Primaris
Healthcare Business Solutions

2020 External Quality Review

Performance Improvement Projects

UnitedHealthcare®

Measurement Period: Calendar Year 2019
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MoHealthNet

THE GREAT SEAL OF THE STATE OF MISSOURI

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1.0 Purpose and Overview

1.1 Background

The Department of Social Services, Missouri HealthNet Division (MHD), operates a Health Maintenance Organization (HMO) style Managed Care Program called MO HealthNet Managed Care (hereinafter stated "Managed Care"). To ensure all Missourians receive quality care, Managed Care is extended statewide in four regions: Central, Eastern, Western, and Southwestern. The goal is to improve access to needed services and quality of healthcare services in the Managed Care and state aid eligible populations, while controlling the program's cost. Participation in Managed Care is mandatory for certain eligibility groups within the regions in operation. Total number of Managed Care (Medicaid and CHIP combined) enrollees by end of SFY 2020 was 657,492 which was an increase of 10.20% as compared to end of SFY 2019.

MHD contracts with Managed Care Organizations (MCOs), also referred to as Managed Care Plans, to provide health care services to its Managed Care enrollees. UnitedHealthcare is one of the three MCOs operating in Missouri (MO). MHD works closely with UnitedHealthcare to monitor services for quality, enrollee satisfaction, and contract compliance. Quality is monitored through various ongoing methods including, but not limited to, MCO's Healthcare Effectiveness Data and Information Set (HEDIS®) indicator reports, annual reviews, enrollee grievances and appeals, targeted record reviews, and an annual external quality review (EQR).

MHD contracts with Primaris Holdings, Inc. (Primaris), an External Quality Review Organization (EQRO), to perform an EQR. An EQR is the analysis and evaluation of aggregated information on quality, timeliness, and access to the health care services that a Managed Care Plan, or its contractors, furnish to Medicaid beneficiaries. EQR 2020 evaluates activities conducted by UnitedHealthcare during calendar year (CY) 2019.

1.2 Performance Improvement Project (PIP)

A PIP is a project conducted by the MCO that is 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, and/or MCO/system level. A statewide performance improvement project (PIP) is defined as a cooperative quality improvement effort by the MCO, MHD, and the EQRO to address clinical or non-clinical topic areas relevant to the Managed Care Program. (Ref: MHD-Managed Care

Contract 2.18.8 (d) 2). Completion of PIPs should be in a reasonable period to generally allow information on the success of PIPs in the aggregate to produce new information on quality of care every year. According to 42 Code of Federal Regulations (CFR) 438.330 (d), PIP shall involve the following:

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

For EQR 2020, MHD required Primaris to validate two PIPs conducted by UnitedHealthcare during CY 2019:

- Clinical: Improving Immunization-Childhood Immunization Status (HEDIS® CIS Combo 10).
- Nonclinical: Improving Oral Healthcare-Annual Dental Visit (HEDIS® ADV).

2.0 Methodology for PIP Validation

Primaris followed guidelines established by Centers for Medicare & Medicaid Services (CMS) EQR Protocol 1 (revised version Oct 2019): Validation of Performance Improvement Projects. (Note: Since this new version of EQR protocol was published in Feb 2020 and PIPs were conducted in CY 2019, introduction of new criteria or new worksheets for evaluation were marked as "Not applicable (N/A)" for EQR 2020. Credit was also given if an MCO followed guidelines from the older version.) Primaris gathered PIPs' requirements from MHD and Managed Care contract. Subsequently, Primaris obtained information from UnitedHealthcare through:

- Documents submission: UnitedHealthcare was requested to submit their PIPs at Primaris' web-based secure file storage site (AWS S3 SOC-2).
- Interview: A virtual meeting with UnitedHealthcare officials was conducted on Aug 20, 2020 to understand their concept, approach, methodology adopted, implementation and results of the PIP intervention. The following personnel attended the session:

  Jamie Bruce, Chief Executive Officer
  Lisa Overturf, RN, CPHQ, Quality Improvement Director
  Kayla Townley, BSN, RN, Clinical Quality Consultant
  Angela Edmondson, Clinical Quality Consultant
  Katherine Whitaker, Associate Director, Compliance
  Jenene Dene, EPSDT Coordinator

Technical Assistance regarding PIP methodology per revised version of EQR protocol 1, was provided on Apr 03, 2020. Additionally, areas requiring improvement, correction, and submission of additional information were discussed during interview.

PIPs validation process included the following activities (Figure 1):

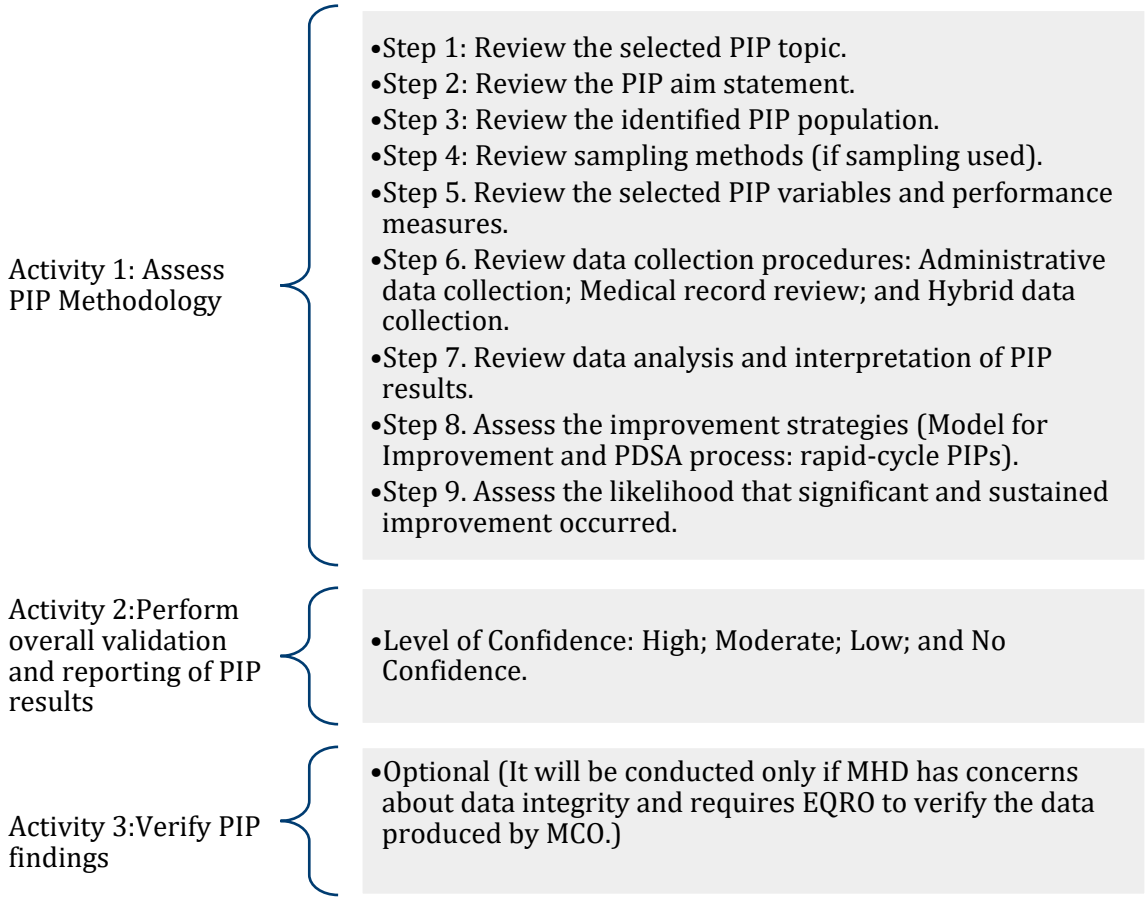

Figure 1. PIP Activities

Primaris assessed the overall validity and reliability of the PIP methods and findings to determine whether it has confidence in the results. The validation rating is based on the EQRO's assessment of whether the MCO adhered to 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.

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 of the 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 PIP methodology was not an acceptable/approved methodology for all phases of design.

3.0 Findings

3.1 Clinical PIP: Improving Childhood Immunization Status

MHD contract section 2.18.8d2 requires MCO to conduct a PIP with a goal to improve HEDIS® CIS Combo 10 each year by at least two percentage 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).

