



# 2022 External Quality Review

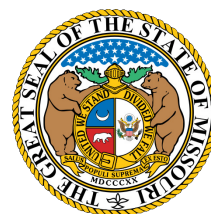
## Performance Improvement Projects

### Healthy Blue

**Measurement Period:** Calendar Year 2021

**Validation Period:** Sept-Oct 2022

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## 1.0 OVERVIEW

The Department of Social Services, Missouri HealthNet Division (MHD) is officially designated with administration, provision, and payment for medical assistance under the Federal Medicaid (Title XIX) and the State Children's Health Insurance (CHIP)(Title XXI) programs. Missouri has an approved combination CHIP under Title XXI of the Social Security Act. Missouri's CHIP uses funds provided under Title XXI to expand eligibility under Missouri's State Medicaid Plan and obtain coverage that meets the requirements for a separate child health program. The MHD operates a Health Maintenance Organization (HMO) style Managed Care program called Missouri (MO) HealthNet Managed Care (hereinafter stated "Managed Care"). Managed Care is extended statewide in four regions: Central, Eastern, Western, and Southwestern, to improve accessibility and quality of healthcare services to all the eligible populations while reducing the cost of providing that care. Participation in Managed Care is mandatory for the eligible groups within the regions in operation. Coverage under CHIP is provided statewide through the Managed Care delivery system. The MHD began enrolling a new population group called Adult Expansion Group (AEG) in the Managed Care effective Oct 1, 2021, under section 1932(a) to include low-income adults ages nineteen to sixty-four. The total number of Managed Care (Medicaid, CHIP, and AEG) enrollees in the end of SFY 2022 was 1,011,719, representing an increase of 25.09% compared to the end of SFY 2021.

The MHD contracts with Managed Care Organizations (MCOs) to provide health care services to its Managed Care enrollees. Healthy Blue is one of the three MCOs operating in MO.

The MHD contracted with PRO Team Management Healthcare Business Solutions, LLC (hereinafter stated PTM), an External Quality Review Organization (EQRO), to conduct an External Quality Review (EQR).<sup>1</sup> The review period for EQR 2022 is the calendar year (CY)/measurement year (MY) 2020.

## 2.0 OBJECTIVE

A PIP is a project conducted by an MCO designed to achieve significant improvement sustained over time in health outcomes and enrollee satisfaction. A PIP may be designed to change behavior at a member, provider, or MCO/system level. The MHD requires Healthy Blue to conduct performance improvement projects (PIPs) that focus on clinical and non-

<sup>1</sup> An EQR is the analysis and evaluation of aggregated information on quality, timeliness, and access to the health care services that an MCO, or its contractors, furnish to Medicaid beneficiaries (42 Code of Federal Regulations-CFR-430.320).

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clinical areas each year as a part of Healthy Blue's quality assessment and performance improvement (QAPI) program (42 CFR 438.330, 457.1240(b)/MHD contract, section 2.18.8 (d)):

- Clinical PIP: Improving Childhood Immunization Status (HEDIS<sup>2</sup> CIS Combo 10 rate).
- Nonclinical PIP: Improving Oral Health (HEDIS ADV rate).

The Code of Federal Regulations (CFR), 42 CFR 438.358(b)(1)(i) requires an EQRO to conduct a validation of performance improvement projects (PIPs) in accordance with 438.330(b)(1) that were underway during the preceding 12 months. Accordingly, PTM validated the two PIPs submitted by Healthy Blue and assessed whether the PIPs used sound methodology in their design, implementation, analysis, and reporting.

### 3.0 TECHNICAL METHOD

PTM followed the guidelines established by the Centers for Medicare and Medicaid Services (CMS) EQR Protocol 1, Validation of PIPs. PTM referred to the MHD contract, section 2.18.8(d), for the requirements and confirmed the scope of work with the MHD. PTM requested Healthy Blue to upload its PIP documentation on PTM's web-based secure file storage site by Aug 30, 2022. PTM requested additional information from Healthy Blue via electronic communication by Oct 7, 2022.

The PIPs validation process included the following activities (Table 1):

Table 1. PIP Validation Process	
<b>Activity 1: Assess PIP Methodology</b>	<p>Step 1. Review the selected PIP topic.</p> <p>Step 2. Review the PIP aim statement.</p> <p>Step 3. Review the identified PIP population.</p> <p>Step 4. Review sampling methods (if sampling is used).</p> <p>Step 5. Review the selected PIP variables and performance measures.</p> <p>Step 6. Review data collection procedures: Administrative data collection, medical record review, and Hybrid data collection.</p> <p>Step 7. Review data analysis and interpretation of PIP results.</p> <p>Step 8. Assess the improvement strategies (Model for Improvement and Plan-Do-Study-Act (PDSA) process: rapid-cycle PIPs).</p>

<sup>2</sup> Healthcare Effectiveness Data and Information Set (HEDIS<sup>®</sup>) is a registered trademark of the National Committee for Quality Assurance (NCQA).

	Step 9. Assess the likelihood that significant and sustained improvement occurred.
<b>Activity 2: Perform overall validation and reporting of PIP results</b>	Level of Confidence: High; Moderate; Low; and No Confidence
<b>Activity 3: Verify PIP findings</b>	Optional (It will be conducted only if the MHD has concerns about data integrity and requires EQRO to verify the data produced by MCO.)

PTM evaluated each step included in the PIP validation process and assigned a score of Fully Met (●), Partially Met (●), or Not Met (●) based on the definitions adapted from the CMS EQRO Protocol 3 as applicable to the PIPs (refer to Appendices A and B). If multiple criteria evaluated in any step received a combination of fully met, partially met, and not met scores, then the overall score assigned was “Partially Met,” or a decision was based on the scores assigned to the critical components.

PTM assessed the overall validity and reliability of the PIP methods and findings to determine whether it has confidence in the results. The validation rating was based on the PTM's assessment of whether Healthy Blue adhered to an acceptable methodology for all phases of design (PIP topic, aim statement, selection of the population, sampling, selection of PIP variables and performance measures, selection of intervention-key driver diagram); data collection; data analysis; an interpretation of the PIP results; produced significant evidence of improvement based on a continuous quality improvement philosophy; and reflected an understanding of lessons learned and opportunities for improvement. (Statistically significant change in performance is noted when  $p \text{ value} \leq 0.05$ ).

The level of confidence is defined as follows:

- High Confidence = The PIP was methodologically sound, achieved the SMART (Specific, Measurable, Attainable, Relevant, Time-bound) Aim, and the demonstrated improvement was clearly linked to the quality improvement processes implemented.
- Moderate Confidence = The PIP was methodologically sound, achieved the SMART Aim, and some quality improvement processes were clearly linked to the demonstrated improvement; however, there was not a clear link between all quality improvement processes and the demonstrated improvement.
- Low Confidence = (A) The PIP was methodologically sound; however, the SMART Aim was not achieved; or (B) The SMART Aim was achieved; however, the quality improvement processes and interventions were poorly executed and could not be

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linked to the improvement.

- No Confidence = The SMART Aim of the PIP was not achieved, and the PIP methodology was not sound/acceptable.

### 4.0 PIP DESCRIPTION

This section briefly describes the PIP design, intervention(s), and results submitted by Healthy Blue. (Note: PTM does not change Healthy Blue's PIPs description other than formatting or minor corrections. Any changes made by Healthy Blue to its original submission after PTM identified the inaccuracies were not scored. However, additional data requested by PTM was evaluated.)

#### 4.1 Clinical PIP: Improving Childhood Immunization Status

The MHD contract section 2.18.8(d)(2) requires Healthy Blue to conduct a PIP to improve HEDIS CIS Combo 10 yearly by at least 2% points in alignment with the Quality Improvement Strategy. Vaccines and recommended doses in HEDIS CIS Combo 10 include DTaP (4); IPV (3); MMR (1); HiB (3); HepB (3); VZV (1); PCV (4); HepA (1); RV (2/3); and Flu (2).

##### 4.1.1 Summary

Table 2(A-D) summarizes the clinical PIP information submitted by Healthy Blue utilizing the worksheet in the CMS EQR Protocol 1.

#### Table 2(A-D). Summary: Improving Childhood Immunization Status

##### 2A. General PIP Information

<b>PIP Title:</b> Improving Childhood Immunization Status (HEDIS CIS Combo 10 rate)	
<b>PIP Aim Statement:</b> To achieve 2% points participation rate in the newly launched Healthy Rewards Influenza Incentives for eligible members, 2 years of age in MY 2021, by December 31, 2021.	
The goal of the PIP is to improve the rates of the most missed vaccine in the CIS Combo 10 series, thus improving the overall HEDIS CIS Combo 10 rate from 36.01% to 38.01% (2% points improvement) by HEDIS MY 2021.	
<b>Was the PIP State-mandated, collaborative, statewide, or plan choice?</b>	
<input checked="" type="checkbox"/>	State-mandated (State required plans to conduct a PIP on this specific topic)
<input type="checkbox"/>	Collaborative (plans worked together during the planning or implementation phases)
<input checked="" type="checkbox"/>	Statewide (the PIP was conducted by all MCOs within the state)
<input type="checkbox"/>	Plan choice (State allowed the plan to identify the PIP topic)



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**Target age group (check one):**

☒ Children only (ages 0–17)\* ☐ Adults only (age 18 and over) ☐ Both adults and children

\*If PIP uses different age thresholds for children, specify the age range here: 0-2 years.

**Target population description, such as duals, LTSS, or pregnant women (specify):**

The target population of the PIP included all Healthy Blue members eligible for the statewide HEDIS CIS measure, as defined by the NCQA CIS HEDIS technical specifications. This consisted of all Healthy Blue members 2 years of age in MY 2021, who had 12 months of continuous enrollment prior to their 2nd birthday. No more than one gap in enrollment of up to 45 days during the 12 months prior to the child's 2nd birthday was allowed to be considered continuously enrolled.

The PIP study population included Healthy Blue members, 2 years of age in MY 2021, who were non-compliant for (had not received) the influenza vaccination as of August 2021.

Programs: ☐ Medicaid (Title XIX) only ☐ CHIP (Title XXI) only ☒ Medicaid and CHIP

**2B. Improvement Strategies or Interventions (Changes tested in the PIP)**

☒ Member-focused interventions (member interventions are those aimed at changing member practices or behaviors, such as financial or non-financial incentives, education, and outreach): Healthy Rewards Member Incentive Program was launched from Aug 16-Dec 31, 2021, that offered a \$10 reward for receiving the annual flu vaccination.

☐ Provider-focused interventions (provider interventions are those aimed at changing provider practices or behaviors, such as financial or non-financial incentives, education, and outreach): N/A

☐ MCO-focused interventions/system changes (MCO/system change interventions are aimed at changing MCO operations; they may include new programs, practices, or infrastructures, such as new patient registries or data tools): N/A

**2C. Performance Measures and Results**

Performance measures (be specific and indicate measure steward and NQF number if applicable)	Baseline year	Baseline sample size and rate	Most recent remeasurement year (if applicable/ Not applicable-PIP is in planning or implementation phase, results not available)	Most recent remeasurement sample size and rate (if applicable)	Demonstrated performance improvement (Yes/No)	Statistically significant change in performance (Yes/No) Specify p-value (<0.01/<0.05)
HEDIS CIS Combo 10 (NQF 0038)-primary measure	MY 2020	36.01% No sampling	MY 2021	30.41% No sampling	No	Yes-decline (> 95% confidence interval)

**2D. PIP Validation Information**

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**Was the PIP validated?** ☒ Yes/☐ No

"Validated" means EQRO reviewed all relevant parts of each PIP and made a determination as to its validity. In many cases, this will involve calculating a score for each relevant stage of the PIP and providing feedback and recommendations.

**Validation phase (check all that apply):**

☒ PIP submitted for approval ☐ Planning phase ☐ Implementation phase  
☐ First remeasurement ☐ Second remeasurement ☐ Other (specify)

Validation rating: ☒ No confidence

"Validation rating" refers to the EQRO's overall confidence that the PIP adhered to an acceptable methodology for all phases of design and data collection, conducted accurate data analysis and interpretation of PIP results, and produced significant evidence of improvement.

**EQRO recommendations for improvement of PIP:** Healthy Blue must have a concise aim statement defining the improvement strategy and the PIP population and be answerable and measurable within a time period. Knowledge of sampling should be applied correctly wherever applicable. The intervention should have a target set based on the goal set by the MHD. PDSA cycles should be utilized to test the intervention, and the intervention should tie to an improvement using correct analysis and interpretation. (Refer to section 6.0 of this report for the details.)

### 4.1.2 PIP Description

**Intervention:** Healthy Blue offered a \$ 10 reward through a new Healthy Rewards Member Incentive Program for all eligible members for the HEDIS CIS Combo 10 measure. To earn rewards for the Healthy Rewards Member Incentive Program, members must enroll in the program prior to or within 30 days of the service by calling Healthy Rewards Member Incentive Program or visiting the website hub. The reward dollars were loaded into the member's Healthy Rewards account after claims for influenza vaccination were received. Rewards could be redeemed for gift cards to various retailers, including Amazon, Kohl's, Subway, and Uber. Care managers educated the members on the Healthy Rewards Member Incentive Program. The information was also posted on the Healthy Blue website.

