Qlarant

Medicaid Managed Care Organization

Performance Improvement Project Validation

2021 Maryland HealthChoice Annual Report

Maryland
DEPARTMENT OF HEALTH

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Performance Improvement Project Validation

2021 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[1].

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. This report summarizes the findings from the validation of both PIPs. The MCOs who conducted PIPs in 2021 are identified below. Aetna Better Health (ABH) did not conduct any PIPs for the calendar year (CY) 2020 measurement period since they joined the HealthChoice program in October 2017 but have now begun participation in the process with their Quarterly Lead PIP Report submission. This year, the COVID-19 public health emergency presented a near-insurmountable challenge for many organizations, and MCOs were not exempt from these trials; some of the managed care challenges included: staffing shortages, ability to engage a rightfully alarmed membership, reduced opportunities for preventative care at times, overwhelmed / temporarily closed provider offices, technology challenges both in the workplace and in the community, and urgency to develop new strategies to overcome unimaginable healthcare barriers.

- AMERIGROUP Community Care (ACC)
- Jai Medical Systems, Inc. (JMS)
- CareFirst Community Health Plan (CFCHP)[2]
- 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)

[1] CMS EQRO Protocols

[2] Formerly University of Maryland Health Partners

PIP Validation Methodology

Qlarant reviews each PIP to assess the MCO's PIP methodology and to 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 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 – with no more than two resubmissions as communicated to MCOs on November 15th, 2021 – 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, 2, 3, and 5 were pre-populated in the questionnaire. MCOs that utilized sampling for any performance measure were required to complete all questions related to Step 4, Sampling Method. Data reviewed included type of sampling, methodology, sample size, and total population. Completion of all questions related to Steps 6 through 9 was required of each MCO. Data collection procedures were reviewed for Step 6, Data Collection Procedures, including data sources, data elements, instruments for data collection and frequency, and guidelines and qualifications of staff collecting medical record review data. For Step 7, Data Analysis and Interpretation of Results, each MCO's quantitative and qualitative data analyses were reviewed for measurement changes from baseline, statistical significance testing, factors threatening internal or external validity of findings, factors influencing comparability of results, assessment of project success, and identified system-wide member, provider, and MCO barriers. EQRO review of MCO data for Step 8, Improvement Strategies (Interventions), encompassed details of each intervention, barriers addressed, and analysis of the impact of the intervention, including use of the Plan, Do, Study, Act approach to test interventions. Step 9, Significant and Sustained Improvement, was reviewed based upon the quantitative data submitted by each MCO - which included performance results from baseline through the current measurement year (MY), including the denominator, numerator, and rate. These numbers were validated by the EQRO against final audited rates for the HEDIS® measures and the final rates provided by MDH's contractor for the Value-Based Purchasing (VBP) lead screening measure.

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®[3] technical specifications.

Table 4. 2021 AMR PIP Validation Results

Step/Description	2021 AMR PIP Validation Results							
	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
Step 2. Aim Statement	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
Step 4. Sampling Method	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
Step 6. Data Collection Procedures	PM	M	M	M	M	M	M	M
Step 7. Data Analysis and Interpretation of Results	M	PM	M	PM	M	M	M	PM
Step 8. Improvement Strategies (Interventions)	PM	PM	PM	PM	PM	PM	PM	PM
Step 9. Significant and Sustained Improvement	PM	M	M	PM	PM	PM	PM	PM

PIP Rating Scale: Green – M (Met); **Orange** – PM (Partially Met); **Red** – UM (Unmet); **Grey** – N/A (Not Applicable)

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.

All MCOs, with the exception of 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.

Five MCOs (ACC, JMS, MPC, MSFC, and PPMCO) received a rating of *Met* for Step 7 (Data Analysis and Interpretation of Results). Three MCOs received a rating of *PM;* CFCHP had repeated errors in the reporting of its quantitative data resulting in three resubmissions (three were allowed as this is prior to the date on which Qlarant communicated to MCOs no more than two resubmissions would be accepted). KPMAS and UHC did not identify any factors that influenced comparability between baseline and repeat measures or any lessons learned as a result of a decrease or lack of improvement in their AMR rate. Additionally, UHC did not specify a long-term improvement goal of at least 10 percentage points above the baseline result or identify in its qualitative analysis any factors that may influence internal or external validity of findings and impact.

[3] HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).

All MCOs received a rating of *PM* for Step 8 (Improvement Strategies [Interventions]). Common issues across MCOs for Step 8 were:

- Lack of evidence that interventions are evidence-based.
- Lack of targeted interventions to address cultural differences based upon a disparities analysis.
- No or limited use of the SMART formula for goal setting.
- No or limited use of the PDSA approach to evaluate small tests of change and refine or terminate an intervention if unsuccessful.
- Lack of assessment of the effectiveness of all or a majority of interventions on the AMR rate.

Additionally, two MCOs (CFCHP and JMS) did not address all system-wide barriers (member, provider, and MCO) in designing their interventions.

