P.T.M.
Healthcare Business Solutions

2022 External Quality Review

Performance Improvement Projects

UnitedHealthcare

Measurement Period: Calendar Year 2021
Validation Period: Sept-Oct 2022
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MoHealthNet

THE GREAT SEAL OF THE STATE OF MISSOURI

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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. UnitedHealthcare 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).[1] 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 UnitedHealthcare to conduct performance improvement projects (PIPs) that focus on

[1] 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).

clinical and non-clinical areas each year as a part of UnitedHealthcare'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[2] 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 UnitedHealthcare 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 UnitedHealthcare to upload its PIP documentation on PTM's web-based secure file storage site by Aug 30, 2022. PTM requested additional information from UnitedHealthcare via electronic communication by Oct 7, 2022.

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

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

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

	Step 9. Assess the likelihood that significant and sustained improvement occurred.
Activity 2: Perform overall validation and reporting of PIP results	Level of Confidence: High; Moderate; Low; and No Confidence
Activity 3: Verify PIP findings	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 UnitedHealthcare 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 value ≤ 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 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 UnitedHealthcare. (Note: PTM does not change UnitedHealthcare's PIPs description other than formatting or minor corrections. Any changes made by UnitedHealthcare 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 UnitedHealthcare 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 UnitedHealthcare utilizing the worksheet in the CMS EQR Protocol 1.

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

2A. General PIP Information

PIP Title: Improving Childhood Immunization Status (HEDIS CIS Combo 10 rate)
PIP Aim Statement: By December 31, 2021, increase the percentage of UnitedHealthcare members aged 2 years and under who are eligible for and receive all CIS Combo 10 vaccines from 36.25% to 38.25%.
Was the PIP State-mandated, collaborative, statewide, or plan choice? ☑ State-mandated (State required plans to conduct a PIP on this specific topic) ☐ Collaborative (plans worked together during the planning or implementation phases) ☑ Statewide (the PIP was conducted by all MCOs within the state) ☐ Plan choice (State allowed the plan to identify the PIP topic)
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 primary measure study population is defined by all UnitedHealthcare members who were eligible based on NCQA's HEDIS CIS Combo 10 technical specifications (8,376). For the secondary measure, the study population consisted of 3,631 members in Oct 2021 and ended with a final denominator of 3,528 for members who turned 2 years old in MY 2021 and were eligible based on NCQA's HEDIS CIS measure, who live in six specific Missouri counties.
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): TTEC Live Agent Calling Program-Vendor calls to assist non-compliant members (turning 2 years by Dec 31, 2021) schedule CIS appointments in targeted 6 counties in MO.
☐ 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	36.25% No sampling	MY 2021	25.3% No sampling	No	Yes-decline (p=0.0002)

2D. 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 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: UnitedHealthcare should have clarity on the concepts of target population/project population/PIP variables and clearly define and apply these in the PIP. The intervention should have a target set to meet the goal set by the MHD. PDSA cycles should be utilized to test the intervention, and the intervention should tie to an improvement. The demonstrated improvement should be clearly linked to the quality improvement processes implemented. (Refer to section 6.0 of this report for the details.)

4.1.2 PIP Description

Intervention: UnitedHealthcare selected the TTEC Live Agent Program as its intervention for MY 2021. The intervention was launched on Oct 6, 2021. TTEC is the name of the vendor who provided targeted live outreach calls to 822 members who were noncompliant for the HEDIS CIS Combo 10 measure in Clay County, Jackson County, Jefferson County, St. Charles County, St. Louis County, and St. Louis City. The program consisted of live agents making outbound calls to noncompliant members and assisting the members with scheduling appointments to close the gap(s). The three types of calls were included in the program:

- Initial Call: If a member answers and authenticates, the agent then assists the member in making an appointment if they do not have one.
- Reminder Call: Based on the date of the scheduled appointment, a call was made prior to the appointment.
- Follow-up Call: A call was also made to ensure the member attended the appointment. If the member did not go, the agent attempted to reschedule the appointment with the member.

The outgoing call from TTEC showed United Healthcare on the caller ID if this feature was available on the member's phone. Once connected with a member, assistance to schedule the appointment was offered. If accepted, a three-way call was made to the member's primary care provider to schedule the immunization appointment. Members were able to return calls to TTEC when voicemails were left.

Performance Measure: UnitedHealthcare utilized HEDIS CIS Combo 10 as the primary measure and HEDIS CIS Combo 10 in 6 counties targeted in the PIP as the secondary measure. The measures were defined per the NCQA HEDIS technical specifications.

Variable: The variable used in the development of this PIP focused on members who turned two years old in MY 2021 and who were non-compliant with the CIS Combo 10 HEDIS measure.

Data Collection: UnitedHealthcare used Inovalon, a HEDIS-certified software engine, to generate the HEDIS CIS Combo 10 measure to ensure a systematic method for collecting valid and reliable data representing the population. The primary measure was reported and analyzed monthly along with the annual rate statewide/region-wise. The secondary measure results were monitored monthly for the six counties included in the intervention. In addition, the data after the intervention was monitored monthly. The data available to review were as follows:

- Call disposition/reach rate/appointment detail (i.e., call back request, hang-up, left a message, scheduled an appointment).
- Reasons for appointment not being scheduled after authentication.
- At the end of the measurement period, research immunization claims for members included in the intervention to identify a correlation between calls and immunization visits.

Findings: UnitedHealthcare summarized the intervention outcomes in Tables 3 and 4.

Table 3. TTEC Live Agent Program Outcomes CIS PIP

Disposition	October	November	December	Totals
Busy	2 (.91%)	2 (1.23%)	27 (1.63%)	31
Call Back Requested	3 (1.36%)	0 (0.00%)	5 (.30%)	8
Do Not Call (remove from list)	3 (1.36%)	0 (0.00%)	7 (.42%)	10
Failed Authentication	15 (6.82%)	1 (0.62%)	7 (.42%)	23
Fax machine	0 (0.00%)	0 (0.00%)	0 (0.00%)	0
Hang Up	15 (6.82%)	4 (2.47%)	98 (5.91%)	117
Left Message	100 (45.45%)	90 (55.56%)	1009 (60.82%)	1199
Left message with different person	4 (1.82%)	1 (.62%)	17 (1.02%)	22

No answer	34 (15.45%)	27 (16.67%)	262 (15.79%)	323
No longer a member	0 (0.00%)	2 (1.23%)	9 (.54%)	11
Number disconnected	15 (6.82%)	14 (8.64%)	66 (3.98%)	95
Authenticated-Appointment already scheduled	16 (7.27%)	12 (7.41%)	70 (4.22%)	98
Authenticated-No appointments made	3 (1.36%)	2 (1.23%)	26 (1.57%)	31
Authenticated-Appointment Scheduled	3 (1.36%)	2 (1.23%)	17 (1.02%)	22
Unauthenticated	4 (1.82%)	2 (1.23%)	10 (.60%)	16
Wrong number	3 (1.36%)	3 (1.82%)	29 (1.75%)	35
Total	220	162	1659	2041

Table 4. Member Outcomes: TTEC Intervention CIS PIP

Member Outcomes*	Total
Number of members outreached	822
Number of members authenticated	151 (18.4%)
Number of members' appointments already scheduled	98 (11.9%)
Number of members' appointments scheduled on call	22 (2.7%)
Number of members who did not schedule appointments	31 (3.8%)

*De-duplicated members and counts. Final call disposition for each member at the end of the intervention timeline (12/31/2021).

UnitedHealthcare summarized its findings from the intervention as follows:

- 150 members were authenticated:
  - Of the 97 members who said they had already scheduled an appointment, 14 had an immunization claim between October 8 -December 31, 2021.
  - Of the 31 members who authenticated and did not schedule an appointment while on the call, 4 had an immunization claim between October 8 -December 31, 2021.
  - Of the 22 members who were authenticated and scheduled an appointment while on the call, 9 had an immunization claim between October 8 -December 31, 2021.
  - A total of 27 members who were authenticated had an immunization claim between October 8 -December 31, 2021.
- 671 members did not answer/were not authenticated: 83 had an immunization claim between October 8 -December 31, 2021

(PTM determined the intervention success rate was 0.01%-9 received immunization of 822 members who were called).

Table 5 presents the HEDIS CIS Combo 10 rates in the six targeted counties during the time

of intervention, along with the statistical significance, and Table 6 shows rates for individual counties.

Table 5. HEDIS CIS Combo 10 Rate in Six Counties: Oct-Dec 2021 (Admin Data)

Measurement Period	Measurement	Numerator	Denominator	Rate	Benchmark (50th percentile)	Goal (2%)
Oct 2021 (claims as of 10/7/21)	Baseline	463	3631	12.75%	38.20%	38.25%
Nov 2021 (claims as of 11/7/21)	Remeasurement 1	415	3260	12.73%	38.20%	38.25%
Dec 2021 (claims as of 12/7/21)	Remeasurement 2	437	3351	13.04%	38.20%	38.25%
2021 Runout (claims as of 12/31/2021)	Remeasurement 3	459	3528	13.01%	38.20%	38.25%
Statistically Significant? (Yes/No)	**Pearson's Chi Sq**	**p-value**	**Measure Periods Compared**			
No	.0007	.9789	Baseline to RM1			
No	.1422	.7061	RM1 to RM 2			
No	.0049	.9441	RM2 to RM3			
No	.1906	.6624	Baseline to RM3			

Table 6. HEDIS CIS Combo 10 Rate in Individual Six Counties

Baseline Oct 2021	Clay County	Jackson County	Jefferson County	St. Charles County	St. Louis County	St. Louis City	Total
Numerator	52	174	29	31	140	37	**463**
Denominator	261	1178	184	278	1187	543	**3631**
Rate	19.92%	14.77%	15.76%	11.15%	11.79%	6.81%	**12.75%**
Remeasurement 1 Nov 2021	Clay County	Jackson County	Jefferson County	St. Charles County	St. Louis County	St. Louis City	Total
Numerator	48	152	30	29	127	29	**415**
Denominator	245	1072	166	257	1100	420	**3260**
Rate	19.59%	14.18%	18.07%	11.28%	11.55%	6.90%	**12.73%**
Remeasurement 2 Dec 2021	Clay County	Jackson County	Jefferson County	St. Charles County	St. Louis County	St. Louis City	Total
Numerator	50	163	30	29	135	30	**437**
Denominator	253	1111	170	263	1124	430	**3351**
Rate	19.76%	14.67%	17.65%	11.03%	12.01%	6.98%	**13.04%**

Remeasurement 3 Retrospective Runout	Clay County	Jackson County	Jefferson County	St. Charles County	St. Louis County	St. Louis City	Total
Numerator	50	177	29	30	133	40	**459**
Denominator	249	1131	175	266	1164	543	**3528**
Rate	20.08%	15.65%	16.57%	11.28%	11.43%	7.37%	**13.01%**

Table 7 presents HEDIS CIS Combo 10 rates in the six counties (secondary measure) compared to the rates for the members turning 2 years old in the rest of the state.