One of the most successful wellness interventions in public health is immunization against vaccine-preventable diseases. According to the World Health Organization (WHO), childhood immunization prevents about 2 to 3 million deaths each year worldwide. The Healthy People 2020 (HP 2020) immunization program has set a goal to target 70-90% of children to receive all CIS Combo 10 vaccinations. Over the past few years, completion rates of childhood vaccines have met HP2020 levels, however completion rates of children under the age of 2 receiving all vaccines is low at about 66%. This leaves children at risk for preventable diseases during a vulnerable time in life (Kurosky, Davis, and Krishnarajah 2016).

Completion of the entire series of immunizations for CIS Combo 10 remains a challenge for all three Missouri Managed Care Organizations (MCOs), ranging from 14.4% to 27.3% statewide per data submitted to MHD in Aug 2019. Missouri is ranked 21st out of all 50 states for Childhood Immunizations for children 19 to 35 months (America's Health Ranking, 2018).

3.1.1 Summary

Table 1(A-D) presents summary of the PIP based on the format adopted from CMS EQR Protocol 1.

Table 1(A-D). PIP Summary: Improving Childhood Immunization Status

A. General PIP Information

PIP Title: Improving Childhood Immunization Status-HEDIS® (CIS) Combo 10
PIP Aim Statement: By Dec 31, 2019, increase the percentage of UnitedHealthcare members age two and under who are eligible for and receive CIS Combo 10 vaccines, from 21.65% to 23.65%.
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 threshold for children, specify age range here: Ages (0-2)
Target population description, such as duals, LTSS or pregnant women (specify): All members eligible for HEDIS® CIS Combo 10 measure (ages 0-2).
Programs: Medicaid (Title XIX) only CHIP (Title XXI) only ☑ Medicaid and CHIP

B. 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): Pfizer Missed Dose Postcards were mailed to members who were non-compliant for CIS Combo 10 immunization at 6, 8, 18 months of age, from Apr-Dec 2019.
Provider-focused interventions (provider interventions are those aimed at changing provider practices or behaviors, such as financial or non-financial incentives, education, and outreach): None.
MCO-focused interventions/System changes (MCO/system change interventions are aimed at changing MCO operations; they may include new programs, practices, or infrastructure, such as new patient registries or data tools): None.

C. 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	Most recent remeasurement sample size and rate (if applicable)	Demonstrated performance improvement (Yes/No)	Statistically significant change in performance (Yes/No) Specify P

			implementation phase, results not available)			value (<0.01/< 0.05)
HEDIS® CIS Combo 10 (NQF 0038)	CY 2018	21.65% No sampling	CY 2019	25.06% No sampling	Yes	No P(0.24)>0.05

D. PIP Validation Information

Was the PIP validated? ☑ Yes/No

"Validated" means Primaris reviewed all relevant part 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: ☑ Low confidence

"Validation rating" refers to the Primaris' overall confidence that the PIP adhered to 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: There should be a consistency and link between secondary measure, data collection, data interpretation and analysis to clearly link the intervention with the projected improvement in primary/secondary measures. (For details, refer to section 5.0.)

3.1.2 Description of PIP

Primaris evaluated all steps of PIP activities in worksheet (Appendix A). This section presents information regarding intervention(s) and results submitted by UnitedHealthcare.

PIP Intervention: A total of 13,126 Pfizer Missed Dose Postcard reminders were mailed from April to Dec 2019. Over 1000 postcards were mailed on a monthly basis to parents and/or guardians of children ages 6, 8, and 16 months who missed one or more CIS Combo 10 immunizations.

PIPs: UnitedHealthcare

PIP Population: The study population consisted of 2,705 members who turned 2 years old in CY 2019 and were identified to be non-compliant with CIS Combo 10 vaccinations.

Performance Measures: Primary Measure is HEDIS® CIS Combo 10 rate.
The Secondary Measure is the number of members who received one or more CIS Combo 10 vaccinations after a missed dose postcard was sent by UnitedHealthcare.

Data Collection (Administrative): HEDIS® CIS Combo 10 rate is based on HEDIS Technical Specifications and generated by using Inovalon, a HEDIS®-certified software engine. For the purpose of PIP monitoring, this rate is administratively collected. However, the final rate is reported based on Hybrid methodology (includes medical record review). For the secondary measure: first, UnitedHealthcare contacted national UHC Clinical Program Delivery team and requested a list of members and member ID of those who had been mailed a Pfizer Missed Dose Postcard. Next, UnitedHealthcare submitted an internal request (at a local level in MO) to the Senior Business Analyst who compared member IDs to medical claims within a stated period (8 weeks of sending postcard reminders), using the specific CPT codes for immunizations.

Data, Analysis, and Interpretation: Out of 13,126 members who received a postcard, 1422 (10.83%) received one or more CIS Combo 10 vaccinations within 8 weeks of receiving the postcard (Table 2).

Table 2. Intervention Data for Immunization PIP

Month	No. of Missed Dose Postcards Mailed	Received One or More CIS Combo 10 Vaccination(s) Within 8 Weeks
Apr	1482	198
May	1461	189
Jun	1498	169
Jul	1368	165
Aug	1434	200
Sep	1935	286
Oct	1384	132
Nov*	1321	56
Dec*	1243	27
Total	**13126**	**1422**

(*Accepting claims through Dec 31, 2019)

Table 3 shows immunization compliance rates for members ages 6 months, 8 months and 16 months. Figure 2 shows quarterly administrative HEDIS® CIS Combo 10 rates for CY 2019.

Table 3: Immunization Compliance

Month	Number of Members at 6 Months, 8 Months, & 16 Months of age	Number of Compliant Members	Compliant %
April (Baseline)	2495	1013	40.60%
July (Remeasurement 1)	2464	1096	44.48%
October (Remeasurement 2)	2360	988	41.86%
December (Remeasurement 3)	2345	1102	46.99%

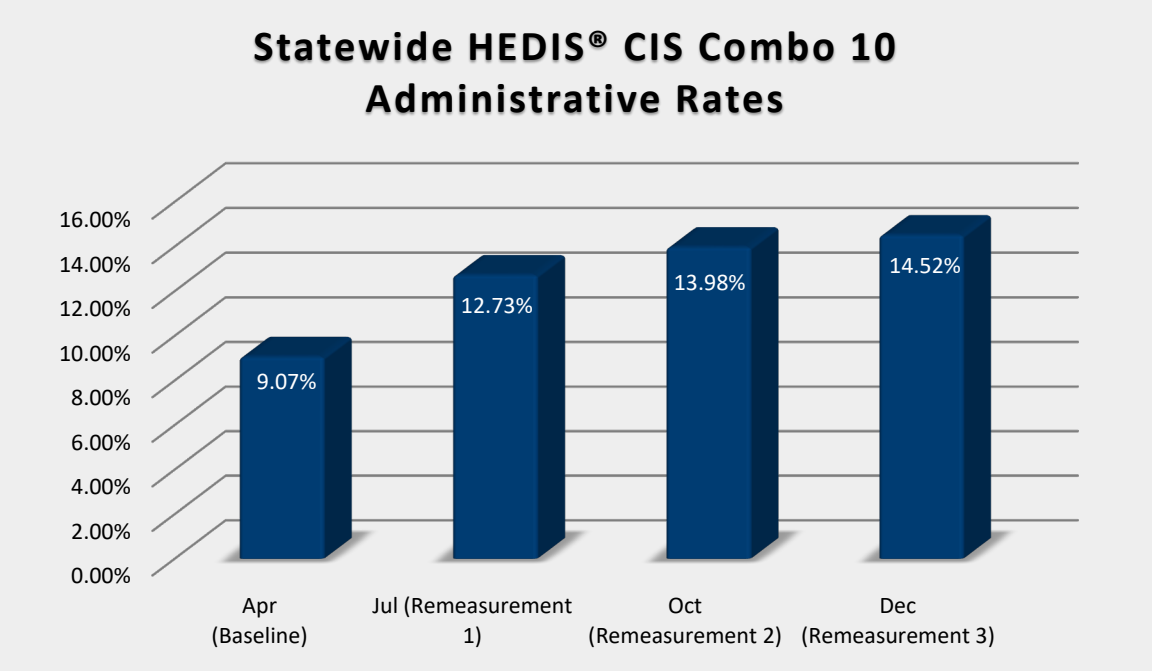

Figure 2. HEDIS® CIS Combo 10 rate (CY 2019)

3.1.3 PIP Result

The statewide rate for HEDIS® CIS Combo 10 for the baseline year (CY 2018) was 21.65%. It has increased to 25.06% during the measurement year (CY 2019), which is an

improvement of 3.41% points (Figure 3). This is not of a statistical significance as p value is 0.24 (P≤0.05 is significant). However, the aim of the PIP is met.

