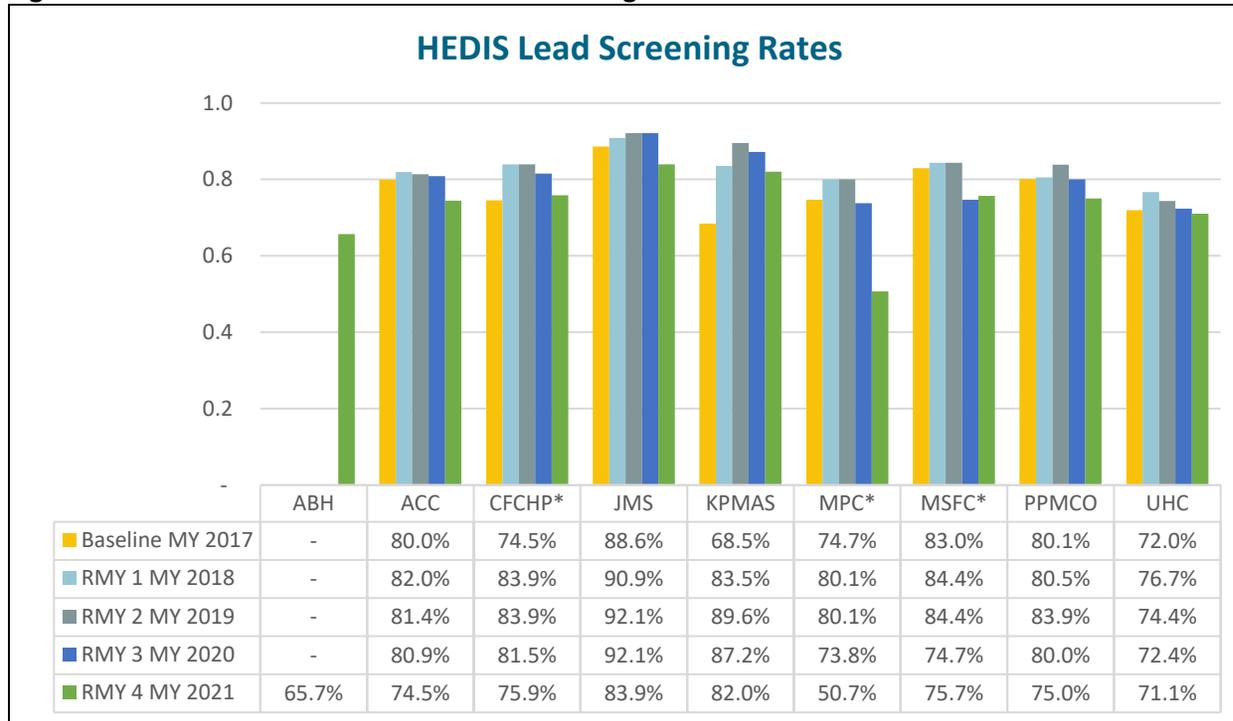
#### MCO Barriers:

- Difficulty scheduling appointments for members due to COVID-19 related office closures, reduced office hours, and/or appointments prioritized for urgent sick visits and immunizations
- Several alternative service vendors suspended or terminated services due to COVID-19
- Insufficient or inaccurate enrollee contact and demographic data
- Limited understanding of cultural and linguistic barriers
- Insufficient data sources and reporting abilities
- Staff lack of awareness of available programs and services and importance of screening/timing
- Lack of education or outreach in the member's preferred language

## Lead Screening PIP Indicator Results

MY 2021 is the final measurement year of data collection for the Lead Screening PIP. Figure 2 represents the Lead Screening PIP indicator rates for all MCOs. Table 7 compares the MCO indicator rates to the HEDIS® 2021 NCQA Quality Compass Medicaid benchmarks.

**Figure 2. MY 2017 - MY 2021 HEDIS® Lead Screening Indicator Rates**



Note: Remeasurement Year (RMY)

\*These MCOs elected to report HEDIS® 2019 audited rates for HEDIS® 2020 hybrid measures based upon NCQA guidance in response to the impact of the COVID-19 public health emergency. RMY 2021 is a Baseline Study for ABH (Dash marker indicates years ABH was not required to report).