Table 7. HEDIS CIS Combo 10 Rate: Six counties vs. All other MO counties

Baseline Oct 2021	Secondary Measure Counties	All Other Counties
Numerator	463	549
Denominator	3631	4732
Rate	12.75%	11.60%
Remeasurement 1 Nov 2021	Secondary Measure Counties	All Other Counties
Numerator	415	506
Denominator	3260	4350
Rate	12.73%	11.63%
Remeasurement 2 Dec 2021	Secondary Measure Counties	All Other Counties
Numerator	437	518
Denominator	3351	4445
Rate	13.04%	11.65%
Remeasurement 3 Retrospective Runout	Secondary Measure Counties	All Other Counties
Numerator	459	581
Denominator	3528	4938
Rate	13.01%	11.77%

Figure 1 shows the statewide HEDIS CIS Combo 10 rates for MY 2020 and before and after the intervention for MY 2021.

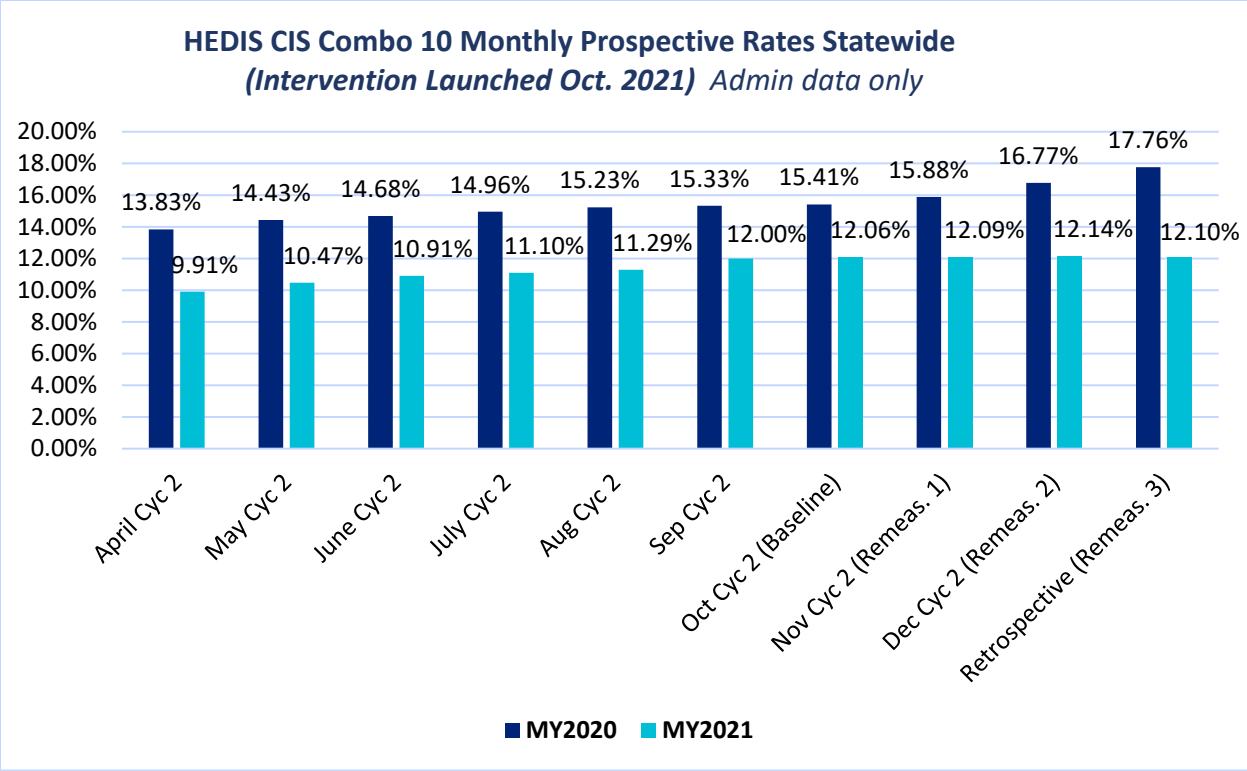

Figure 1. HEDIS CIS Combo 10 Rates MY 2020-2021

Table 8 presents primary measure data statewide for Oct-Dec 2021 for the intervention period and statistical significance.

Table 8. Statewide HEDIS CIS Combo 10 Rates: Oct-Dec 2021 (Admin Data)

Measurement Period	Measurement	Numerator	Denominator	Rate	Benchmark (50th percentile)	Goal (2%)
Oct 2021 (claims as of 10/7/21)	Baseline	1014	8409	12.06%	38.20%	38.25%
Nov 2021 (claims as of 11/7/21)	Remeasurement 1	1014	8388	12.09%	38.20%	38.25%
Dec 2021 (claims as of 12/7/21)	Remeasurement 2	1016	8370	12.14%	38.20%	38.25%
2021 Runout (claims as of 12/31/2021)	Remeasurement 3	1026	8481	12.10%	38.20%	38.25%
Statistically Significant? (Yes/No)	**Pearson's Chi Sq**	**p-value**	**Measure Periods Compared**			
No	.0036	.9521	Baseline to RM1			

No	.0098	.9213	RM1 to RM 2
No	.0430	.8357	RM2 to RM3
No	.0061	.9378	Baseline to RM3

Figure 2 illustrates the final (hybrid) CIS Combo 10 rates from MY 2018-MY 2021.

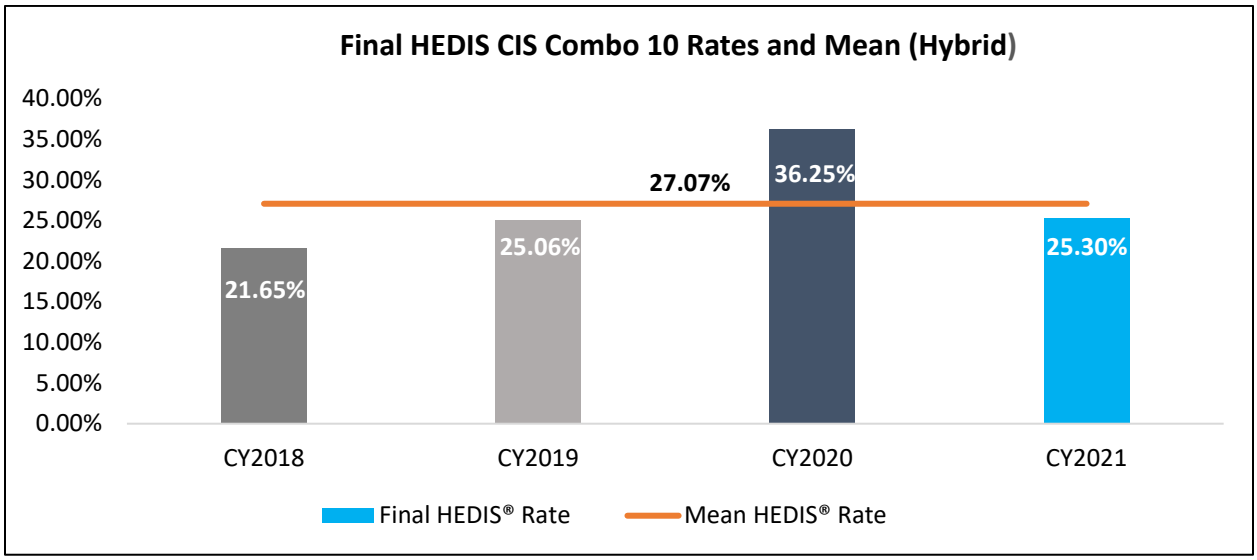

Figure 2. HEDIS CIS Combo 10 Trend (MY 2018-2021)

4.1.3 PIP Result

UnitedHealthcare 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 36.25% (MY 2020) to 25.3% (MY 2021) by 10.95% points (Figure 2). This decline was statistically significant. PTM summarized UnitedHealthcare's data for primary and secondary measures for comparison as follows.

Table 9. Primary and Secondary Measures (Admin Data) MY 2020-2021

Measurement Period	HEDIS CIS Combo 10 Rate Six counties	HEDIS CIS Combo 10 Statewide
Oct (baseline) 2021	12.75%	12.06%
October to November 2021	12.73%	12.09%
November to December 2021	13.04%	12.14%
December to Retrospective 2021	13.01%	12.10%
Baseline-Final Rate MY 2020	21.54%	17.76%

4.2 Nonclinical PIP: Improving Oral Health

The MHD contract section 2.18.8(d)(2) requires UnitedHealthcare 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 10(A-D) summarizes the nonclinical PIP information submitted by UnitedHealthcare in the format adopted from the CMS EQR Protocol 1.

Table 10(A-D). Summary: Improving Oral Health

10A. General PIP Information

PIP Title: Improving Oral Health (HEDIS ADV rate)
PIP Aim Statement: By December 31, 2021, increase the percentage of UnitedHealthcare members between ages 2–20 years old who are eligible for and receive an annual dental visit from 41.18% to 43.18%.
Was the PIP State-mandated, collaborative, statewide, or plan choice? ☑ State-mandated (State required plans to conduct a PIP on this specific topic) ☐ Collaborative (plans worked together during the planning or implementation phases) ☑ Statewide (the PIP was conducted by all MCOs within the state) ☐ Plan choice (State allowed the plan to identify the PIP topic)
Target age group (check one): Children only (ages 0–17) Adults only (age 18 and over) ☑ *Both adults and children * Specify the age range here: Aged 0-20 years
Target population description, such as duals, LTSS, or pregnant women (specify): The study population for the primary measure consists of all UnitedHealthcare members who were eligible based on NCQA's HEDIS Annual Dental Visit (ADV) Technical Specifications. The criteria specify Medicaid members aged 2-20 years as of Dec 31, 2021, who are continuously enrolled throughout the measurement year with no more than one gap in enrollment as the eligible population. The population for the secondary measure and intervention included members eligible for the HEDIS ADV measure who were aged 4-6 years and who lived in Jackson County, Saint Louis County, and Saint Louis City.
Programs: ☐ Medicaid (Title XIX) only ☐ CHIP (Title XXI) only ☑ Medicaid and CHIP

10B. 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): TTEC Live Agent Calling Program-Vendor calls to assist non-compliant members 4-6 years old schedule dental appointments in targeted three counties in MO.