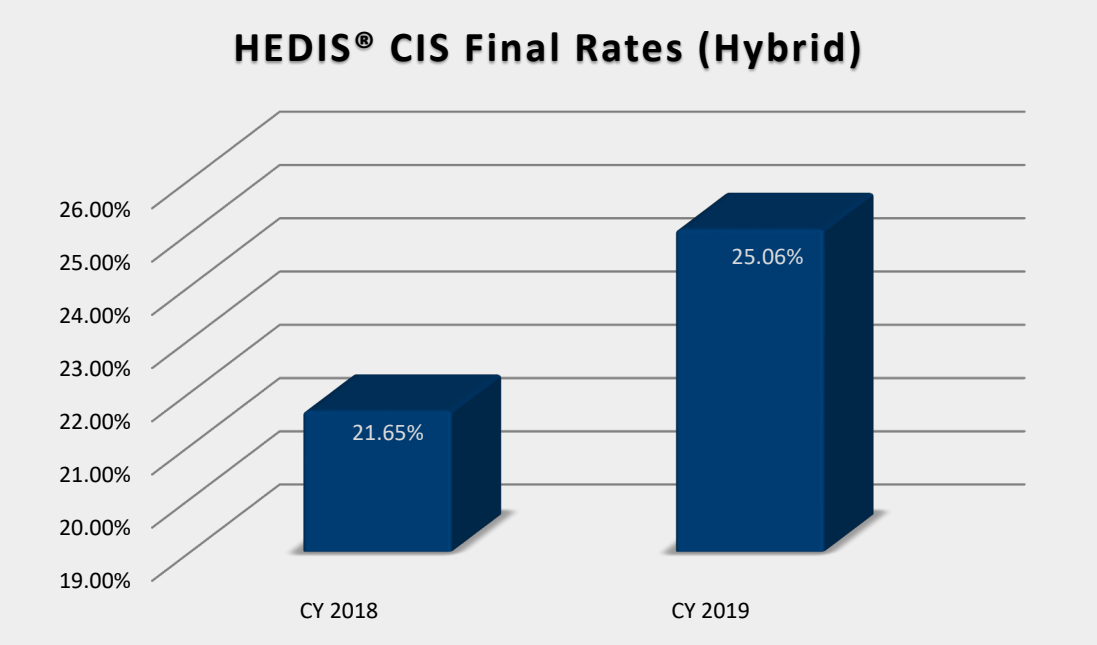

Figure 3. HEDIS® CIS Combo 10 Rates (CY 2018-2019)

3.2 Nonclinical PIP: Improving Oral Health

MHD contract section 2.18.8d2 requires the MCO to conduct a PIP with a goal to improve HEDIS® Annual Dental Visit (ADV) rate for two to twenty- year-olds each year by at least two percentage points in alignment with the Quality Improvement Strategy.

The U.S. Department of Health and Human Services (HHS) reports that caries is the most prevalent infectious disease in our nation's children.[1] More than 40 percent of children have caries by the time they reach kindergarten.[2] In contrast to declining prevalence of dental caries among children in older age groups, the prevalence of caries in poor U.S. children under the age of five years is increasing.[3] HHS documents there exists a perception that oral health is separate from general health and, therefore, less important. By raising oral health awareness, the prevention, early detection, and management of dental, oral, and craniofacial tissues can become integrated into health care, community-based programs,

[1] Preventing Cavities, Gum Disease, Tooth Loss, and Oral Cancers at a Glance 2011. CDC Oral Health Resources.
[2]The Kaiser Commission on Medicaid and the Uninsured: Dental Coverage and Care for Low-Income Children: The Role of Medicaid and SCHIP. August 2007. The Henry J. Kaiser Family Foundation.
[3] Children's Oral Health. 2007. CDC Oral Health Resources.

and social services.

According to the Missouri Coalition for Oral Health, oral health in Missouri is lacking and the need for change is great. The State of Missouri has a five year (2015-2020) oral health plan that seeks to improve the oral health of all Missourians through education, prevention, and leadership. According to the National Oral Health Surveillance System, the state of Missouri has lower dental visit rates, more tooth loss, and higher oral cancer rates among adults than those observed nationally. The Southeast region of Missouri has the lowest dental visit rates and the highest rates of tooth loss among older Missourians in the state. Specific to UnitedHealthcare's population, HEDIS®ADV rate of 48.24% in CY 2018 is at the 25th percentile of the NCQA's 2018 Quality Compass,® which indicates room for improvement.

3.2.1 Summary

Table 4(A-D) presents summary of the PIP based on the format adopted from CMS EQR Protocol 1.

Table 4(A-D). PIP Summary: Improving Oral Health

A. General PIP Information

PIP Title: Improving Oral Health-HEDIS® ADV Rate
PIP Aim Statement: By December 31, 2019, increase the percentage of UnitedHealthcare members between ages 2–20 years old who are eligible for and receive an annual dental visit, from 48.24% to 50.24%.
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 threshold for children, specify age range here: Ages (2-20)
Target population description, such as duals, LTSS or pregnant women (specify): All members eligible for HEDIS® ADV measure (ages 2-20) including, but not limited to, members with special needs and physical or behavioral health conditions.
Programs: Medicaid (Title XIX) only CHIP (Title XXI) only ☑ Medicaid and CHIP

B. 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): None
☑ Provider-focused interventions (provider interventions are those aimed at changing provider practices or behaviors, such as financial or non-financial incentives, education, and outreach): Provide Dental Care Opportunity Report (DCOR) to the Federally Qualified Healthcare Centers (FQHCs) with the highest volume of non-compliant members for the FQHCs to outreach non-compliant members identified in the report.
MCO-focused interventions/System changes (MCO/system change interventions are aimed at changing MCO operations; they may include new programs, practices, or infrastructure, such as new patient registries or data tools): None

C. 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	CY 2018	48.24% No sampling	CY 2019	53.70% No sampling	Yes	Yes P 0.0<0.05

D. PIP Validation Information

Was the PIP validated? ☑ Yes/No

"Validated" means Primaris reviewed all relevant part 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: ☑ Low confidence

"Validation rating" refers to the Primaris' overall confidence that the PIP adhered to 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 recommendation for improvement of PIP: UnitedHealthcare should focus on data collection around a variable (a measurable characteristic, quality, trait, or attribute of a particular individual, object, or situation being studied) such that intervention can be directly linked to the projected improvement in primary/secondary measures. (For details, refer to section 5.0).

3.2.2 Description of PIP

Primaris evaluated all steps of PIP activities and reported in worksheet (Appendix B). This section presents information regarding intervention(s) implemented and results submitted by UnitedHealthcare.

PIP Population: All non-compliant members in nine FQHCs (cycle 1 of intervention-3,198 members) and 14 FQHCs (cycle 2 of intervention-2,655 members) were included in the study. Total number of unique members were 4,757 (Table 4).

Performance Measures: Primary Measure is HEDIS® ADV rate (measured per HEDIS Technical Specifications). Secondary Measures: UnitedHealthcare selected three secondary measures as follows.

- Dental Exam.
  Numerator-Members who had a dental visit (D0120) within 90 days of DCOR delivery.
  Denominator-Members age 2-20 years old as of December 31 of the measurement year who had no dental visits during the previous 12 months.
- Preventive Dental Visit.
  Numerator-Members who had a preventive dental visit (D1120) within 90 days of DCOR delivery.
  Denominator-Members age 2-20 years old as of December 31 of the measurement year who had no dental visits during the previous 12 months.
- Oral Sealant Applied.
  Numerator-Members who had an oral sealant applied (D1351) within 90 days of DCOR delivery.
  Denominator-Members age 6-9 years old as of December 31 of the measurement year who had no dental visits during the previous 12 months.

Data Collection: Primary Measure was reported using HEDIS® Technical Specifications (administrative methodology). Data collection for secondary measure was based upon the DCOR outcome report. The DCOR outcome report is generated by the UnitedHealthcare Dental team 90 days after the DCORs are distributed to providers. Both reports, the DCOR and the DCOR outcome report, are generated based on claims data received by the dental vendor. The DCOR is run on a Tax ID Number (TIN)-specific basis to identify members who are non-compliant for the secondary measures.

Data, Analysis and Interpretation:

Table 4. Intervention Timeline

DCOR Date	Date(s) DCOR Distributed to FQHCs	Number of FQHCs Targeted	Number of Members Targeted	DCOR Outcome Report Timeframe
5/14/2019	5/31/2019 – 6/7/2019	9	4,026	6/20/2019 – 9/18/2019
9/27/2019	10/11/2019	14	3,292	10/31/2019 – 1/29/2020*

*Allows for claims runout after 12/31/2019.