Two MCOs (CFCHP and JMS) received a rating of *Met* for Step 9 (Significant and Sustained Improvement). The remaining six MCOs received a rating of *PM*. Both ACC and PPMCO did not demonstrate sustained improvement from baseline. KPMAS did not demonstrate statistically significant improvement from baseline. Both MPC and MSFC reported no improvement from baseline. UHC's reported improvement did not appear to be the result of its interventions and was not statistically significant. Additionally, it did not demonstrate sustained improvement.

AMR PIP Interventions Implemented

It is important to note, many interventions were placed on hold during MY 2020 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:

- Asthma Home Visiting Program - Collaboration with the Green and Healthy Homes' Initiative to identify member environmental risk factors, facilitate repairs, and provide litigation support.
- Pharmacy policy expansion to a 90 Day Montelukast supply
- Provider notification of members over-utilizing short-acting beta agonists with zero pharmacy claims for a longer acting controller medication
- Outreach to non-compliant members, their providers, and pharmacies to coordinate controller medication refills
- Outreach education from both pharmacists and technicians
- Video visits with an Allergist for members identified with unmanaged asthma
- Biweekly review of Controller Medication Refills - feedback review
- Controlling excessive fills for Albuterol

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

- SyncScript Program through pharmacy vendor
- Multi-Dose Pack Program through MCO pharmacy vendor
- Member incentive for 30-day controller prescription fills

- eMocha Health video-based medication adherence services
- Targeted telephonic health coaching
- Pharmacy point of service edit for contacting prescribers when a member was filling a rescue inhaler without a controller medication
- Seasonal asthma mailings
- Health education classes
- Disease management program
- Asthma Action Plan outreach
- Provider lists of members who were eligible but did not meet the AMR measure criteria
- Pediatric-based reports embedded in the electronic medical records (EMRs)

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:

- Health education and outreach, addressing enrollees who meet specific criteria
- Health coaches
- Provider education
- Provider care opportunity report
- Asthma-related articles in member and provider newsletters
- Monthly texting campaign with reminders to adhere to controller medication regimens and schedule follow-up appointments with their primary care provider (PCP)
- Mail order program and 90-day prescription refills
- Medication Adherence Alerts
- Transportation for office appointments and prescription needs; pharmacy delivery of prescriptions
- Chart review/patient assessment/recommended interventions by allergist of pediatric patients discharged from emergency department or hospital for asthma
- Creation of an electronic medical record tool to require decision-making/chart review before refilling rescue medications
- Change from 30-day to 90-day refills for selected medications
- Use of social media for asthma education

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:

- High no-show rates for PCP appointments
- 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

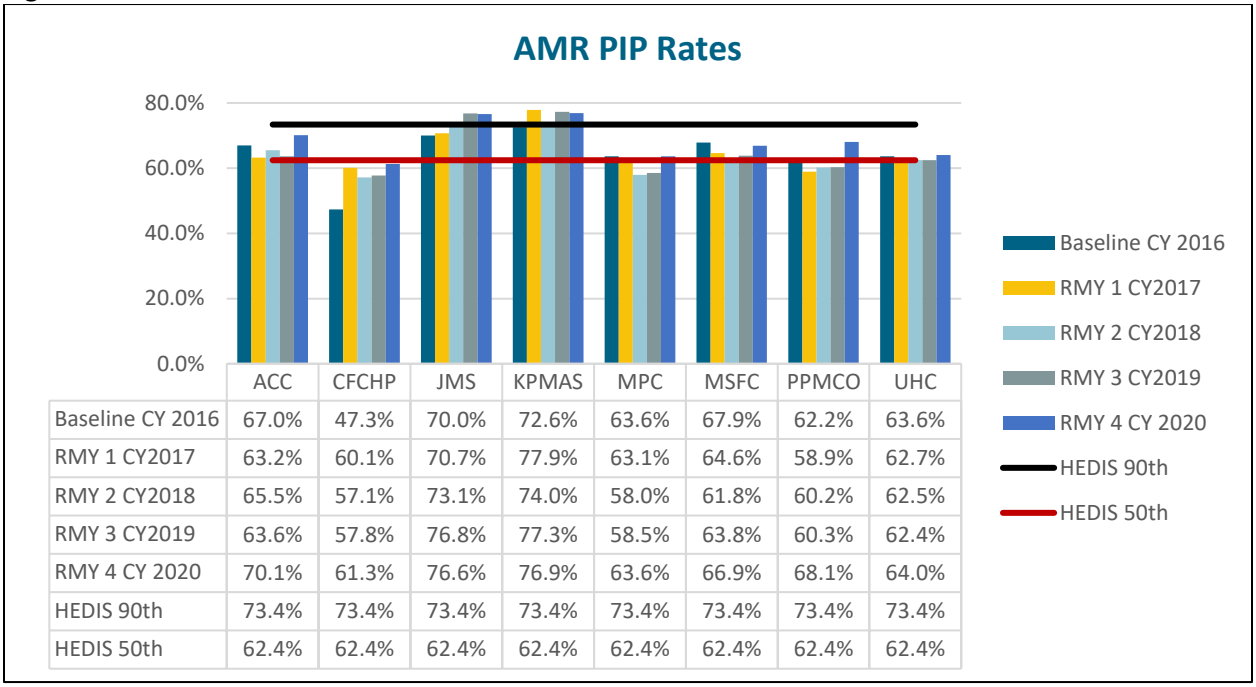
MCO Barriers:

- 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

CY 2020 is the fourth remeasurement year of data collection for the AMR PIP. Figure 1 represents the AMR PIP indicator rates for all MCOs.