ABH’s participation was not previously required as the MCO did not initiate operations until October 2017. MY 2021 is considered a baseline study for ABH. Improvement in the HEDIS® Lead Screening rate from baseline to MY 2021 was demonstrated by two MCOs (CFCHP and KPMAS). Six MCOs experienced a decline in performance over their baseline rate:

- ACC’s rate declined by 5.5 percentage points. The lack of evidence-based interventions and tests of change could have contributed to the 5.5 percentage point rate decline for ACC.
- JMS’ rate declined by 4.7 percentage points. The lack of evidence-based interventions and barriers due to the COVID-19 public health emergency could have contributed to the 4.7 percentage point rate decline for JMS.

- MPC’s rate declined significantly by 24 percentage points. Barriers due to the COVID-19 public health emergency could have contributed to the 24 percentage point rate decline for MPC.
- MSFC’s rate declined by 7.3 percentage points. The lack of evidence-based interventions and barriers due to the COVID-19 public health emergency could have contributed to the 7.3 percentage point rate decline for MSFC.
- PPMCO’s rate declined by 6.9 percentage points. The lack of robust interventions addressing member, provider, and MCO barriers could have contributed to the 6.9 percentage point rate decline for PPMCO.
- UHC’s rate declined by 0.9 percentage points. The lack of robust interventions implementing the Specific-Measurable-Achievable-Relevant-Time Bound (SMART) formula could have contributed to the 0.9 percentage point rate decline for UHC.

**Table 6. Diamond Rating System Used to Compare MCO Performance to Benchmarks**

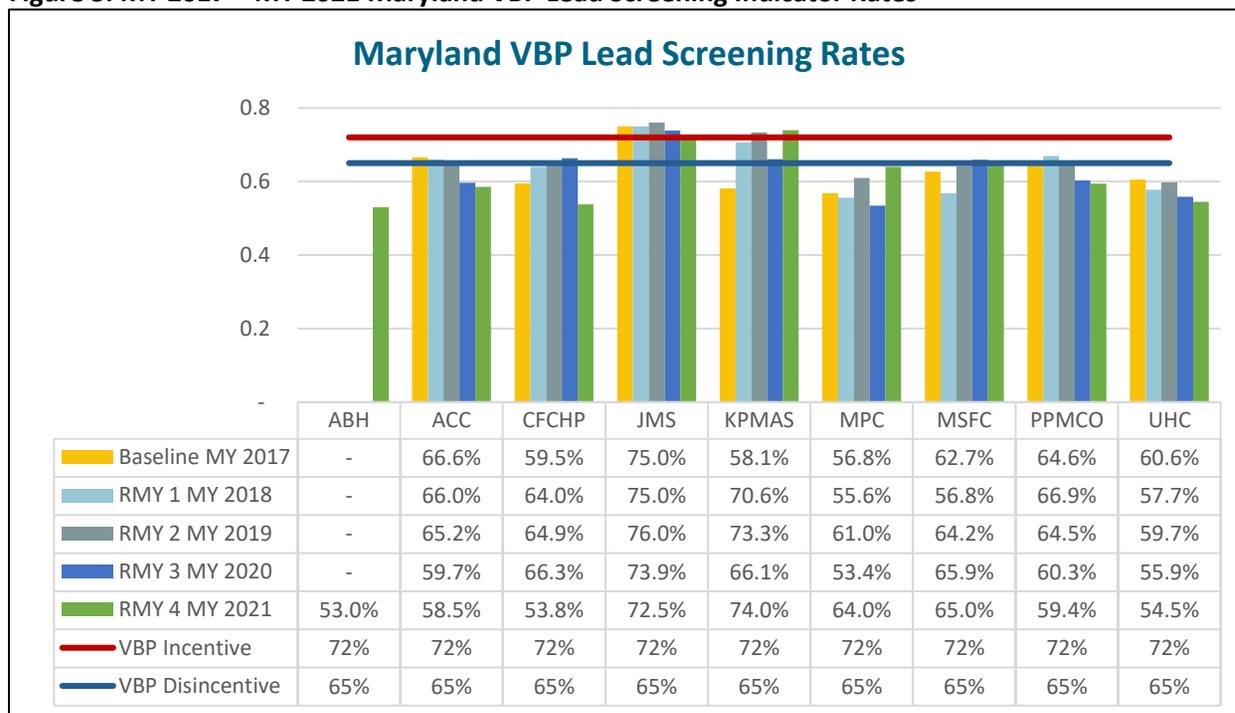
Diamond Rating System Used to Compare MCO Performance to Benchmarks	
Diamonds	SHP’s Performance Compared to Benchmarks
◆◆◆◆	MCO rate is equal to or exceeds the NCQA Quality Compass 90 <sup>th</sup> Percentile.
◆◆◆	MCO rate is equal to or exceeds the NCQA Quality Compass 75 <sup>th</sup> Percentile, but does not meet the 90 <sup>th</sup> Percentile.
◆◆	MCO rate is equal to or exceeds the NCQA Quality Compass 50 <sup>th</sup> Percentile, but does not meet the 75 <sup>th</sup> Percentile.
◆	MCO rate is below the NCQA Quality Compass 50 <sup>th</sup> Percentile.