Table 5. DCOR Intervention

		Dental Exam (D0120)		Preventive Dental Visit (D1120)		Oral Sealant Applied (D1351)		
Intervention	Number of members with no visit in previous 12 months	Number of members with dental visit within 90 days	% of members with dental visit within 90 days	Number of members with preventive service within 90 days	% of members with preventive service within 90 days	Number of members age 6 to 9 with no visit in previous 12 months	Number of members with sealant applied within 90 days	% of members with sealant applied within 90 days
May 2019	3,198	472	14.76%	387	12.10%	828	44	5.31%
Oct 2019	2,655	430	16.20%	341	12.84%	637	31	4.87%

Nine FQHCs were identified for distribution of DCORs in May 2019 (Intervention-Cycle 1). A total of 903 members out of 4026 (22%) had a dental visit within 90 days after May DCOR-intervention-cycle 1 (Table 4, 5). ADV rates specific to the nine FQHCs improved 16.06% points by August 2019 and 25.04% points by October 2019 compared to the baseline rate in May (Figure 4). UnitedHealthcare decided to broaden the scope and include fourteen FQHCs in October 2019 (intervention-cycle 2). A total of 802 members out of 3,293 (24%) were seen within 90 days after cycle 2. Only one measurement was available due to the PIP period ending December 31, 2019. The rate improved by 7.76% points from

the October baseline to the January remeasurement (looking at claims processed as of 12/7/2019) (Figure 5). Statistical significance testing of these rates shows that the baseline and remeasurement rates for both interventions were statistically significant with a p value of less than 0.05.

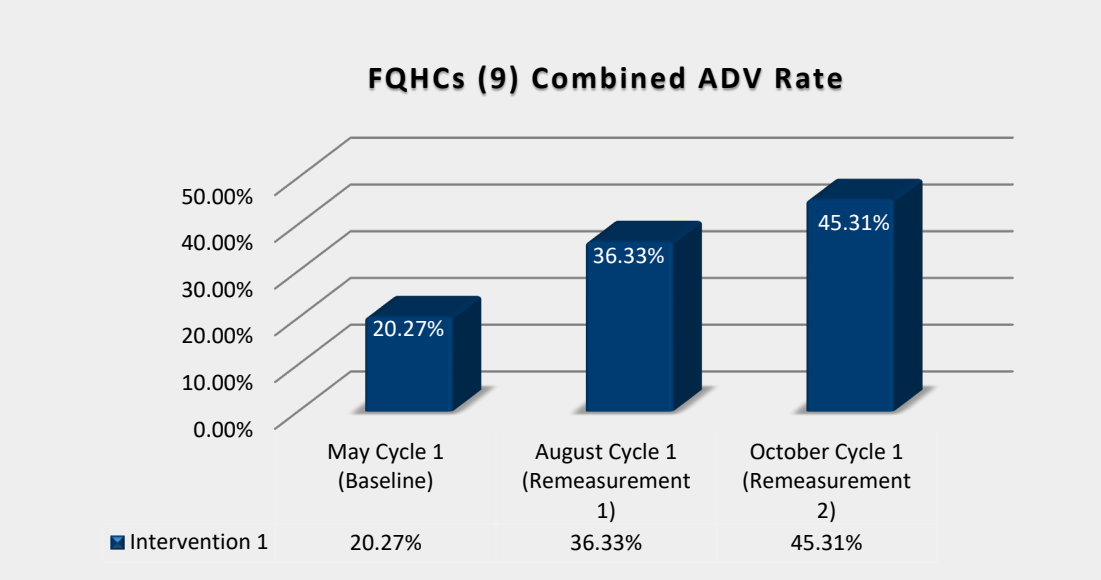

Figure 4. Intervention (Cycle 1-May 2019 DCOR Delivery)

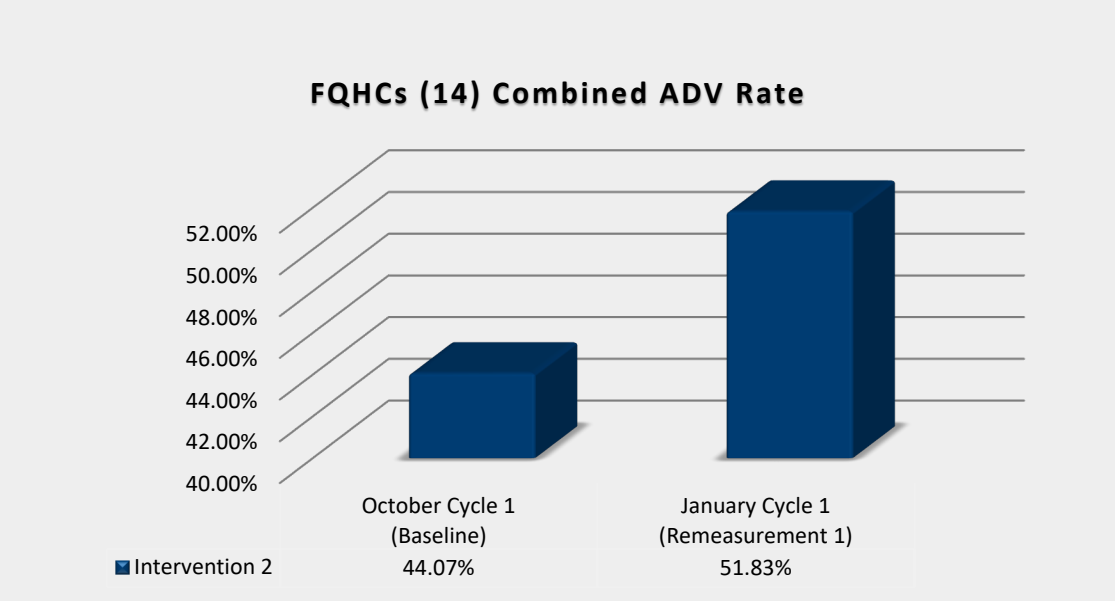

Figure 5. Intervention (Cycle 2-October 2019 DCOR Delivery)

Quarterly HEDIS® rates (Figure 6) shows that the rate improved consistently over the course of the year and was statistically significant (p≤0.5).

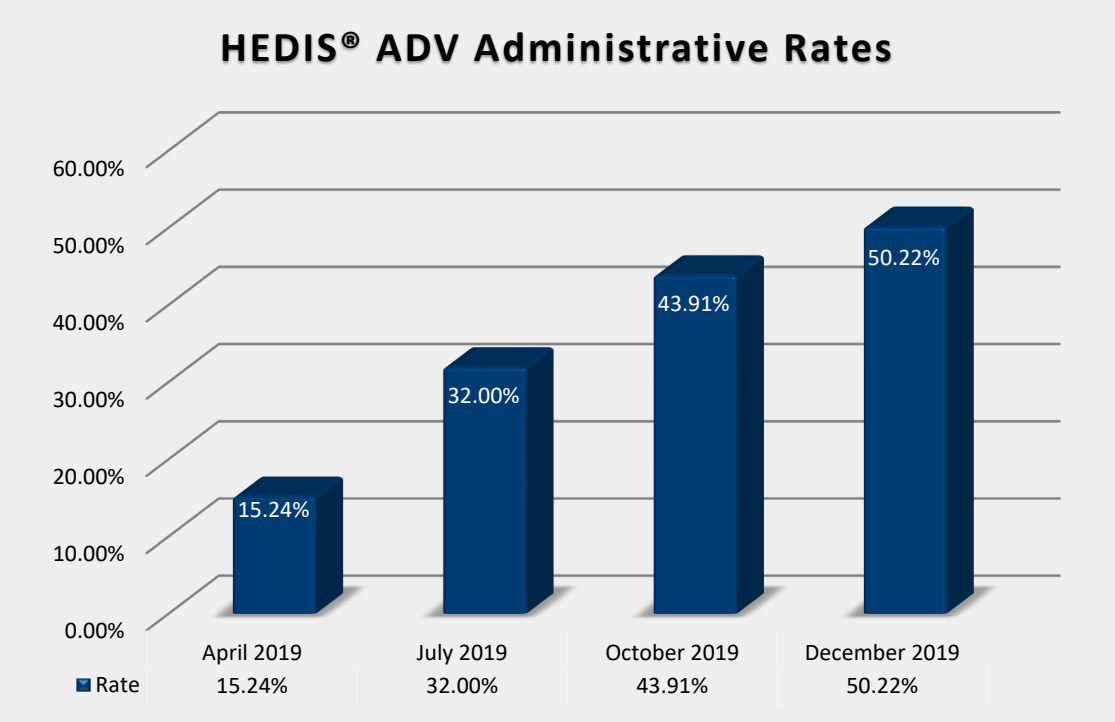

Figure 6. HEDIS® ADV Rate (CY 2019-Quarterly)