Figure 1. CY 2016 - CY 2020 AMR Rates



	ACC	CFCHP	JMS	KPMAS	MPC	MSFC	PPMCO	UHC
Baseline CY 2016	67.0%	47.3%	70.0%	72.6%	63.6%	67.9%	62.2%	63.6%
RMY 1 CY2017	63.2%	60.1%	70.7%	77.9%	63.1%	64.6%	58.9%	62.7%
RMY 2 CY2018	65.5%	57.1%	73.1%	74.0%	58.0%	61.8%	60.2%	62.5%
RMY 3 CY2019	63.6%	57.8%	76.8%	77.3%	58.5%	63.8%	60.3%	62.4%
RMY 4 CY 2020	70.1%	61.3%	76.6%	76.9%	63.6%	66.9%	68.1%	64.0%
HEDIS 90th	73.4%	73.4%	73.4%	73.4%	73.4%	73.4%	73.4%	73.4%
HEDIS 50th	62.4%	62.4%	62.4%	62.4%	62.4%	62.4%	62.4%	62.4%

Note: Remeasurement Year (RMY)

There is wide variation among the MCOs in their performance relative to the HEDIS® 2020 (MY 2019) Medicaid 90th Percentile benchmark. HEDIS® MY 2020 benchmarks were not yet available at the time of this report. JMS and KPMAS are performing above the 90th percentile. Both MCOs have had multiple and ongoing systematic interventions since the initiation of this PIP. For example, JMS has established a process to contact members who are out of controller medication, request a refill, and provide any assistance, as needed. If the refill does not occur within two weeks, the member is contacted by a breathing specialist (a PCP who is trained on the process) to address any misunderstandings regarding their asthma treatment. KPMAS has developed a decision-support tool and an alert that highlights the member's AMR to guide treatment. Additionally, KPMAS has arranged video visits between an allergist and individual members who demonstrate unmanaged asthma. ACC is performing above the 75th percentile, and PPMCO is at the 75th percentile. Three MCOs (MPC, MSFC, and UHC) are performing between the 50th and 75th percentiles. CFCHP is performing below the 50th percentile; however they made large strides in performance over time from their baseline measurement.

Improvement in the AMR rate from baseline to MY 2020 was demonstrated by all but two MCOs. MPC's rate remained unchanged, and MSFC's rate decreased by 1 percentage point. Many of the interventions MPC implemented were either passive in nature, such as member and provider newsletters and social media posts, and/or were not assessed for their impact on the AMR rate. MSFC's decline may be

attributed to its lack of ongoing assessment of the effectiveness of its interventions based on clearly defined goals.

Lead Screening PIPs

All Lead Screening PIPs focused on increasing the percentage of children 2 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).

Table 5. 2021 Lead Screening PIP Validation Results

Step/Description	2021 Lead Screening PIP Validation Results							
	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
Step 2. Aim Statement	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
Step 4. Sampling Method	N/A	M	N/A	M	N/A	M	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
Step 6. Data Collection Procedures	PM	M	M	PM	M	M	M	M
Step 7. Data Analysis and Interpretation of Results	M	PM	PM	PM	PM	PM	M	PM
Step 8. Improvement Strategies (Interventions)	PM	PM	M	PM	M	PM	PM	PM
Step 9. Significant and Sustained Improvement	PM	M	PM	M	PM	PM	PM	PM

PIP Rating Scale: Green – M (Met); **Orange** – PM (Partially Met); **Red** – UM (Unmet); **Grey** – N/A (Not Applicable)

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.
Three MCOs, (CFCHP, KPMAS, and MSFC) received a rating of *Met* for Step 4 (Sampling Method), as they utilized HEDIS® sampling methodology, which satisfies requirements. The remaining five MCOs received a rating of *N/A* because the entire population was studied for both HEDIS® and VBP indicators.
Six of the MCOs (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* as they did not specify the data elements to be collected.

Two MCOs (ACC and PPMCO) received a rating of *Met* for Step 7 (Data Analysis and Interpretation of Results). The six remaining MCOs received a rating of *PM*. Four MCOs (CFCHP, JMS, MPC, and MSFC) did not identify any lessons learned in response to declines in performance from either baseline or the prior MY. KPMAS and UHC did not include in their qualitative analysis any factors that influenced comparability between baseline and repeat measurements. Additionally, UHC did not specify a long-term improvement goal of at least 10 percentage points above the baseline result or provide an

accurate assessment of project success and contributing factors that are based on appropriate project goals.