☐ 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

10C. 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 ADV-primary measure	MY 2020	41.18% No sampling	MY 2021	42.39% No sampling	Yes	Yes (P=0.000000002)

10D. 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: UnitedHealthcare should have clarity on the concepts of target population/project population/PIP variables and clearly define and apply these in the PIP. The intervention should have a target set to meet the goal set by the MHD. PDSA cycles should be utilized to test the intervention, and the intervention should tie to an improvement. The demonstrated improvement should be clearly linked to the quality improvement processes implemented. (Refer to section 6.0 of this report for the details.)

4.2.2 PIP Description

Intervention: TTEC Live Agent Calling Program: The program consisted of live agents making outbound calls to members non-compliant with specific HEDIS measures and assisted the members with scheduling appointments to close the gap(s). Three types of calls were included in the program:

- Initial Call: If a member answers and authenticates, the agent then assists the member in making an appointment if they do not have one.
- Reminder Call: Based on the date of the scheduled appointment, a call will be made prior to the appointment.
- Follow-Up Call: A call will also be made to ensure the member attended the appointment. If the member did not go, the agent attempted to reschedule the appointment with the member.

A list of 4,768 members aged 4-6 years located in Jackson County, Saint Louis County, and Saint Louis City who were non-compliant for ADV were provided to the vendor for outreach. A total of 4,177 members were outreached.

Performance Measure: The Primary Measure used to measure the outcome of the PIP was the HEDIS ADV measure, which measures the number of members aged 2-20 years who had at least one dental visit during the measurement year. The secondary measure utilized available HEDIS member-level detail (MLD) data to monitor ADV compliance for members aged 4-6 years in the specific counties of Jackson County, Saint Louis County, and Saint Louis City throughout the PIP intervention process.

Variable: The eligible members who had not received a dental visit in MY 2021.

Data Collection: UnitedHealthcare used Inovalon, a HEDIS-certified software engine, to generate the HEDIS ADV measure final rate annually. Data incorporated into Inovalon for the ADV measure was based on dental claims/encounters. The HEDIS ADV measure was analyzed and interpreted monthly using prospective data. For the Secondary Measure, Inovalon generated unaudited prospective data monthly throughout the measurement year. UnitedHealthcare's Quality team used the ADV MLD data to extract the rates for members aged 4-6 years who lived in Jackson County, Saint Louis County, and Saint Louis City prior to the TTEC Live Agent Calling Program and monthly after that. Call results were generated monthly to evaluate the effectiveness of the intervention. Data available to review were as follows:

- Call disposition/reach rate/appointment detail (i.e., call back request, hang-up, left a message, scheduled an appointment).
- COVID-19 barrier report (tracks any barriers to scheduling an appointment due to

COVID-19).

- At the end of the measurement period, dental claims were researched for members included in the program to identify a correlation between calls and dental visits.

Findings: The intervention outcomes are summarized in Tables 11 and 12.

Table 11. TTEC Live Agent Program Outcomes ADV PIP

Call Disposition	October	November	December	Total
Busy	7 (0.53%)	9 (1.09%)	142 (1.76%)	158 (1.55%)
Call Back Requested	19 (1.43%)	3 (0.36%)	42 (0.52%)	64 (0.63%)
Do Not Call (remove from list)	7 (0.53%)	2 (0.24%)	14 (0.17%)	23 (0.23%)
Failed Authentication	14 (1.06%)	3 (0.36%)	2 (0.02%)	19 (0.19%)
Fax machine	1 (0.08%)	1 (0.12%)	-	2 (0.02%)
Hang Up	59 (4.45%)	41 (4.95%)	447 (5.55%)	547 (5.36%)
Left Message	644 (48.60%)	423 (51.09%)	4454 (55.28%)	5521 (54.07%)
Left message with different person	10 (0.75%)	4 (0.48%)	72 (0.89%)	86 (0.84%)
No answer	278 (20.98%)	192 (23.19%)	1668 (20.70%)	2138 (20.94%)
No longer a member	5 (0.38%)	9 (1.09%)	23 (0.29%)	37 (0.36%)
Number disconnected	107 (8.08%)	58 (7.00%)	425 (5.27%)	590 (5.78%)
Authenticated-Appointment already scheduled	37 (2.79%)	20 (2.42%)	197 (2.45%)	254 (2.49%)
Authenticated-No appointments made	49 (3.70%)	11 (1.33%)	200 (2.48%)	260 (2.55%)
Authenticated-Appointment Scheduled	18 (1.36%)	14 (1.69%)	95 (1.18%)	127 (1.24%)
Unauthenticated	25 (1.89%)	11 (1.33%)	94 (1.17%)	130 (1.27%)
Wrong number	45 (3.40%)	27 (3.26%)	182 (2.26%)	254 (2.49%)
Total	1325	828	8057	10,210

Table 12. Member Outcomes: TTEC Intervention ADV PIP

Member Outcomes*	Total
Number of members outreached	4,177
Number of members authenticated	638 (15.3%)

Number of members' appointments already scheduled	253 (6.1%)
Number of members' appointments scheduled on call	127 (3.0%)
Number of members who did not schedule appointments	259 (6.2%)

*De-duplicated members and counts. Final call disposition for each member at the end of the intervention timeline (12/31/2021).

UnitedHealthcare summarized its findings from the intervention as follows:

- 638 members were authenticated:
  - Of the 253 members who said they had already scheduled an appointment, 121 had a dental claim in 2021.
  - Of the 259 members who did not schedule an appointment while on the call, 26 had a dental claim in 2021.
  - Of the 127 members who scheduled an appointment while on the call, 26 had a dental claim in 2021.
  - A total of 173 members (27%) who were authenticated had a dental visit in MY 2021.
- Of the 3,539 members who did not answer/were not authenticated, 554 (16%) had a dental visit in 2021.

(PTM determined the intervention success rate was 0.62%-26 had dental visits of 4177 members who were called).

Table 13 presents the HEDIS ADV rates in the three targeted counties during the time of intervention and their statistical significance, and Table 14 presents rates for individual counties. The HEDIS ADV rate for members 4-6 years in Jackson County, St. Louis County, and St. Louis City) increased from 40.48% (MY 2020) to 44.29% (MY 2021), an increase of 3.81% points but is not linked to the intervention.

Table 13. HEDIS ADV Rate in Three Counties: Oct-Dec 2021

Measurement Period	Measurement	Numerator	Denominator	Rate	Benchmark (50th percentile)	Goal (2%)
October 2021 (claims as of 10/7/21)	Baseline	2666	7324	36.40%	50.59%	42.28 %
November 2021 (claims as of 11/7/21)	Remeasurement 1	2595	6592	39.37%	50.59%	42.28 %
December 2021 (claims as of 12/7/21)	Remeasurement 2	2813	6690	42.05%	50.59%	42.28 %
2021 Runout (claims as of 12/31/21)	Remeasurement 3	3078	6950	44.29%	50.59%	42.28 %

Statistically Significant? (Yes/No)	Pearson's Chi Sq	p-value	Measure Periods Compared
Yes	12.9718	0.00031	Baseline to RM1
Yes	9.8940	0.00166	RM1 to RM 2
No	6.9705	0.00827	RM2 to RM3
Yes	92.2418	0.00000	Baseline to RM3

Table 14. HEDIS ADV Rate in Individual Three Counties

Baseline October 2021	Jackson	St. Louis	St. Louis City	Total
Numerator	1293	937	436	2666
Denominator	3171	2867	1286	7324
Rate	40.78%	32.68%	33.90%	36.40%
Remeasurement 1 November 2021	Jackson	St. Louis	St. Louis City	Total
Numerator	1248	944	403	2595
Denominator	2870	2610	1112	6592
Rate	43.48%	36.17%	36.24%	39.37%
Remeasurement 2 December 2021	Jackson	St. Louis	St. Louis City	Total
Numerator	1360	1023	430	2813
Denominator	2930	2642	1118	6690
Rate	46.42%	38.72%	38.46%	42.05%
Remeasurement 3 Retrospective Runout	Jackson	St. Louis	St. Louis City	Total
Numerator	1480	1101	497	3078
Denominator	3008	2717	1225	6950
Rate	49.20%	40.52%	40.57%	44.29%

Table 15 presents HEDIS ADV rates in the three counties (secondary measure) compared to the rates for the members in the rest of the state.

Table 15. HEDIS ADV Rate: Three Counties vs. All other MO Counties

Baseline October 2021	Secondary Measure	ADV Members (4-6 years in all other MO counties)
Numerator	2666	5797
Denominator	7324	14831
Rate	36.40%	39.09%
Remeasurement 1 November 2021	Secondary Measure	ADV Members (4-6 years in all other MO counties)
Numerator	2595	5749
Denominator	6592	13547
Rate	39.37%	42.44%

Remeasurement 2 December 2021	Secondary Measure	ADV Members (4-6 years in all other MO counties)
Numerator	2813	6217
Denominator	6690	13793
Rate	42.05%	45.07%
Remeasurement 3 Retrospective Runout	Secondary Measure	ADV Members (4-6 years in all other MO counties)
Numerator	3078	6696
Denominator	6950	14053
Rate	44.29%	47.65%

Figure 3 shows the statewide HEDIS ADV rates for MY 2020 and before and after the intervention in MY 2021.