3.2.3 PIP Result

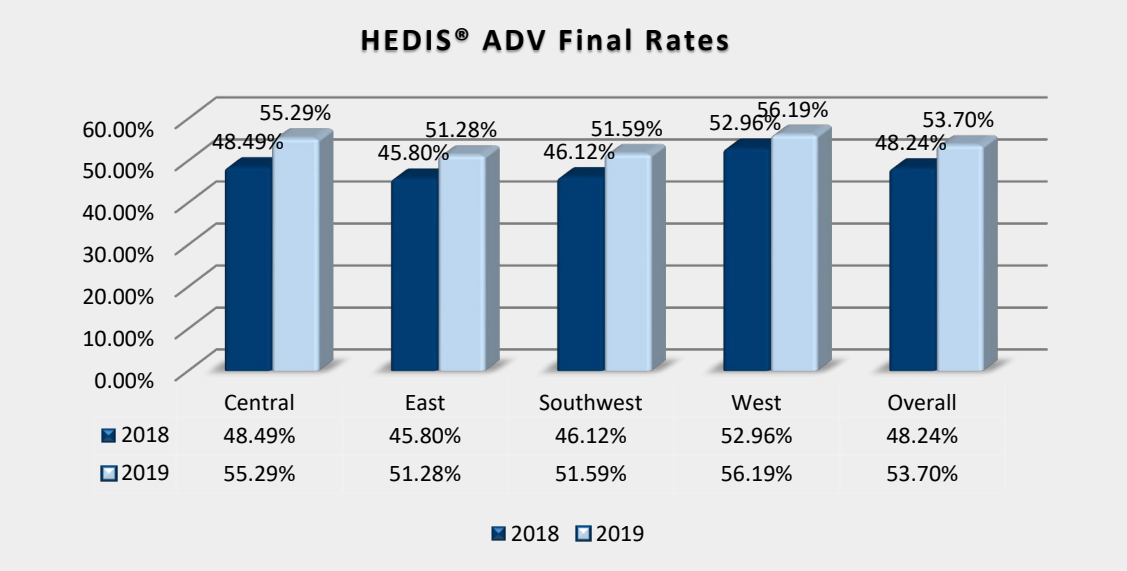

Figure 7. HEDIS® ADV Rates (CY 2018-2019)

The statewide rate for HEDIS® ADV for the baseline year (CY 2018) was 48.24%. It has increased to 53.70% during the measurement year (CY 2019), which is an improvement of

5.46% points (Figure 7). This increase is of a statistical significance as p value is 0.0 (P≤0.05 is significant). Aim of the PIP is met.

4.0 Overall Conclusions

PIPs Score

Primaris assigns a score of Low Confidence for both PIPs. Aim was achieved; however, the quality improvement processes and interventions were poorly executed and could not be linked to the improvement.

PIPs did not meet all the required guidelines stated in the CFR/MHD contract (Table 6). (Ref: 42 Code of federal Regulations (CFR) 438.330 (d)/MHD contract 2.18.8 d 1). Note: Definitions of Met/Partially Met/Not Met are utilized from CMS EQRO Protocol 3.

Table 6: PIPs' Evaluation based on CFR guidelines

CFR Guidelines	Evaluation
Measurement of performance using objective quality indicators	Met
Implementation of system interventions to achieve improvement in quality	Not Met
Evaluation of the effectiveness of the interventions	Not Met
Planning and initiation of activities for increasing or sustaining improvement	Met

4.1 Strengths and Weaknesses

Strengths

Improving Oral Health PIP: UnitedHealthcare initiated Plan-Do-Study-Act (PDSA) cycles to test the improvement (involved 9 FQHCs) and thereafter adopted the cycle by widening the scope (included 14 FQHCs). They reported results of secondary measures and primary measure by test of significance (p value).

Weaknesses

- Improving Childhood Immunization Status:

1. A link between member response to intervention (average CIS Combo 10 rate 10.83%) and change in CIS Combo 10 rate is not explained. CIS Combo 10 rates for members at ages 6, 8, 18 months in Apr was 40.40% (baseline), increased to 44.48% in July, decreased to

41.86% in Oct and again increased to 46.99%.

2. Even though the postcards were sent to children who were noncompliant at 6, 8, 18 months, the rationale for projecting CIS Combo 10 rates for only these age groups as an evidence to show improvement is not clear.

3. The overall HEDIS® CIS Combo 10 rate (administrative) for Apr is 9.07% (baseline-beginning of intervention) which increased to 12.73% in Jul, 13.98% in Oct, and 14.52% in Dec 2019. Thus, the increase from baseline rate (beginning of intervention) in Apr to Dec (end of intervention) is 60% (5.45% points) which is much higher than the postcard response.

4. UnitedHealthcare stated, "Pfizer Missed Dose Postcard operates in 26 states within UnitedHealthcare Medicaid plans since 2017, to include Missouri." It is clear that baseline projected in this PIP already was a part of ongoing intervention.

- Improving Oral Health PIP:

1. An assumption is made that distribution of DCOR reports to FQHCs have resulted in increased dental visits. There is no data to show if an action is taken by FQHCs (e.g., number of appointments scheduled for members appearing in the report) and how many members responded to those appointments. The member response rate of 22% (cycle 1) and 24% (cycle 2) could be due to members' own initiatives. There was an increase in dental visit from Aug (36.33%) to Oct 2019 (45.31%) by 8.98% points even when the intervention was not in place.

2. The data does not suggest that the increase in HEDIS® ADV rate (primary measure) could be the result of intervention. The HEDIS® ADV rate statewide increased significantly from 15.24% (in Apr 2019) to 32.00% (in July 2019) by 16.76% points (Figure 5) at the beginning of the cycle-1 of intervention (DCOR distribution 5.31.2019-6.7.19). This indicated that there are many other factors influencing HEDIS® ADV rate.

3. The secondary measures are reported as: dental exam 14.76%; preventive dental visit 12.10%; and oral sealant applied 5.31%, after May DCOR cycle-1 intervention. Baseline values and repeat measurements for these secondary measures are not reported.

4.2 Improvement by UnitedHealthcare

The statewide CIS Combo 10 rate has increased by 3.41% points and statewide rate for

HEDIS® ADV has increased by 5.46% points. Table 7 shows UnitedHealthcare's compliance with previous year's recommendations by EQRO.

Table 7. Response to Previous EQR's Recommendations

Recommendations	Action by UnitedHealthcare	Comment by EQRO
Primaris recommends: 1.UnitedHealthcare to follow CMS EQRO protocol and Medicaid Oral Health Performance Improvement Projects: A How-To Manual for Health Plans, July 2015[4], for guidance on methodology and approach of PIPs to obtain meaningful results.	UnitedHealthcare has followed the steps mentioned in CMS EQRO PIPs Protocol.	Met
2. UnitedHealthcare must refine their skills in the development and implementation of approaches to effect change in their PIP.	UnitedHealthcare has shown some improvement.	Partially Met
3. The aim and study question(s) should be stated clearly in writing (baseline rate, % increase to achieve in a defined period).	Achieved.	Met
4. PIPs should be conducted over a reasonable time frame (a calendar year) so as to generally allow information on the success of performance improvement projects in the aggregate to produce new information on quality of care every year.	Achieved.	Met
5. The interventions should be planned specifically for the purpose of PIP required by MHD Contract.	Intervention is ongoing each month since 2017, for CIS Combo 10 PIP. DCOR intervention is probably ongoing as it included nine FQHCs in the initiation of PIP.	Partially Met

[4]https://www.medicaid.gov/medicaid/benefits/downloads/pip-manual-for-health-plans.pdf

6. The results should be tied to the interventions.	Analysis of results to link with intervention is not explained.	Not Met

5.0 Recommendations

1. Even though overarching goal is mandated by MHD, UnitedHealthcare has the flexibility to 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 how to improve care delivery.

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).

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 the secondary measures and/or supplement the overall measurement set, providing information that will aid PIP planning and implementation.

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 DCOR list and % of members responding by visiting to a dentist.

5. Repeat measurements (at least two) in short intervals (unlike 90-day intervals selected in ADV PIP) should be conducted to determine whether significant change in performance relative to baseline measurement was observed.

6. Effectiveness of the improvement strategy should be determined by measuring change in performance according to the predefined measures and linking to intervention.

7. When analyzing multiple data points over time, UnitedHealthcare should consider tools such as: Time series; run and control chart; data dashboard; and basic trend analyses.