**Performance Measure:** Healthy Blue utilized the HEDIS CIS Combo 10 measure to track the quarterly performance of the PIP. The measure was defined per the HEDIS technical specifications for MY 2021 as follows:

Numerator: The percentage of children 2 years of age who had four diphtheria, tetanus, and acellular pertussis (DTaP); three polio (IPV); one measles, mumps, and rubella (MMR); three Haemophilus influenza type B (HiB); three hepatitis B (HepB), one



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chickenpox (VZV); four pneumococcal conjugate (PCV); one hepatitis A (HepA); two or three rotavirus (RV); and two influenza (flu) vaccines by their second birthday

Denominator: All children, 2 years of age in the measurement year, who had continuous enrollment for at least 12 months prior to the child's second birthday and no more than one gap in enrollment of up to 45 days during the 12 months prior to the child's second birthday.

**Variable:** Healthy Blue measured the number of members eligible for the CIS Measure (2 years of age in MY 2021) who were non-compliant with the influenza vaccination as of August 2021 and, in turn, were awarded the Member Incentives for receiving the annual influenza vaccination. Healthy Blue named it as "participation rate" and defined it as follows:

Numerator: Eligible members, 2 years of age in MY 2021, who were awarded Healthy Rewards Member Incentives for receiving an influenza vaccination during the 2021 flu season (Aug 16-Dec 31, 2021).

Denominator: Children 2 years of age in MY 2021 who had continuous enrollment for at least 12 months prior to the child's second birthday and no more than one gap in enrollment of up to 45 days during the 12 months prior to the child's second birthday who was non-compliant (had not received) the influenza vaccination as of August 2021.

**Data Collection:** To measure and track the project's performance, Healthy Blue monitored the HEDIS CIS Combo 10 rate quarterly and annually using administrative data (claims and encounter data). However, the final HEDIS CIS Combo-10 rate included administrative and hybrid data from medical record review (MRR). The claims data for the study were queried from the claims-based software and put into NCQA-certified software (Inovalon). Inovalon follows the HEDIS technical specifications to calculate the HEDIS CIS Combo 10 rate. Primary Care Providers and other health agencies submit claims and encounter data to the Vaccines for Children (VFC) Program, and Healthy Blue receives that information through the state immunization registry. This supplemental data and information obtained from Electronic Medical Records were used to identify vaccinations included in the CIS Combo-10 rate.

The participation rates of members who received the annual influenza vaccination as of August 2021 and received the newly launched rewards through the Healthy Rewards Member Incentive Program were tracked monthly from Aug 16-Dec 31, 2021. The participation rates were calculated using HEDIS technical specifications, claims and encounter data, and the Healthy Rewards Member Incentive Program data.

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**Findings:** Total non-complaint members (2 years of age) for influenza vaccines in Aug 2021 were 8,993. Table 3 shows the results of the intervention from Aug-Dec 2021.

**Table 3. Healthy Rewards Member Incentive Program: Aug-Dec 2021**

	Aug	Sept	Oct	Nov	Dec	Total
Number of members receiving influenza rewards.	0	4	54	60	70	187
Participation rate of receiving influenza rewards	0%	0.04%	0.6%	0.67%	0.78%	2.08%
95% Confidence Interval	N/A	0.01%-0.01%	0-0.09%	0.44%-0.77%	0.49%-0.84%	0-0.09%
Statistically Significant Improvement (Yes/No)	N/A	Yes	Yes	No	No	Yes

**Table 4 . Statewide HEDIS CIS Combo 10 Rates (MY 2020-2021)**

Quarterly Measurements	Numerator	Denominator	HEDIS MY 2020 Rate	HEDIS MY 2021 Rate	95% Confidence Interval	Statistical Significance between Measurement Periods
Quarter 1	1030	5001	20.60%	14.15%	19.47% - 21.73%	Yes-Divide
Quarter 2	1161	4956	23.43%	16.11%	22.24% - 24.62%	Yes-Divide
Quarter 3	1209	4916	24.59%	17.27%	23.38% - 25.81%	Yes-Divide
Quarter 4	1203	4865	24.73%	17.68%	23.51% - 25.95%	Yes-Divide
Final Rate	148	411	36.01%	30.41%	31.25% - 40.77%	Yes-Divide

### 4.1.3 PIP Result

Healthy Blue did not meet the aim to increase the HEDIS CIS Combo 10 rate by 2% points from the previous year. The HEDIS CIS Combo 10 rate decreased from 36.01% (MY 2020) to 30.41% (MY 2021) by 5.6% points (Table 4). This decline was statistically significant.

## 4.2 Nonclinical PIP: Improving Oral Health

The MHD contract section 2.18.8(d)(2) requires Healthy Blue to conduct a PIP to improve the HEDIS Annual Dental Visit (ADV) rate for 2-20 years old yearly by at least 2% points in alignment with the Quality Improvement Strategy.

### 4.2.1 Summary

Table 5(A-D) summarizes the nonclinical PIP information submitted by Healthy Blue in the format adopted from the CMS EQR Protocol 1.

**Table 5(A-D). Summary: Improving Oral Health****5A. General PIP Information**

<b>PIP Title:</b> Improving Oral Health (HEDIS ADV rate)
<b>PIP Aim Statement:</b> To increase the statewide HEDIS ADV rate from 44.18% to 46.18% (by 2% points) for members 2-20 years of age in MY 2021 by deploying a robust texting campaign to remind members of needed annual dental visits beginning May 21, 2021, and continuing through December 31, 2021.
<b>Was the PIP State-mandated, collaborative, statewide, or plan choice?</b> <input checked="" type="checkbox"/> State-mandated (State required plans to conduct a PIP on this specific topic) <input type="checkbox"/> Collaborative (plans worked together during the planning or implementation phases) <input checked="" type="checkbox"/> Statewide (the PIP was conducted by all MCOs within the state) <input type="checkbox"/> Plan choice (State allowed the plan to identify the PIP topic)
<b>Target age group (check one):</b> Children only (ages 0–17)    Adults only (age 18 and over) <input checked="" type="checkbox"/> *Both adults and children * Specify the age range here: Aged 0-20 years
<b>Target population description, such as duals, LTSS, or pregnant women (specify):</b> The target population of this PIP includes all Healthy Blue members eligible for the statewide HEDIS ADV measure, as defined by the HEDIS ADV technical specifications. The PIP study population included Healthy Blue members, 2 years of age in MY 2021, who were non-compliant for (had not received) the influenza vaccination as of August 2021.
Programs: <input type="checkbox"/> Medicaid (Title XIX) only <input type="checkbox"/> CHIP (Title XXI) only <input checked="" type="checkbox"/> Medicaid and CHIP

**5B. Improvement Strategies or Interventions (Changes tested in the PIP)**

<input checked="" type="checkbox"/> Member-focused interventions (member interventions are those aimed at changing member practices or behaviors, such as financial or non-financial incentives, education, and outreach): Healthy Blue sent biweekly texts, up to six messages, to members or members' guardians eligible for the HEDIS ADV Measure (2-20 years of age in MY 2021) with a gap in care as of May 2021, reminding them to get their annual dental visit.
<input type="checkbox"/> Provider-focused interventions (provider interventions are those aimed at changing provider practices or behaviors, such as financial or non-financial incentives, education, and outreach): N/A
<input type="checkbox"/> MCO-focused interventions/system changes (MCO/system change interventions are aimed at changing MCO operations; they may include new programs, practices, or infrastructures, such as new patient registries or data tools): N/A

**5C. Performance Measures and Results**

Performance measures (be specific and indicate measure steward and NQF number if applicable)	Baseline year	Baseline sample size and rate	Most recent remeasurement year (if applicable/ Not applicable-PIP is in planning or implementation)	Most recent remeasurement sample size and rate (if applicable)	Demonstrated performance improvement (Yes/No)	Statistically significant change in performance (Yes/No) Specify p-value

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			phase, results not available)			(<0.01/<0.05)
HEDIS ADV-primary measure	MY 2020	44.18% No sampling	MY 2021	44.93% No sampling	Yes	Yes (> 95% confidence interval)

**5D. PIP Validation Information**

**Was the PIP validated?** ☒ Yes / ☐ No

"Validated" means EQRO reviewed all relevant parts of each PIP and made a determination as to its validity. In many cases, this will involve calculating a score for each relevant stage of the PIP and providing feedback and recommendations.

**Validation phase (check all that apply):**

☒ PIP submitted for approval ☐ Planning phase ☐ Implementation phase  
☐ First remeasurement ☐ Second remeasurement ☐ Other (specify)

Validation rating: ☒ No confidence

"Validation rating" refers to EQRO's overall confidence that the PIP adhered to an acceptable methodology for all phases of design and data collection, conducted accurate data analysis and interpretation of PIP results, and produced significant evidence of improvement.

**EQRO recommendations for improvement of PIP:** Knowledge of sampling should be applied correctly wherever applicable. The intervention should have a target set based on the goal set by the MHD. PDSA cycles should be utilized to test the intervention, and the intervention should tie to an improvement using correct analysis and interpretation. (Refer to section 6.0 of this report for the details.)

**4.2.2 PIP Description**

**Intervention:** In MY 2021, Healthy Blue partnered with mPulse to develop a robust texting campaign reminding members to receive annual dental services. Additional educational information was included in the messages, as well as Healthy Blue's member services phone number to answer questions, help members find a dentist, or schedule transportation services to assist members in getting to their appointment. Members had an option to respond as "stop" or "wrong" to the text messages to disenroll from the texting campaign. If members have received services, texting "done" also disenrolled them. Texting "learn" provided additional oral health facts for educational information.

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mPulse sends out text messages every two weeks until members receive dental care, disenroll, or until the campaign is completed. Up to six dental care messages are sent. If more than one member with the same phone number, such as siblings, only one message was sent per unique phone number. To be enrolled in the campaign, eligible members must have a care gap as of May 2021, must meet the criteria for the HEDIS ADV measure, and have a valid cell phone number with Healthy Blue. The text messages were in English and Spanish. The first text message sent was a welcome message, indicating the communication was from Healthy Blue and allowed members the opportunity to opt-out. The first ADV-specific text was then sent. Members who received the ADV-specific text were considered in this PIP.

**Performance Measure:** Healthy Blue utilized the HEDIS ADV measure to track the performance of the PIP. The measure was defined per the HEDIS technical specifications for MY 2021 as follows:

Numerator: Eligible members, 2-20 years of age in MY 2021, identified as having one or more dental visits with a dental practitioner during the measurement year.

Denominator: Eligible members, 2-20 years of age in MY 2021, who are continuously enrolled during the measurement year with no more than one gap in enrollment of up to 45 days.

**Variable:** Number of members, 2-20 years of age in MY 2021, who received the first HEDIS ADV specific text message between May 21-Dec 31, 2021, and the number of those members who obtained dental care in MY 2021 after getting the HEDIS ADV text message.

**Data Collection:** Claims and encounter data for the entire eligible population for the HEDIS ADV measure from the MY 2021 were queried from claims-based software and put into NCQA-certified software (Inovalon). Inovalon followed HEDIS technical specifications to calculate the HEDIS ADV rate. Additional data collected were based on the same HEDIS technical specifications for the ADV measure but focused on members who were enrolled in the mPulse texting campaign. HEDIS ADV rates were then compared to the prior year's monthly rates to assess the impact of the ADV text messages. The HEDIS ADV rate is calculated using administrative data only. MRR was not conducted for rate calculations. Data sent from mPulse, identifying all members who received the first HEDIS ADV-specific text message, was then compared against claims data. Those members who received dental services after receiving the text were tracked monthly from May 21-Dec 31, 2021, for comparison and trending. HEDIS ADV rates were monitored monthly while the texting campaign was active and in April 2021 to serve as a baseline rate. HEDIS ADV rates were also tracked quarterly and annually to evaluate the impact of this intervention. Healthy

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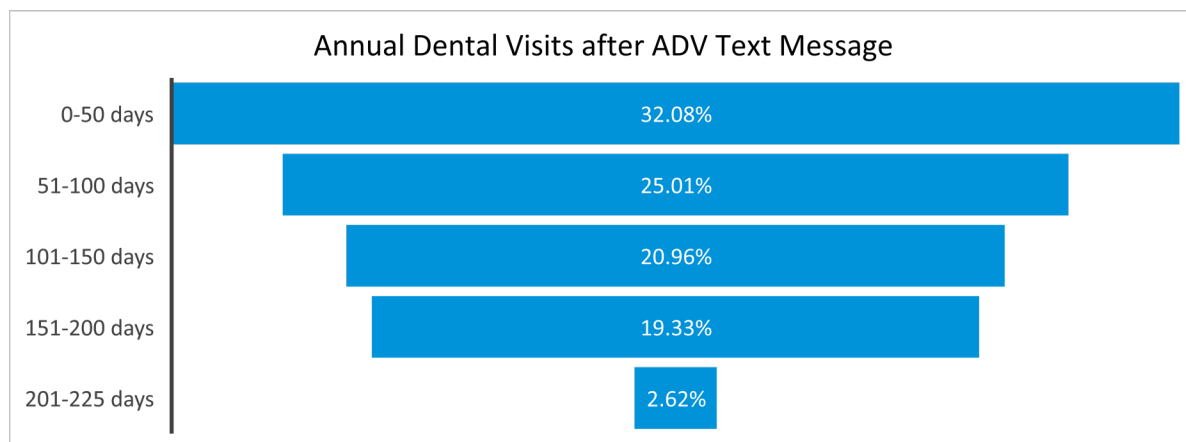
Blue reviewed quarterly and annual HEDIS ADV rates to measure improvement over the prior year.