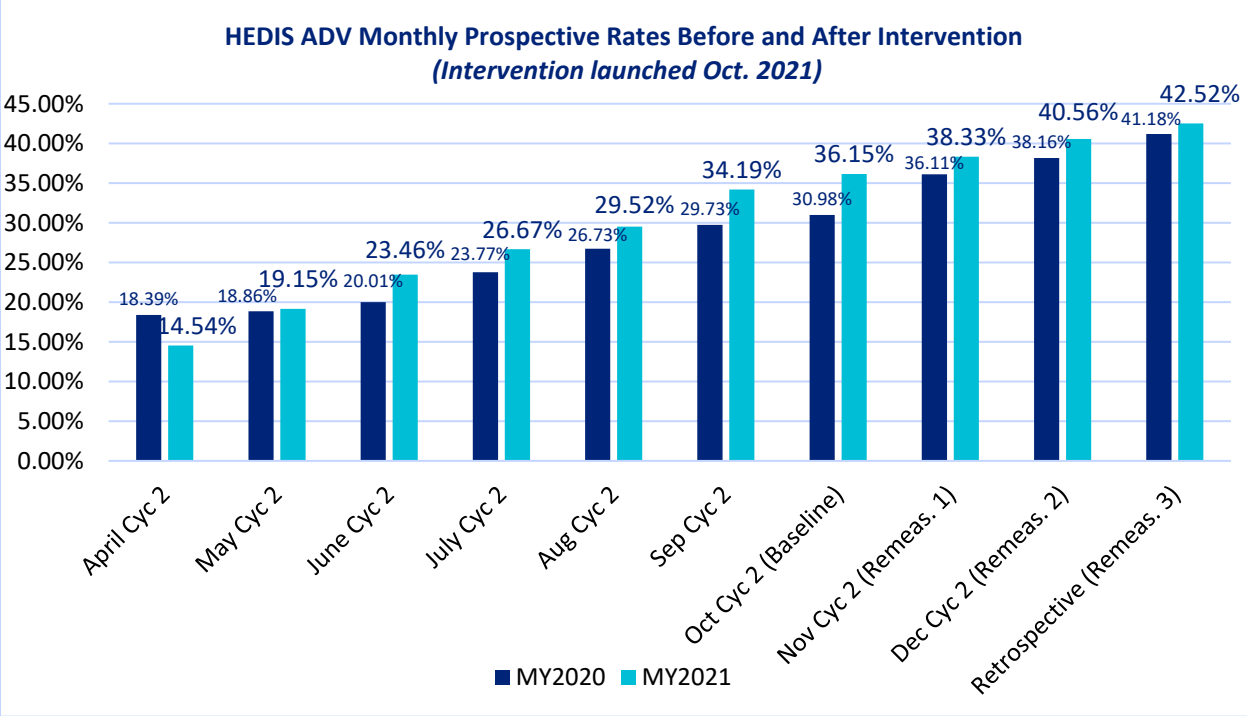

Figure 3. HEDIS ADV Rates MY 2020-2021

Table 16 presents primary measure data statewide for Oct-Dec 2021 for the intervention period and statistical significance.

Table 16. Statewide HEDIS ADV Rates: Oct-Dec 2021

Measurement Period	Measurement	Numerator	Denominator	Rate	Benchmark (50th percentile)	Goal (2%)
October 2021 (claims as of 10/7/21)	Baseline	47,841	132,341	36.15%	45.77%	43.18%

November 2021 (claims as of 11/7/21)	Remeasurement 1	50,299	131,222	38.33%	45.77%	43.18%
December 2021 (claims as of 12/7/21)	Remeasurement 2	52,820	130,221	40.56%	45.77%	43.18%
2021 Runout (claims as of 12/31/21)	Remeasurement 3	54,762	128,798	42.52%	45.77%	43.18%

Statistically Significant? (Yes/No)	**Pearson's Chi Sq**	**p-value**	**Measure Periods Compared**
Yes	134.1610	.00000	Baseline to RM1
Yes	136.1502	.00000	RM1 to RM 2
Yes	102.0130	.00000	RM2 to RM3
Yes	1109.65	.00000	Baseline to RM3

4.2.3 PIP Result

UnitedHealthcare did not meet the MHD's goal to increase the HEDIS ADV rate by 2% points from the previous year though the HEDIS ADV rate increased from 41.18% (MY 2020) to 42.39% (MY 2021) by 1.21% points which was statistically significant.

5.0 OVERALL CONCLUSIONS

PIPs Score

UnitedHealthcare did not meet the aim 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 17).

Table 17. PIPs' Evaluation based on the CFR/MHD Guidelines

CFR Guidelines	CIS PIP	ADV PIP
Measurement of performance using objective quality indicators	Partially Met	Partially 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.	Partially Met	Partially Met

5.1 Strengths and Weaknesses

PTM identified the following strengths and weaknesses in the validation process of both the PIPs, summarized in Table 18.

Table 18. 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)	UnitedHealthcare did not mention explicitly whether the PIP included special populations or high-priority services.
2. Writing an Aim statement	The PIP aim statement was concise and defined the improvement strategy, population, and period.	
3. Identifying the study population		UnitedHealthcare lacks clarity on what constitutes the target population and the project population.
4. Sampling		A non-probability sampling methodology (convenience type) was utilized for clinical and nonclinical PIPs. However, UnitedHealthcare did not correctly report in the non-clinical PIP.
5. Variables/performance measures (the MHD decided the primary measure)	UnitedHealthcare's national Quality Solutions Delivery (QSD) team manages all HEDIS-related activities, including vendor training and State-specific reporting. There is an overread process for all HEDIS hybrid measures and final validation by an NCQA-certified auditor.	Even though UnitedHealthcare reported using variables in the PIPs, they were incorrectly defined. Changes in enrollee satisfaction or experiences were not captured.
6. Data collection procedures	The data collection plan and analysis plan were linked. Inovalon, a HEDIS-certified software engine, generated primary and secondary	Qualitative data collection methods were not used (such as interviews or focus groups) to collect meaningful and valuable

Evaluation Criteria	Strength	Weakness
	measure results. The TTEC program included reporting with call results, reach rate reports, and barrier reports.	information from respondents. UnitedHealthcare did not provide information regarding the data sources: if they used data for inpatients, primary care providers, specialty care providers, ancillary service providers, and if Electronic Health Records (EHR) were utilized.
7. Data analysis and interpretation of results	The analysis of the intervention and the primary measure included the baseline data and repeat measurements.	The secondary measure analysis did not include the baseline data (MY 2020) for the six counties (clinical PIP) and three counties (non-clinical PIP) for the corresponding period of intervention (Oct-Dec 2020). Though the final MY 2020 baseline for the counties was reported, it was not included in the analysis. Also, the data corresponding to the noncompliant members who were the focus of the intervention was not provided for the MY 2020. The data presented does not link to the intervention. The PIP findings were not concise and were repetitive.
8. Improvement strategies	Both the PIPs utilized the same operational strategy in other states served by UnitedHealthcare. Barrier analysis and a care management survey were conducted to select the strategy.	The usefulness of the improvement strategies was not based on the PDSA cycle, even though UnitedHealthcare reportedly used PDSA. The intervention was ongoing, and results were reported monthly. The secondary measure

Evaluation Criteria	Strength	Weakness
		rates were compared between the six counties (clinical PIP)/three counties (non-clinical PIP) included in the intervention and all other counties in MO collectively. However, PTM determined that this collective comparison does not give any meaningful input to the quality improvement process. PTM determined the success rate (no. of members outreached to the number of members received care due to the outreach per 100 members) of the intervention was 0.01% for clinical PIP and 0.62% for non-clinical PIP.
9. Significant and sustained improvement		The overall HEDIS CIS Combo 10 rate significantly decreased from 36.25% (MY 2020) to 25.3% (MY 2021). The overall HEDIS ADV rate increased from 41.18% (MY 2020) to 42.39% (MY 2021), showing a statistically significant improvement of 1.21% points. However, improvement is unlikely due to the intervention.

5.2 Improvement by UnitedHealthcare

Table 19 shows the degree to which UnitedHealthcare responded to EQRO's recommendations from the previous years' EQRs. PTM evaluated the actions taken by UnitedHealthcare 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 19. Degree of response to EQRO's previous recommendations

Previous Recommendation	Action by UnitedHealthcare	UnitedHealthcare's Degree of Response and EQRO's Recommendations
EQR 2021		
1. Study Population: UnitedHealthcare 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.	The issue remained in the EQR 2022.	**Low** The same recommendation applies to the EQR 2022.
2. Variables/secondary measures: Data elements collected after the intervention should be clearly and accurately defined along with units of measure and correctly utilized to analyze the PIP results.	Secondary measures were defined accurately for both the PIPs. However, the variables were not accurate.	**Medium** The same recommendation applies to the EQR 2022.
3. Data Collection Procedures: UnitedHealthcare must address the data collection sources and specify if they used data for inpatients, primary care providers, specialty care providers, ancillary service providers, Electronic Health Records (EHR), and if the data collection included encounter/utilization data for all the services provided.	No action was taken. The issue remains in the EQR 2022	**Low** The same recommendation applies to the EQR 2022.
4. PDSA Cycles: UnitedHealthcare must adopt PDSA cycles that involve analysis, feedback/lessons learned from the data collected after the intervention, and	Though UnitedHealthcare reported using the PDSA cycles for both the PIPs, PTM determined that the process was not followed.	**Low** The same recommendation

Previous Recommendation	Action by UnitedHealthcare	UnitedHealthcare's Degree of Response and EQRO's Recommendations
application of these outcomes to plan another test cycle.		applies to the EQR 2022.
5. Sustained improvement: After an intervention is implemented and results are analyzed, UnitedHealthcare should identify strategies to create a sustained improvement. This allows UnitedHealthcare 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.	UnitedHealthcare did not meet the requirements for both PIPs. The interventions were ongoing without demonstrating improvement.	**Low** 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.
EQR 2020		
1. Even though the MHD mandates an overarching goal, UnitedHealthcare can select a topic within specified parameters. To ensure a successful PIP, UnitedHealthcare should find early and regular opportunities to obtain input from staff, providers, and members on improving care delivery.	There was some improvement towards this step in the methodology of PIP in EQR 2022.	**Medium** The same recommendation applies to EQR 2022. Additionally, UnitedHealthcare must mention explicitly whether the PIP included special populations or high-priority services.
2. UnitedHealthcare 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).	There was no improvement in this step in the methodology of PIP.	**Low** The same recommendation applies to EQR 2022.

Previous Recommendation	Action by UnitedHealthcare	UnitedHealthcare's Degree of Response and EQRO's Recommendations
3. UnitedHealthcare should select a variable (a measurable characteristic, quality, trait, or attribute of a particular individual, object, or situation being studied) that could identify UnitedHealthcare's performance on the PIPs and track improvement over time. UnitedHealthcare 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.	There was no improvement towards this step in the methodology of PIP in EQR 2022.	**Low** The same recommendation applies to EQR 2022.
4. UnitedHealthcare should have variables/secondary measures that should tie an intervention to improvement. For example, after sending DCOR reports in ADV PIP, UnitedHealthcare should measure the % of appointments scheduled from the DCOR list and % of members responding by visiting a dentist.	There was an improvement in this step of PIPs' methodology. However, no improvement was evident.	**Medium** The same recommendation applies to EQR 2022.
5. Repeat measurements (at least two) in short intervals (unlike 90-day intervals selected in ADV PIP) should be conducted to determine whether significant performance changes relative to baseline measurement were observed.	There was an improvement towards this step in the methodology of PIP in EQR 2022.	**High**
6. Effectiveness of the improvement strategy should be determined by measuring a change in performance	There was no improvement towards this step in the	**Low**

Previous Recommendation	Action by UnitedHealthcare	UnitedHealthcare's Degree of Response and EQRO's Recommendations
according to the predefined measures and linking to intervention.	methodology of PIP in EQR 2022.	The same recommendation applies to EQR 2022.
7. When analyzing multiple data points over time, UnitedHealthcare should consider tools such as time series, run charts, control charts, data dashboards, and basic trend analyses.	Data was primarily presented using Tables.	**Low** UnitedHealthcare should use the tools recommended in this section for the PIPs to show the intervention results and the baselines.
EQR 2019		
1. UnitedHealthcare 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.	**Medium** The same recommendation applies to EQR 2022.
2. The interventions should be planned specifically for PIP required by the MHD Contract.	There was some improvement. However, the interventions were ongoing even when no improvement was evident.	**Medium** The same recommendation applies to EQR 2022.
3. The results should be tied to the interventions.	No improvement was seen.	**Low** The same recommendation applies to EQR 2022.