Additional Resources

https://health.mo.gov/data/InterventionMICA/OralHealth/index_5.html

https://www.chcs.org/media/OHLC-Webinar-Slides_12.18.14.pdf

(Appendices are on Next Page.)

APPENDIX A. PERFORMANCE IMPROVEMENT PROJECT VALIDATION WORKSHEET

Date of Evaluation/Interview: Aug 20, 2020

MCO Name/Mailing Address/Email ID:	UnitedHealthcare/13655 Riverport Dr, Maryland Heights, MO 63043/lisa.overturf@uhc.com
MCO Contact Name and Title:	Lisa Overturf, RN, CPHQ, QI Director
Name of Performance Improvement Project:	Improving Childhood Immunization Status
PIP Period Date:	Jan 1, 2019-Dec 31, 2019
Programs:	Medicaid only/CHIP only/✓Medicaid and CHIP
Demographic Information:	Number of Medicaid/CHIP enrollees in MCO: 158,409 Medicaid/CHIP members included in the study: 2,705 Number of PCPs/Specialists: 25,803 individual practitioners and 4,174 locations including 298 FQHCs and 114 Health Departments.

Score: **Met (M)** 🟢**/ Partially Met (PM)** 🟡**/Not Met (NM)** 🔴**/ Not Applicable (N/A)**

ACTIVITY 1: ASSESS THE PIP METHODOLOGY

Step 1: Review the PIP Topic

Component/Standard	Score	Comments
1.1 Was the topic selected through a comprehensive analysis of MCO enrollee needs, care, and services? (Note: If the PIP topic was required by the state, it will be marked as N/A.)	N/A	MHD contract section 2.18.8d2 requires MCO to conduct a PIP with a goal to improve HEDIS® CIS Combo 10 each year by at least two % 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	As primary measure was decided by MHD, this is marked as N/A. However, MHD did select Child Core Set measure (NQF0038) for PIP.
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	Topic was required by MHD.
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	🟢 M	UnitedHealthcare population ages 2-20 years old included those with special health care needs, physical disabilities, and behavioral health issues: • 2.3% were 2 years of age • 54.56% within the Aid Category MO

• 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		HealthNet for Kids–Poverty • 25.26% within the Aid Category MO HealthNet Families–Child • 22.46% are African American • 4.87% are MO HealthNet Foster Care Kids • 0.23% whose primary language is Spanish
1.5 Did the PIP topic align with priority areas identified by HHS and/or CMS?	M	PIP was aimed at CMS Child Core Set Measure.
1.6 Overall assessment/recommendations for improving PIP topic.	M	Even though overarching goal is mandated by MHD, UnitedHealthcare has the flexibility to 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 how to improve care delivery.

Step 2: Review the PIP Aim Statement

Component/Standard	Score	Comments
2.1 Did the PIP aim statement clearly specify the improvement strategy?	M	Increase the number of members who receive CIS Combo 10 vaccines in measurement year.
2.2 Did the PIP aim statement clearly specify the population for the PIP?	M	All members two years old and under were included.
2.3 Did the PIP aim statement clearly specify the time period for the PIP?	M	CY 2019 (end of Dec 31, 2019).
2.4 Was the PIP aim statement concise?	M	By December 31, 2019, increase the percentage of UnitedHealthcare members age two (2) and under who are eligible for and receive CIS Combo 10 vaccines from 21.65% to 23.65%.
2.5 Was the PIP aim statement answerable?	M	Same comment as in section 2.4.

2.6 Was the PIP aim statement measurable?	M	Same comment as in section 2.4.
2.7 Overall assessment/recommendations for improving the PIP aim statement.	M	Even though overarching aim is provided by MHD, UnitedHealthcare should translate 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)?	M	PIP population-2,705 members who turned age 2 years old in CY 2019 and were identified to be non-compliant with CIS Combo 10 vaccinations.
3.2 Was the entire MCO population included in the PIP?	M	Target population-All MCO members who were eligible based on NCQA's HEDIS® CIS Combo 10 Technical Specifications.
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?	M	Data collection for Target population was performed according to HEDIS Technical Specifications.
3.4 Was a sample used?	N/A	No sample was used.
3.5 Overall assessment/recommendations for identifying the project population.	M	PIP population should be selected from a county, provider office, or a region so that results can be measured during 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?	N/A	Sampling was not used in this study. However, final CIS Combo 10 rate was reported using hybrid methodology per HEDIS Technical Specifications.
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	Same comment as in section 4.1.

4.3 Did the sample contain a sufficient number of enrollees taking into account non-response?	N/A	Same comment as in section 4.1.
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?	N/A	Same comment as in section 4.1.
4.5 Were valid sampling techniques used to protect against bias? Specify the type of sampling used.	N/A	Same comment as in section 4.1.
4.6 Overall assessment/recommendations for improving the sampling method.	N/A	Same comment as in section 4.1.

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)?	PM	Secondary measure was selected: Number of members who received one or more CIS Combo 10 vaccinations after a missed dose postcard was sent by UnitedHealthcare. However, a variable (a measurable characteristic, quality, trait, or attribute of a particular individual, object, or situation being studied) is not selected that could identify UnitedHealthcare's performance on the PIP and track improvement over time.
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?	M	HEDIS® CIS Combo 10 measure was used as a primary 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)?	M	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	M	Same comment as in section 5.2.

incidents (such as death, avoidable readmission), referral patterns, authorization requests, appropriate medication use.		
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?	M	Quarterly HEDIS® CIS Combo 10 rates statewide were reported after Primaris provided TA. Data for other MCOs was not available to UnitedHealthcare (not a collaborative PIP). The performance of intervention remained more or less constant each month. However, HEDIS® CIS Combo 10 rate increased quarterly.
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?	M	CMS Child Core Set measure (HEDIS® CIS Combo 10) was used as primary 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 reliably and accurately calculate the measure? • 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	Since this criterion is newly introduced in protocol, this will be scored in EQR 2021.
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.)	N/A	Same comment as in section 5.7

5.9 Did the measures include a strategy to ensure inter-rater reliability (if applicable)?	N/A	Same comment as in section 5.7
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.	N/A	Same comment as in section 5.7
5.11 Overall assessment/recommendations for improving the selected PIP variables and performance measures.	PM	UnitedHealthcare can use focus groups, surveys, and interviews to collect qualitative insights from members, health plan and provider staff, and key external partners. Qualitative measures can serve as the secondary measures and/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 PI?	M	Primary measure-Data collection was performed according to HEDIS Technical specifications. Secondary measure-claims data was the source.
6.2 Did the PIP design specify the frequency of data collection? If yes, what was the frequency (for example, semi-annually)?	M	UnitedHealthcare specified data collection for primary measure and secondary measure quarterly.
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	M	Primary measure- HEDIS® Interactive Data Submission System (IDSS). Secondary measure-Claims data.

enrollee interviews.		
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).	M	Primary measure-HEDIS® CIS Combo 10 Secondary measure- Numerator (Number of members who received one or more CIS Combo 10 vaccinations after a missed dose postcard was sent by UnitedHealthcare) Denominator (Number of members who were mailed a Pfizer Missed Dose postcard).
6.5 Did the data collection plan link to the data analysis plan to ensure that appropriate data would be available for the PIP?	NM	Data collection for intervention was done on a monthly basis but plan mentioned quarterly. Data collection and data analysis were not linked.
6.6 Did the data collection instruments allow for consistent and accurate data collection over the time periods studied?	M	Inovalon, a HEDIS®-certified software engine, was used to generate the HEDIS® CIS Combo 10 measure rates. Data obtained for the secondary measure was gathered through claims data.
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?	N/A	Since this criterion is newly introduced in protocol, this will be scored in EQR 2021.
6.8 Overall assessment/recommendations for improving the data collection procedures.	NM	Secondary measure-Units of measure/rate, if statewide or at particular region/location should be stated. Data collection plan should be linked to the data analysis plan to ensure that appropriate data would be available for the PIP.
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	Sections 6.9 to 6.14 are new additions in EQR protocol and are not reported in PIP by UnitedHealthcare. These will be evaluated in EQR 2021 for CY 2020 PIP.
6.10 If primary care data was used, did primary care providers submit encounter or utilization data for all encounters?	N/A	
6.11 If specialty care data was used, did specialty care providers submit encounter or utilization data for all encounters?	N/A	
6.12 If ancillary data was used, did ancillary service providers submit encounter or	N/A	

utilization data for all services provided?		
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	
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	
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.)	N/A	Medical Record Review (MRR) was not the source of data collection for PIP. However, final HEDIS CIS Combo 10 is a hybrid measure and final result included MRR.
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	
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	