**Findings:** Healthy Blue analyzed that out of the total 117,841 who received the first HEDIS ADV-specific text messages from May 21-Dec 31, 32,529 members subsequently visited the dentist (27.6%) (Table 6).

**Table 6 . mPulse Campaign Results: May-Dec 2021**

	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Total
Number of members receiving dental care after ADV-specific text	308	5,629	5,292	5,156	4,286	4,137	4,455	3,266	32,529
Number of initial ADV-specific text messages	64,966	42,870	8,277	562	549	44	463	110	117,841

Healthy Blue evaluated rates to determine the length of time between the initial ADV-specific text and the dental visit. Healthy Blue reported that the text intervention was most impactful within the first 50 days of the initial ADV text (Figure 1). Members continued to receive texts biweekly until members disenrolled, received services, or the campaign ended. The texts were least impactful 201-225 days after the initial text.

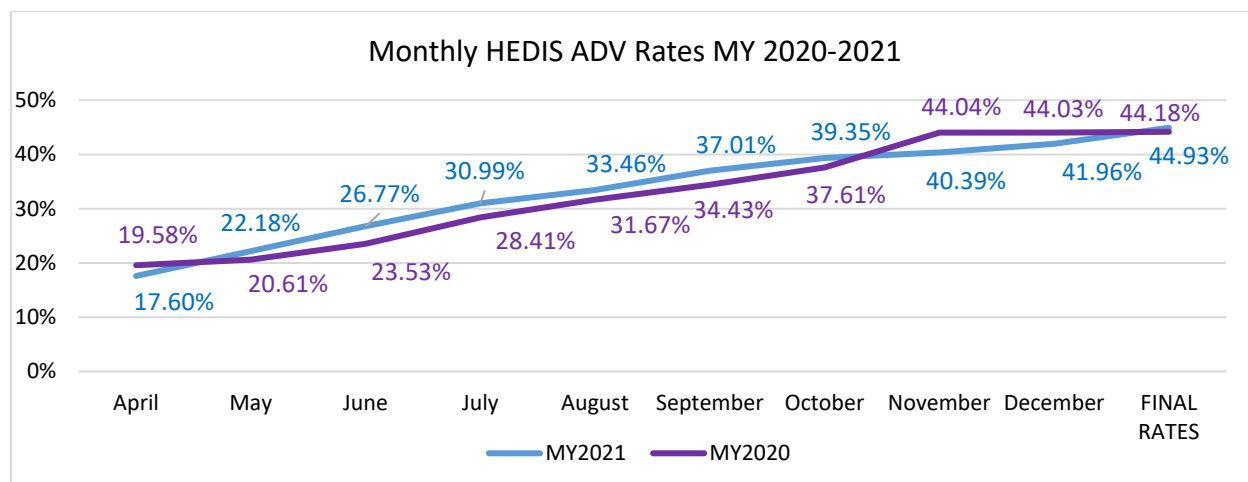


**Figure 1. Response after ADV-Specific Text Message**

Figure 2 and Table 7 show HEDIS ADV rates for the MY 2020 and MY 2021 tracked monthly and quarterly.



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**Figure 2. Monthly HEDIS ADV Rate: MY 2020-MY 2021**

**Table 7. Statewide HEDIS ADV Rates (MY 2020-2021)**

Quarterly Measurements	HEDIS MY 2020	HEDIS MY 2021	95% Confidence Interval	Statistical Significance
Quarter 1	13.46%	15.34%	13.29% - 13.63%	Statistically Significant Improvement
Quarter 2	23.53%	26.77%	23.32% - 23.74%	Statistically Significant Improvement
Quarter 3	34.43%	37.01%	34.18% - 34.67%	Statistically Significant Improvement
Quarter 4	42.67%	41.96%	42.42% - 42.93%	Statistically Equivalent
Final HEDIS Rate	44.18%	44.93%	43.92% - 44.43%	Statistically Significant Improvement

### 4.2.3 PIP Result

Healthy Blue did not meet the aim to increase the HEDIS ADV rate by 2% points from the previous year. However, Healthy Blue reported an increase in the HEDIS ADV rate from 44.18% (MY 2020) to 44.93% (MY 2021) by 0.75% points. This change is statistically significant based on the 95% confidence limits (43.92%-44.43%).

## 5.0 OVERALL CONCLUSIONS

### PIPs Score

Healthy Blue did not meet the MHD's goal to increase the HEDIS CIS Combo 10 and HEDIS ADV rates by 2% points from the previous year. Also, the PIP methodology was not sound, so PTM assigned a score of "no confidence" for both clinical and nonclinical PIPs.

The PIPs did not meet all the required guidelines stated in the 42 CFR 438.330(d)(2)/MHD contract, section 2.18.8(d)(1) (Table 8).

**Table 8. PIPs' Evaluation based on the CFR/MHD Guidelines**

CFR Guidelines	CIS PIP	ADV PIP
Measurement of performance using objective quality indicators	● Fully Met	● Fully Met
Implementation of system interventions to achieve improvement in the access to and quality of care	● Not Met	● Not Met
Evaluation of the effectiveness of the interventions	● Not Met	● Not Met
Planning and initiation of activities for increasing or sustaining improvement.	● Fully Met	● Not Met

### 5.1 Strengths and Weaknesses

PTM identified the following strengths and weaknesses in the validation process of both the PIPs, summarized in Table 9.

**Table 9. Strengths and Weaknesses of PIPs**

Evaluation Criteria	Strength	Weakness
1. Selection of PIP topic	N/A (the MHD provided the topic, hence marked as Not/Applicable-N/A)	N/A
2. Writing an Aim statement		The clinical PIP did not have a concise aim statement, did not clearly specify the improvement strategy and the PIP population, nor identified a measurable or answerable target.
3. Identifying the study population	Healthy Blue had clarity on what constitutes the target population and the project population.	
4. Sampling		PTM determined that a non-probability sampling methodology (Judgmental/purposive) was utilized for both the clinical and nonclinical PIPs. However, Healthy Blue did not identify or report it.
5. Variables/performance measures (the MHD decided the primary measure)	The PIP variable and the performance indicator were selected and accurately defined.	Changes in enrollee satisfaction or experiences were not captured.

## Performance Improvement Projects: Healthy Blue

Evaluation Criteria	Strength	Weakness
6. Data collection procedures	NCQA-certified software (Inovalon) was used to collect data for the PIPs. The data sources were specified. The data collection plan and analysis plan were linked in the clinical PIP.	Qualitative data collection methods were not used (such as interviews or focus groups) to collect meaningful and useful information from respondents. However, the nonclinical PIP had an option to receive members' responses.
7. Data analysis and interpretation of results		<p>The baseline data for MY 2020 corresponding to parameters reported in MY 2021 for the intervention were not included. The data presented does not link to the intervention.</p> <p>PTM comments: Clinical PIP- The participation rate of members eligible for the HEDIS CIS Combo 10 who were non-compliant as of Aug 2021 and received incentives was 2.08%. The participation rate could be due to reminders, education, provider incentives, or other operational activities Healthy Blue applied.</p> <p>PTM comments: Nonclinical PIP- The data submitted by Healthy Blue revealed that the dental visits exceeded the texts in Aug (917%), Sept (780%), Oct (9402%), Nov (962%), Dec (2969%), showing no link to the intervention and results.</p>
8. Improvement strategies	The selected strategies for both the PIPs were evidence-based and were	The usefulness of the improvement strategies was not based on the PDSA cycle,

## Performance Improvement Projects: Healthy Blue

Evaluation Criteria	Strength	Weakness
	identified through data analysis and a quality improvement process.	even though Healthy Blue reportedly used PDSA. The intervention was ongoing, and results were reported monthly.
9. Significant and sustained improvement		<p>The overall HEDIS CIS Combo 10 rate significantly decreased from 36.01% (MY 2020) to 30.41% (MY 2021). The success of the intervention showed a participation rate of 2.08%.</p> <p>The overall HEDIS ADV rate showed an improvement of 0.75% points in the MY 2021, which was reported as statistically significant. However, Healthy Blue reported that the annual dental visits every 50 days showed a continuous drop from 32.08% to 2.62% by the end of the intervention (May-Dec 2021).</p>

## 5.2 Improvement by Healthy Blue

Table 10 shows the degree to which Healthy Blue responded to EQRO's recommendations from the previous years' EQRs. PTM evaluated the actions taken by Healthy Blue and categorized them as follows:

- High: MCO fully addressed the recommendation, complied with the requirement, and PTM closed the item.
- Medium: MCO partially addressed the recommendation, the same recommendation applies, or a new recommendation is provided, and the item remains open.
- Low: Minimal action/no action was taken, the same recommendation applies, and the item remains open.

**Table 10. Degree of response to EQRO's previous recommendations**

Previous Recommendation	Action by Healthy Blue	Healthy Blue's Degree of Response and EQRO's Recommendation
<b>EQR 2021</b>		
1. Aim Statement: Healthy Blue must have one aim statement for their PIP, which can have multiple objectives (if they choose). The PIP aim statement should be concise and define the improvement strategy, population, and period.	Healthy Blue followed the recommendation regarding one aim statement. However, the aim statement for the clinical PIP was not accurately defined.	<b>Medium</b>  The same recommendation applies to the EQR 2022.
2. Study Population: Healthy Blue should articulate the concepts and clearly define the target population and PIP population. The PIP population should be selected at a small scale (e.g., from a county, provider office, or region) so that results can be measured during the PDSA cycle and subsequently applied at a larger scale.	Healthy Blue met the requirements for both PIPs.	<b>High</b>
3. PDSA Cycles: Healthy Blue must adopt PDSA cycles that involve analysis, feedback/lessons learned from the data collected after the intervention, and application of these outcomes to plan another test cycle.	Though Healthy Blue reported using the PDSA cycles for both the PIPs, PTM determined that the process was not followed.	<b>Low</b>  The same recommendation applies to the EQR 2022.
4. Data Analysis and Interpretation of Results: Though conclusive demonstration through controlled studies is not required, Healthy Blue should compare the results across multiple entities, such as different patient subgroups and provider sites, to ascertain the change brought by the intervention.	Healthy Blue did not meet the requirements.	<b>Low</b>  The same recommendation applies to the EQR 2022.
5. Sustained improvement: After an intervention is implemented and results are analyzed, Healthy Blue	Healthy Blue did not meet the requirements for both PIPs. The interventions	<b>Low</b>

## Performance Improvement Projects: Healthy Blue

Previous Recommendation	Action by Healthy Blue	Healthy Blue's Degree of Response and EQRO's Recommendation
should identify strategies to create a sustained improvement. This allows Healthy Blue to maintain the positive results of the intervention, correct negative results, and scale the intervention to support longer-term improvements or broader improvement capacity across other health services, populations, and aspects of care. Because PIPs can be resource-intensive, this phase also helps learn how to allocate more efficiently for future projects.	were ongoing without demonstrating improvement.	The same recommendation applies to the EQR 2022. In addition, a target should be set for the intervention based on the goal of the PIP. The intervention should be adopted, adapted, or abandoned with each PDSA cycle based on the results obtained.
<b>EQR 2020</b>		
1. Even though the MHD mandates an overarching goal, Healthy Blue can select a topic within specified parameters. To ensure a successful PIP, Healthy Blue should find early and regular opportunities to obtain input from staff, providers, and members, improving care delivery.	There was some improvement towards this step in the methodology of PIP in EQR 2022.	<b>Medium</b>  The same recommendation applies to EQR 2022.
2. Healthy Blue should translate the aim statement to identify the focus of the PIP and establish the framework for data collection and analysis on a small scale (PDSA cycle). PIP population should be selected from a county, provider office, or region so that results can be measured during the PDSA cycle and subsequently applied on a larger scale.	There was some improvement towards this step in the methodology of PIP in EQR 2022.	<b>Medium</b>  The same recommendation applies to EQR 2022.
3. Healthy Blue should select a variable (a measurable characteristic, quality, trait, or attribute of a particular individual, object, or situation being studied) that could identify Healthy Blue's	There was an improvement towards this step in the methodology of PIP in EQR 2022 compared to EQR 2021. Variables were selected.	<b>Medium</b>  Healthy Blue should include qualitative measures to link the



## Performance Improvement Projects: Healthy Blue

Previous Recommendation	Action by Healthy Blue	Healthy Blue's Degree of Response and EQRO's Recommendation
performance on the PIPs and track improvement over time. Healthy Blue can use focus groups, surveys, and interviews to collect qualitative insights from members, MCO and provider staff, and key external partners. Qualitative measures can serve as secondary measures or supplement the overall measurement set, providing information that will aid PIP planning and implementation.		intervention to the improvement.
4. Healthy Blue should use variables/secondary measures that tie an intervention to improvement. Clear and concise definitions of data elements (including numerical definitions and units of measure) should be provided for the data collected after the intervention.	There was an improvement in the EQR 2022. The variables were selected and the data elements were defined accurately.	High
5. Data collection plan should be linked to the data analysis plan to ensure that appropriate data would be available for the PIP.	There was an improvement in the EQR 2022.	High
6. A baseline rate should be presented before the start of an intervention, followed by at least two remeasurements. Analysis of results should be utilized to plan the subsequent intervention (cycle-PDSA) for future PIP. Additionally, primary and secondary measures/variables should be linked to illustrate the impact of the intervention on a project's performance.	There was no improvement towards this step in the methodology of PIP in EQR 2022.	Low The same recommendation applies to EQR 2022.