6.0 RECOMMENDATIONS

UnitedHealthcare

UnitedHealthcare 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 19 in section 5.0 of this report). Some other

recommendations directed toward improving the weaknesses noted in Table 18 are as follows:

1. Sampling: Accurate knowledge of sampling must be applied while conducting PIPs.

2. Data Analysis and Interpretation of PIP results: The baseline corresponding to the parameters under study must be provided from the previous year to see the trend over a period.

MHD

1. The MHD must clarify with UnitedHealthcare 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 UnitedHealth 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.

3. The MHD should require UnitedHealthcare 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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APPENDIX A. PIP VALIDATION WORKSHEET-IMPROVING CHILDHOOD IMMUNIZATION STATUS

Date of Evaluation: Oct 14, 2022

MCO Name/Mailing Address:	UnitedHealthcare/13655 Riverport Dr, Maryland Heights, MO 63043
MCO Contact Name and Title:	Senior Director, Clinical Quality; and Analyst, Clinical Quality
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: 258,581 Medicaid/CHIP members included in the study: 822 Number of PCPs/Specialists involved in CIS Combo 10 immunizations: Over 1000 individual practitioners and 260 locations, including 22 FQHCs and 73 Health Departments.

Score: **Met** 🟢 **/ Partially Met** 🟡 **/Not Met** 🔴 **/ 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 UnitedHealthcare 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: • Children with special health care needs • Adults with physical disabilities • Children or adults with behavioral health issues	🟢 FM	The UnitedHealthcare population of children aged 0-2 years old, including those with special health care needs, physical disabilities, and behavioral health issues, was included in the PIP.

• People with intellectual and developmental disabilities • People with dual eligibility who use long-term services and supports (LTSS) • Preventive care • Acute and chronic care • High-volume or high-risk services • Care received from specialized centers (e.g., burn, transplant, cardiac surgery) • Continuity or coordination of care from multiple providers and over multiple episodes • Appeals and grievances • Access to and availability of care		
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, UnitedHealthcare 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 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?	FM	The aim statement was "by December 31, 2021, increase the percentage of UnitedHealthcare MO members aged two and under who are eligible for and receive all CIS Combo 10 vaccines from 36.25% to 38.25%." PTM determined that the improvement strategy is clearly specified.
2.2 Did the PIP aim statement clearly specify the population for the PIP?	FM	All members two years old and under were eligible for CIS Combo 10 vaccines were stated in the aim statement.
2.3 Did the PIP aim statement clearly specify the time period for the PIP?	FM	By the end of Dec 31, 2021.
2.4 Was the PIP aim statement concise?	FM	Same comment as in section 2.1.

2.5 Was the PIP aim statement answerable?	FM	Same comment as in section 2.1
2.6 Was the PIP aim statement measurable?	FM	Same comment as in section 2.1
2.7 Overall assessment/recommendations for improving the PIP aim statement.	FM	Even though the overarching aim is provided by the MHD, UnitedHealthcare should translate the aim statement that identifies the focus of the PIP and establish the framework for data collection and analysis on a small scale.

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)?	NM	UnitedHealthcare presented two different statements about the project population: "The primary measure study population is defined by all UnitedHealthcare members who were eligible based on NCQA's HEDIS CIS Combo 10 Technical Specifications." For the secondary measure, the study population consisted of a baseline of 3,631 members and ended with a final denominator of 3,528 for members who turned 2 years old in MY 2021 and were eligible based on NCQA's HEDIS CIS measure, who live in six specific Missouri counties. PTM determined that UnitedHealthcare did not have clarity about the project population and target population.
3.2 Was the entire MCO population included in the PIP?	FM	The sampling frame was a list of all members turning 2 years old by Dec 31, 2021, who lived in six specific counties in the State of Missouri.
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	The entire population was not included in the PIP. The primary and secondary measures were calculated using NCQA-certified software and HEDIS technical specifications.
3.4 Was a sample used?	FM	Non-probability sampling method with convenience sampling was used for the secondary measure.

3.5 Overall assessment/recommendations for identifying the project population.	PM	UnitedHealthcare should have clarity on defining the target population and PIP population. PTM recommends that the PIP population 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.

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	The sampling frame consisted of a list of all members turning 2 years old by December 31, 2021, who live in six specific counties in the State of Missouri. These counties included Clay County, Jackson County, Jefferson County, St. Charles County, St. Louis County, and St. Louis City.
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?	N/A	All eligible members with phone numbers within these targeted counties were used in the sampling. Having a valid phone number was a requirement for the intervention.
4.3 Did the sample contain a sufficient number of enrollees taking into account non-response?	FM	UnitedHealthcare selected the counties for the secondary measure with the highest denominator for CIS Combo 10.
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	Same comment as in section 4.1
4.5 Were valid sampling techniques used to protect against bias? Specify the type of sampling used.	PM	Non-probability sampling method with convenience sampling for the secondary measure. PTM determined that the sampling was for the intervention, not the secondary measure.
4.6 Overall assessment/recommendations for improving the sampling method.	PM	UnitedHealthcare must have clarity on the usage of sampling methods.

Step 5: Review the Selected PIP Variables and Performance Measures

Component/Standard	Score	Comments
PIP Variables		

5.1 Were the variables adequate to answer the PIP question? • Did the PIP use objective, clearly defined, time-specific variables (e.g., an event or status that can be measured)? • Were the variables available to measure performance and track improvement over time (at least semiannual basis)?	NM	The variable used in the development of the PIP was focused on members who turned two years old in MY 2021 and who were non-compliant with the HEDIS CIS Combo 10 measure. PTM noted that UnitedHealthcare corrected the variable after PTM identified the inaccuracy. However, PTM scored the original definition of the variable.
Performance measures		
5.2 Did the performance measure assess an important aspect of care that will make a difference to enrollees' health or functional status?	FM	The HEDIS CIS Combo 10 measure was used as a primary measure, and the HEDIS CIS Combo 10 rate in six counties targeted in PIP (Clay County, Jackson County, Jefferson County, St. Charles County, St. Louis County, and St. Louis City) was used as a secondary measure.
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	Same comment as in section 5.2.
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, appropriate medication use.	FM	Same comment as in section 5.2.
5.5 Did the performance measures: • Monitor the performance of MCO at a point in time? • Track MCO performance over time? • Compare performance among MCOs over time? • Inform the selection and evaluation of quality improvement activities?	FM	The primary and secondary measures were tracked monthly during the intervention period. UnitedHealthcare did not compare its performance with the other MCOs as this was not a collaborative PIP.
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.

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? • Did the measure address accepted clinical guidelines relevant to the PIP question? • Did the measure address an important aspect of care or operations that was meaningful to MCO enrollees? • Did available data sources allow the MCO to calculate the measure reliably and accurately? • Were all criteria used in the measure defined clearly (such as time periods, characteristics of eligible enrollees, services to be assessed, and exclusion criteria)?	N/A	Same comment as in section 5.2.
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.)	PM	The measures did not capture changes in the enrollee satisfaction or experience of care. However, the TTEC intervention captured reasons for members not scheduling appointments during the call.
5.9 Did the measures include a strategy to ensure inter-rater reliability (if applicable)?	FM	UnitedHealthcare's national Quality Solutions Delivery (QSD) team manages all HEDIS-related activities, including vendor training and State-specific reporting. There is an overread process for all HEDIS hybrid measures and final validation by an NCQA-certified auditor. The PIPs did not include a medical record review. However, the final HEDIS CIS Combo 10 measure was a hybrid rate.
5.10 If process measures were used, is there strong clinical evidence indicating that the process being measured is meaningfully associated with outcomes? • This determination will be based on published guidelines, including citations from randomized clinical trials, case-control studies, or cohort studies. • At a minimum, the PIP should be able to	FM	The process measure used in the PIP is a CMS Child Core Set measure (NQF0038).

demonstrate a consensus among relevant practitioners with expertise in the defined area who attest to the importance of a given process.		
5.11 Overall assessment/recommendations for improving the selected PIP variables and performance measures.	PM	The variable should be defined accurately and used in the PIP. UnitedHealthcare can use focus groups, surveys, and interviews to collect qualitative insights from members, 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.

Step 6: Review Data Collection Procedures

Component/Standard	Score	Comments
Assessment of Overall Data Collection Procedures		
6.1 Did the PIP design specify a systematic method for collecting valid and reliable data that represents the population in the PIP?	FM	HEDIS-certified software was utilized to generate the primary and secondary measures. TTEC collected the intervention data, and claims data was queried to obtain the immunization results.
6.2 Did the PIP design specify the frequency of data collection? If yes, what was the frequency (for example, semi-annually)?	FM	The primary and secondary measures and the intervention data were reported monthly from Oct-Dec 2021. Also, the primary measure was reported monthly for the MY 2020-2021.
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 measure-HEDIS Interactive Data Submission System (IDSS). Secondary measure- Inovalon Member-Level Detail Reporting Intervention-immunization claims data
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	Data elements collected were defined. However, the variable was incorrectly defined and scored in 5.1. Therefore, it was not scored again in this section.
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-the same comment as in section 6.2.

6.6 Did the data collection instruments allow for consistent and accurate data collection over the time periods studied?	FM	Same comment as in section 6.1.
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 live agent contacting the member was able to report the reasons for the member not able to schedule an appointment with the providers. See additional comments in section 5.8.
6.8 Overall assessment/recommendations for improving the data collection procedures.	PM	UnitedHealthcare must consider qualitative data collection methods such as interviews and focus groups on generating meaningful data that can help improve member satisfaction and health status. In addition, UnitedHealthcare must clearly address sections 6.9, 6.11, 6.12, and 6.14, described below.
Assessment of Data Collection Procedures for Administrative Data Sources		
6.9 If inpatient data was used, did the data system capture all inpatient admissions/discharges?	N/A	UnitedHealthcare did not report using the inpatient data.
6.10 If primary care data was used, did primary care providers submit encounter or utilization data for all encounters?	FM	Administrative data were used for reporting primary and secondary measures. Immunization claims were queried for intervention data.
6.11 If specialty care data was used, did specialty care providers submit encounter or utilization data for all encounters?	N/A	UnitedHealthcare has not reported using specialty care providers.
6.12 If ancillary data was used, did ancillary service providers submit encounter or utilization data for all services provided?	N/A	UnitedHealthcare did not report on it.
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	UnitedHealthcare did not reported on it.