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?	NM	Monthly data for secondary measure was submitted. Analysis for secondary data was not submitted.
7.2 Did the analysis include baseline and repeat measurements of project outcomes?	NM	Baseline and repeat measurements for primary measure were reported but not linked to data collected after intervention.
7.3 Did the analysis assess the statistical significance of any differences between the initial and repeat measurements?	M	Statistical significance was tested between initial and repeat measurements.
7.4 Did the analysis account for factors that may influence the comparability of initial and repeat measurements?	NM	This was not mentioned. However, UnitedHealthcare reported that October 2020 was an outlier as evident from secondary data.
7.5 Did the analysis account for factors that may threaten the internal or external validity of the findings?	M	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?	N/A	New addition, will be evaluated in EQR 2021.
7.7 Were PIP results and findings presented in a concise and easily understood manner?	NM	The rates and statistical significance of difference in rates was stated. However, link between primary measure and secondary measure and how intervention is linked to improvement is not explained.
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	UnitedHealthcare continued intervention each month with almost same response rate. However, they have concluded that there is an opportunity to improve by identifying additional member-specific demographic information to understand the population that is not receiving vaccinations.
7.9 Overall assessment/recommendations for improving the analysis and interpretation of PIP results.	NM	Primaris recommends following step 7 of CMS EQR Protocol. A baseline rate should be presented before start of an intervention followed by at least two remeasurements, analysis of results should be utilized for planning next intervention (cycle-PDSA).

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)?	M	Pfizer reports an 18.2% percentage improvement in pediatric vaccination rates by using the Missed Dose Postcard. The Pfizer Missed Dose Postcard currently operates in 26 states within UnitedHealthcare Medicaid plans since 2017, to include Missouri.
8.2 Was the strategy designed to address root causes or barriers identified through data analysis and quality improvement processes?	M	Barrier analysis showed members' lack of knowledge about importance of preventive services, including vaccine schedules.
8.3 Was the rapid-cycle PDSA approach used to test the selected improvement strategy?	N/A	This criterion was newly introduced in EQR protocol and will be evaluated in EQR 2021.
8.4 Was the strategy culturally and linguistically appropriate?	M	Pfizer Missed Dose Postcard was mailed with both English and Spanish languages (readability statistics reported was 5th grade).
8.5 Was the implementation of the strategy designed to account 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)?	N/A	This is not addressed in PIP. This criterion was newly introduced in EQR protocol and will be evaluated in EQR 2021.
8.6 Building on the findings from the data analysis and interpretation of PIP results (Step 7), did the PIP assess the extent to which the improvement strategy was successful and identify potential follow-up activities?	NM	UnitedHealthcare showed improvement in primary performance measure (not statistically significant); however, it is not evident that the improvement is due to intervention. UnitedHealthcare has decided to continue this intervention in future.
8.7 Overall assessment/recommendations for improving the implementation strategies.	NM	Effectiveness of the improvement strategy should be determined by measuring change in performance according to the predefined measures and linking to intervention.

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?	M	Primary and secondary measures were collected using same methodology.

9.2 Was there any quantitative evidence of improvement in processes or outcomes of care?	M	Evidence of improvement is presented by comparing HEDIS® CIS Combo 10 rate for CY 2018 and CY 2019. There is an improvement of 3.41% points and PIP has met the aim.
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	It is not evident that improvement was likely due to intervention.
9.4 Is there statistical evidence (e.g., significance tests) that any observed improvement is the result of the intervention?	NM	The observed improvement is not statistically significant (P=0.248)
9.5 Was sustained improvement demonstrated through repeated measurements over time?	PM	The HEDIS® CIS Combo 10 rate showed sustained improvement. The quarterly CIS Combo 10 rates for children of ages 6, 8, 18 months is not sustained overtime.
9.6 Overall assessment/recommendations for improving the significance and sustainability of improvement as a result of the PIP.	NM	Repeat measurements (at least two) should be conducted after each intervention cycle to determine whether significant change in performance relative to baseline measurement was observed.

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	Even though aim of the PIP is met and the HEDIS® CIS rate has increased from 21.65% to 25.06% (3.41% points), which is not statistically significant, the PIP is assigned a score of "Low Confidence." The quality improvement process and intervention were poorly executed and could not be linked to the improvement.

APPENDIX B. PERFORMANCE IMPROVEMENT PROJECT VALIDATION WORKSHEET

Date of Evaluation/Interview: Aug 20, 2020

MCO Name/Mailing Address/Email ID:	UnitedHealthcare/13655 Riverport Dr, Maryland Heights, MO 63043/lisa.overturf@uhc.com
MCO Contact Name and Title:	Lisa Overturf, RN, CPHQ, QI Director
Name of Performance Improvement Project:	Improving Oral Health
PIP Period Date:	Jan 1, 2019-Dec 31, 2019
Programs:	Medicaid only/CHIP only/✓Medicaid and CHIP
Demographic Information:	Number of Medicaid/CHIP enrollees in MCO: 158,409 Medicaid/CHIP members included in the study: 4,757 Number of Dentists/Specialists: 675 individual practitioners and 340 locations including 105 FQHCs and 235 independent provider locations

Score: **Met (M)** 🟢**/ Partially Met (PM)** 🟡**/Not Met (NM)** 🔴**/ Not Applicable (N/A)**

ACTIVITY 1: ASSESS THE PIP METHODOLOGY

Step 1: Review the PIP Topic

Component/Standard	Score	Comments
1.1 Was the topic selected through a comprehensive analysis of MCO enrollee needs, care, and services? (Note: If the PIP topic was required by the state, it will be marked as N/A.)	N/A	MHD contract section 2.18.8d2 requires MCO, at a minimum, to set a goal to improve the plan specific HEDIS® Annual Dental Visit (ADV) rate for two (2) to twenty (20) year-olds each year by at least two % 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	HEDIS® ADV measure was selected (as required by the MHD). This is not CMS coreset 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	Topic was required by MHD.
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	🟢 M	Study included entire UnitedHealthcare population ages 2-20 years old including those with special health care needs, physical disabilities, and behavioral health

• Children or adults with behavioral health issues • 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		issues, as following: • 22.6% between the ages of 2 and 5 • 54.56% within the Aid Category MOHNET for Kids–Poverty • 25.26% within the Aid Category MO HealthNet Families–Child • 22.46% were African American • 4.87% were MO HealthNet Foster Care Kids • 0.23% whose primary language is Spanish
1.5 Did the PIP topic align with priority areas identified by HHS and/or CMS?	M	PIP was aimed at improving oral health.
1.6 Overall assessment/recommendations for improving PIP topic.	M	Even though overarching goal is mandated by MHD, UnitedHealthcare has the flexibility to 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 how to improve care delivery.

Step 2: Review the PIP Aim Statement

Component/Standard	Score	Comments
2.1 Did the PIP aim statement clearly specify the improvement strategy?	M	Members who had a dental visit in measurement year was the improvement strategy.
2.2 Did the PIP aim statement clearly specify the population for the PIP?	M	Entire UnitedHealthcare population ages 2-20 years old were included.
2.3 Did the PIP aim statement clearly specify the time period for the PIP?	M	CY 2019 (end of Dec 31, 2019).
2.4 Was the PIP aim statement concise?	M	By December 31, 2019, increase the percentage of members between ages 2 – 20 years old who are eligible for and receive an annual dental visit from 48.24% to 50.24%.

2.5 Was the PIP aim statement answerable?	M	Same comment as in section 2.4
2.6 Was the PIP aim statement measurable?	M	Same comment as in section 2.4
2.7 Overall assessment/recommendations for improving the PIP aim statement.	M	Even though overarching aim is provided by MHD, UnitedHealthcare should translate 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)?	M	PIP population contained a total of 4,757 unique members who were ages 2-20 years old in CY 2019 and were noncompliant for dental visit.
3.2 Was the entire MCO population included in the PIP?	M	Medicaid members age 2-20 years as of 12/31/2019 who were continuously enrolled throughout the measurement year with no more than one gap in enrollment (79,656 members).
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?	M	Data collection approach was based on HEDIS® Technical Specifications.
3.4 Was a sample used?	N/A	Sampling was not done.
3.5 Overall assessment/recommendations for identifying the project population.	M	PIP population to be selected on a small scale during initial test cycles (PDSA).