Two MCOs (JMS and MPC) received a rating of *Met* for Step 8 (Improvement Strategies [Interventions]). The remaining MCOs received a rating of *PM* for this step. Common issues among the majority of these MCOs for Step 8 were:

- Lack of evidence that interventions are evidence-based.
- Lack of targeted interventions to address cultural differences based upon a disparities analysis.
- Limited or no use of the SMART formula for goal setting.
- Limited or no use of the PDSA approach to evaluate small tests of change and refine or terminate an intervention if unsuccessful.
- Lack of timely, robust interventions that address all system-wide barriers (member, provider, and MCO).

Additionally, there was no evidence that three of the MCOs (ACC, CFCHP, and PPMCO) evaluated the effectiveness of their interventions in increasing the Lead Screening rates.

Two MCOs (CFCHP and KPMAS) received a rating of *Met* for Step 9 (Significant and Sustained Improvement). The remaining six MCOs received a rating of *PM*. Both MPC and PPMCO did not demonstrate improvement from baseline. JMS did not demonstrate statistically significant improvement from baseline. Both ACC's and UHC's improvement in the HEDIS® measure did not appear to be related to their interventions and was not statistically significant. MSFC did not demonstrate sustained improvement.

Lead Screening PIP Interventions Implemented

It is important to note, many interventions were placed on hold during MY 2020 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:

- Home visits to members who are overdue for lead screening; providing education, appointment scheduling, and transportation
- Dedicated staff with improved/stratified reports
- Lead testing at community events with transportation provided
- Bi-Directional Data Exchanges with provider EMRs
- In-home lead screening from a mobile phlebotomy vendor
- 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)

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
- Bulk lead lab orders
- Drive up Phlebotomy
- Online reminder for lead screening
- Provider Performance Incentive
- Free, same day transportation through Lyft
- Forward sweep text messaging with video link to Maryland's Department of Health YouTube Lead Video
- Provider feedback on lead screening performance
- MCO staff education on lead screening and available resources
- Provider gaps-in-care reports
- Education for pregnant members and members with a recent birth through case management
- 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

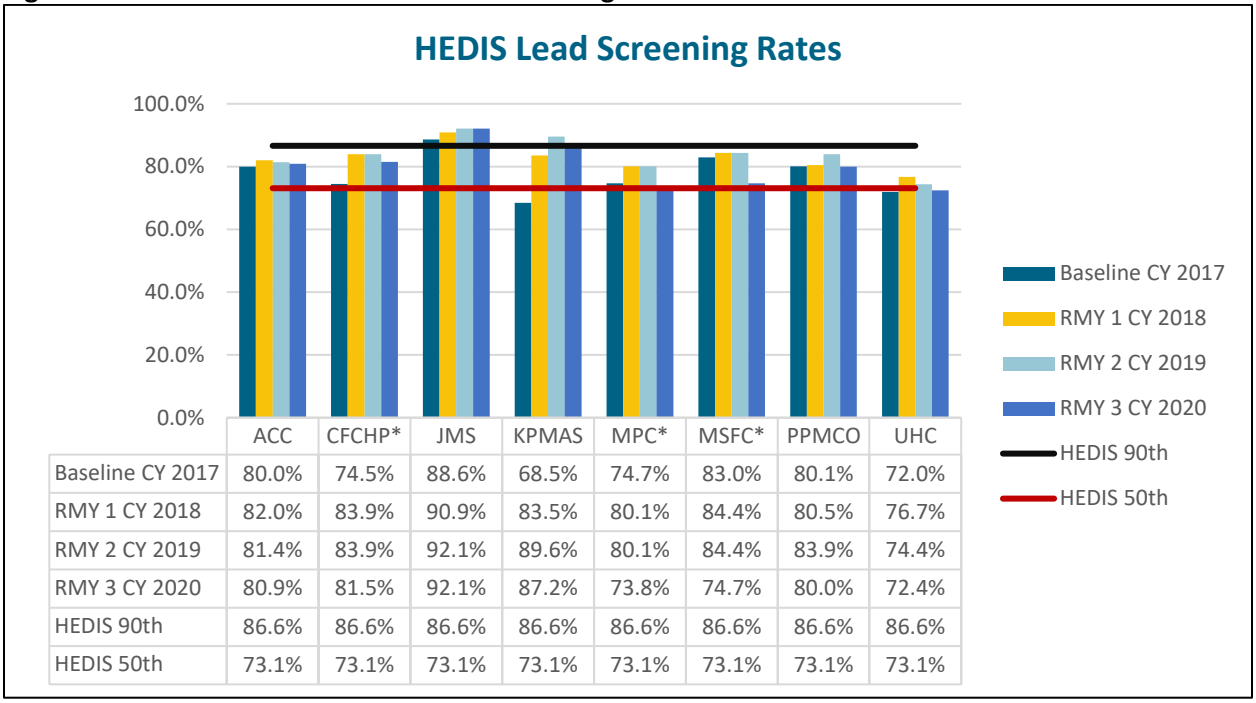
MCO Barriers:

- 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

CY 2020 is the third remeasurement year of data collection for the Lead Screening PIP.
Figure 2 represents the HEDIS® indicator rates for the eight MCOs participating in this PIP.