## Performance Improvement Projects: Healthy Blue

Previous Recommendation	Action by Healthy Blue	Healthy Blue's Degree of Response and EQRO's Recommendation
7. Effectiveness of the improvement strategy should be determined by measuring a change in performance according to the predefined measures and linking to intervention.	There was no improvement towards this step in the methodology of PIP in EQR 2022.	<b>Low</b> The same recommendation applies to EQR 2022.
8. When analyzing multiple data points over time, Healthy Blue should consider tools such as time series, run charts, control charts, data dashboards, and basic trend analyses.	There was some improvement in the EQR 2022.	<b>Medium</b> The same recommendation applies to EQR 2022.
<b>EQR 2019</b>		
1. Health Blue should follow CMS EQR protocol and Medicaid Oral Health Performance Improvement Projects: A How-To Manual for Health Plans, July 2015, for guidance on the methodology and approach of PIPs to obtain meaningful results.	There was some improvement in the methodology of PIP in EQR 2022.	<b>Medium</b> The same recommendation applies to EQR 2022.
2. Healthy Blue must refine its skills in the development and implementation of approaches to effect change in the PIPs.	There was some improvement in the methodology of PIP in EQR 2022.	<b>Medium</b> The same recommendation applies to EQR 2022.
3. The interventions should be planned specifically for the PIP required by the MHD contract.	There was some improvement in EQR 2022. However, the interventions were ongoing even when no improvement was evident.	<b>Medium</b> The same recommendation applies to EQR 2022.
4. The results should be tied to the interventions.	There was no improvement in the methodology of PIP in the EQR 2022.	<b>Low</b> The same recommendation applies to EQR 2022.

## 6.0 RECOMMENDATIONS

### Healthy Blue

Healthy Blue must improve the methodology for its PIPs to meet the compliance requirements set in 42 CFR 438.330(d)(2)/MHD contract, section 2.18.8(d). All recommendations from the previous years scored as "Low" and "Medium" must be addressed in future PIPs (refer to Table 9 in section 5.0 of this report). Additionally, accurate knowledge of sampling must be applied while conducting PIPs.

### MHD

1. The MHD must clarify with Healthy Blue to implement system interventions only (MHD contract, section 2.18.8 (d)(1)) and not member/provider interventions. Per the CMS EQR protocol 1, it is expected that interventions associated with significant improvement will be system interventions (such as educational efforts, policy changes, or targeting of additional resources). However, 42 CFR 438.330(d)(2) requires an MCO to implement interventions to achieve improvement in the access and quality of care. There is no emphasis on system interventions.

2. A formal one-on-one technical assistance would help Healthy Blue close the gaps in knowledge of its approach to conducting a PIP. Training, assistance, and expertise for designing, analyzing, and interpreting PIP findings are available from the EQRO, CMS publications, and research reviews.

2. The MHD should require Healthy Blue to develop a specific PIP plan, including a timeline, SMART aim statement, names and credentials of team members conducting the PIP, key driver diagram, performance indicators (primary and secondary measures, variables), interventions planned, data collection plan by the first quarter of a given MY, for approval.

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## Performance Improvement Projects: Healthy Blue

**APPENDIX A. PIP VALIDATION WORKSHEET IMPROVING CHILDHOOD IMMUNIZATION STATUS**

Date of Evaluation: Oct 5, 2022

MCO Name/Mailing Address:	Healthy Blue/1831 Chestnut, St. Louis, MO, 63103
MCO PIP Coordinators:	Director II, GBD-Quality Management Clinical Quality Program Manager Clinical Quality Program Administrator
Name of Performance Improvement Project:	Improving Childhood Immunization Status
PIP Period Date:	Jan 1, 2021-Dec 31, 2021
Programs:	Medicaid only/CHIP only/✓Medicaid and CHIP
Demographic Information:	Number of Medicaid/CHIP enrollees in MCO: 340,239 Medicaid/CHIP members included in the study: 8,993 Number of Primary Care Providers: 5,304

**Score: Fully Met (FM) ● / Partially Met (PM) ● / Not Met (NM) ● / Not Applicable (N/A)**
**ACTIVITY 1: ASSESS THE PIP METHODOLOGY****Step 1: Review the PIP Topic**

Component/Standard	Score	Comments
1.1 Was the topic selected through a comprehensive analysis of MCO enrollee needs, care, and services? (Note: If the PIP topic was required by the State, it will be marked as N/A.)	N/A	The MHD contract section 2.18.8(d)(2) requires Healthy Blue to conduct a PIP to improve HEDIS CIS Combo 10 yearly by at least 2% points in alignment with the Quality Improvement Strategy.
1.2 Did selection of the PIP topic consider performance on the CMS Child and Adult Core Set measures?	N/A	The MHD selected the PIP topic. However, Childhood Immunization Status is a Child Core Set measure (NQF0038).
1.3 Did the selection of the PIP topic consider input from enrollees or providers who are users of, or concerned with, specific service areas? (Note: If the PIP topic was required by the State, it will be marked as N/A.)	N/A	The MHD selected the PIP topic.
1.4 Did the PIP topic address care of special populations or high-priority services, such as: <ul style="list-style-type: none"> <li>• Children with special health care needs</li> <li>• Adults with physical disabilities</li> <li>• Children or adults with behavioral health issues</li> <li>• People with intellectual and developmental disabilities</li> </ul>	● FM	The PIP considers all members eligible for the HEDIS CIS measure regardless of special health care needs, behavioral health issues, intellectual or physical disability, and developmental delays. No children were excluded.

## Performance Improvement Projects: Healthy Blue

<ul style="list-style-type: none"> <li>• People with dual eligibility who use long-term services and supports (LTSS)</li> <li>• Preventive care</li> <li>• Acute and chronic care</li> <li>• High-volume or high-risk services</li> <li>• Care received from specialized centers (e.g., burn, transplant, cardiac surgery)</li> <li>• Continuity or coordination of care from multiple providers and over multiple episodes</li> <li>• Appeals and grievances</li> <li>• Access to and availability of care</li> </ul>		
1.5 Did the PIP topic align with priority areas identified by HHS and/or CMS?	N/A	The MHD selected the topic. The CIS measure aligns with the CMS priority areas.
1.6 Overall assessment/recommendations for improving PIP topic.	● FM	Even though the MHD mandates the overarching goal, Healthy Blue should find early and regular opportunities to obtain input from staff, providers, and members on improving care delivery and decide on the focus of the PIP to impact on the HEDIS CIS Combo 10 rate.

## Step 2: Review the PIP Aim Statement

Component/Standard	Score	Comments
2.1 Did the PIP aim statement clearly specify the improvement strategy?	● NM	The aim statement was “to achieve a 2% points participation rate in the newly launched Healthy Rewards Influenza Incentives for eligible members, 2 years of age in MY 2021, by December 31, 2021. Influenza vaccination rewards were launched on August 16, 2021.” PTM determined that the improvement strategy is not clearly specified.
2.2 Did the PIP aim statement clearly specify the population for the PIP?	● PM	The target population was clearly specified: 2 years of age in MY 2021. However, the PIP population was not clearly specified.
2.3 Did the PIP aim statement clearly specify the time period for the PIP?	● FM	MY 2021 (by Dec 31, 2021).
2.4 Was the PIP aim statement concise?	● NM	PTM determined that the aim statement was not concise and complete, as the strategy and PIP population were not mentioned.

## Performance Improvement Projects: Healthy Blue

2.5 Was the PIP aim statement answerable?	● NM	PTM determined that the 2% points participation rate in the newly launched member reward program does not have clarity and basis for the target selection.
2.6 Was the PIP aim statement measurable?	● NM	The aim statement does not provide the baseline rate, so measuring 2% points is not possible.
2.7 Overall assessment/recommendations for improving the PIP aim statement.	● PM	Healthy Blue should frame a concise aim statement. The PIP aim statement should define the improvement strategy and the PIP population and be answerable and measurable within a time period.

## Step 3: Review the Identified Study Populations

Component/Standard	Score	Comments
3.1 Was the project population clearly defined in terms of the identified PIP question (e.g., age, length of the PIP population's enrollment, diagnoses, procedures, other characteristics)?	● FM	<p>The target population of the PIP included all Healthy Blue members eligible for the statewide HEDIS CIS measure, as defined by the NCQA CIS HEDIS Technical Specifications. This consisted of all Healthy Blue members 2 years of age in MY 2021, who had 12 months of continuous enrollment prior to their 2nd birthday. No more than one gap in enrollment of up to 45 days during the 12 months prior to the child's 2nd birthday was allowed to be considered continuously enrolled.</p> <p>The PIP study population included Healthy Blue members, 2 years of age in MY 2021, who were non-compliant for (had not received) the influenza vaccination as of August 2021.</p> <p>PTM determined that Healthy Blue had clearly defined the target and the PIP population.</p>
3.2 Was the entire MCO population included in the PIP?	● FM	The entire eligible population for the HEDIS CIS Combo 10 measure was included in the PIP.
3.3 If the entire population was included in the PIP, did the data collection approach capture all enrollees to whom the PIP question applied?	● FM	Healthy Blue utilized Inovalon, an NCQA-certified vendor, to collect the administrative data for the HEDIS CIS measure Technical Specifications. Claims

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## Performance Improvement Projects: Healthy Blue

		and encounter data were also utilized.
3.4 Was a sample used?	● NM	<p>Healthy Blue reported that the entire population of Healthy Blue members 2 years of age in MY 2021 who were eligible for the HEDIS CIS Combo 10 measure per the HEDIS Technical Specifications were included in the study; therefore, sampling methods were not applicable.</p> <p>PTM determined that all non-compliant members for the influenza vaccines from the eligible population for CIS Combo 10 were included in the PIP population. This is a type of non-probability sampling but not reported in the PIP.</p>
3.5 Overall assessment/recommendations for identifying the project population.	● PM	Healthy Blue should select the PIP population on a small scale, e.g., a county, provider office, or region, so that results can be measured during the PDSA cycle and subsequently applied on a larger scale for improvement. Knowledge of sampling must be applied accurately.

## Step 4: Review Sampling Method

Component/Standard	Score	Comments
4.1 Did the sampling frame contain a complete, recent, and accurate list of the target PIP population?	● FM	Healthy Blue reported that the entire population of Healthy Blue members 2 years of age in MY 2021 who were eligible for the HEDIS CIS measure using the HEDIS technical specifications were included in this study.
4.2 Did the sampling method consider and specify the true or estimated frequency of the event, the confidence interval to be used, and the acceptable margin of error?	● NM	PTM determined that Healthy Blue utilized nonprobability sampling that consisted of all the noncompliant members from the target population. However, Healthy Blue did not report that sampling was utilized.
4.3 Did the sample contain a sufficient number of enrollees taking into account non-response?	● FM	All non-compliant members of the influenza vaccine were selected for the PIP.
4.4 Did the method assess the representativeness of the sample according to subgroups, such as those defined by age, geographic location, or health status?	● FM	See the comment above.

## Performance Improvement Projects: Healthy Blue

4.5 Were valid sampling techniques used to protect against bias? Specify the type of sampling used.	● NM	PTM determined that a non-probability sampling methodology (Judgmental/purposive) was utilized. However, Healthy Blue did not identify or report it.
4.6 Overall assessment/recommendations for improving the sampling method.	● PM	Healthy Blue must have clarity on the sampling methodologies utilized in the PIP.