**Table 7. Lead Screening MCO Performance Comparison to Benchmarks**

Lead Screening Rate (Total)		
MCO	MY 2021 Rate	Qlarant Diamond Rating
ABH	65.7%	◆◆
ACC	74.5%	◆◆◆
CFCHP	75.9%	◆◆◆
JMS	83.9%	◆◆◆◆
KPMAS	82.0%	◆◆◆◆
MPC	50.7%	◆◆
MSFC	75.7%	◆◆◆
PPMCO	75.0%	◆◆◆
UHC	71.1%	◆◆

Two MCOs (JMS and KPMAS) met or exceeded the HEDIS® 2021 Medicaid 90<sup>th</sup> Percentile benchmark for the Lead Screening rate. Four MCOs (ACC, CFCHP, MSFC, and PPMCO) met or exceeded the HEDIS® 75<sup>th</sup> percentile All MCOs exceeded the HEDIS® 50<sup>th</sup> percentile.

**Figure 3. MY 2017 – MY 2021 Maryland VBP Lead Screening Indicator Rates**



Note: Remeasurement Year (RMY)  
 RMY 2021 is a Baseline Study for ABH (Dash marker indicates years ABH was not required to report).

Three MCOs’ (KPMAS, MPC, and MSFC) VBP Lead Screening Rates improved MY 2021 in comparison to baseline. Two MCOs (JMS and KPMAS) exceeded the VBP incentive benchmark range of  $\geq 72\%$ . ACC, CFCHP, MPC, PPMCO, and UHC fell within the VBP disincentive benchmark ( $\leq 65\%$ ).

Five MCOs experienced a decline in performance over their baseline rate:

- ACC’s rate declined by 8.1 percentage points. The lack of evidence-based timely and robust interventions using the SMART formula could have contributed to the 8.1 percentage point rate decline for ACC.

- CFCHP’s rate declined by 5.7 percentage points. The lack of evidence-based interventions using the SMART formula and the lack of testing interventions to identify and address issues could have contributed to the 5.7 percentage point rate decline for CFCHP.
- JMS’ rate declined by 2.5 percentage points. Barriers due to the COVID-19 public health emergency and lacking evidence-based interventions that will provide sustainable results when repeated could have contributed to the 2.5 percentage point rate decline for JMS.
- PPMCO’s rate declined by 5.2 percentage points. The lack of robust interventions that address all system-wide barriers (member, provider, and MCO) could have contributed to the 5.2 percentage point rate decline for PPMCO.
- UHC’s rate declined by 6.1 percentage points. The lack of timely, robust interventions using the SMART formula and lack of evidence-based literature to support PIP intervention and sustainability when repeated could have contributed to the 6.1 percentage point rate decline for UHC.

## AMR and Lead Screening PIPs Validity and Reliability Results

An assessment of the validity and reliability of the PIP study design and results reflects a detailed review of each MCO’s PIPs and audited HEDIS® and Maryland encounter data (VBP) measure findings for the selected indicators. Tables 8 and 9 identify the validation rating and the corresponding level of confidence Qlarant has assigned to each MCO’s AMR and Lead Screening PIPs for MY 2021 PIP performance.