Figure 2. CY 2017 - CY 2020 HEDIS® Lead Screening Indicator Rates



	ACC	CFCHP*	JMS	KPMAS	MPC*	MSFC*	PPMCO	UHC
Baseline CY 2017	80.0%	74.5%	88.6%	68.5%	74.7%	83.0%	80.1%	72.0%
RMY 1 CY 2018	82.0%	83.9%	90.9%	83.5%	80.1%	84.4%	80.5%	76.7%
RMY 2 CY 2019	81.4%	83.9%	92.1%	89.6%	80.1%	84.4%	83.9%	74.4%
RMY 3 CY 2020	80.9%	81.5%	92.1%	87.2%	73.8%	74.7%	80.0%	72.4%
HEDIS 90th	86.6%	86.6%	86.6%	86.6%	86.6%	86.6%	86.6%	86.6%
HEDIS 50th	73.1%	73.1%	73.1%	73.1%	73.1%	73.1%	73.1%	73.1%

Note: Remeasurement Year (RMY)

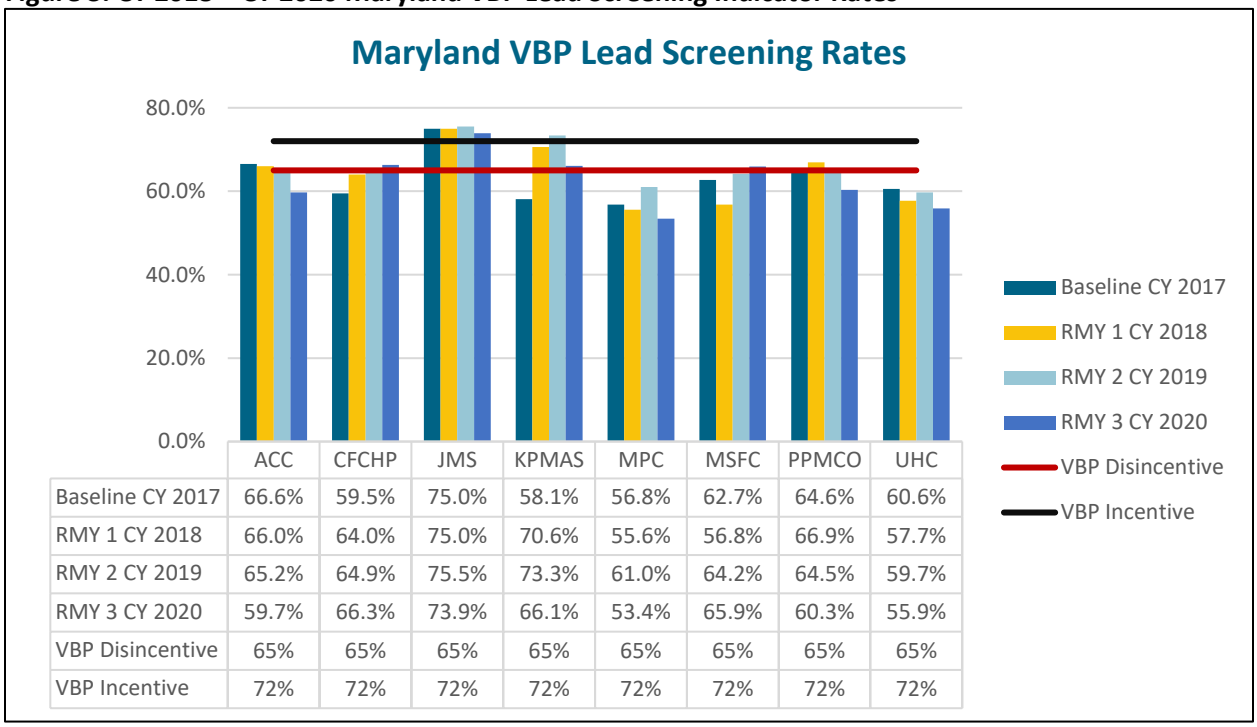
*These MCOs elected to report HEDIS® 2019 audited rates for HEDIS® 2020 hybrid measures based upon NCQA guidance in response to the impact of the COVID-19 public health emergency.