Assessment of Data Collection Procedures for Medical Record Review		
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	MRR was not conducted for the PIP. However, UnitedHealthcare reported that the annual evaluation of PIPs is the responsibility of the Quality Management Committee (QMC). This is the decision-making body ultimately responsible for the implementation, coordination, and integration of all quality improvement activities. The senior director and Clinical Quality analyst were responsible for the clinical PIP.
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? •A glossary of terms for each project should be developed before data collection begins to ensure consistent interpretation among and between data collection staff. •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.	N/A	MRR was not conducted for the PIP. A glossary of terms for each project was not developed. The medical record review 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

Component/Standard		
7.1 Was the analysis conducted in accordance with the data analysis plan?	FM	Yes. Same comment as in section 6.2.
7.2 Did the analysis include baseline and repeat measurements of project outcomes?	PM	The analysis of the intervention and the primary measure included the baseline data and repeat measurements. However, the secondary measure analysis did not include the baseline data (MY 2020) for the six counties for the corresponding period of intervention (Oct-Dec 2020). Though the

		final MY 2020 baseline for six counties was reported, it was not included in the analysis. Also, the baseline corresponding to the noncompliant members who were the focus of the intervention was not provided for the MY 2020. Baseline and repeat measurements for the intervention were provided and analyzed.
7.3 Did the analysis assess the statistical significance of any differences between the initial and repeat measurements?	PM	The statistical significance (Pearson's Chi-Square test) between the initial and repeat measurements of the primary and secondary measurements was assessed, which did not show any significant improvement. The initial and repeat measurements of the intervention outcomes were not assessed.
7.4 Did the analysis account for factors that may influence the comparability of initial and repeat measurements?	FM	UnitedHealthcare reported continued effects of the COVID-19 pandemic, causing member hesitation to schedule well-child and immunization appointments. Also, primary care providers continue to face multiple barriers, including staffing shortages, new guidelines for screening and caring for patients, and financial repercussions of the pandemic and shutdowns.
7.5 Did the analysis account for factors that may threaten the internal or external validity of the findings?	FM	UnitedHealthcare reported that no factors were identified that threatened the internal or external validity of the findings.
7.6 Did the PIP compare the results across multiple entities, such as different patient subgroups, provider sites, or MCOs?	PM	The secondary measure rates were collectively compared between the six counties included in the intervention and all other counties in MO. However, PTM determined that this collective comparison does not give any meaningful input to the quality improvement process.
7.7 Were PIP results and findings presented in a concise and easily understood manner?	NM	There were some inaccuracies/issues noted in the data presented, such as faulty units, data not labeled correctly, incomplete data, and inaccurate reporting. In addition, the reporting was not concise.
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	NM	The PIP design did not analyze and incorporate lessons learned during the intervention at each measurement.

on a continuous improvement philosophy and reflect on lessons learned and opportunities for improvement.)		
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. Baseline and measurement year must have the comparison corresponding to the same parameters. E.g., if non-compliant members are the focus of study in the measurement year, then the same must be reported for the baseline year.

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	UnitedHealthcare utilized the TTEC Live Agent Calling Program in other states. Even though UnitedHealthcare didn't have specific measure outcome results, they felt the program's benefits outweighed the cost and planned on continuing the program for the foreseeable future. UnitedHealthcare submitted results from the care management survey, including a small number of members (seven) showing members' experience related to immunization. Reasons for members not scheduling an appointment during the call were included in the intervention.
8.2 Was the strategy designed to address root causes or barriers identified through data analysis and quality improvement processes?	NM	The root cause or barrier identified for poor results from the intervention was not addressed.
8.3 Was the rapid-cycle PDSA approach used to test the selected improvement strategy?	NM	Though UnitedHealthcare reported using the PDSA approach, PTM determined that the PDSA approach was not used in the PIP. The same intervention continued each month despite the poor results of the intervention (1.36%, 1.23%, 1.02% appointments scheduled in Oct-Dec 2021).
8.4 Was the strategy culturally and linguistically appropriate?	FM	The call scripts were also available in Spanish, making the program accessible to Spanish-speaking members.

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)?	FM	The appointments already scheduled by the members for Oct-Dec 2021, not due to the intervention, were reported separately.
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	A 0.26% points increase was noted in the secondary measure, and a 0.04% points increase was noted in the primary measure from Oct-Dec 2021 during the intervention period. PTM identified that the success rate of the intervention was 0.01%, and the strategy was not successful. Potential follow-up activities include ensuring the intervention is implemented earlier in MY 2022 and, if it is to continue, then implementing procedures to update member contact information using care management documentation and other sources prior to sending the non-compliant list to TTEC.
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 baseline and repeat measurements for the primary measure and the intervention used the same methodology. The baseline for Oct-Dec 2020 was not submitted for the six counties.
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 36.25% (MY 2020) to 25.3% (MY 2021). The final (admin) secondary measure for the six counties in MY 2020 was 21.54%, and the secondary rate reported by Dec 31, 2021, was 13.01%. The success of the intervention was 0.01%.

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	A significant decline was reported in the HEDIS CIS Combo 10, and no statistically significant improvement was noted during the intervention.
9.5 Was sustained improvement demonstrated through repeated measurements over time?	NM	Same comment as in sections 9.2 and 9.4.
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
☐ High confidence ☐ Moderate confidence ☐ Low confidence ☑ No confidence	UnitedHealthcare 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 36.25% (MY 2020) to 25.3% (MY 2021) by 10.95% points. The secondary measure for the six counties dropped from 21.54% in MY 2020 to 13.01% in MY 2021. The success achieved by the intervention was 0.01% immunizations.

APPENDIX B. PIP VALIDATION WORKSHEET-IMPROVING ORAL HEALTH

Date of Evaluation: Oct 21, 2022

MCO Name/Mailing Address:	UnitedHealthcare/13655 Riverport Dr, Maryland Heights, MO 63043
MCO Contact Name and Title:	Senior Director, Clinical Quality; Analyst, Clinical Quality; and Consultant, Clinical Quality
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: 258,581 Medicaid/CHIP members included in the study: 4177 Number of Dentists/Specialists: 492

Score: **Met** / **Partially Met** / **Not Met** / **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 UnitedHealthcare, 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 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: • Children with special health care needs • Adults with physical disabilities • Children or adults with behavioral health issues • People with intellectual and developmental	PM	This is not explicitly reported in the PIP. However, UnitedHealthcare stated that all members eligible for the HEDIS ADV measure aged 4-6 years and who lived in Jackson County, Saint Louis County, and Saint Louis City were included in the study.

disabilities • People with dual eligibility who use long-term services and supports (LTSS) • Preventive care • Acute and chronic care • High-volume or high-risk services • Care received from specialized centers (e.g., burn, transplant, cardiac surgery) • Continuity or coordination of care from multiple providers and over multiple episodes • Appeals and grievances • Access to and availability of care		
1.5 Did the PIP topic align with priority areas identified by HHS and/or CMS?		The MHD selected the topic. The HEDIS ADV measure aligns with the CMS priority areas. The CMS Child Core Set measures have two measures related to improving oral health: The percentage of eligibles who received preventive dental services (PDENT-CH); and the percentage of children aged 6-9 years at elevated risk of dental caries who received a sealant on a permanent first molar (SEAL-CH).
1.6 Overall assessment/recommendations for improving PIP topic.	PM	UnitedHealthcare should clarify if the PIP met all the requirements stated in section 1.4. Even though the MHD mandates the overarching goal, UnitedHealthcare 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 the HEDIS ADV rate.

Step 2: Review the PIP Aim Statement

Component/Standard	Score	Comments
2.1 Did the PIP aim statement clearly specify the improvement strategy?	FM	By December 31, 2021, increase the percentage of UnitedHealthcare members between ages 2–20 years old who are eligible for and receive an annual dental visit from 41.18% to 43.18%. PTM determined that the improvement strategy is clearly specified.
2.2 Did the PIP aim statement clearly specify the population for the PIP?	FM	Members 2-20 years old were specified in the aim statement.

2.3 Did the PIP aim statement clearly specify the time period for the PIP?	FM	By the end of Dec 31, 2021.
2.4 Was the PIP aim statement concise?	FM	Same comment as in section 2.1.
2.5 Was the PIP aim statement answerable?	FM	Same comment as in section 2.1.
2.6 Was the PIP aim statement measurable?	FM	Same comment as in section 2.1.
2.7 Overall assessment/recommendations for improving the PIP aim statement.	FM	Even though the overarching aim is provided by the MHD, UnitedHealthcare should translate the aim statement that identifies the focus of the PIP and establish the framework for data collection and analysis on a small scale.

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)?	NM	UnitedHealthcare presented two different statements about the project population: The study population for the primary measure consists of all UnitedHealthcare members who were eligible based on NCQA's HEDIS ADV technical specifications. The population for the secondary measure and intervention included members eligible for the HEDIS ADV measure who were aged 4-6 years and who lived in Jackson County, Saint Louis County, and Saint Louis City. PTM determined that the intervention population was the noncompliant members for ADV in the three counties stated above. UnitedHealthcare does not have clarity about the project population and target population.
3.2 Was the entire MCO population included in the PIP?	FM	The entire population was not used in the PIP. See the comment for the secondary measure population in section 3.1.
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 section 3.1. The data collection approach captured enrollees from the three counties selected for the PIP.

3.4 Was a sample used?	PM	Non-probability sampling method with convenience sampling was used for the secondary measure. PTM determined that the sampling was for the intervention, not the secondary measure. UnitedHealthcare changed after PTM reviewed the PIP; hence, it was not scored. Furthermore, the change was incorrect.
3.5 Overall assessment/recommendations for identifying the project population.	PM	UnitedHealthcare should have clarity on defining the target population and PIP population. PTM recommends that the PIP population 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.

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	All members eligible for the HEDIS ADV measure who were between the age of 4-6 years by December 31, 2021, who lived in the following geographical areas of Missouri: Jackson County, Saint Louis County, and Saint Louis City.
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?	N/A	All non-compliant members with the HEDIS ADV in the three counties were included in the sample population.
4.3 Did the sample contain a sufficient number of enrollees taking into account non-response?	FM	The sample consisted of all non-compliant members (4,768). Out of these, 4,177 were outreached during the intervention.
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	Same comment as in section 4.1
4.5 Were valid sampling techniques used to protect against bias? Specify the type of sampling used.	PM	UnitedHealthcare reported that the non-probability sampling method with convenience sampling was used for the secondary measure.