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?	N/A	Sampling was not used in this study.
4.2 Did the sampling method consider and specify the true or estimated frequency of the	N/A	Same comment as in section 4.1.

event, the confidence interval to be used, and the acceptable margin of error?		
4.3 Did the sample contain a sufficient number of enrollees taking into account non-response?	N/A	Same comment as in section 4.1.
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?	N/A	Same comment as in section 4.1.
4.5 Were valid sampling techniques used to protect against bias? Specify the type of sampling used.	N/A	Same comment as in section 4.1.
4.6 Overall assessment/recommendations for improving the sampling method.	N/A	Same comment as in section 4.1.

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)?	PM	Secondary measures (dental exam, preventive dental visit, oral sealant applied) were selected. However, a variable (a measurable characteristic, quality, trait, or attribute of a particular individual, object, or situation being studied) is not selected that could identify UnitedHealthcare's performance on the PIP questions objectively and reliably and track improvement over time.
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?	M	HEDIS® ADV measure was used as a primary 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)?	M	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.	M	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?	M	Quarterly HEDIS® ADV rates statewide were reported after Primaris provided TA. Data for other MCOs was not available to UnitedHealthcare (not a collaborative PIP). As the rates improved (test of significance conducted), intervention scope was broadened by UnitedHealthcare.
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?	M	HEDIS® ADV measure was used as primary 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 reliably and accurately calculate the measure? • 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	Since this criterion is newly introduced in protocol, this will be scored in EQR 2021.

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.)	N/A	Same comment as in section 5.7
5.9 Did the measures include a strategy to ensure inter-rater reliability (if applicable)?	N/A	Same comment as in section 5.7
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.	N/A	Same comment as in section 5.7
5.11 Overall assessment/recommendations for improving the selected PIP variables and performance measures.	PM	In future, 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 PIP questions objectively and reliably and use clearly defined indicators of performance.

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?	M	Primary measure-Data collection was according to HEDIS Technical specifications. Secondary measures- DCOR and the DCOR Outcome Reports are generated based on

		claims data received by the dental vendor. The DCOR is run on a Tax ID Number (TIN)-specific basis to identify members who are non-compliant for the secondary measures.
6.2 Did the PIP design specify the frequency of data collection? If yes, what was the frequency (for example, semi-annually)?	M	Primary measure is reported Quarterly. Secondary measures are reported after 90 days of intervention.
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.	M	Primary measure- UnitedHealthcare uses Inovalon, a HEDIS®-certified software engine to generate on an annual basis the HEDIS® ADV rates. Secondary measure-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).	PM	Primary and secondary measures were clearly defined. However, those were not sufficient to link intervention to improvement.
6.5 Did the data collection plan link to the data analysis plan to ensure that appropriate data would be available for the PIP?	PM	PIP stated that HEDIS ADV rate is analyzed annually. However, UnitedHealthcare submitted quarterly data after TA. Linking of primary measure with secondary measures is not evident.
6.6 Did the data collection instruments allow for consistent and accurate data collection over the time periods studied?	M	Same methodology was used for primary and secondary measures.
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?	N/A	Since this criterion is newly introduced in protocol, this will be scored in EQR 2021.
6.8 Overall assessment/recommendations for improving the data collection procedures.	PM	UnitedHealthcare responded to technical assistance provided by Primaris and resubmitted information to match with data collection and data analysis. Data collection should match with data analysis.
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	Sections 6.9 to 6.14 are new additions in EQR protocol and are not reported in PIP by UnitedHealthcare. These will be evaluated in EQR 2021 for CY 2020 PIP.

6.10 If primary care data was used, did primary care providers submit encounter or utilization data for all encounters?	N/A	
6.11 If specialty care data was used, did specialty care providers submit encounter or utilization data for all encounters?	N/A	
6.12 If ancillary data was used, did ancillary service providers submit encounter or utilization data for all services provided?	N/A	
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	
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	
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.)	N/A	HEDIS® ADV is an administrative measure. Medical records were not reviewed for secondary measures.
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	Same comment as in section 6.15
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	N/A	Same comment as in section 6.15

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?	M	UnitedHealthcare was provided TA following which they resubmitted data plan and analysis.
7.2 Did the analysis include baseline and repeat measurements of project outcomes?	PM	Baseline for secondary measures was not reported. However, baseline ADV rate was reported (which included all three secondary measures).
7.3 Did the analysis assess the statistical significance of any differences between the initial and repeat measurements?	M	P value was calculated (Chi-square test).
7.4 Did the analysis account for factors that may influence the comparability of initial and repeat measurements?	M	No factors identified for primary measure. One factor that could influence the comparability of the secondary measure results is that the Oct intervention occurred during the school year while the May intervention occurred at the end of the school year and during summer break.
7.5 Did the analysis account for factors that may threaten the internal or external validity of the findings?	M	No factors threatened validity of findings.
7.6 Did the PIP compare the results across multiple entities, such as different patient subgroups, provider sites, or MCOs?	N/A	New addition, will be evaluated in EQR 2021.
7.7 Were PIP results and findings presented in a concise and easily understood manner?	PM	Primaris requested several clarifications in order to understand the data presented. Assistance was provided in data reporting during TA.
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.)	M	UnitedHealthcare projected improvement in FQHCs' ADV rates. For future PIP, they see an opportunity for improvement by obtaining the compliance rate of members who have seen a dentist in the previous 12 months for the FQHCs involved in the DCOR intervention. This will allow them to

		compare baseline and remeasurement rates.
7.9 Overall assessment/recommendations for improving the analysis and interpretation of PIP results.	PM	Primaris recommends following step 7 of CMS EQR Protocol. A baseline rate should be presented before start of intervention followed by at least two remeasurements, analysis of results should be utilized for planning next intervention (cycle-PDSA). For better interpretation, baseline can show trends prior to intervention by reporting rates from previous months/year before intervention.

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)?	M	Primaris is aware that a gap closure report (DCOR) is an effective strategy (stated in resources published in CMS Medicaid Oral Health Performance Improvement Projects manual). UnitedHealthcare quality team had discussed with providers (i.e., FQHCs, PCPs, Dentists, staff) about barriers and drivers to decide for potential interventions.
8.2 Was the strategy designed to address root causes or barriers identified through data analysis and quality improvement processes?	M	Same as comment above in 8.1.
8.3 Was the rapid-cycle PDSA approach used to test the selected improvement strategy?	N/A	This criterion was newly introduced in EQR protocol and will be evaluated in EQR 2021. However, Primaris commends UnitedHealthcare's attempt to initiate PDSA cycles based on our recommendation from previous year.
8.4 Was the strategy culturally and linguistically appropriate?	M	No issues related to strategy are reported at provider level.
8.5 Was the implementation of the strategy designed to account 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)?	N/A	This is not addressed in PIP. This criterion was newly introduced in EQR protocol and will be evaluated in EQR 2021.

8.6 Building on the findings from the data analysis and interpretation of PIP results (Step 7), did the PIP assess the extent to which the improvement strategy was successful and identify potential follow-up activities?	PM	There was significant improvement projected by UnitedHealthcare in primary measure and secondary measures projected as ADV rate for FQHCs. However, the link between intervention and improvement could not be established.
8.7 Overall assessment/recommendations for improving the implementation strategies.	PM	UnitedHealthcare should have variables/secondary measures that should tie an intervention to improvement. Such as, after sending DCOR reports, they should measure the % of appointments scheduled from DCOR list and % of members responding by visiting to a dentist.

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?	M	Same methodology was used for repeat ADV rates.
9.2 Was there any quantitative evidence of improvement in processes or outcomes of care?	M	Primary measure has shown improvement from 48.24% (CY 2018) to 53.70% (CY 2019). For secondary measures (baseline is not projected for all three measures). However, combined ADV rate of FQHCs have shown improvement.
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	No Data reported to assess DCOR report resulted in increase in ADV rates of FQHCs.
9.4 Is there statistical evidence (e.g., significance tests) that any observed improvement is the result of the intervention?	NM	The improvement shown in primary measure and FQHCs ADV rate is statistically significant. However, link is not observed.
9.5 Was sustained improvement demonstrated through repeated measurements over time?	NM	Only one measurement was taken after intervention in May (cycle 1) and Oct (cycle 2).
9.6 Overall assessment/recommendations for improving the significance and sustainability of improvement as a result of the PIP.	NM	Repeat measurements (at least two) in short intervals (unlike 90 days interval selected in this PIP) should be conducted to determine whether significant change in performance relative to baseline measurement was observed.

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	Even though aim of the PIP is met and the HEDIS® ADV rate has significantly increased from 48.24% to 53.70% (5.46% points), the PIP is assigned a score of "Low Confidence." The quality improvement process and intervention were poorly executed and could not be linked to the improvement.

(End of Worksheets for PIPs)