Both JMS and KPMAS exceeded the HEDIS® 2020 (MY 2019) Medicaid 90th Percentile benchmark for the Lead Screening rate. HEDIS® MY 2020 benchmarks were not yet available at the time of this report. The success of these two plans may be partially attributed to the common ownership of the health plan and the majority of PCP providers, which allows for increased synergy. Additionally, KPMAS has a shared decision-support system that alerts providers to needed/overdue services, such as lead testing at the time of care. CFCHP is performing between the 75th and 90th percentiles. Both KPMAS and CFCHP made notable gains in performance from their baseline over time. Four MCOs (ACC, MPC, MSFC, and PPMCO) are performing between the 50th and 75th percentiles. UHC is performing below the 50th percentile.

Improvement in the HEDIS® Lead Screening rate from baseline to MY 2020 was demonstrated by five MCOs (ACC, CFCHP, JMS, KPMAS, and UHC). Three MCOs experienced a decline in performance over their baseline rate:

- MPC's rate declined by 0.9 percentage points, which may be attributed to suspending some high impact interventions due to the COVID-19 public health emergency and generally not replacing them with comparable interventions.
- MSFC's rate declined by 8.3 percentage points, which may be attributed to its decision to prioritize its resources on children up to the age of 15 months who were determined to be most at risk of falling behind in well-care visits and immunizations.
- PPMCO's rate declined by 0.1 percentage points, which may be attributed to its lack of robust interventions that address all system-wide barriers (member, provider, and MCO).

Figure 3. CY 2018 – CY 2020 Maryland VBP Lead Screening Indicator Rates



	ACC	CFCHP	JMS	KPMAS	MPC	MSFC	PPMCO	UHC
Baseline CY 2017	66.6%	59.5%	75.0%	58.1%	56.8%	62.7%	64.6%	60.6%
RMY 1 CY 2018	66.0%	64.0%	75.0%	70.6%	55.6%	56.8%	66.9%	57.7%
RMY 2 CY 2019	65.2%	64.9%	75.5%	73.3%	61.0%	64.2%	64.5%	59.7%
RMY 3 CY 2020	59.7%	66.3%	73.9%	66.1%	53.4%	65.9%	60.3%	55.9%
VBP Disincentive	65%	65%	65%	65%	65%	65%	65%	65%
VBP Incentive	72%	72%	72%	72%	72%	72%	72%	72%

Note: Remeasurement Year (RMY)

JMS is the only MCO with Maryland VBP rates for lead screening that are in the incentive benchmark range of ≥ 72% for VBP. VBP rates of three MCOs (CFCHP, KPMAS, and MSFC) fall in the neutral zone. The remaining four MCOs (ACC, MPC, PPMCO, and UHC) have rates within the VBP disincentive benchmark (≤ 65%).

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

- ACC's rate declined by 6.9 percentage points. ACC's decline may be attributed to its lack of robust interventions that address all system-wide barriers (member, provider, and MCO) and lack of focus on the PIP population (members in need of lead screening rather than those with elevated lead levels).
- JMS' rate declined by 1.1 percentage points, which may be attributed to pausing several of its interventions due to the COVID-19 public health emergency and not replacing them with comparable interventions.
- MPC's rate declined by 3.4 percentage points, which may be attributed to suspending some high-impact interventions due to the COVID-19 public health emergency and generally not replacing them with comparable interventions.
- PPMCO's rate declined by 4.3 percentage points, which may be attributed to its lack of robust interventions that address all system-wide barriers (member, provider, and MCO).
- UHC's rate declined by 4.7 percentage points, which may be attributed to a lack of timely, robust interventions specifically focused on increasing the lead screening rate.

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. Confidence levels were assigned to each MCO based upon the effectiveness of its interventions in increasing the AMR and Lead rates and its demonstration of adhearing to the required steps in the PIP protocol. It is important to note that performance was likely influenced by the COVID-19 public health emergency contraints. Tables 6 and 7 identify the validation rating and the corresponding level of confidence Qlarant has assigned to each MCO's AMR and Lead Screening PIPs for CY 2020 PIP performance.

Table 6. 2021 AMR Screening PIP Validation Rating and Confidence Levels

2021 AMR PIP Validation Rating and Confidence Level	ACC	CFCHP	JMS	KPMAS	MPC	MSFC	PPMCO	UHC
PIP Validation Rating	**81.07%**	**73.65%**	**94.19%**	**71.84%**	**67.12%**	**68.05%**	**88.79%**	**44.41%**
Confidence Level	**C**	**L**	**H**	**L**	**L**	**L**	**C**	**NC**

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

JMS' PIP was assigned a *High Confidence* level as a result of the effectiveness of its interventions in increasing the AMR rate and its adherence to most of the required steps in the PIP protocol.

A level of *Confidence* was assigned to AMR PIPs from two MCOs (ACC and PPMCO). ACC did not identify the data elements to be collected, fully utilize the PDSA approach, or demonstrate sustained improvement. PPMCO provided no evidence of a disparities analysis to support targeted interventions or demonstrate sustained improvement.