**Table 8. 2021 AMR Screening PIP Validation Rating and Confidence Levels**

Step/Description	MY 2021 AMR PIP Validation Results								
	ABH	ACC	CFCHP	JMS	KPMAS	MPC	MSFC	PPMCO	UHC
Step 1. Topic	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Step 2. Aim Statement	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Step 3. Identified Population	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Step 4. Sampling Method	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Step 5. Performance Measures and Population	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Step 6. Data Collection Procedures	Met	PM	Met						
Step 7. Data Analysis and Interpretation of Results	Met	PM	Met	Met	PM	Met	Met	Met	Met
Step 8. Improvement Strategies (Interventions)	N/A	PM	PM	Met	PM	PM	PM	PM	PM
Step 9. Significant and Sustained Improvement	N/A	PM	Met	PM	Met	PM	PM	PM	PM
<b>PIP Numerical Score</b>	<b>23</b>	<b>51</b>	<b>89</b>	<b>86</b>	<b>84</b>	<b>80</b>	<b>76</b>	<b>87</b>	<b>65</b>

Step/Description	MY 2021 AMR PIP Validation Results								
	ABH	ACC	CFCHP	JMS	KPMAS	MPC	MSFC	PPMCO	UHC
PIP Total Available Points	23	98	94	98	98	97	98	98	93
PIP Validation Rating	100%	52.04%	94.68%	87.76%	85.71%	82.47%	77.55%	88.78%	69.89%
Confidence Level	High	NC	High	C	C	C	C	C	Low

Validation Results: Light Green – M (Met); Light Yellow – PM (Partially Met); Light Red – UM (Unmet); Gray – N/A (Not Applicable)

Confidence Levels: Green – High; Yellow – C (Confidence); Orange – Low; Red – NC (Not Credible)

MY 2021 is a Baseline Study for ABH

All MCOs were given a rating of *N/A* for Step 1 (Topic), Step 2 (Aim Statement), Step 3 (Identified Population), and Step 5 (Performance Measures and Population) since MDH selected the study topic, aim statement, and performance measures, which included the PIP population and variables. All MCOs were also given a rating of *N/A* for Step 4 (Sampling Method), as the entire study population was included for AMR.

ABH was given a rating of *N/A* for Step 8 (Improvement Strategies) and Step 9 (Significant and Sustained Improvement) since MY 2021 was a baseline measurement year.

All MCOs, except ACC, received a rating of *Met* for Step 6 (Data Collection Procedures). ACC received a rating of *PM* as it did not specify the data elements to be collected and did not include method data.

Seven MCOs (ABH, CFCHP, JMS, MPC, MSFC, PPMCO, and UHC) received a rating of *Met* for Step 7 (Data Analysis and Interpretation of results). Two MCOs received a rating of *PM*; ACC and KPMAS did not identify any factors that may influence comparability between baseline and repeat measurements. KPMAS also did not identify any lessons learned that could be applied to the study.

JMS was the only MCO to have received a rating of *Met* for Step 8 (Improvement Strategies). The remaining MCOs received ratings of *PM*, except ABH's rating of *N/A*. ACC, CFCHP, KPMAS, MSFC, and PPMCO lacked linguistically and culturally appropriate interventions. ACC, MPC, and UHC's interventions were not evidenced-based and ACC and MSFC did not test interventions to assess continuous improvement/change using the Plan, Do, Study, Act cycle (PDSA). KPMAS' interventions were passive in nature and lacked SMART objectives. UHC was unable to determine direct effectiveness of its interventions on the AMR rate.

Two MCOs (CFCHP and KPMAS) received a rating of *Met* for Step 9 (Significant and Sustained Improvement). The remaining MCOs received ratings of *PM*, except ABH's rating of *N/A*. ACC did not report any improvement in the AMR rate from MY 2020 to 2021. JMS, MPC, and MSFC's improvements in AMR rates from baseline to MY 2021 were found not to be statistically significant. UHC's AMR rate fell below the baseline year rate and is a decrease from MY 2020. JMS, MPC, MSFC, PPMCO, and UHC's AMR rates have not sustained improvement over the course of the lifetime of the PIP.

Confidence levels were assigned to each MCO's PIP based upon the effectiveness of its interventions in increasing the AMR rate and its demonstration of adhering to the required steps in the PIP protocol. ABH and CFCHP's AMR PIP scored within the *High Confidence* level. Five MCOs' (JMS, KPMAS, MPC, MSFC, and PPMCO) scored within the *Confidence* level. UHC was the only MCO that scored within the *Low Confidence* level and ACC was the only MCO that scored within the *Not Credible* confidence level. It is important to note that performance was likely influenced by the COVID-19 public health emergency constraints. Additional detail on the assignment of a confidence level to each MCO's AMR PIP can be found below in the section, "AMR and Lead Screening PIPs Validity and Reliability Results."