		PTM determined that the sampling was for the intervention, not the secondary measure.
4.6 Overall assessment/recommendations for improving the sampling method.	PM	UnitedHealthcare must have clarity on the usage of sampling methods.

Step 5: Review the Selected PIP Variables and Performance Measures

Component/Standard	Score	Comments
PIP Variables		
5.1 Were the variables adequate to answer the PIP question? • Did the PIP use objective, clearly defined, time-specific variables (e.g., an event or status that can be measured)? • Were the variables available to measure performance and track improvement over time (at least semiannual basis)?	NM	The variable used in the PIP was reported as eligible members who had not received a dental visit in MY 2021. PTM noted that UnitedHealthcare corrected the variable after PTM pointed out the inaccuracy. However, the original definition of the variable was scored.
Performance measures		
5.2 Did the performance measure assess an important aspect of care that will make a difference to enrollees' health or functional status?	FM	The primary measure used to measure the outcome of the PIP was the HEDIS ADV measure, and the secondary measure utilized available HEDIS member-level detail data to monitor ADV compliance for members aged 4-6 years in the specific counties of Jackson County, Saint Louis County, and Saint Louis City throughout the PIP intervention process.
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	Same comment as in section 5.2.
5.4 Were the measures based on current clinical knowledge or health services research? E.g., Recommended procedures, appropriate utilization (hospital admissions, emergency department visits), adverse incidents (such as death, avoidable readmission), referral patterns, authorization requests, appropriate medication use.	FM	Same comment as in section 5.2.

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5.5 Did the performance measures: • Monitor the performance of MCO at a point in time? • Track MCO performance over time? • Compare performance among MCOs over time? • Inform the selection and evaluation of quality improvement activities?	FM	The primary and secondary measures were tracked monthly during the intervention period. UnitedHealthcare did not compare its performance with the other MCOs as this was not a collaborative PIP.
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.
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? • Did the measure address accepted clinical guidelines relevant to the PIP question? • Did the measure address an important aspect of care or operations that was meaningful to MCO enrollees? • Did available data sources allow the MCO to calculate the measure reliably and accurately? • Were all criteria used in the measure defined clearly (such as time periods, characteristics of eligible enrollees, services to be assessed, and exclusion criteria)?	N/A	Same comments as in section 5.2.
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.)	FM	The HEDIS ADV rate increased by 1.21% points from the previous year.

5.9 Did the measures include a strategy to ensure inter-rater reliability (if applicable)?	N/A	Since HEDIS ADV is not a hybrid measure, NCQA does not require inter-rater reliability evaluation.
5.10 If process measures were used, is there strong clinical evidence indicating that the process being measured is meaningfully associated with outcomes? • This determination will be based on published guidelines, including citations from randomized clinical trials, case-control studies, or cohort studies. • 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.	FM	HEDIS ADV measure was used in the PIP.
5.11 Overall assessment/recommendations for improving the selected PIP variables and performance measures.		The variable should be defined accurately and used in the PIP. UnitedHealthcare can use focus groups, surveys, and interviews to collect qualitative insights from members, 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.

Step 6: Review Data Collection Procedures

Component/Standard	Score	Comments
Assessment of Overall Data Collection Procedures		
6.1 Did the PIP design specify a systematic method for collecting valid and reliable data that represents the population in the PIP?	FM	HEDIS-certified software was utilized to generate the primary and secondary measures. TTEC collected the intervention data, and claims data queried to obtain the dental visits.
6.2 Did the PIP design specify the frequency of data collection? If yes, what was the frequency (for example, semi-annually)?	FM	The primary and secondary measures and the intervention data were reported monthly from Oct-Dec 2021. Also, the primary measure was reported monthly for the MY 2020-2021.
6.3 Did the PIP design clearly specify the data sources? Data sources may include: Encounter and claims systems, medical records,	FM	UnitedHealthcare used Inovalon, a HEDIS-certified software engine, to generate the HEDIS ADV measure rates, ensuring a

case management or electronic visit verification systems, tracking logs, surveys, provider and/or enrollee interviews.		systematic method for collecting valid and reliable data representing the population. Data incorporated into Inovalon for the ADV measure was based on dental claims/encounters. UnitedHealthcare's Quality team used the ADV MLD data to extract the rates for members aged 4-6 years who lived in Jackson County, Saint Louis County, and Saint Louis City. Claims were used to look for dental appointments after the intervention.
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	Data elements to be collected were defined. However, the variable was incorrectly defined and scored in 5.1. Therefore, it is not scored again in this section.
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-the same comment as in section 6.2.
6.6 Did the data collection instruments allow for consistent and accurate data collection over the time periods studied?	FM	Same comment as in section 6.1.
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 live agent contacting the member was able to report the reasons for the member not able to schedule an appointment with the providers.
6.8 Overall assessment/recommendations for improving the data collection procedures.	PM	UnitedHealthcare must consider qualitative data collection methods such as interviews and focus groups on generating meaningful data that can help improve member satisfaction and health status. In addition, UnitedHealthcare must clearly address sections 6.9, 6.11, 6.12, and 6.14, described below.
Assessment of Data Collection Procedures for Administrative Data Sources		
6.9 If inpatient data was used, did the data system capture all inpatient admissions/discharges?	N/A	UnitedHealthcare has not reported using the inpatient data.

6.10 If primary care data was used, did primary care providers submit encounter or utilization data for all encounters?	FM	Claims and encounters were incorporated into Inovalon to generate the primary and secondary measures.
6.11 If specialty care data was used, did specialty care providers submit encounter or utilization data for all encounters?	N/A	UnitedHealthcare has not reported using specialty care providers.
6.12 If ancillary data was used, did ancillary service providers submit encounter or utilization data for all services provided?	N/A	UnitedHealthcare did not reported on it.
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	UnitedHealthcare did not reported on it.
Assessment of Data Collection Procedures for Medical Record Review		
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	UnitedHealthcare reported that the annual evaluation of PIPs is the responsibility of the QMC. This decision-making body is ultimately responsible for the implementation, coordination, and integration of all quality improvement activities. The senior director, senior analyst, and consultant of Clinical Quality were responsible for the clinical PIP.
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 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? •A glossary of terms for each project should be developed before data collection begins to ensure consistent interpretation among and	N/A	MRR was not used for this PIP.

between data collection staff. •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.		

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	Yes, the analysis was as per the data analysis plan. See comment in section 6.2.
7.2 Did the analysis include baseline and repeat measurements of project outcomes?	PM	The analysis of the intervention and the primary measure included the baseline data and repeat measurements. However, the secondary measure analysis did not include the baseline data (MY 2020) for the three counties for the corresponding period of intervention (Oct-Dec 2020). Though the final MY 2020 baseline for three counties was reported, it was not included in the analysis. Also, the baseline corresponding to the noncompliant members who were the focus of the intervention was not provided for the MY 2020. Baseline and repeat measurements for the intervention were provided and analyzed.
7.3 Did the analysis assess the statistical significance of any differences between the initial and repeat measurements?	PM	The statistical significance (Pearson's Chi-Square test) between the initial and repeat measurements of the primary and secondary measurements was assessed and showed significant improvement. The initial and repeat measurements of the intervention outcomes were not assessed.
7.4 Did the analysis account for factors that may influence the comparability of initial and repeat measurements?	FM	A review of the call disposition result showed that the total number of calls completed each month seemed out of proportion. However, a discussion with the vendor explained that there were more calls in December due to completing 2nd or 3rd call attempts for all members contacted in October and November 2021. With a total of 10,210 phone calls made, the dispositions that occurred most often were leaving a message (54.07%), No Answer

		(20.94%), and Number Disconnected (5.78%). The continued effects of the COVID-19 pandemic may have caused member hesitation to schedule dental appointments.
7.5 Did the analysis account for factors that may threaten the internal or external validity of the findings?	FM	UnitedHealthcare reported that no factors were identified that threatened the internal or external validity of the findings.
7.6 Did the PIP compare the results across multiple entities, such as different patient subgroups, provider sites, or MCOs?	PM	The secondary measure rates were collectively compared between the three counties included in the intervention and all other counties in MO. PTM determined that the ADV rates reported in the counties with the intervention were lower than all other counties. Additionally, this collective comparison does not give any meaningful input to the quality improvement process.
7.7 Were PIP results and findings presented in a concise and easily understood manner?	NM	The findings were not concise and were repetitive.
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 did not analyze and incorporate lessons 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. The baseline and measurement year must have a comparison corresponding to the same parameters. E.g., if non-compliant members are the focus of study in the measurement year, then the same must be reported for the baseline year.

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	UnitedHealthcare utilized the TTEC Live Agent Calling Program in other states. Even though UnitedHealthcare didn't have specific measure outcome results, they felt the program's benefits outweighed the cost and planned on continuing the program for the foreseeable future. UnitedHealthcare submitted results from the care management survey, including a small number of members (seven) showing members' experience related to dental care. The TTEC program also included extensive reporting with call results, reach rate reports, and barrier reports.
8.2 Was the strategy designed to address root causes or barriers identified through data analysis and quality improvement processes?	NM	The root cause or barrier identified for poor results from the intervention was not addressed.
8.3 Was the rapid-cycle PDSA approach used to test the selected improvement strategy?	NM	Though UnitedHealthcare reported using the PDSA approach, PTM determined that the PDSA approach was not used in the PIP. The same intervention continued each month despite the poor results of the intervention (1.36%, 1.69%, 1.18% appointments scheduled in Oct-Dec 2021).
8.4 Was the strategy culturally and linguistically appropriate?	FM	The call scripts were available in Spanish, making the program accessible to Spanish-speaking members.
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)?	FM	The appointments already scheduled by the members for Oct-Dec 2021, not due to the intervention, were reported separately.
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	A 7.89% points increase was noted in the secondary measure, and a 6.37% points increase was noted in the primary measure from Oct-Dec 2021 during the intervention period. However, PTM identified that the success rate of the intervention was 0.62%, and the strategy was not successful.