Low Confidence was assigned to four MCOs (CFCHP, KPMAS, MPC, and MSFC) for the AMR PIP. CFCHP did not provide accurate and consistent results, address MCO system-wide barriers in its interventions, utilize the SMART formula for goal setting, provide evidence of a disparities analysis to support targeted interventions, or consistently utilize the PDSA approach. KPMAS did not include in its qualitative analysis factors that influence comparability between baseline and repeat measurements; identify any lessons learned for a decline in performance; demonstrate that its interventions are evidence-based, robust in response to identified barriers, and include a SMART goal and methodology for evaluating effectiveness; provide evidence of a disparities analysis to support targeted interventions; or demonstrate that improvement in the AMR rate from baseline is statistically significant. MPC did not demonstrate that its interventions are evidence-based, use of the PDSA cycle, or improvement over baseline. MSFC did not provide evidence of a disparities analysis to support targeted interventions, demonstrate use of the PDSA cycle, or report any improvement from baseline.

UHC's AMR PIP was determined *Not Credible* as it's quantitative and qualitative analyses were missing several components. UHC's AMR PIP did not use the PDSA approach; demonstrate robust interventions in response to identified barriers that include a SMART goal or conduct a disparities analysis to support targeted interventions; or demonstrate improvement that was sustained, statistically significant, or was the result of its interventions.

Table 7. 2021 Lead Screening PIP Validation Rating and Confidence Levels

2021 Lead PIP Validation Rating and Confidence Level	ACC	CFCHP	JMS	KPMAS	MPC	MSFC	PPMCO	UHC
PIP Validation Rating	**59.10%**	**68.66%**	**92.22%**	**87.80%**	**76.84%**	**86.51%**	**62.24%**	**52.32%**
Confidence Level	**NC**	**L**	**H**	**C**	**C**	**C**	**L**	**NC**

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

A level of *High Confidence* was assigned to JMS' Lead PIP as a result of the effectiveness of its interventions in increasing the Lead Screening rate and its demonstration of adhering to most of the required steps in the PIP protocol.

A level of *Confidence* was assigned to three MCOs (KPMAS, MPC, and MSFC). All three MCOs did not identify any lessons learned as a result of a decline in performance. Additionally, KPMAS' qualitative analysis was incomplete and lacked specificity regarding data elements to be collected and factors influencing comparability between baseline and repeat measurements. It also did not demonstrate that its interventions were evidence-based. MPC experienced a decrease in both of its rates from baseline to MY 2020, which may be attributed to suspension of some high impact interventions due to COVID-19 and passive interventions that could not be evaluated for their impact on the lead screening rates. MSFC experienced a decrease in its HEDIS® rate from baseline to MY 2020 as a result of prioritizing resources to focus on a population of 15 months or younger and provided no evidence of targeted interventions to address cultural differences based upon a disparities analysis.

Lead PIPs from two MCOs (CFCHP and PPMCO) were assigned a level of *Low Confidence*. CFCHP did not identify any lessons learned and interventions were not evidence-based or include all system components or SMART goals. Additionally, CFCHP did not demonstrate use of PDSA or implementation of targeted interventions to address cultural differences based upon a disparities analysis. PPMCO did not demonstrate that its interventions were evidence-based, timely, robust, or targeted to address cultural differences based upon a disparities analysis; both its MY 2020 HEDIS® and VBP measures were below its baseline results.

PIPs from ACC and UHC were determined *Not Credible* as both MCOs did not demonstrate that their interventions were evidence-based, timely, robust and did not include SMART goals. Additionally, neither MCO demonstrated use of PDSA, targeted interventions based upon a disparities analysis, or statistically significant improvement that was likely the result of their interventions. Furthermore, ACC did not identify the data elements to be collected or include all system components in its interventions. UHC did not assess its performance against the approved long-term goal, identify any factors that influenced comparability between baseline and repeat measurements, or provide an accurate assessment of project success.

PIP Conclusions and Recommendations

Although MCOs are required to participate in two PIPs, AMR and Lead Screening, ABH's participation was not required since the MCO did not initiate operations until October 2017 and when it had sufficient data, the other MCOs were midway through the PIP cycle. CY 2020 results for the AMR PIP were submitted on September 15, 2021, and the Lead Screening results were submitted on September

30, 2021. A separate HEDIS® audit of all PIP indicator results was conducted by an independent NCQA-certified organization. Maryland encounter data (VBP) rates were also validated by MDH's subcontractor.

Overall, performance indicator results were mixed and opportunities for improvement remain. Confidence levels assigned to the AMR and Lead PIPs were similar. For both PIPs, one MCO was assigned a *High Confidence* level while a level of *Confidence* was assigned to three different MCOs. PIPs from the remaining four MCOs were either assigned a level of *Low Confidence* or determined *Not Credible*. Past results demonstrated stronger performance for the Lead PIP, which suggested that the implementation of a Rapid Cycle PIP methodology had helped to facilitate more frequent assessments that led to adjustments in interventions. However, the impact of the COVID-19 public health emergency during MY 2020 was an exceptional confounding variable for the Lead PIP. The lead screening rates were challenged specifically due to the implementation of executive stay-at-home emergency orders. Therefore, many of the interventions were placed on hold during MY 2020 due to temporary closures of provider offices, diversion of lab resources to COVID-19 testing, and the discontinuation of in-home testing services. Progressing into MY 2021, the MCOs are working towards modifying active interventions and introducing new interventions in order to overcome the challenges presented from the COVID-19 public health emergency.