**Table 9. 2021 Lead Screening PIP Validation Rating and Confidence Levels**

Step/Description	MY 2021 Lead Screening PIP Validation Results								
	ABH	ACC	CFCHP	JMS	KPMAS	MPC	MSFC	PPMCO	UHC
Step 1. Topic	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Step 2. Aim Statement	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Step 3. Identified Population	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Step 4. Sampling Method	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Step 5. Performance Measures and Population	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Step 6. Data Collection Procedures	Met	PM	Met	Met	PM	Met	Met	Met	Met
Step 7. Data Analysis and Interpretation of Results	Met	Met	Met	Met	PM	Met	Met	Met	Met
Step 8. Improvement Strategies (Interventions)	N/A	PM	PM	PM	PM	Met	PM	PM	PM
Step 9. Significant and Sustained Improvement	N/A	PM	PM	PM	Met	PM	PM	PM	PM
<b>PIP Numerical Score</b>	<b>30</b>	<b>46</b>	<b>52</b>	<b>71</b>	<b>90</b>	<b>92</b>	<b>73</b>	<b>64</b>	<b>64</b>
<b>PIP Total Available Points</b>	<b>30</b>	<b>98</b>	<b>100</b>	<b>100</b>	<b>98</b>	<b>98</b>	<b>100</b>	<b>98</b>	<b>98</b>
<b>PIP Validation Rating</b>	<b>100%</b>	<b>46.94%</b>	<b>52.00%</b>	<b>71.00%</b>	<b>91.84%</b>	<b>93.88%</b>	<b>73.00%</b>	<b>65.31%</b>	<b>65.31%</b>
<b>Confidence Level</b>	<b>High</b>	<b>NC</b>	<b>NC</b>	<b>Low</b>	<b>High</b>	<b>High</b>	<b>Low</b>	<b>Low</b>	<b>Low</b>

Validation Results: Light Green – M (Met); Light Yellow – PM (Partially Met); Light Red – UM (Unmet); Gray – N/A (Not Applicable)

Confidence Levels: Green – High (High Confidence); Yellow – C (Confidence); Orange – Low (Low Confidence); Red – NC (Not Credible)

MY 2021 is a Baseline Study for ABH

All MCOs were given a rating of *N/A* for Step 1 (Topic), Step 2 (Aim Statement), Step 3 (Identified Population), Step 4 (Sampling Method), and Step 5 (Performance Measures and Population) since MDH selected the study topic, aim statement, and performance measures, which included the PIP population and variables.

ABH was given a rating of *N/A* for Step 8 (Improvement Strategies) and Step 9 (Significant and Sustained Improvement) since MY 2021 was a baseline measurement year.

Seven MCOs (ABH, CFCHP, JMS, MPC, MSFC, PPMCO, and UHC) received a rating of *Met* for Step 6 (Data Collection Procedures). ACC and KPMAS received a rating of *PM*. ACC did not report correct data elements collected, which was the guidance previously provided for MY 2020. KPMAS did not list any instruments for data collection and did not provide any further explanation as to how the electronic medical record was used for consistent and accurate data collection.

All MCOs received a rating of *Met* for Step 7 (Data Analysis and Interpretation of Results) except for KPMAS, which received a rating of *PM*. KPMAS did not identify any lessons learned that could be applied to the PIP.

MPC was the only MCO to receive a rating of *Met* for Step 8 (Improvement Strategies) except for ABH, which received a finding of *N/A* for its baseline study for MY 2021. All remaining MCOs (ACC, CFCHP, JMS, KPMAS, MSFC, PPMCO, and UHC) received a finding of *PM*. Common issues among MCOs were:

- Lack of evidence-based interventions
- Lack of SMART goals
- Interventions were passive in nature
- Interventions were not culturally and linguistically appropriate
- Interventions were not tested to assess continuous improvement/change using the PDSA cycle

KPMAS was the only MCO to receive a rating of *Met* for Step 9 (Significant and Sustained Improvement). ABH received a finding of *N/A* for MY 2021 as it was considered a baseline study. The remaining MCOs (ACC, CFCHP, JMS, MSFC, MPC, PPMCO, and UHC) received a finding of *PM* due to lacking improvement in the HEDIS and VBP Lead rates and lacking sustained improvement over the lifetime of the PIP.