**Step 5: Review the Selected PIP Variables and Performance Measures**

Component/Standard	Score	Comments
<b>PIP Variables</b>		
5.1 Were the variables adequate to answer the PIP question? <ul style="list-style-type: none"> <li>Did the PIP use objective, clearly defined, time-specific variables (e.g., an event or status that can be measured)?</li> <li>Were the variables available to measure performance and track improvement over time (at least semiannual basis)?</li> </ul>	● FM	The number of members eligible for the CIS Measure (2 years of age in MY 2021) who were non-compliant with the influenza vaccination as of August 2021 and, in turn, were awarded the member incentives for receiving the annual influenza vaccination. This data was monitored monthly from Aug-Dec 2021, and an overall rate was calculated to evaluate the impact of the influenza vaccine rewards on the statewide CIS Combo-10 rate.
<b>Performance measures</b>		
5.2 Did the performance measure assess an important aspect of care that will make a difference to enrollees' health or functional status?	● FM	HEDIS CIS measure is a CMS child core set measure.  The participation rate in the Healthy Reward Member Incentives Program was also calculated. The numerator and denominator were accurately defined.
5.3 Were the performance measures appropriate based on the availability of data and resources to collect the data (administrative data, medical records, or other sources)?	● FM	HEDIS CIS Combo 10 was calculated using administrative data (claims and encounters, state immunization registry, and electronic medical records). Medical records were reviewed for the final hybrid rate calculation.  The participation rates were calculated using HEDIS Technical Specifications, claims and encounter data, and the Healthy Rewards Member Incentive Program data.
5.4 Were the measures based on current clinical knowledge or health services research? Examples: Recommended procedures, appropriate utilization (hospital admissions,	● FM	Same comment as in sections 5.2 and 5.3.

## Performance Improvement Projects: Healthy Blue

emergency department visits), adverse incidents (such as death, avoidable readmission), referral patterns, authorization requests, and appropriate medication use.		
<p>5.5 Did the performance measures:</p> <ul style="list-style-type: none"> <li>• Monitor the performance of MCO at a point in time?</li> <li>• Track MCO performance over time?</li> <li>• Compare performance among MCOs over time?</li> <li>• Inform the selection and evaluation of quality improvement activities?</li> </ul>	● FM	HEDIS CIS Combo 10 rate was measured and tracked quarterly for the MY 2021. Healthy Blue did not compare its performance with the other MCOs. This was not a collaborative PIP. The participation rate was tracked and reported monthly.
5.6 Did the MCO consider existing measures, such as CMS Child and Adult Core Set, Core Quality Measure Collaborative, certified community behavioral health clinics (CCBHC) measures, HEDIS, or AHRQ measures?	● FM	CMS Child Core Set measure (HEDIS CIS Combo 10) was a performance indicator.
<p>5.7 If there were gaps in existing measures, did the MCO consider the following when developing new measures based on current clinical practice guidelines or health services research?</p> <ul style="list-style-type: none"> <li>• Did the measure address accepted clinical guidelines relevant to the PIP question?</li> <li>• Did the measure address an important aspect of care or operations that was meaningful to MCO enrollees?</li> <li>• Did available data sources allow the MCO to calculate the measure reliably and accurately?</li> <li>• Were all criteria used in the measure defined clearly (such as time periods, characteristics of eligible enrollees, services to be assessed, and exclusion criteria)?</li> </ul>	N/A	Same comment as in section 5.2.
<p>5.8 Did the measures capture changes in enrollee satisfaction or experience of care? Was there some improvement in health or functional status? (For projects in non-clinical areas such as addressing access or availability of services, measurement of health or functional status is preferred.)</p>	● NM	Enrollee satisfaction or experience of care was not addressed in the PIP. The final HEDIS CIS Combo 10 measure did not improve. The total participation rate in the Healthy Reward Member Incentive Program was 2.08%.

## Performance Improvement Projects: Healthy Blue

5.9 Did the measures include a strategy to ensure inter-rater reliability (if applicable)?	● FM	MRR on 453 medical records was conducted for the final HEDIS CIS Combo 10 rate by trained staff who passed three IRR tests with a score of 100%. All compliant records were overread to ensure accuracy.
5.10 If process measures were used, is there strong clinical evidence indicating that the process being measured is meaningfully associated with outcomes? <ul style="list-style-type: none"> <li>This determination will be based on published guidelines, including citations from randomized clinical trials, case-control studies, or cohort studies.</li> <li>At a minimum, the PIP should be able to demonstrate a consensus among relevant practitioners with expertise in the defined area who attest to the importance of a given process.</li> </ul>	● FM	The process measure used in the PIP is a CMS Child Core Set measure (NQF0038).
5.11 Overall assessment/recommendations for improving the selected PIP variables and performance measures.	● PM	The PIP should focus on changes in enrollee satisfaction or experience of care and improvement in health or functional status.

## Step 6: Review Data Collection Procedures

Component/Standard	Score	Comments
<b>Assessment of Overall Data Collection Procedures</b>		
6.1 Did the PIP design specify a systematic method for collecting valid and reliable data that represents the population in the PIP?	● FM	Claims data for the study were queried from the claims-based software and put into NCQA-certified software (Inovalon). Inovalon follows the HEDIS Technical Specifications to calculate the CIS Combo 10 rate. The data for the participation rate was collected using claims and encounters.
6.2 Did the PIP design specify the frequency of data collection? If yes, what was the frequency (for example, semi-annually)?	● FM	The HEDIS CIS Combo 10 rate was calculated quarterly and annually. The participation rate was collected monthly from Aug-Dec 2021.
6.3 Did the PIP design clearly specify the data sources? Data sources may include: Encounter and claims systems, medical records, case management or electronic visit verification systems, tracking logs, surveys, provider and/or enrollee interviews.	● FM	Primary Care Providers and other health agencies submit claims and encounter data to the Vaccines for Children (VFC) Program, and Healthy Blue receives that information through the state immunization registry. This supplemental data, as well as

## Performance Improvement Projects: Healthy Blue

		information obtained from Electronic Medical Records, were utilized to identify vaccinations received by the members.
6.4 Did the PIP design clearly define the data elements to be collected? Accurate measurement depends on clear and concise definitions of data elements (including numerical definitions and units of measure).	● FM	The numerators and denominators were defined accurately for the participation rate and HEDIS CIS Combo rate calculations.
6.5 Did the data collection plan link to the data analysis plan to ensure that appropriate data would be available for the PIP?	● FM	The data collection and analysis plan are linked. Same comment as in 6.2.
6.6 Did the data collection instruments allow for consistent and accurate data collection over the time periods studied?	● FM	NCQA-certified software (Inovalon) was utilized for data collection.
6.7 If qualitative data collection methods were used (such as interviews or focus groups), were the methods well-defined and designed to collect meaningful and useful information from respondents?	● NM	Qualitative data collection methods were not used.
6.8 Overall assessment/recommendations for improving the data collection procedures.	● PM	Healthy Blue must consider qualitative data collection methods such as interviews and focus groups to generate meaningful data that can help improve member satisfaction and health status.
<b>Assessment of Data Collection Procedures for Administrative Data Sources</b>		
6.9 If inpatient data was used, did the data system capture all inpatient admissions/discharges?	N/A	Inpatient data was not used.
6.10 If primary care data was used, did primary care providers submit encounter or utilization data for all encounters?	● FM	Primary Care Providers and other health agencies submitted claims and encounter data to the Vaccines for Children (VFC) Program and Healthy Blue received that information through the state immunization registry.
6.11 If specialty care data was used, did specialty care providers submit encounter or utilization data for all encounters?	N/A	Healthy Blue did not use specialty care data.
6.12 If ancillary data was used, did ancillary service providers submit encounter or utilization data for all services provided?	N/A	Healthy Blue did not use ancillary data.

## Performance Improvement Projects: Healthy Blue

6.13 If LTSS data was used, were all relevant LTSS provider services included (for example, through encounter data, case management systems, or electronic visit verification (EVV) systems)?	N/A	LTSS is excluded per the MHD contract.
6.14 If EHR data was used, were patient, clinical, service, or quality metrics validated for accuracy and completeness as well as comparability across systems?	N/A	Healthy Blue did not report on using EHR data.
<b>Assessment of Data Collection Procedures for Medical Record Review</b>		
6.15 Was a list of data collection personnel and their relevant qualifications provided? (Note: Experienced clinical staff such as registered nurses should be used to extract data to support a judgment about whether clinical criteria are met.)	● FM	Healthy Blue provided a list of qualified personnel involved in the PIP. MRR was not used for the PIP results.
6.16 For medical record review, was inter-rater and intra-rater reliability described? The PIP should also consider and address intra-rater reliability (i.e., reproducibility of judgments by the same abstractor at a different time).	N/A	MRR was not conducted for the PIP. However, the final hybrid CIS Combo 10 rate included MRR, and Healthy Blue reported that the IRR score requirement for the readers was a 100% score on three tests per measure.
6.17 For medical record review, were guidelines for obtaining and recording the data developed? <ul style="list-style-type: none"> <li>A glossary of terms for each project should be developed before data collection begins to ensure consistent interpretation among and between data collection staff.</li> <li>Data collection staff should have clear, written instructions, including an overview of the PIP, how to complete each section of the form or instrument, and general guidance on how to handle situations not covered by the instructions. This is particularly important when multiple reviewers are collecting data.</li> </ul>	N/A	MRR was not conducted for the PIP. A glossary of terms for each project was not developed. The MRR was a part of generating the HEDIS CIS Combo 10 rate, as this is a hybrid measure.

**Step 7: Review Data Analysis and Interpretation of PIPs Results**



## Performance Improvement Projects: Healthy Blue

Component/Standard	Score	Comments
7.1 Was the analysis conducted in accordance with the data analysis plan?	● FM	Quarterly reporting and analysis were conducted for the HEDIS CIS Combo 10 measure. The monthly participation rate in the Healthy Rewards Member Incentive Program from Aug-Dec 2021 was presented and analyzed.
7.2 Did the analysis include baseline and repeat measurements of project outcomes?	● PM	The baseline data for MY 2020 was not provided. Healthy Blue considered Aug 2021 as a baseline when the intervention (Healthy Rewards Member Incentive Program) was launched. Repeat measurements from Sept 2021-Dec 2021 were reported when the intervention was in place.
7.3 Did the analysis assess the statistical significance of any differences between the initial and repeat measurements?	● PM	Statistical significance of the initial and repeat measurements was conducted. Statewide HEDIS CIS Rates declined from the baseline rate of 36.01% to 30.41% in MY 2021, representing a statistically significant decline. (95% Confidence Interval: 31.25% - 40.77%). The monthly participation rate showed a statistically significant improvement from Aug-Oct 2021; after that, Nov and Dec 2021 showed no statistically significant improvement.
7.4 Did the analysis account for factors that may influence the comparability of initial and repeat measurements?	● FM	Healthy Blue reported that the increase in participation might be due to the care managers providing education to members, the member website information, and the supplemental provider education.
7.5 Did the analysis account for factors that may threaten the internal or external validity of the findings?	● FM	No external or internal threats were reported that could affect the validity of the findings. However, Healthy Blue reported that the Covid pandemic affected the HEDIS CIS Combo rate.
7.6 Did the PIP compare the results across multiple entities, such as different patient subgroups, provider sites, or MCOs?	● NM	The PIP was not designed to address this requirement.
7.7 Were PIP results and findings presented in a concise and easily understood manner?	● PM	The PIP results and findings were easily understood. However, important elements of the findings were missing. Noncompliant members in the baseline year were not reported. The Influenza vaccination rates for the months corresponding to the baseline year were not presented.

## Performance Improvement Projects: Healthy Blue

7.8 To foster continuous quality improvement, did the analysis and interpretation of the PIP data include lessons learned about less-than-optimal performance? (Note: Analysis and interpretation of the PIP data should be based on a continuous improvement philosophy and reflect on lessons learned and opportunities for improvement.)	● PM	The PIP design was not such that it analyzed and incorporated lessons learned during the intervention at each measurement. However, Healthy Blue decided to provide additional reminders and education through the mPulse influenza texting campaign, prompting more members to receive their seasonal influenza vaccination. An additional provider-facing flyer was created to educate providers so that they could educate the members visiting their offices.
7.9 Overall assessment/recommendations for improving the analysis and interpretation of PIP results.	● PM	The PIP should be designed to compare different provider groups or patient groups so that meaningful intervention results can be obtained. Since the influenza vaccination has a seasonal influence, the baseline in this PIP should be the MY 2020, Aug-Dec 2020. If the results for the MY 2021 are reported for non-compliant members, then the same parameter must be used for presenting the baseline data.

## Step 8: Assess the Improvement Strategies

Component/Standard	Score	Comments
8.1 Was the selected improvement strategy evidence-based, that is, was there existing evidence (published or unpublished) suggesting that the test of change would be likely to lead to the desired improvement in processes or outcomes (as measured by the PIP variables)?	● FM	The selected strategy was evidence-based. Research has shown that financial incentives have a positive impact on patients receiving services such as preventive care and vaccinations. Monetary rewards are notably effective among low-income or high-risk members.
8.2 Was the strategy designed to address root causes or barriers identified through data analysis and quality improvement processes?	● FM	Healthy Blue identified the need for additional educational material to promote the Healthy Rewards Member Incentive Program. Provider-facing materials were launched in October 2021.
8.3 Was the rapid-cycle PDSA approach used to test the selected improvement strategy?	● NM	Though Healthy Blue reported using the PDSA approach, PTM determined that the PDSA approach was not used in the PIP. The participation rate was reported monthly from Aug-Dec 2021, the results were studied, and actions were planned but never implemented before each remeasurement to see a positive impact. The same intervention continued from Aug-Dec 2021.