Remeasurement data was reported for all PIPs. Table 8 summarizes each MCO's overall PIP performance. Improvement is evaluated by comparing the most recent remeasurement results (MY 2020) to baseline performance.

Table 8. Overall PIP Performance

Performance Improvement Project		2021 Overall PIP Performance							
		ACC	CFCHP	JMS	KPMAS	MPC	MSFC	PPMCO	UHC
Asthma Medication Ratio PIP	Validation Rating	**81.07%**	**73.65%**	**94.19%**	**71.84%**	**67.12%**	**68.05%**	**88.79%**	**44.41%**
	Confidence Level	**C**	**L**	**H**	**L**	**L**	**L**	**C**	**NC**
	Any Improvement?	✓	✓	✓	✓	–	–	✓	✓
	Any Statistical Significant Improvement?	✓	✓	✓	–	–	–	✓	–
	Any Sustained Improvement?	–	✓	✓	✓	–	–	–	–
Lead Screening PIP	Validation Rating	**59.10%**	**68.66%**	**92.22%**	**87.80%**	**76.84%**	**86.51**	**62.24%**	**52.32%**
	Confidence Level	**NC**	**L**	**H**	**C**	**C**	**C**	**L**	**NC**
	Any HEDIS® Rate Improvement?	✓	✓	✓	✓	–	–	–	✓
	Any Statistically Significant Improvement in HEDIS® rate?	–	✓	–	✓	–	–	–	–
	Any Sustained Improvement in HEDIS® rate?	✓	✓	✓	–	–	–	–	✓
	Any VBP Rate Improvement?	–	✓	–	✓	–	✓	–	–
	Any Statistically Significant Improvement in VBP rate?	–	✓	–	✓	–	✓	–	–
	Any Sustained Improvement in VBP rate?	–	✓	–	✓	–	–	–	–

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

Six MCOs (ACC, CFCHP, JMS, KPMAS, PPMCO, and UHC) demonstrated improvement in the AMR rate from baseline to MY 2020. Reported improvement was determined statistically significant for four MCOs (ACC, CFCHP, JMS, and PPMCO). Three MCOs (CFCHP, JMS, and KPMAS) demonstrated sustained improvement from baseline.

Five MCOs (ACC, CFCHP, JMS, KPMAS, and UHC) demonstrated improvement in the HEDIS® Lead Screening rate from baseline to MY 2020. Reported improvement was determined statistically significant for two MCOs (CFCHP and KPMAS). Five MCOs (ACC, CFCHP, JMS, KPMAS, and UHC) demonstrated sustained improvement from baseline.

Three MCOs (CFCHP, KPMAS, and MSFC) demonstrated improvement in the VBP Lead Screening rate from baseline to MY 2020, which was determined statistically significant. Two MCOs (CFCHP and KPMAS) demonstrated sustained improvement from baseline.

Recommendations

Qlarant recommendations remain fairly consistent from those offered in prior PIP Validations. 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. Many MCOs are not implementing any new interventions until the latter half of the measurement year, most often in the last quarter.
- **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. Although Qlarant provided training to all MCOs on the process for identifying disparities based on analysis of MCO-specific data in May 2018, the majority of MCOs continue to demonstrate a lack of in-depth analysis to identify root causes for informing targeted interventions. 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 addressed members with elevated blood levels, which would have no impact on either the HEDIS® or VBP rates as only one lead test is counted for each member.
- **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 at the activity level rather than at the process or outcome level when assessing the impact of interventions.
- **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.

- **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 final audited rates** for each of the measures. Resubmissions were required from several MCOs due to incorrect rates or reported absence of final CY 2018 Lead Screening rates from MDH's contractor. Rates also must be consistent in the number of decimal places for all measurement periods. It was observed that a variance in reporting decimal places from one period to the next can have an impact on the percentage point changes and the results of statistical significance testing.
- **Ensure that the quantitative analysis of PIP results includes a comparison of results to the long-term approved goal** in addition to any annual goals that the MCO has established. All goals need to reflect an improvement from the baseline measure. Some MCOs identified annual goals that were below the baseline rate.
- **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. As a response to these challenges, one MCO developed a drive-up phlebotomy intervention for lead screening to address parental reluctance to bring their child to a provider's office and/or lab due to possible COVID-19 exposure.
- **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.
- **Revise the PIP Validation template to include a score of Partially Met** for each of the components under the nine steps.

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. Qlarant is also planning technical assistance meetings individually with MCOs to address ongoing challenges in developing SMART objectives and/or using the PDSA process.