## PIP Conclusions and Recommendations

MY 2021 results for the AMR PIP were submitted on September 15, 2022, and the Lead Screening results were submitted on September 30, 2022. A separate HEDIS® audit of all PIP indicator results was conducted by an independent NCQA-certified organization, MetaStar, Inc. Maryland encounter data (VBP) rates were also validated by MDH's subcontractor, The Hilltop Institute of University of Maryland, Baltimore County.

Overall, AMR and Lead PIP performance results were mixed and opportunities for improvement remain. As ABH did not initiate operations until October 2017, its participation in MY 2021 is considered a baseline study. Past results demonstrate an improvement in performance for the AMR PIP.

- Three MCOs (KPMAS, MPC, and MSFC) improved from a *Low Confidence* level in MY 2020 and to a *Confidence* level for MY 2021.
- CFCHP's AMR improved from a *Low Confidence* level in MY 2020 to a *High Confidence* level for MY 2021.

Past results for the Lead PIP demonstrated a stronger performance overall.

- Three MCOs (CFCHP, JMS, and MSFC) declined in performance from a *High Confidence* or *Confidence* level in MY 2020 to a *Low Confidence* or *Not Credible* level in MY 2021.
- MY 2021 resulted in only three MCOs receiving a rating of *High Confidence* (ABH- Baseline year, KPMAS, and MPC), while the remaining six MCOs received ratings of *Low Confidence* or *Not Credible* (ACC, CFCHP, JMS, MSFC, PPMCO, and UHC).

The impact of the COVID-19 public health emergency continued for MY 2021. MCOs modifications and recovery progress consistently focused on increased communication and education such as:

- Text notifications
- Mailed literature
- Telehealth accessibility in provider offices
- Blog posts
- Provider-to-member education 1:1 in office
- Outreach calls
- COVID-19 vaccine programs

**Table 10. Overall PIP Performance**

Performance Improvement Project		MY 2021 Overall PIP Performance								
		ABH	ACC	CFCHP	JMS	KPMAS	MPC	MSFC	PPMCO	UHC
Asthma Medication Ratio PIP	Validation Rating	100%	52.04%	94.68%	87.76%	85.71%	82.47%	77.55%	88.78%	69.89%
	Confidence Level	High	NC	High	C	C	C	C	C	Low
	Any Improvement?	N/A	Y	Y	Y	Y	Y	Y	Y	N
	Any Statistically Significant Improvement?	N/A	Y	Y	N	Y	N	N	Y	N
	Any Sustained Improvement?	N/A	N	Y	N	Y	N	N	N	N
Lead Screening PIP	Validation Rating	100%	46.94%	52.00%	71.00%	91.84%	93.88%	73.00%	65.31%	65.31%
	Confidence Level	High	NC	NC	Low	High	High	Low	Low	Low
	Any HEDIS® Rate Improvement?	N/A	N	Y	N	Y	N	N	N	N
	Any Statistically Significant Improvement in HEDIS® Rate?	N/A	N	N	N	Y	N	N	N	N
	Any Sustained Improvement in HEDIS® rate?	N/A	N	N	N	Y	N	N	N	N
	Any VBP Rate Improvement?	N/A	N	N	N	Y	Y	Y	N	N
	Any Statistically Significant Improvement in VBP Rate?	N/A	N	N	N	Y	N	N	N	N
	Any Sustained Improvement in VBP Rate?	N/A	N	N	N	Y	N	N	N	N

**Confidence Levels:** Green – High (High Confidence); Yellow – C (Confidence); Orange – Low (Low Confidence); Red – NC (Not Credible); Gray – N/A (Not Applicable)

MY 2021 is a Baseline Study for ABH

Seven MCOs (ACC, CFCHP, JMS, KPMAS, MPC, MSFC, and PPMCO) demonstrated improvement in the AMR rate from baseline to MY 2021. Reported improvement was determined statistically significant for four MCOs (ACC, CFCHP, KPMAS, and PPMCO). CFCHP and KPMAS demonstrated sustained improvement from baseline.

Two MCOs (CFCHP and KPMAS) demonstrated improvement in the HEDIS® Lead Screening rate from baseline to MY 2021. Reported improvement was determined statistically significant for one MCO (KPMAS). KPMAS also demonstrated sustained improvement from baseline.