## Performance Improvement Projects: Healthy Blue

8.4 Was the strategy culturally and linguistically appropriate?	● FM	Healthy Blue reported that to ensure interventions met and supported members' cultural and linguistic needs, Healthy Blue offered 6-grade reading level and language translation options available on all member materials/calls.
8.5 Was the implementation of the strategy designed to account for or adjust for any major confounding variables that could have an obvious impact on PIP outcomes (e.g., patient risk factors, Medicaid program changes, provider education, clinic policies, or practices)?	● NM	All non-compliant members from Aug 2021 who received the Healthy Reward Member Incentives were included in the results. Healthy Blue reported that the care managers educated the members, and provider education was provided using flyers in Oct 2021.
8.6 Building on the findings from the data analysis and interpretation of PIP results (Step 7), did the PIP assess the extent to which the improvement strategy was successful and identify potential follow-up activities?	● PM	Though Healthy Blue reported that the monthly participation rates statistically increased month over month, PTM noted that the success rate of the intervention was only 2.08%. Healthy Blue did not set up the target rate to be achieved. This small % will not contribute to the HEDIS CIS Combo 10 rate of 38.01% overall goal. The overall HEDIS CIS Combo 10 rate decreased from 36.01% (MY 2020) to 30.41% (MY 2021) during the year this PIP was conducted. Healthy Blue identified potential follow-up activities, e.g., additional reminders and education will be provided to the members through the mPulse influenza texting campaign and brochures.
8.7 Overall assessment/recommendations for improving the implementation strategies.	● PM	The effectiveness of the improvement strategy should be determined by measuring a change in performance according to a predefined target or aim. Each intervention cycle should be followed by a root cause analysis of poor performance and incorporate feedback into the next invention cycle (PDSA) cycle.

**Step 9: Assess the Likelihood that Significant and Sustained Improvement Occurred**

Component/Standard	Score	Comments
9.1 Was the same methodology used for baseline and repeat measurements?	● PM	The same methodology was used for the repeat measurements for the participation rate and HEDIS CIS Combo rates. The baseline for the participation rate is not submitted, so PTM cannot comment on it.

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## Performance Improvement Projects: Healthy Blue

9.2 Was there any quantitative evidence of improvement in processes or outcomes of care?	● NM	The overall HEDIS CIS Combo 10 rate decreased from 36.01% (MY 2020) to 30.41% (MY 2021). The success of the intervention showed a participation rate of 2.08%.
9.3 Was the reported improvement in performance likely to be a result of the selected intervention? (Conclusive demonstration through controlled studies is not required.)	● NM	Same comment as in section 9.2.
9.4 Is there statistical evidence (e.g., significance tests) that any observed improvement is the result of the intervention?	● NM	Healthy Blue reported a significant improvement in the participation rate in Sept-Oct 2021 (an increase from 0 to 0.6%). PTM cannot determine as an improvement as the influenza season begins in Aug-Sept. Baseline information for MY 2020 was not provided. There was no statistically significant improvement in Nov and Dec 2021.
9.5 Was sustained improvement demonstrated through repeated measurements over time?	● NM	Sustained improvement could not be demonstrated through repeat measurements. See comment in section 9.2.
9.6 Overall assessment/recommendations for improving the significance and sustainability of improvement as a result of the PIP.	● NM	A target should be set for the intervention to achieve the PIP goal. The intervention should be adopted, adapted, or abandoned with each PDSA cycle based on the results obtained.

## ACTIVITY 2: PERFORM OVERALL VALIDITY AND REPORTING OF PIP RESULTS

## Perform Overall Validation of PIP Results

PIP Validation Rating (check one box)	Comments
<input type="checkbox"/> High confidence <input type="checkbox"/> Moderate confidence <input type="checkbox"/> Low confidence <input checked="" type="checkbox"/> No confidence	<p>Healthy Blue did not meet the MHD's goal to increase the HEDIS CIS Combo 10 rate by 2% points from the previous year. The HEDIS CIS Combo 10 rate decreased from 36.01% (MY 2020) to 30.41% (MY 2021) by 5.6% points. The participation rate as a result of the intervention was 2.08%. Though Healthy Blue demonstrated the statistical significance of the data, this intervention is not likely to contribute to improving the overall HEDIS CIS Combo 10 rate.</p>

## APPENDIX B. PIP VALIDATION WORKSHEET IMPROVING ORAL HEALTH

Date of Evaluation: Oct 7, 2022

MCO Name/Mailing Address:	Healthy Blue/1831 Chestnut, St. Louis, MO, 63103
MCO Contact Name and Title:	Director II, GBD-Quality Management Clinical Quality Program Manager Clinical Quality Program Administrator
Name of Performance Improvement Project:	Improving Oral Health
PIP Period Date:	Jan 1, 2021-Dec 31, 2021
Programs:	Medicaid only/CHIP only/✓Medicaid and CHIP
Demographic Information:	Number of Medicaid/CHIP enrollees in MCO: 344,693 Medicaid/CHIP members included in the study:117,841 Number of Dentists: 645

Score : Fully Met (FM) ● / Partially Met (PM) ● / Not Met (NM) ● / Not Applicable (N/A)

## ACTIVITY 1: ASSESS THE PIP METHODOLOGY

## Step 1: Review the PIP Topic

Component/Standard	Score	Comments
1.1 Was the topic selected through a comprehensive analysis of MCO enrollee needs, care, and services? (Note: If the PIP topic was required by the State, it will be marked as N/A.)	N/A	The MHD contract section 2.18.8(d)(2) requires Healthy Blue, at a minimum, to set a goal to improve the plan-specific HEDIS ADV rate for 2-20 years-olds each year by at least 2% points in alignment with the Quality Improvement Strategy.
1.2 Did selection of the PIP topic consider performance on the CMS Child and Adult Core Set measures?	N/A	The MHD selected the PIP topic. This is not a CMS Core Set measure.
1.3 Did the selection of the PIP topic consider input from enrollees or providers who are users of or concerned with specific service areas? (Note: If the PIP topic was required by the State, it will be marked as N/A.)	N/A	The MHD selected the PIP topic.
1.4 Did the PIP topic address care of special populations or high-priority services, such as: <ul style="list-style-type: none"> <li>Children with special health care needs</li> <li>Adults with physical disabilities</li> <li>Children or adults with behavioral health issues</li> </ul>	● FM	The PIP considers access and availability of care for all enrollees from 2-20 years of age and includes, but is not limited to, members with special health care needs, physical disabilities, behavioral health conditions, and intellectual or developmental

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<ul style="list-style-type: none"> <li>• People with intellectual and developmental disabilities</li> <li>• People with dual eligibility who use long-term services and supports (LTSS)</li> <li>• Preventive care</li> <li>• Acute and chronic care</li> <li>• High-volume or high-risk services</li> <li>• Care received from specialized centers (e.g., burn, transplant, cardiac surgery)</li> <li>• Continuity or coordination of care from multiple providers and over multiple episodes</li> <li>• Appeals and grievances</li> <li>• Access to and availability of care</li> </ul>		disabilities.
1.5 Did the PIP topic align with priority areas identified by HHS and/or CMS?	N/A	The MHD selected the topic. The HEDIS ADV measure aligns with the CMS priority areas. CMS Child Core Set measures have two measures related to improving oral health.
1.6 Overall assessment/recommendations for improving PIP topic.	● FM	Even though the MHD mandates the overarching goal, Healthy Blue has the flexibility to select a topic within specified parameters. To ensure a successful PIP, Healthy Blue should find early and regular opportunities to obtain input from staff, providers, and members on how to improve care delivery.

**Step 2: Review the PIP Aim Statement**

Component/Standard	Score	Comments
2.1 Did the PIP aim statement clearly specify the improvement strategy?	● FM	The aim statement was “to increase the statewide HEDIS ADV rate from 44.18% to 46.18% (by 2% points) for members 2-20 years of age in MY 2021 by deploying a robust texting campaign to remind members of needed annual dental visits beginning May 21, 2021, and continuing through December 31, 2021.
2.2 Did the PIP aim statement clearly specify the population for the PIP?	● FM	Members 2-20 years of age in MY 2021.
2.3 Did the PIP aim statement clearly specify the time period for the PIP?	● FM	May 21-Dec 31, 2021.



## Performance Improvement Projects: Healthy Blue

2.4 Was the PIP aim statement concise?	● FM	See comment in section 2.1.
2.5 Was the PIP aim statement answerable?	● FM	See comment in section 2.1.
2.6 Was the PIP aim statement measurable?	● FM	See comment in section 2.1.
2.7 Overall assessment/recommendations for improving the PIP aim statement.	● FM	The PIP aim statement was concise, measurable, answerable, and defined the improvement strategy, population, and time period.

**Step 3: Review the Identified Study Populations**

Component/Standard	Score	Comments
3.1 Was the project population clearly defined in terms of the identified PIP question (e.g., age, length of the PIP population's enrollment, diagnoses, procedures, other characteristics)?	● FM	<p>The target population of PIP included all Healthy Blue members eligible for the statewide HEDIS ADV measure, as defined by the HEDIS ADV technical specifications. Healthy Blue members 2-20 years who are continuously enrolled throughout the year (MY 2021) with no more than one gap in enrollment of up to 45 days.</p> <p>The PIP study population includes Healthy Blue members, 2-20 years of age, who had not yet received an Annual Dental Visit as of May 2021.</p>
3.2 Was the entire MCO population included in the PIP?	● FM	The entire eligible population for the ADV measure was included in the PIP.
3.3 If the entire population was included in the PIP, did the data collection approach capture all enrollees to whom the PIP question applied?	● FM	Same comment as in 3.2.
3.4 Was a sample used?	● NM	<p>Healthy Blue reported that all eligible members 2-20 years of age who were eligible for the HEDIS ADV Measure using the HEDIS Technical Specifications were included; therefore, sampling methods were not applicable.</p> <p>PTM determined that Healthy Blue members, 2-20 years of age, who had not yet received an Annual Dental Visit as of</p>



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		May 2021, were included in the PIP population. This type of non-probability sampling is not reported in the PIP.
3.5 Overall assessment/recommendations for identifying the project population.	● PM	Healthy Blue should select the PIP population on a small scale, e.g., a county, provider office, or a region, so that results can be measured during the PDSA cycle and subsequently applied on a larger scale for improvement. Knowledge of sampling must be utilized accurately.

**Step 4: Review Sampling Method**

Component/Standard	Score	Comments
4.1 Did the sampling frame contain a complete, recent, and accurate list of the target PIP population?	● FM	Healthy Blue reported that the entire population of Healthy Blue members 2-20 years of age in MY 2021 who were eligible for the HEDIS ADV measure using the HEDIS Technical Specifications were included in this study.
4.2 Did the sampling method consider and specify the true or estimated frequency of the event, the confidence interval to be used, and the acceptable margin of error?	● NM	PTM determined that Healthy Blue utilized nonprobability sampling that consisted of all the noncompliant members from the target population who had valid phone numbers in Healthy Blue's file. However, Healthy Blue did not report that sampling was utilized.
4.3 Did the sample contain a sufficient number of enrollees taking into account non-response?	● FM	All non-compliant members for annual dental visits who had a valid phone number were included in the PIP.
4.4 Did the method assess the representativeness of the sample according to subgroups, such as those defined by age, geographic location, or health status?	● FM	See comment in section 4.3.
4.5 Were valid sampling techniques used to protect against bias? Specify the type of sampling used.	● NM	PTM determined that a non-probability sampling methodology (Judgmental/purposive) was utilized. However, Healthy Blue did not identify or report it.
4.6 Overall assessment/recommendations for improving the sampling method.	● PM	Healthy Blue must have clarity on the sampling methodologies utilized in the PIP.

**Step 5: Review the Selected PIP Variables and Performance Measures**

Component/Standard	Score	Comments
PIP Variables		

## Performance Improvement Projects: Healthy Blue

<p>5.1 Were the variables adequate to answer the PIP question?</p> <ul style="list-style-type: none"> <li>Did the PIP use objective, clearly defined, time-specific variables (e.g., an event or status that can be measured)?</li> <li>Were the variables available to measure performance and track improvement over time (at least semiannual basis)?</li> </ul>	● FM	Variable was the number of members, 2-20 years of age in MY 2021, who received the first HEDIS ADV specific text message between May 21-Dec 31, 2021, and the number of those members who obtained dental care in MY 2021 after getting the HEDIS ADV text message. It was tracked from May-Dec 2021 for the period of the texting intervention.
<b>Performance measures</b>		
5.2 Did the performance measure assess an important aspect of care that will make a difference to enrollees' health or functional status?	● FM	HEDIS ADV measure was used to assess the health status of members. This is a CMS priority area.
5.3 Were the performance measures appropriate based on the availability of data and resources to collect the data (administrative data, medical records, or other sources)?	● FM	HEDIS ADV measure was calculated using administrative data (claims and encounters). The variable was calculated from the claims data based on the same HEDIS technical specifications for the ADV measure but focused on members who were enrolled in the mPulse texting campaign.
5.4 Were the measures based on current clinical knowledge or health services research? Examples: Recommended procedures, appropriate utilization (hospital admissions, emergency department visits), adverse incidents (such as death, avoidable readmission), referral patterns, authorization requests, and appropriate medication use.	● FM	Same comment as in sections 5.2 and 5.3.
<p>5.5 Did the performance measures:</p> <ul style="list-style-type: none"> <li>Monitor the performance of MCO at a point in time?</li> <li>Track MCO performance over time?</li> <li>Compare performance among MCOs over time?</li> <li>Inform the selection and evaluation of quality improvement activities?</li> </ul>	● FM	HEDIS ADV measure was tracked monthly, quarterly, and annually. The variable was measured monthly during the period of intervention.
5.6 Did the MCO consider existing measures, such as CMS Child and Adult Core Set, Core Quality Measure Collaborative, certified community behavioral health clinics (CCBHC) measures, HEDIS, or AHRQ measures?	● FM	The MHD selected the HEDIS ADV measure as a performance indicator.