		Potential follow-up activities include ensuring the intervention is implemented earlier in MY 2022 if it is to continue and implementing procedures to update member contact information using Care Management documentation and other sources prior to sending the non-compliant list to TTEC and performing a secret shopper dental appointment accessibility survey to confirm that providers are meeting expected standards.
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 baseline and repeat measurements for the primary measure and the intervention used the same methodology. The baseline for Oct-Dec 2020 was not submitted for the three counties.
9.2 Was there any quantitative evidence of improvement in processes or outcomes of care?	FM	The overall HEDIS ADV rate increased from 41.18% (MY 2020) to 42.39% (MY 2021). The final (admin) secondary measure for the three counties in MY 2020 was 40.48%, and the secondary rate reported by Dec 31, 2021, was 44.29%. The overall success of the intervention was 0.62% (26 dental visits out of 4177 members outreached).
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	The overall success of the intervention was 0.62% and did not link to the improvement in the secondary rates for the three counties.
9.4 Is there statistical evidence (e.g., significance tests) that any observed improvement is the result of the intervention?	NM	A statistically significant improvement is noted in the primary and secondary measures. However, the improvement is not reported as a result of the intervention.

9.5 Was sustained improvement demonstrated through repeated measurements over time?	NM	Improvement was noted in the primary and secondary measurements during the intervention period but not in the outcome of the intervention-the same comment as 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

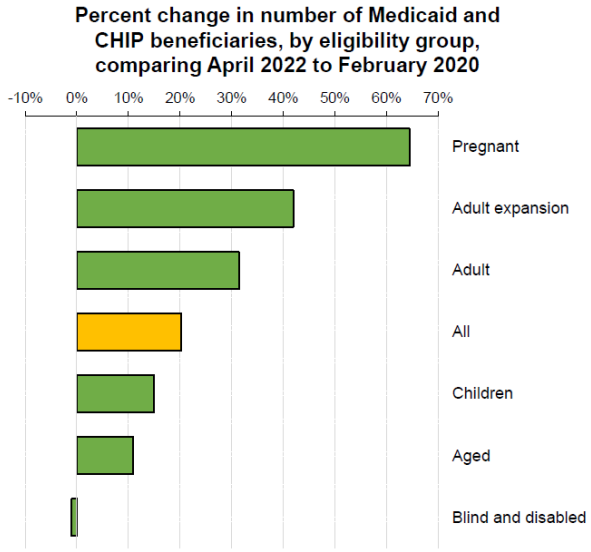
Perform Overall Validation of PIP Results

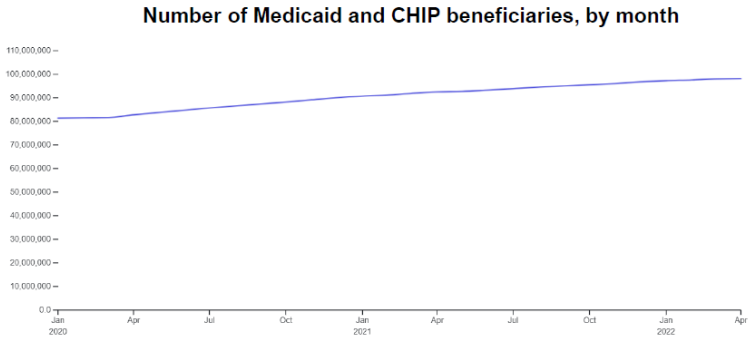
PIP Validation Rating (check one box)	Comments
☐ High confidence ☐ Moderate confidence ☐ Low confidence ☑ No confidence	UnitedHealthcare did not meet the MHD's goal to increase the HEDIS ADV rate by 2% points from the previous year. The overall HEDIS ADV rate increased from 41.18% (MY 2020) to 42.39% (MY 2021). The final (admin) secondary measure for the three counties in MY 2020 was 40.48%, and the secondary rate reported by Dec 31, 2021, was 44.29%. The overall success of the intervention was 0.62% (26 dental visits out of 4177 members outreached).

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

PTM shares the following information with the MHD and UnitedHealthcare 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."[3] 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





Comparing April 2022 to February 2020 across Medicaid and CHIP, the data show **~20% more** (16.6 million) enrolled beneficiaries, **~64% more** (652,000) beneficiaries in the pregnant eligibility group, **~42% more** (6.7 million) beneficiaries in the adult expansion eligibility group, and **~31% more** (3.3 million) beneficiaries in the adult eligibility group. There were **~15% more** beneficiaries in the children eligibility group, **~11% more** beneficiaries in the aged eligibility group, and **~1% fewer** beneficiaries in the blind and disabled eligibility group.

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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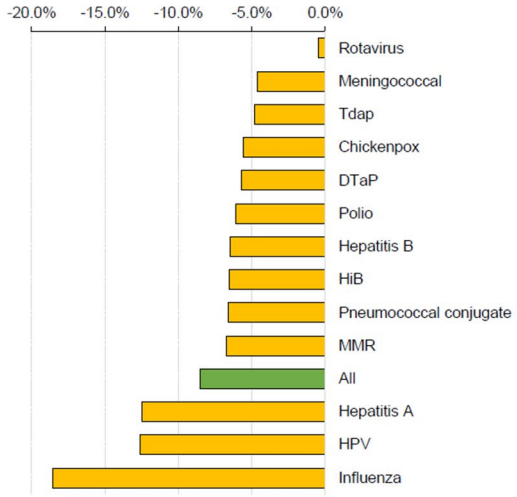
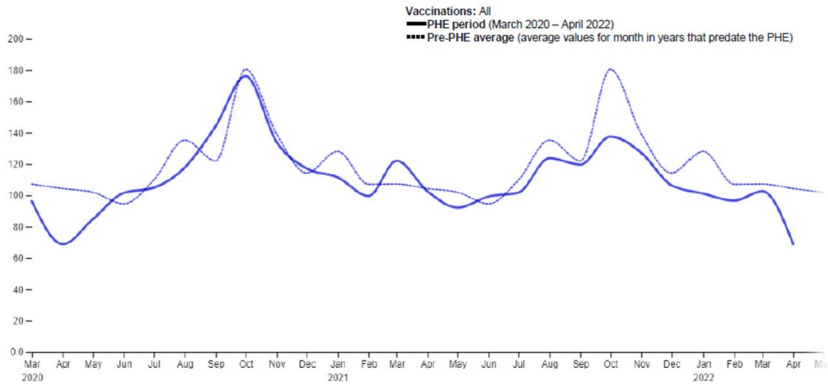
[3] https://www.medicaid.gov/state-resource-center/downloads/covid-19-medicaid-data-snapshot-04302022.pdf

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%**.

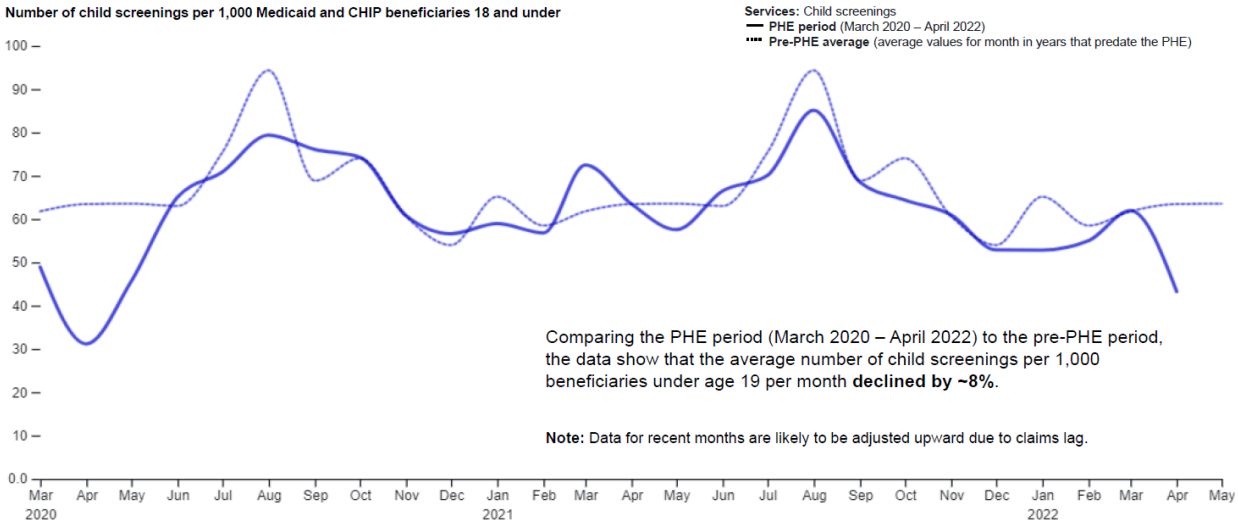
Note: Data for recent months are likely to be adjusted upward due to claims lag.

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.

21

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



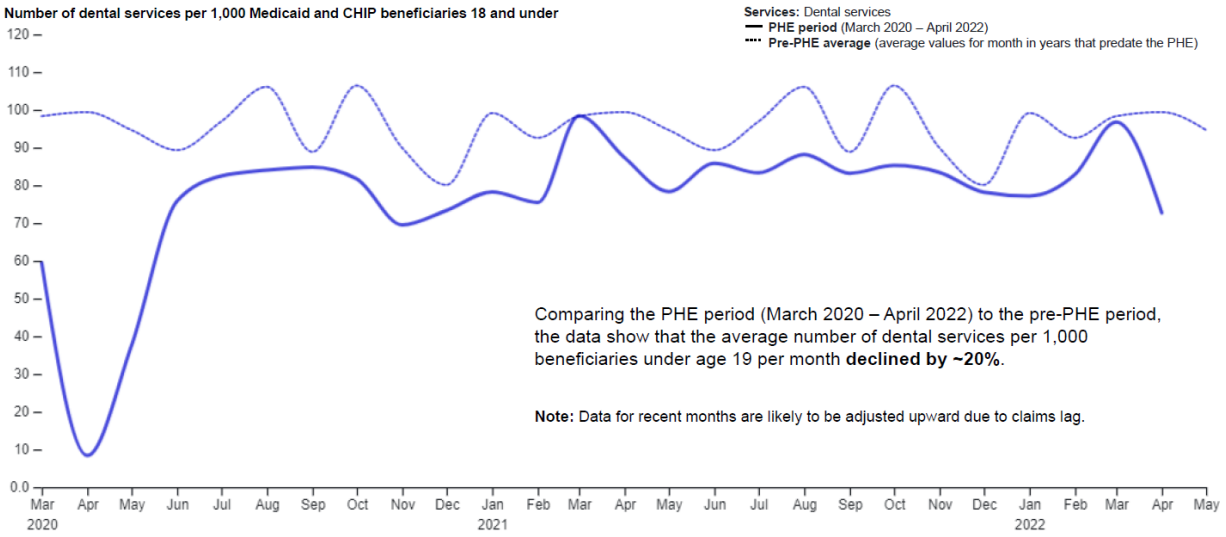
Comparing the PHE period (March 2020 – April 2022) to the pre-PHE period, the data show that the average number of child screenings per 1,000 beneficiaries under age 19 per month **declined by ~8%**.

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.

22

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



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.