Three MCOs (KPMAS, MPC, and MSFC) demonstrated improvement in the VBP Lead Screening rate from baseline to MY 2021. Reported improvement was determined statistically significant for one MCO (KPMAS) and demonstrated sustained improvement from baseline.

## Recommendations

Qlarant's recommendations remain fairly consistent with those offered in prior PIP Validations. Qlarant conducted technical support meetings with MCOs in an effort to improve MCOs' AMR and Lead Screening PIP rates. The technical support meetings held also provided an opportunity to address ongoing challenges in developing SMART objectives and/or using the PDSA process. Qlarant recommends that the HealthChoice MCOs concentrate efforts on the areas described below.

- **Complete in-depth barrier analysis at least annually** to identify root causes of suboptimal performance and to effectively drive improvement. MCOs continue to conduct high-level barrier analyses, resulting in little or no improvement in indicator rates. Use of a quality improvement technique, such as the *5 Whys*, may facilitate an improved understanding of root causes.
- **Develop evidence-based, robust, system-level interventions** in response to identified barriers. Generally, the majority of MCO interventions were not evidence-based. PIP documentation should identify the specific evidence-based intervention, its source, and how it was implemented by the MCO.
- **Implement timely interventions** within the measurement year to have a meaningful impact on the measure rate.
- **Ensure that interventions address differences among population subgroups**, such as differences in health care attitudes and beliefs among various racial/ethnic groups within the MCO's membership. Identifying a health disparity is only the first step. The next step is to understand why it exists. This requires in-depth analysis of possible contributing factors through review of available data, literature review, and collaboration with representatives of the subpopulation. With this knowledge, interventions could be specifically targeted at addressing these misunderstandings or fears, such as aligning with an influential member of the community to outreach to these members or hosting a presentation at a relevant venue (such as a local church), led by a physician or other health care provider with the same cultural background. It should be noted that a common barrier to understanding racial and cultural differences is the lack of critical demographic data for a large percentage of the MCOs' membership. MCOs need to explore approaches to increasing this data to better identify any health disparities. Inclusion of representatives from subpopulations with known disparities in the PIP process should help to drive effective improvement strategies.
- **Ensure that interventions are focused on the priority population for the lead screening PIP.** Several MCOs had interventions that utilized language services, but did not specifically address disparate populations.
- **Develop SMART objectives for all interventions** to support evaluation of the effectiveness of interventions. All or a majority of MCO interventions did not include SMART objectives. MCOs generally focus on the activity level rather than at the process or outcome level when assessing the impact of interventions. MDH and Qlarant provided MCO PIP trainings on February 22, 2021 and October 13, 2022.
- **Demonstrate consistent use of the Institute for Healthcare Improvement's rapid cycle PDSA approach** to test the effectiveness of interventions and initiate adjustments where outcomes are unsatisfactory. Consideration should be given to small tests of change to assess intervention effectiveness before implementing across the board. Identify lessons learned in the qualitative review.

- **Ensure that interventions address all system-wide barriers** (member, provider, and MCO). A number of MCOs did not include all components in designing their interventions.
- **Ensure that all PIP submissions include accurate final audited rates** for each of the measures. Several MCOs reported inaccurate rate calculations for MY 2021.
- **Demonstrate a proactive approach to refining or developing new interventions when unforeseen challenges occur**, such as the COVID-19 public health emergency. For example, many MCOs suspended interventions that were based on in-person contact such as home visits and community events but did not explore creative approaches to overcoming these barriers.
- **Ensure that a comprehensive analysis is completed to identify any factors that influenced comparability of initial and repeat measurements and any confounding variables** that could have an obvious impact on outcomes when designing interventions. Some of the MCOs did not identify any factors that influenced comparability of initial and repeat measurements and/or confounding variables despite the impact of the COVID-19 public health emergency on health care delivery.
- **In designing interventions, determine the methodology for evaluating effectiveness** in achieving the established goal. This could include such approaches as comparisons of rates between participant and non-participants or pre- and post-intervention rates for participants.

In an effort to further encourage MCOs to implement these improvement recommendations on intervention planning, design, and evaluation, MDH has developed an enhanced review of MCOs' PIPs to provide in-depth feedback on MCOs' improvement strategies. With this more in-depth review, MCOs may be able to attain critical insight and increased intervention efficacy. Furthermore, providing a forum for MCOs to discuss barriers and share best practices also may be helpful in improving rates among all HealthChoice MCOs.