## Performance Improvement Projects: Healthy Blue

<p>5.7 If there were gaps in existing measures, did the MCO consider the following when developing new measures based on current clinical practice guidelines or health services research?</p> <ul style="list-style-type: none"> <li>• Did the measure address accepted clinical guidelines relevant to the PIP question?</li> <li>• Did the measure address an important aspect of care or operations that was meaningful to MCO enrollees?</li> <li>• Did available data sources allow the MCO to calculate the measure reliably and accurately?</li> <li>• Were all criteria used in the measure defined clearly (such as time periods, characteristics of eligible enrollees, services to be assessed, and exclusion criteria)?</li> </ul>	N/A	
<p>5.8 Did the measures capture changes in enrollee satisfaction or experience of care? Was there some improvement in health or functional status? (For projects in non-clinical areas such as addressing access or availability of services, measurement of health or functional status is preferred.)</p>	● FM	The HEDIS ADV rate increased by 0.75% points from the previous year.
<p>5.9 Did the measures include a strategy to ensure inter-rater reliability (if applicable)?</p>	N/A	HEDIS ADV measure and the variable were measured using administrative data by NCQA-certified software. Medical records were not reviewed, so IRR was not applicable.
<p>5.10 If process measures were used, is there strong clinical evidence indicating that the process being measured is meaningfully associated with outcomes?</p> <ul style="list-style-type: none"> <li>• This determination will be based on published guidelines, including citations from randomized clinical trials, case-control studies, or cohort studies.</li> <li>• At a minimum, the PIP should be able to demonstrate a consensus among relevant practitioners with expertise in the defined area who attest to the importance of a given process.</li> </ul>	● FM	HEDIS ADV measure was used in the PIP.

## Performance Improvement Projects: Healthy Blue

5.11 Overall assessment/recommendations for improving the selected PIP variables and performance measures.	● FM	No comments.
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**Step 6: Review Data Collection Procedures**

Component/Standard	Score	Comments
<b>Assessment of Overall Data Collection Procedures</b>		
6.1 Did the PIP design specify a systematic method for collecting valid and reliable data that represents the population in the PIP?	● FM	The data collected included the entire eligible population of HEDIS ADV claims/encounter data according to HEDIS technical specifications within the measurement year (MY 2021). The data collected for the intervention was also based on HEDIS technical specifications for the ADV measure but focused on members who were enrolled in the mPulse texting campaign and had valid phone numbers.
6.2 Did the PIP design specify the frequency of data collection? If yes, what was the frequency (for example, semi-annually)?	● FM	The HEDIS ADV rate was measured monthly, quarterly, and annually. The success rate of the intervention was tracked monthly.
6.3 Did the PIP design clearly specify the data sources? Data sources may include: Encounter and claims systems, medical records, case management or electronic visit verification systems, tracking logs, surveys, provider and/or enrollee interviews.	● FM	Claims and encounters were queried from the claims-based software and put into the NCQA-certified software. The claims data received from the intervention was also used.
6.4 Did the PIP design clearly define the data elements to be collected? Accurate measurement depends on clear and concise definitions of data elements (including numerical definitions and units of measure).	● FM	The numerators and denominators for the HEDIS ADV measure were as per the HEDIS technical specifications. The variable measured also was defined accurately: the number of members, 2-20 years of age in 2021, who received the first ADV-specific text message between May 21, 2021 – December 31, 2021; and the number of those members who obtained dental care in 2021 after getting the ADV text message.
6.5 Did the data collection plan link to the data analysis plan to ensure that appropriate data would be available for the PIP?	● FM	The data collection and analysis plan are linked. Same comment as in 6.2.
6.6 Did the data collection instruments allow for consistent and accurate data collection over the time periods studied?	● FM	Claims software and NCQA-certified software (Inovalon) were utilized for data collection.

## Performance Improvement Projects: Healthy Blue

6.7 If qualitative data collection methods were used (such as interviews or focus groups), were the methods well-defined and designed to collect meaningful and useful information from respondents?	● PM	Qualitative data collection methods were not used. However, the PIP was designed to receive messages from the members who had a dental visit. However, Healthy Blue did not report the data.
6.8 Overall assessment/recommendations for improving the data collection procedures.	● PM	Healthy Blue must consider qualitative data collection methods such as interviews and focus groups to generate meaningful data that can help improve member satisfaction and health status.
<b>Assessment of Data Collection Procedures for Administrative Data Sources</b>		
6.9 If inpatient data was used, did the data system capture all inpatient admissions/discharges?	N/A	Inpatient data was not used.
6.10 If primary care data was used, did primary care providers submit encounter or utilization data for all encounters?	N/A	Primary Care data was not used.
6.11 If specialty care data was used, did specialty care providers submit encounter or utilization data for all encounters?	N/A	Healthy Blue did not use specialty care data.
6.12 If ancillary data was used, did ancillary service providers submit encounter or utilization data for all services provided?	N/A	Healthy Blue has not used ancillary data.
6.13 If LTSS data was used, were all relevant LTSS provider services included (for example, through encounter data, case management systems, or electronic visit verification (EVV) systems)?	N/A	LTSS is excluded per the MHD contract.
6.14 If EHR data was used, were patient, clinical, service, or quality metrics validated for accuracy and completeness as well as comparability across systems?	N/A	Healthy Blue did not use EHR data.
<b>Assessment of Data Collection Procedures for Medical Record Review</b>		
6.15 Was a list of data collection personnel and their relevant qualifications provided? (Note: Experienced clinical staff such as	● FM	Healthy Blue provided a list of qualified personnel involved in the PIP. MRR was not used for the PIP results.

## Performance Improvement Projects: Healthy Blue

registered nurses should be used to extract data to support a judgment about whether clinical criteria are met.)		
6.16 For medical record review, were inter-rater and intra-rater reliability described? The PIP should also consider and address intra-rater reliability (i.e., reproducibility of judgments by the same abstractor at a different time).	N/A	MRR was not used, so inter-rater and intra-rater reliability were not applicable.
6.17 For medical record review, were guidelines for obtaining and recording the data developed? <ul style="list-style-type: none"> <li>A glossary of terms for each project should be developed before data collection begins to ensure consistent interpretation among and between data collection staff.</li> <li>Data collection staff should have clear, written instructions, including an overview of the PIP, how to complete each section of the form or instrument, and general guidance on how to handle situations not covered by the instructions. This is particularly important when multiple reviewers are collecting data.</li> </ul>	N/A	Same comment as in section 6.16.

**Step 7: Review Data Analysis and Interpretation of PIPs Results**

Component/Standard	Score	Comments
7.1 Was the analysis conducted in accordance with the data analysis plan?	● FM	Monthly data during the intervention was submitted, and the HEDIS ADV rate for MY 2020 and MY 2021 was reported.
7.2 Did the analysis include baseline and repeat measurements of project outcomes?	● PM	The baseline for the HEDIS ADV rate in MY 2020 was included. However, the baseline corresponding to the noncompliant members who were the focus of the intervention was not provided for the MY 2020. Repeat measurements of the project outcomes from May-Dec 2021 were provided.
7.3 Did the analysis assess the statistical significance of any differences between the initial and repeat measurements?	● PM	A statistically significant increase was reported for the HEDIS ADV measures from the baseline MY 2020 to MY 2021. The rate in MY 2021 improved by 0.75% points which was reported to be above the 95% confidence level. Statistical significance of

## Performance Improvement Projects: Healthy Blue

		initial and repeat measurements of the project outcomes was not reported.
7.4 Did the analysis account for factors that may influence the comparability of initial and repeat measurements?	● NM	Healthy Blue reported that COVID-19 continued to have an impact on dental visits. However, PTM noted enormous dental visits exceeding the text messages from Aug-Dec 2021, as high as 9402% in Oct 2021, showing other factors influencing the results.
7.5 Did the analysis account for factors that may threaten the internal or external validity of the findings?	● FM	No threats were reported to the validity of the findings. However, Healthy Blue reported that an external factor of COVID-19 could have continued to impact dental visits in 2021. Although the height of the pandemic was subsiding in MY 2021, many people were still hesitant to go out in public for preventive appointments. Dental office staffing and operating hours could have also been affected by COVID-19. In addition, the highly transmissible Omicron variant was discovered in December 2021, and may have affected even more annual dental visits.
7.6 Did the PIP compare the results across multiple entities, such as different patient subgroups, provider sites, or MCOs?	● NM	The PIP was not designed to address this requirement.
7.7 Were PIP results and findings presented in a concise and easily understood manner?	● PM	The PIP results and findings were easily understood. Noncompliant members in the baseline year were not reported. A comparison was not made using the same parameter (non-compliant members) for the MY 2020 and MY 2021.
7.8 To foster continuous quality improvement, did the analysis and interpretation of the PIP data include lessons learned about less-than-optimal performance? (Note: Analysis and interpretation of the PIP data should be based on a continuous improvement philosophy and reflect on lessons learned and opportunities for improvement.)	● NM	The PIP design was not such that it analyzed and incorporated lessons learned during the intervention at each measurement.
7.9 Overall assessment/recommendations for improving the analysis and interpretation of PIP results.	● PM	The PIP should be designed to compare different provider groups or patient groups so that meaningful intervention results can be obtained. Comparisons should be made



## Performance Improvement Projects: Healthy Blue

		between the same parameters in the baseline and measurement years. The results should be analyzed after each cycle, and feedback should be incorporated; interventions are then adapted based on what was learned.
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**Step 8: Assess the Improvement Strategies**

Component/Standard	Score	Comments
8.1 Was the selected improvement strategy evidence-based, that is, was there existing evidence (published or unpublished) suggesting that the test of change would be likely to lead to the desired improvement in processes or outcomes (as measured by the PIP variables)?	● FM	According to an article published by the U.S. Department of Health and Human Services, "Using Health Text Messages to Improve Consumer Health Knowledge, Behaviors, and Outcomes," text messaging has improved treatment compliance. Improved attendance to appointments, as well as medication compliance, has been noted after receiving specific health-related text messages.
8.2 Was the strategy designed to address root causes or barriers identified through data analysis and quality improvement processes?	● FM	Root causes for members not being compliant with completing an annual dental visit were identified as follows: <ul style="list-style-type: none"> <li>• Members are not aware they are due for annual dental visits.</li> <li>• Lack of understanding of the importance of annual dental visits.</li> <li>• Lack of awareness of dental benefits available.</li> <li>• Lack of safety, or perception of safety, due to the global pandemic COVID-19, causing people to delay preventive dental visits.</li> </ul>
8.3 Was the rapid-cycle PDSA approach used to test the selected improvement strategy?	● NM	Though Healthy Blue reported using the PDSA approach, PTM determined that the PDSA approach was not correctly used in the PIP. The aim of the intervention was not set up (Plan), each cycle did not have an analysis (Study), and how the intervention changed each month (Act) was not reported. The intervention was ongoing from May-Dec 2021, and the results were reported.
8.4 Was the strategy culturally and linguistically appropriate?	● FM	Healthy Blue reported that the interventions were culturally and linguistically appropriate. The texts were in English and Spanish.

## Performance Improvement Projects: Healthy Blue

8.5 Was the implementation of the strategy designed to account for or adjust for any major confounding variables that could have an obvious impact on PIP outcomes (e.g., patient risk factors, Medicaid program changes, provider education, clinic policies, or practices)?	● NM	PTM noted that the data submitted by Healthy Blue revealed that the dental visits exceeded the texts in Aug (917%), Sept (780%), Oct (9402%), Nov (962%), Dec (2969%), showing that the requirement of this section is not met.
8.6 Building on the findings from the data analysis and interpretation of PIP results (Step 7), did the PIP assess the extent to which the improvement strategy was successful and identify potential follow-up activities?	● NM	Healthy Blue reported that the annual dental visits every 50 days showed a continuous drop from 32.08% to 2.62% by the end of the intervention. The overall HEDIS ADV rate showed an improvement of 0.75% points in the MY 2021.
8.7 Overall assessment/recommendations for improving the implementation strategies.	● PM	The effectiveness of the improvement strategy should be determined by measuring a change in performance according to a predefined target or aim. Each intervention cycle should be followed by a root cause analysis of poor performance and incorporate feedback into the next invention cycle (PDSA) cycle.

**Step 9: Assess the Likelihood that Significant and Sustained Improvement Occurred**

Component/Standard	Score	Comments
9.1 Was the same methodology used for baseline and repeat measurements?	● PM	The same methodology was used to calculate HEDIS ADV rates for the baseline and measurement years. However, the baseline data was not submitted corresponding to the measurement year.
9.2 Was there any quantitative evidence of improvement in processes or outcomes of care?	● PM	The final overall HEDIS ADV increased by 0.75% points, which is reported as statistically significant. The annual dental visits reported after intervention shows a decline from May (32.08%) to Dec (2.62%).
9.3 Was the reported improvement in performance likely to be a result of the selected intervention? (Conclusive demonstration through controlled studies is not required.)	● NM	PTM calculated the annual dental visits exceeding the number of texts sent in a given month ranging from 780% to 9402%, suggestive of no valid link established between the intervention and the ADV visits.
9.4 Is there statistical evidence (e.g., significance tests) that any observed improvement is the result of the intervention?	● NM	The statistical significance of results obtained each month during the ongoing intervention was not reported.

## Performance Improvement Projects: Healthy Blue

9.5 Was sustained improvement demonstrated through repeated measurements over time?	● NM	Sustained improvement in the overall HEDIS ADV rate was not evident. Even though the final rate improved, the HEDIS ADV rate in Nov and Dec 2021 declined.
9.6 Overall assessment/recommendations for improving the significance and sustainability of improvement as a result of the PIP.	● PM	The intervention should be adopted, adapted, or abandoned with each PDSA cycle based on the results obtained.

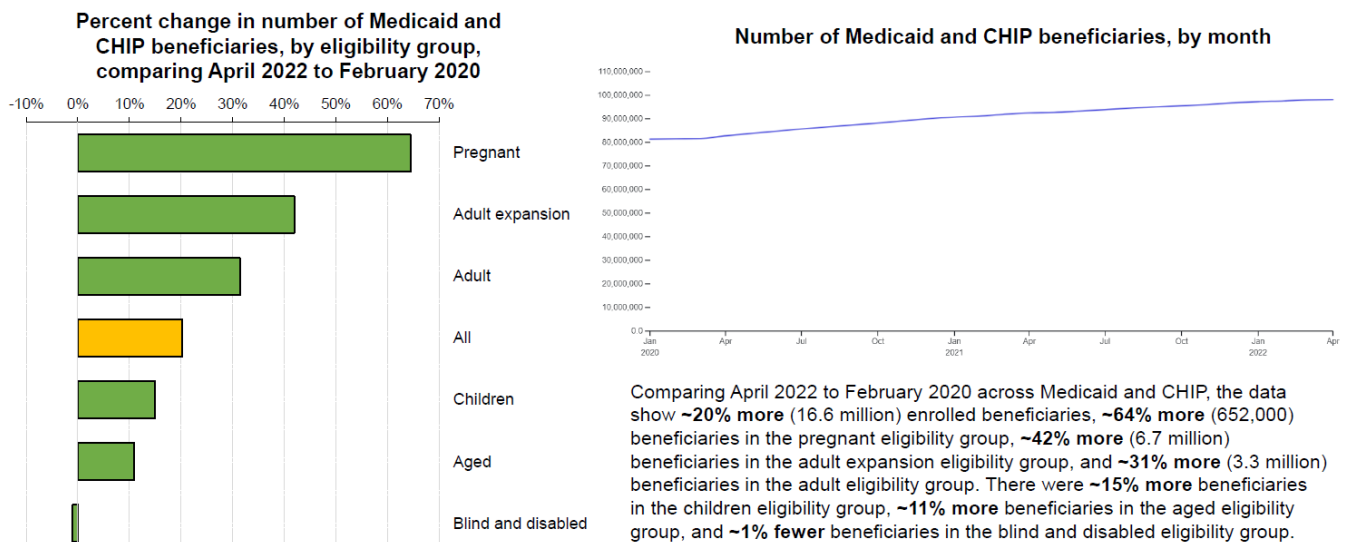
**ACTIVITY 2: PERFORM OVERALL VALIDITY AND REPORTING OF PIP RESULTS****Perform Overall Validation of PIP Results**

PIP Validation Rating (check one box)	Comments
<input type="checkbox"/> High confidence <input type="checkbox"/> Moderate confidence <input type="checkbox"/> Low confidence <input checked="" type="checkbox"/> No confidence	<p>Healthy Blue did not meet the MHD's goal to increase the HEDIS ADV rate by 2% points from the previous year. The HEDIS ADV rate increased from 44.18% (MY 2020) to 44.93% (MY 2021), which is a statistically significant improvement based on the confidence limits (43.92%-44.43%). Though Healthy Blue reported 27.6% dental visits after sending text messages from May-Dec 2021, the link between the intervention and the results could not be reasonably established. PTM noted enormous dental visits exceeding the text messages from Aug-Dec 2021, as high as 9402% in Oct 2021, showing other factors influencing the results. Also, the PIP methodology was not sound/acceptable, so PTM assigned a score of "no confidence."</p>

## APPENDIX C: MEDICAID AND CHIP, AND THE COVID-19 DATA

PTM shares the following information with the MHD and Healthy Blue obtained from the CMS: “Based on an analysis of Transformed Medicaid Statistical Information System (T-MSIS) submissions during the COVID-19 Public Health Emergency (PHE), from March 2020-April 2022, over 130 million Americans, including children, pregnant women, parents, seniors, and individuals with disabilities, were enrolled across each state’s Medicaid or the Children’s Health Insurance Program (CHIP) for at least one day during the PHE period.”<sup>3</sup> The Figures below show the overall enrollment, vaccination rate (<18 years ), rate of child screenings services, and rate of dental services in children during this period.

**Preliminary data comparing April 2022 to February 2020 show overall enrollment in Medicaid and CHIP for beneficiaries with full, comprehensive, and partial benefits increased by 20%, with the greatest percentage increases found in the pregnant, adult expansion, and adult eligibility groups**



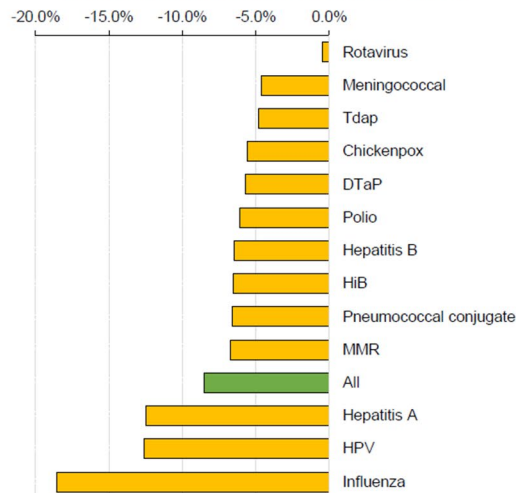
Notes: These data are preliminary. Data are sourced from the T-MSIS Analytic Files v7 in DataConnect. They are based on June T-MSIS submissions with enrollment through the end of May. Recent dates of enrollment have very little time for runout, and we expect some changes in enrollment after each monthly update. Because data for May are incomplete, results are only presented through April 30, 2022. The baseline period includes Medicaid and CHIP eligibility data from February 2020 and the comparison period includes eligibility data from April 2022. These enrollment counts include Medicaid and CHIP beneficiaries with full, comprehensive, and partial benefits.

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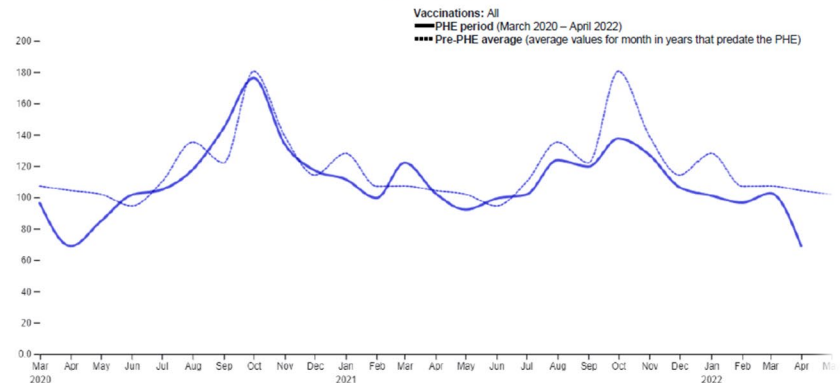
<sup>3</sup> <https://www.medicaid.gov/state-resource-center/downloads/covid-19-medicaid-data-snapshot-04302022.pdf>

## Preliminary data show the vaccination rate among beneficiaries under age 19 declined for all vaccines during the PHE period compared to averages from prior years, and the percent decline varied by vaccination type

Percent change in the rate of vaccinations delivered to children under age 19 during the PHE compared to averages from prior years



Number of vaccinations per 1,000 Medicaid and CHIP beneficiaries under age 19, by month



Comparing the PHE period (March 2020 – April 2022) to the pre-PHE period, the data show that the average number of vaccinations per 1,000 beneficiaries under age 19 per month declined by ~9%.

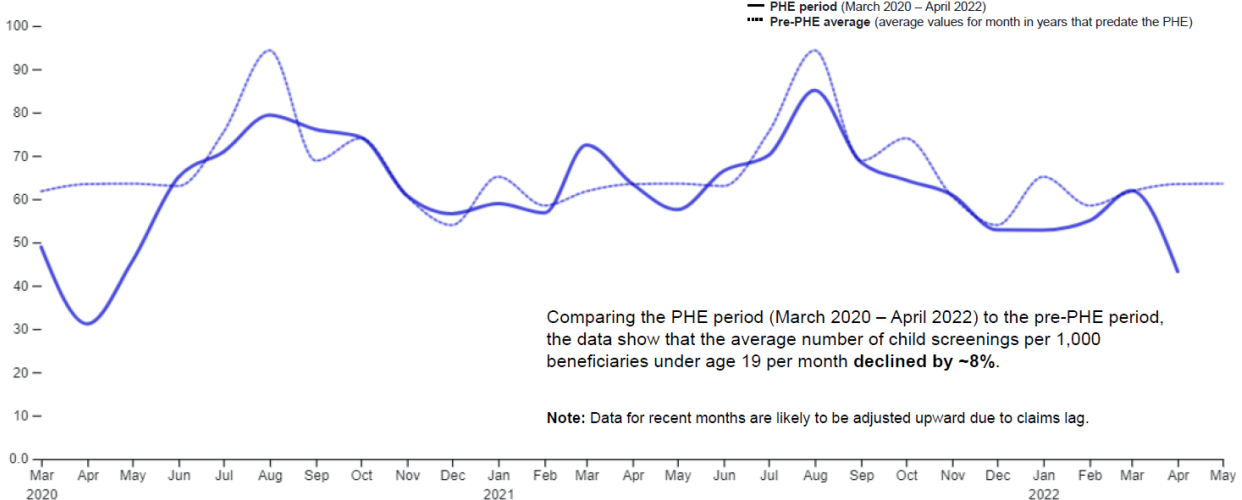
Note: Data for recent months are likely to be adjusted upward due to claims lag.

Notes: These data are preliminary. Data are sourced from the T-MSIS Analytic Files v7 in DataConnect using final action claims. They are based on June T-MSIS submissions with services through the end of May. Recent dates of service have very little time for claims runout, and we expect large changes in the results after each monthly update. Because data for May are incomplete, results are only presented through April 30, 2022. The PHE period includes data for March 2020 through April 2022. The pre-PHE average is the average of all values for that month in the years that predate the PHE, using data from January 2018 through February 2020. The PHE period rate may not be directly comparable to prior years' average rate since, for some states, there are increased suspensions of eligibility redeterminations during the PHE, which may inflate the denominator Medicaid population.

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## Preliminary data suggest that after an initial decline, the rate of child screening services during the PHE rebounded starting in June 2020

Number of child screenings per 1,000 Medicaid and CHIP beneficiaries 18 and under



Comparing the PHE period (March 2020 – April 2022) to the pre-PHE period, the data show that the average number of child screenings per 1,000 beneficiaries under age 19 per month declined by ~8%.

Note: Data for recent months are likely to be adjusted upward due to claims lag.

Notes: These data are preliminary. Data are sourced from the T-MSIS Analytic Files v7 in DataConnect using final action claims. They are based on June T-MSIS submissions with services through the end of May. Recent dates of service have very little time for claims runout, and we expect large changes in the results after each monthly update. Because data for May are incomplete, results are only presented through April 30, 2022. The PHE period includes data for March 2020 through April 2022. The pre-PHE average is the average of all values for that month in the years that predate the PHE, using data from January 2018 through February 2020. The PHE period rate may not be directly comparable to prior years' average rate since, for some states, there are increased suspensions of eligibility redeterminations during the PHE, which may inflate the denominator Medicaid population.

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## Performance Improvement Projects: Healthy Blue

**Preliminary data show the rate of dental services for children during the PHE, after an initial steep decline, remained slightly below averages from prior years**

